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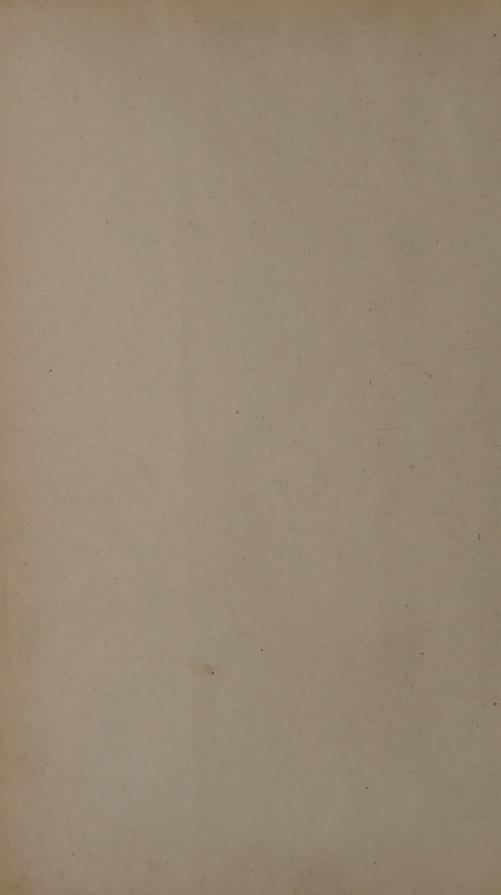
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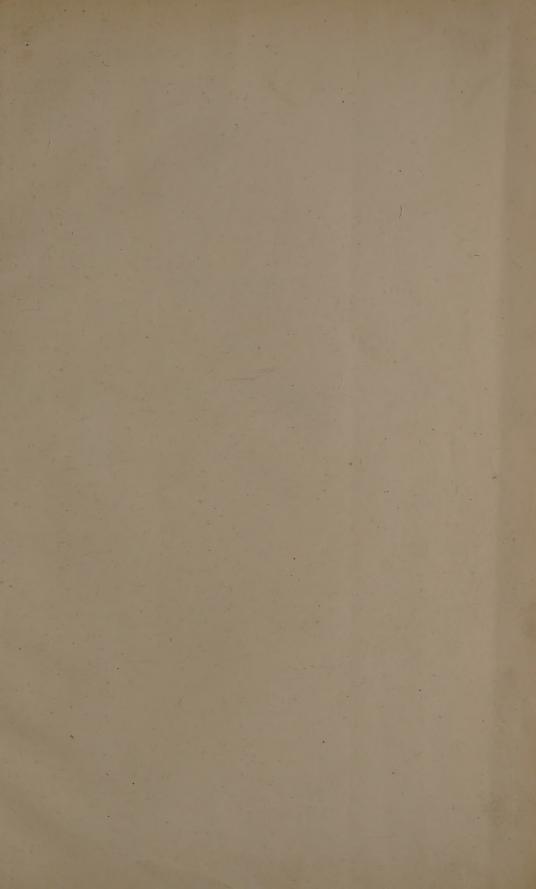
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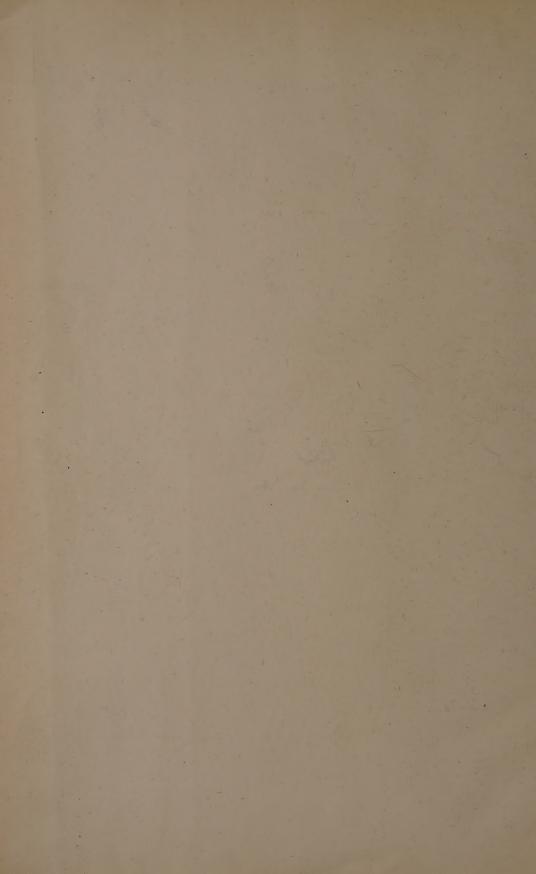
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DER

KOHLENSTOFF-VERBINDUNGEN

П.

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Theil I umfasst Titel, Vorwort, Einleitung und die Seiten 1—1264.

Theil II umfasst die Seiten 1265—2482.

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LEXIKON

DER

KOHLENSTOFF-VERBINDUNGEN

Von

M. M. RICHTER.

II. ABTHEILUNG:

VERBINDUNGEN $C_{12}-C_{867}$ — PROCENTTABELLEN REGISTER DER EIGENNAMEN

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Procenttabellen		•	۰					. •		۰	٠	2277
Register der Eigennamen								J	0			2453



- 1) Diäthyläther d. Triäthyl-ββ-Dioxyäthylammoniumjodid. Sm. 78° $\mathbf{C}_{12}\mathbf{H}_{28}\mathbf{O}_{2}\mathbf{N}\mathbf{J}$ (B. **30**, 1506).
- 1) Tetraoxypropylidenphosphoniumchlorid. Sm. 128° (B. 21, 331). $\mathbf{C}_{12}\mathbf{H}_{28}\mathbf{O}_{4}\mathbf{ClP}$ **- I**, 941.
- 1) Tetraoxypropylidenphosphoniumbromid. Sm. 105-106° (B. 21, C₁₂H₂₈O₄BrP 332). — I, 941.
- 1) Tetraoxypropylidenphosphoniumjodid. Sm. 95-960 (A. ch. [6] 2, 24). $\mathbf{C}_{12}\mathbf{H}_{28}\mathbf{O}_{4}\mathbf{JP}$ **- I**, 941.
- C₁₂H₂₈O₈N₆Fe 1) Imidoferrocyanwasserstoffmethyläther. 2 HCl (B. 21, 934). I, 1488.
- C_{1.9}H₂₈N₄Br₂S₂ 1) Verbindung (aus s-Diäthylharnstoff u. Aethylenbromid). Sm. 184° (B. **23**, 2199). — **I**, 1324.
- 1) Aethylenpentaäthylphosphammoniumchlorid. 2 + PtCl₄ (A. Spl. C₁₂H₃₀NCl₂P **1**, 302). — **I**, 1506.
- C₁₉H₃₀NBr₂P 1) Aethylenpentaäthylphosphammoniumbromid (A. Spl. 1, 302). I, 1506.
- $C_{12}H_{31}O_{12}ClS_4$ 1) Chlorpropan- α -Sulfonsäure + 3 Molec. Propan- α -Sulfonsäure.
- Ba₂ $(\vec{B}.$ 16, 327). C₁₂ $\mathbf{H}_{34}O_{10}\mathbf{N}_{2}\mathbf{Si}_{4}1)$ Diamid d. Tetrakieselsäurehexaäthylester (A. ch. [5] 7, 472). I, 346.

C₁₂-Gruppe mit fünf Elementen.

- $\mathbf{C}_{12}\mathbf{H}_4\mathbf{O}_6\mathbf{N}_2\mathbf{Br}_6\mathbf{S}_2$ 1) 2,4,6,2',4',6'-Hexabromazobenzol-3,3'-Disulfonsäure $+ \mathbf{x} \mathbf{H}_2\mathbf{O}$. $K_2 + 3H_2O$, $Ca + 7H_2O$, $Ba + 2H_2O$, $Pb + 4H_2O$ (A. 215, 225). — IV, 1368.
- 1) Tetrachlordiphenylaminsulfoxyd (B. 29, 1364). C₁₂H₅ONCl₄S
- C₁₂H₅ONBr₂S 1) Dibromindophenin (B. 18, 2638). — II, 1618.
- $\mathbf{C}_{12}\mathbf{H}_5\mathbf{O}_5\mathbf{N}_3\mathbf{C}_{12}\mathbf{S}$ 1) Dichlordinitrodiphenylaminsulfoxyd (B. 29, 1366). C₁₂H₆ONBrS 1) Bromindophenin (B. 12, 1312; 16, 1478). — II, 1618.
- 1) Chlordibromnitrosoazobenzol. Sm. 143-144° (J. pr. [2] 44, 68). C₁₂H₆ON₃ClBr₂ · IV, 1354.
- $\mathbf{C}_{12}\mathbf{H}_{6}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{Cl}_{2}\mathbf{S}$ 1) Di[4-Chlor-2-Nitrophenyl]sulfid. Sm. 149—150° (A. 197, 79). — II, 803.
- C₁₂H₈O₄N₄Br₆S₂ 1) Amid d. 2, 4, 6, 2', 4', 6'-Hexabrombenzol-3, 3'-Disulfonsäure (A. 215, 227). IV, 1368.
- 1) 2,4,6-Trichlorphenylester d. ?-Nitrobenzolsulfonsäure. Sm. 90 C₁,H₆O₅NCl₃S bis 91°. — II. 671.
- 1) 2,4,6-Tribromphenylester d.?-Nitrobenzolsulfonsäure. Sm. 151°. C₁₂H₆O₅NBr₃S **– II**, 674.
- 1) 2,4,6-Trijodphenylester d. ?-Nitrobenzolsulfonsäure. Sm. 155 $\mathbf{C}_{12}\mathbf{H}_{6}\mathbf{O}_{5}\mathbf{N}\mathbf{J}_{8}\mathbf{S}$ bis 156°. — II, 677.
- $\mathbf{C}_{12}\mathbf{H}_{6}\mathbf{O}_{6}\mathbf{N}_{2}\mathbf{Br}_{4}\mathbf{S}_{2}$ 1) 2,4,2',4'-Tetrabromazobenzol-5,5'-Disulfonsäure. $\mathbf{K}_{2}+3\,\mathbf{H}_{2}\mathbf{O}_{7}$
 - Ca + $4\,\mathrm{H}_2\mathrm{O}$, Ba + $\mathrm{H}_2\mathrm{O}$, Pb + $2^{1/2}\,\mathrm{H}_2\mathrm{O}$ (A. 215, 217). TV, 1367. 2) 2, 6, 2', 6'- Tetrabromazobenzol-4, 4'- Disulfonsäure. $\mathrm{K}_2 + 2\,\mathrm{H}_2\mathrm{O}$, $Ca + 4H_2O$, $Ba + 3H_2O$, Pb (A. 215, 222). — IV, 1367.
 - 3) isom. Tetrabromazobenzoldisulfonsäure. K2, Ba (A. 215, 221).
- IV, 1368. $\mathbf{C}_{12}\mathbf{H}_{6}\mathbf{O}_{8}\mathbf{N}_{2}\mathbf{Cl}_{2}\mathbf{S}_{2}$ 1) Chlorid d. Dinitrobiphenyl-2,2¹-Disulfonsäure. Sm. 202⁰ (A.
 - 261, 331). II, 226. 2) Chlorid d. Dinitrobiphenyl-4,4'-Disulfonsäure. Sm. 166° (B.
- 13, 1411). II, 226. C₁₂H₆O₈N₂Cl₄S₄ 1) Chlorid d. Azobenzol-2,4,2',4'-Tetrasulfonsäure. Sm. 58° (A. 203, 71). — IV, 1366.
- $C_{12}H_8O_8N_9Br_9S$ 1) s-Dibromdinitrodioxydiphenylsulfon, Sm. 284—285°. Na₂ + 2H₂O (B. 9, 660). — II, 841.
- 1) Dijoddinitrodioxydiphenylsulfon. Sm. 294—295°. $Na_2 + 2H_2O$ $\mathbf{C}_{12}\mathbf{H}_{6}\mathbf{O}_{8}\mathbf{N}_{2}\mathbf{J}_{2}\mathbf{S}$ (B. 9, 661). — II, 841.
- $\mathbf{C}_{12}\mathbf{H}_{6}\mathbf{O}_{8}\mathbf{N}_{4}\mathbf{Br}_{4}\mathbf{S}_{2}$ 1) Diazoderivat (aus ?-Tetrabrom-4,4'-Diamidobiphenyl-2,2'-Disulfonsäure) (A. **202**, 366). **IV**, 1501.

1) 2,4-Dichlorphenylimid - 2,4-Dichlorphenylamid d. Phosphor-C, HON, CLP säure (B. 29, 724).

1) Chlorid d. 2,5-Dichlorazobenzol-?-Sulfonsäure. Sm. 161 ° (B. C19H7O9N9Cl3S 15, 2559). — IV, 1367.

1) 2,4,6-Tribrom-1-Phenylsulfondiazobenzol. Zers. bei 1220 (B. $\mathbf{C}_{12}\mathbf{H}_7\mathbf{O}_2\mathbf{N}_2\mathbf{Br}_3\mathbf{S}$ 30, 315). — IV, 1523.

1) 4-Chlor-?-Nitrophenylimid-4-Chlor-?-Nitrophenylamid d.Phos-C10H7O5N4Cl2P phorsäure. Sm. über 300° (B. 28, 619).

1) Chlorid d. ?-Nitrobiphenyl-4,4'-Disulfonsäure. Sm. 130-131°

C19H7O6NCl9S2 (B. 13, 1411). — II, 226.

C₁₂H₇O₈N₃Br₄S₂ 1) Säure (aus 4,6-Dibrom-1-Amidobenzol-3-Sulfonsäure). K (A. 191, 229). — IV, 1537. 1) Chlorid d. 4-Oxyazobenzoltrisulfonsäure. Sm. 217—220° (A. 215,

C1. H7O7N2Cl3S3 235; B. 15, 1297). — IV, 1412. 1) Chlorid d. 4-Chlorazobenzol-4'-Sulfonsäure. Sm. 130° (B. 19,

C1,H8O,N,Cl,S 2973). — IV, 1366. 1) Monochlorid d. Thiophosphorsäuredi-4-Chlorphenylester. Sm.

C₁,H₂O₂Cl₃SP 92° (B. 31, 1109).

1) 2,5-Dichlorazobenzol-P-Sulfonsäure + xH₂O. Na, K, Ca, Ba + C19H8O3N9Cl3S xH_2O , Pb, Ag (B. 13, 1183; 15, 2558). — IV, 1366.

1) ?-Dibromazobenzol-?-Sulfonsäure + 3H2O. K, Ag (A. 165, 197). C, H, O, N, Br, S - IV. 1367.

1) Chlorid d. 4-Nitrobiphenyl-4'-Sulfonsäure. Sm. 178° (B. 13. C12H8O4NCIS 1409—1410). — II, 226.

1) Chlorid d. Azobenzol-3,3'-Disulfonsäure. Sm. 166° (145°; 123 $\mathbf{C}_{12}\mathbf{H}_{8}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{Cl}_{2}\mathbf{S}_{2}$ bis 125°) (A. 202, 335; B. 11, 763; 14, 1358; M. 3, 243). — IV, 1365.

2) Chlorid d. Azobenzol-3,4'-Disulfonsäure. Sm. 123-1250 (1200) (B. 14, 1358; A. 215, 215). — IV, 1365.

3) Chlorid d. Azobenzol-4, 4'-Disulfonsäure. Sm. 170° (M. 3, 242; A. 215, 214). — IV, 1366.

1) 2,4-Dibromazoxybenzol-5-Sulfonsäure. $K + 2H_2O$ (B. 18, 1425). C12H8O4N9Br.S **– IV**, 1339.

 $C_{19}H_2O_4N_3S_3As_3$ 1) ?-Nitrophenylarsensesquisulfid. Sm. 119 $^{\circ}$ (B. 27, 271). — IV, 1686. $C_{12}H_8O_4N_4Br_4S_2$ 1) Amid d. 2, 4, 2', 4'-Tetrabromazobenzol-5, 5'-Disulfonsäure (A.

215, 220). — IV, 1367. 2) Amid d. 2, 6, 2', 6'-Tetrabromazobenzol-4, 4'-Disulfonsäure (A. 215, 224). — IV, 1367.

C₁₂H₈O₅N₂Cl₃S₂ 1) Chlorid d. Azoxybenzol-3, 3'-Disulfonsäure. Sm. 138° (A. 202, 343). **— IV**, *1339*.

 $C_{10}H_3O_6N_0Br_0S_2$ 1) 2,2'-Dibromazobenzol-5,5'-Disulfonsäure. K_2+2H_2O (B. 18, 1422). — IV, 1367.

 C_{1} , H_{3} , O_{6} , N_{2} , Br_{4} S, 1) ?-Tetrabrom-4,4'-Diamidobiphenyl-2,2'-Disulfonsäure + 2 u. $4\,\mathrm{H}_2\mathrm{O}$. Zers. bei 170°. $\mathrm{NH}_4 + 2^{1/2}\,\mathrm{H}_2\mathrm{O}$, $\mathrm{K} + {}^{1/2}\,\mathrm{H}_2\mathrm{O}$, $\mathrm{K}_2 + 3\,\mathrm{H}_2\mathrm{O}$, $\mathrm{Ca} + 4^{1/2}\,\mathrm{H}_2\mathrm{O}$, $\mathrm{Ba} + 2\,\mathrm{u}$. $6\,\mathrm{H}_2\mathrm{O}$, $\mathrm{Pb} + 6\,\mathrm{H}_2\mathrm{O}$, $\mathrm{Ag}_2 + 2^{1/2}\,\mathrm{H}_2\mathrm{O}$, $\mathrm{Ag}_3 + 2^{1/2}\,\mathrm{H}_3\mathrm{O}$, $\mathrm{Ag}_3 + 2^{$

61, 769; 67, 910). — II, 616.

2) 1-Chlor-6-Brom-2-Naphtylamid d. Essigsäure. Sm. 216° (B. 24 [2] 749). — II, 616.

C, HONBrJ 1) 4-Brom-1-Jod-2-Naphtylamid d. Essigsäure. Sm. 235° (Soc. 61, 767). — II, 616.

C₁₂H₉ON,Cl₂P 1) 3-Chlorphenylimid-3-Chlorphenylamid d. Phosphorsäure. Sm. 341° (B. 29, 722).

2) 4-Chlorphenylimid-4-Chlorphenylamid d. Phosphorsäure. Sm. über 300° (B. 28, 619).

C₁₉H₉ON₉Br₉P 1) 3-Bromphenylimid-3-Bromphenylamid d. Phosphorsäure. Sm. C1.H.O.N.CIS

329° (B. **29**, 723). 1) **4-Chlor-1-Phenylsulfondiazobenzol.** Sm. 102—103° (106—107°) (B. 30, 314; 31, 638). - IV, 1520.2) Chlorid d. Azobenzol-4-Sulfonsäure. Sm. 82° (Z. 1870, 643;

M. 3, 238). — IV, 1364.

- $\mathbf{C}_{12}\mathbf{H}_{0}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{BrS}$ 1) **4-Brom-1-Phenylsulfondiazobenzol**, Sm. 116° (B. 30, 314). IV, 1522.
- C₁₂H₉O₃N₂ClS 1) 4-Chlorazobenzol-4'-Sulfonsäure. Sm. 148°. Na, Ba (B. 19, 2972).
 IV, 1366.
 - Chlorid d. 4-Oxyazobenzol-4'-Sulfonsäure. Zers. bei 250° (A. 215, 232). IV, 1411.
 - 3) Chlorid d. isom. Oxyazobenzolsulfonsäure. Sm. 122° (B. 15, 1296; A. 215, 232). IV, 1411.
- $C_{12}H_9O_3N_2BrS$ 1) 3-Bromazobenzol-P-Sulfonsäure + $1^1/_2H_2O$. Na (M. 8, 54). IV, 1367.
 - 2) 4-Bromazobenzol-4'-Sulfonsäure + 3H₂O. Na, K (M. 5, 162; 8, 53). IV. 1367.
- 53). IV, 1367. C₁₂H₉O₄N₂ClS 1) Chlorid d. 4-Nitro-l-Phenylamidobenzol-2-Sulfonsäure. Sm. 102—104° (B. 24, 3799). — II, 577.
- $C_{19}H_{9}O_{4}N_{2}BrS$ 1) **2-Bromazoxybenzol-5-Sulfonsäure.** $K + 2H_{2}O$ (B. 18, 1423). — IV, 1339.
- $\mathbf{C}_{12}\mathbf{H}_{10}\mathbf{ONCl}_{2}\mathbf{P}$ 1) Diphenylmonamid d. Phosphorsäuredichlorid. Sm. 57° (B. 28, 613).
- C₁₂H₁₀ONCl₄Br 1) 1,2,3,4-Tetrachlor-1-Brom-2-Acetylamido-1,2,3,4-Tetrahydronaphtalin. Sm. 115° u. Zers. (*J. pr.* [2] 57, 13).
- $C_{12}H_{10}ON_{2}ClBr$ 1) Aethyläther d. 6-Chlor-3-[?-Brom-4-Oxyphenyl]-1,2-Diazin. Sm. 152—153° (B. 32, 406).
- $\mathbf{C}_{12}\mathbf{H}_{10}\mathbf{ON}_2\mathbf{Cl}_3\mathbf{P}$ 1) $\mathbf{Di}[\mathbf{4}\text{-}\mathbf{Chlorphenylmonamid}]$ d. Phosphorsäuremonochlorid (B. 28, 618).
- C₁₂H₁₀O₂NCIS 1) Phenylamid d. 4-Chlorbenzol-1-Sulfonsäure. Sm. 104° (B. 9, 426). II, 425.
 - 2) 4-Chlorphenylamid d. Benzolsulfonsäure. Sm. 120—122° (B. 9, 425; J. 1879, 417). II, 424.
- C₁₂H₁₀O₂NBrS 1) Phenylamid d. 4-Brombenzol-1-Sulfonsäure. Sm. 119° (B. 8, 597). II, 425.
- C₁₂H₁₀O₂N₃ClS 1) Amid d. 4-Chlorazobenzol-4'-Sulfonsäure. Sm. 211° (B. 19, 2974). IV, 1366.
- $C_{12}H_{10}O_2ClBr_2P$ 1) Chloriddibromid d. Diphenylphosphorsäure (A. 253, 111). II, 660.
- C₁₂H₁₀O₂ClSP 1) Chlorid d. Diphenylthiophosphorsäure. Sm. 66—67°; Sd. 194°_{11} (A. 253, 117; B. 31, 1101). II, 660.
- $\mathbf{C}_{12}\mathbf{H}_{10}\mathbf{O}_3\mathbf{NCl}_2\mathbf{P}$ 1) Amid d. Di[4-Chlorphenyl] phosphorsäure. Sm. 152° (B. 30, 2376).
- $\mathbf{C}_{12}\mathbf{H}_{10}\mathbf{O}_{3}\mathbf{N}_{2}\mathbf{Br}_{2}\mathbf{S}$ 1) ?-Dibrom-s-Diphenylhydrazin-4-Sulfonsäure. K + H₂O (B. 18, 1425). IV, 1501.
- C₁₂H₁₀O₄NClS 1) 1-Chlor-2-Acetylamidonaphtalin-?-Sulfonsäure $+ 2 H_2 O$. Na $+ 2 H_2 O$, K $+ H_2 O$, Mg $+ 9 H_2 O$, Ca $+ 8 H_2 O$, Ba $+ 4 H_2 O$, Zn $+ 10 H_2 O$. H, 630.
- $C_{12}H_{10}O_4N_4S_2Fe_21$) Phenyldinitrosoeisensulfid. Sm. 179° (C. 1895 [2] 435; 1896 [1] 794).
- C₁₂H₁₀O₅NClS 1) Aethylester d. 2-Chlor-I-Nitronaphtalin-5-Sulfonsäure. Sm 110°. II, 215.
 - 2) Aethylester d. 2-Chlor-1-Nitronaphtalin-6-Sulfonsäure. Sm. 139°. II, 215.
 - Aethylester d. 2-Chlor-l-Nitronaphtalin-7-Sulfonsäure. Sm. 184° (B. 25, 2485). II, 215.
 - 4) Aethylester d. 2-Chlor-l-Nitronaphtalin-8-Sulfonsäure. Sm. 181°. II, 216.
 - 5) Aethylester d. 4-Chlor-l-Nitronaphtalin-6-Sulfonsäure. Sm. 89°. II, 216.
 - 6) Aethylester d. 4-Chlor-1-Nitronaphtalin-7-Sulfonsäure. Sm 123°. II, 216.
 - 7) Aethylester d. 5-Chlor-1-Nitronaphtalin-6-Sulfonsäure. Sm. 116°. II, 216.
 - 8) Aethylester d. 8-Chlor-1-Nitronaphtalin-2-Sulfonsäure. Sm. 124° (108°). II, 216.

9) Chlorid d. ?-Nitro-2-Oxynaphtalinäthyläther-6-Sulfonsäure. C10H10O5NCIS Sm. 146° (C. 1895 [1] 1064).

10) Chlorid d. ?-Nitro-2-Oxynaphtalinäthyläther-8-Sulfonsäure. Sm. 155° (C. 1895 [1] 1064).

 $C_{12}H_{10}O_6NBrS_2$ 1) 4¹-Brom-4-Amidobiphenyl-2,2¹-Disulfonsäure. Ba + xH₉O (A. **261**, 318). — II, 634.

 $\mathbf{C}_{12}\mathbf{H}_{10}\mathbf{O}_{6}\mathbf{N}_{2}\mathbf{Br}_{2}\mathbf{S}_{2}\mathbf{1})$? - Dibrom - 4,4' - Diamidobiphenyl - 2,2'-Disulfonsäure + $\mathbf{H}_{2}\mathbf{O}$. $K + 2H_2O, K_2 + H_2O, Ca + 3H_2O, Ba + 5H_2O, Pb + 4H_2O, Ag_2 + 31/2, H_2O$ (A. 202, 367). — IV, 1501.

1) P-Thiophenoxylphenphosphazin. Sm. 1850 (B. 31, 1112). $\mathbf{C}_{12}\mathbf{H}_{11}\mathbf{ON}_{2}\mathbf{SP}$

1) Chlorid d. 4,4'-Diamidobiphenyl-?-Sulfonsäure. Sm. oberh. 240° (B. 11, 1048). — IV, 968. C₁₂H₁₁O₂N₂ClS

C₁₂H₁₁O₂N₂Cl₂P 1) Di[4-Chlorphenylmonamid] d. Phosphorsäure. Sm. 126°. Cu (B. 28, 618).

C₁₂H₁₁O₃NClBr 1) Chlormethylat d. Bromtarkonin. 2 + PtCl₄, + AuCl₃ (A. 212, 173; **245**, 325). — III, *919*.

1) Chlormethylat d. Jodtarkonin + H₂O. 2 + PtCl₄, + AuCl₃ (A. C₁₂H₁₁O₃NClJ **245**, 318). — III, 919.

1) Jodmethylat d. Bromtarkonin. Sm. 203-2040 (A. 212, 171). -C19H11O8NBrJ III, 919.

1) Di[Phenylamid] d. Phosphorsäuremonochlorid (Dianilin-n-Oxy-C19H19ON9ClP chlorphosphin). Sm. 174° (B. 27, 2574; 29, 720).

 β-Chloräthyläther d. Benzol-1,2-Dicarbonsäure-β-Merkaptoäthylimid. Sm. 76—77° (B. 24, 3099). — II, 1801.
 β-Bromäthyläther d. Benzol-1,2-Dicarbonsäure-β-Merkapto- $\mathbf{C}_{12}\mathbf{H}_{12}\mathbf{O}_{2}\mathbf{NClS}$

 $\mathbf{C}_{12}\mathbf{H}_{12}\mathbf{O}_{2}\mathbf{NBrS}$ äthylimid. Sm. 89-90° (B. 24, 3100). - II, 1801.

1) Monamid d. Thiophosphorsäurediphenylester. Sm. 115° (B. 31, C19H19O2NSP

1) Amid d. 1-Brom-2-Oxynaphtalinäthyläther-6-Sulfonsäure. Sm. $\mathbf{C}_{12}\mathbf{H}_{12}\mathbf{O}_{3}\mathbf{NBrS}$ 191° (C. 1895 [1] 1064).

1) Jodmethylat d. Dibromeytisin (C. 1897 [2] 555).

 $\mathbf{C}_{12}\mathbf{H}_{15}\mathbf{ON}_{2}\mathbf{Br}_{2}\mathbf{J}$

 $\mathbf{C}_{12}^{\mathbf{H}_{16}^{\mathbf{H}_{16}}}\mathbf{ON}_{2}\mathbf{ClBr}$ 1) Chlormethylat d. Bromcytisin. 2 + PtCl₄, + AuCl₃ (C. 1897) [2] 555).

 $\mathbf{C}_{12}\mathbf{H}_{16}\mathbf{ON}_{2}\mathbf{BrJ}$ 1) Jodnethylat d. Bromcytisin (C. 1897 [2] 555).

 Triäthylester d. 4-Sulfophenylamidophosphorsäure. Sm. 102° (J. pr. [2] 20, 251). — II, 569. $\mathbf{C}_{12}\mathbf{H}_{20}\mathbf{O}_{6}\mathbf{NSP}$

C₁₂-Gruppe mit sechs Elementen.

C₁, H₄O₄N₂, Cl₂Br₄S₂ 1) Chlorid d. 2, 4, 2', 4'-Tetrabromazobenzol-5, 5'-Disulfonsäure.

Sm. 232—233° (A. 215, 220). — IV, 1367. 2) Chlorid d. 2, 6, 2', 6'-Tetrabromazobenzol-4, 4'-Disulfonsäure. Sm. 258—262° (A. 215, 224). — IV, 1367.

1) Monamid d. Thiophosphorsäuredi-4-Chlorphenylester. Sm. $C_{12}H_{10}O_2NCl_2SP$ 96° (B. 31, 1109).

C₁₈-Gruppe mit einem Element.

C13 H10

C 94,0 — H 6,0 — M. G. 166. 1) Fluoren. Sm. 112—113°; Sd. 294—295°. Pikrat Sm. 79—80°. Lit. bedeutend. — II, 244.

2) γ-Methylenbiphenyl. Sm. 116°; Sd. 295° (Soc. 37, 708; 43, 164). — II, 246.

3) δ-Methylenbiphenyl. Sm. 205°; Sd. 320° (Soc. 37, 708). — II, 246.

4) Sesquoien. Sm. 205°; Sd. 290—300° (B. 13, 1656; 14, 2203). — II, 246. 5) Kohlenwasserstoff (aus Phtalsäure). Sm. 243—244° (J. r. 11, 260; B. 11, 1397). — II, 247.

 $C_{13}H_{12}$

C13 H16

 $C_{13}H_{18}$

 $C_{18}H_{20}$

C₁₃H₂₄

 $C_{13}H_{26}$

 $C_{13}H_{28}$

C 92,8 — H 7,2 — M. G. 168.

- 1) Diphenylmethan. Sm. 26-27°; Sd. 261-262°. Lit. bedeutend. -II, 228.
- 2) 2-Methylbiphenyl. Sd. 258-260° (261-264°) (B. 7, 1548; 28, 2551; 30, 369; G. 25 [1] 132). — II, 230. 3) 3-Methylbiphenyl. Sd. 272—277° (Bl. [3] 7, 181; A. ch. [6] 15, 242;
- 3. 38. 28. 2547). II, 230.

 4) 4-Methylbiphenyl. Sd. 263—267° (J. 1876, 419; B. 26, 1997; 30, 369; Soe. 37, 706; G. 25 [1] 131). II, 230.

 5) α-[1-Naphtyl]propen. Sd. 137—138°₁₀. Pikrat (Bl. [3] 17, 813). C 91,8 H 8,2 M. G. 170.

 $C_{13}H_{14}$

- 1) 1-Propylnaphtalin. Sd. 265-270°. Pikrat (Sm. 88°) (M. RICHTER, Dissertat., 1884; A. ch. [6] 12, 315). — II, 220.
 2) 2-Propylnaphtalin. Sd. 270° u. ger. Zers. (M. Richter, Dissertat.,
- 1884).
- 3) ?-Isopropylnaphtalin (aus Petroleum). Sd. 240—250° (B. 13, 1732; 15, 733, 734).
 4) 2,3,7-Trimethylnaphtalin? Sm. 92—93°; Sd. 263—264° (Soc. 63, 336).

C 90,7 — H 9,3 — M. G. 172.

1) 1-Methyl-3-Phenyl-1,2,3,4-Tetrahydrobenzol. Sd. 248-252° (A. **303**, 263).

2) Kohlenwasserstoff (aus Alantolsäurelakton). Sd. 288° (A. 285, 379). C 89,6 — H 10,4 — M. G. 174.

1) α-[?-Isopropylphenyl]-α-Buten (Isopropylbutenylbenzol). Sd. 242—243° (J. 1877, 381). — II, 173.

2) α -[4-Isopropylphenyl]- β -Methylpropen (β -Isopropylbutenylbenzol). Sd.

234—235° (Soc. 35, 141). — II, 173.

3) Jonen (1,1,6-Trimethyl-1,2,3,9-Tetrahydronaphtalin). Sd. 106—107°₁₀ (B. 26, 2693, 2700; 31, 873; Bl. [3] 15, 1008).

4) Iren (1,1,6-Trimethyl-1,4,9,10-Tetrahydronaphtalin). Sd. 113—115°₉ (B. 2602).

26, 2682, 2689, 2705).

5) Oktohydrofluoren. Sd. 272—275° (Bl. [3] 4, 266). — II, 245.
 C 88,6 — H 11,4 — M. G. 176.

1) Dekahydrofluoren. Sd. 245—256° (Bl. [3] 4, 266). — II, 245.

1) Dekkhylrohutoren. Sd. 243—250° (Bt. [5] 4, 200). — II, 275.
2) Heptylbenzol. Sd. 233° (B. 19, 2987; Bl. 47, 48). — II, 37.
3) Dimethylisoamylbenzol. Sd. 232—233° (4. 141, 168). — II, 37.
4) 2,4-Dipropyl-1-Methylbenzol. Sd. 230° (J. pr. [2] 43, 535). — II, 37.
5) 3,5-Dipropyl-1-Methylbenzol. Sd. 243—248° (B. 8, 1259). — II, 37.
6) 2-Propyl-3-Isopropyl-1-Methylbenzol. Sd. 225° (J. pr. [2] 46, 487).

· II, 37.

7) 2,4-Diisopropyl-1-Methylbenzol. Sd. 220° (C. 1895 [2] 287).

8) Kohlenwasserstoff (aus Ammoniakgummiharz). Sd. 235° (B. 12, 1663). II, 38.

9) Kohlenwasserstoff (aus Dehydrophotosantonsäure). Sd. 225° (G. 23 [1] 290). — II, 38.

10) Kohlenwasserstoff (aus Pyrophotosantonsäure). Sd. 221,5—223° (G. 12, 83). — II, 38. C 87,7 — H 12,3 — M. G. 178.

 $C_{18}H_{22}$

Dodekahydroffuoren. Sd. 230° (B. 22, 781). — II, 245.
 C 86,7 — H 13,3 — M. G. 180.

1) 1-Methyl-3-Hexyl-1,2,3,4-Tetrahydrobenzol. Sd. 228-230° (A.

289, 165). C 85,7 — H 14,3 — M. G. 182.

1) Trideken (aus Erdöl). Sd. 232,70 (Z. 1868, 232). — I, 124. C 84,8 — H 15,2 — M. G. 184.

1) norm. Tridekan. Sd. 234° (B. 15, 1699; 22, 2134). — I, 105. 2) Kohlenwasserstoff (aus Fluoren) oder $C_{18}H_{26}$? Sd. 240° (A. ch. [5] 7, 510). — **I**, 106.

C₁₈- Gruppe mit zwei Elementen.

 $\mathbf{C}_{13}\mathbf{H}_{3}\mathbf{Cl}_{7}$ ·1) Heptachlorfluoren (B. 16, 1103).

1) Verbindung (aus Dichlorfluoren) (Soc. 43, 170). — II, 245. C₁₈H₅Cl₇

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C 51,0 - H 1,9 - O 47,1 - M. G. 306.
C13H6O9
                 1) Galloflavin. K<sub>2</sub> (B. 20, 2328). — II, 1926.
1) Trichlorfluoren. Sm. 147° (B. 16, 1082). — II, 245.
C12H7Cl2
                 1) Tribromfluoren. Sm. 161-162° (A. ch. [5] 7, 492; B. 16, 1082). -
C_{13}H_7Br_3
                    II, 245.
                 C 86,7 — H 4,4 — O 8,9 — M. G. 180.
1) Pyrenketon. Sm. 142° (A. 240, 178). — III, 242.
C13H8O
                2) 9-Ketofluoren (Biphenylenketon). Sm. 84°; Sd. 341,5° (A. 166, 373; 193, 115; 229, 156; 279, 258; 290, 244; 291, 15; B. 11, 212; 16, 502; 27, 3484; 28, 113; 29, 228; A. ch. [5] 7, 504). — III, 240.
3) Isobiphenylenketon. Sm. 83°; Sd. 235—350° (B. 21, 2005). — III, 242.
                 4) Pseudobiphenylenketon. Sm. 85° (B. 29, 228). — III, 242.
                     C.79,6 - H.4,1 - O.16,3 - M.G.196.
C13H8O2
                 1) 1-Oxy-9-Ketofluoren. Sm. 115° (B. 28, 112, 113; 31, 3034).
                    III. 241.
                2) 4-Oxy-9-Ketofluoren. Sm. 249° (A. 284, 315, 321). — III, 241.
3) Fluorenchinon. Sm. 181—182° (A. ch. [5] 7, 500). — III, 404.
4) γ-Methylenbiphenylchinon. Sm. 280—281° (Soc. 37, 709). — III, 404.
5) δ-Methylenbiphenylchinon. Sm. 276—278° (Soc. 37, 709). — III, 404.
                 6) Xanthon (Carbonyldiphenylenoxyd; o-Benzophenonoxyd). Sm. 173-174°;
                    Sd. 349 - 350^{\circ}_{780}. Lit. bedeutend. — III, 195.
                 7) 1-Naphtylpropiolsäure (1-Naphtyläthincarbonsäure). Sm. 138-139° u.
                    Zers. Ba + H_2O (Bl. [3] 7, 645). - II, 1473.
                 8) Naphtocumarin (Lakton d. β-Naphtocumarsäure). Sm. 118° (B. 16, 685).
                      - II, 1694.
                9) Lakton d. Isonaphtocumarsäure. Sm. 141° (B. 17, 1651). — II, 1695.
               10) Lakton d. 1-[2-Oxyphenyl] benzol-2-Carbonsäure. Sm. 92,5° (J. pr.
               [2] 28, 294; A. 284, 316). — II, 1695.
11) Verbindung (aus 2,2'-Diamidodiphenylketon). Sm. 115° (A. 283, 176;
                    B. 28, 112). — III, 197.
                    C 73,6 - H 3,8 - O 22,6 - M. G. 212.
C_{13}H_8O_3
                 1) 1-Oxyxanthon. Sm. 146-147°. Na, Na + NaOH (Am. 5, 91; A. 254,
                     290). — III, 200.
                 2) 2-Oxyxanthon. Sm. 231° (B. 25, 1648). — III, 201.
3) 3-Oxyxanthon. Sm. 242° (B. 24, 3981). — III, 201.

4) 4-Oxyxanthon. Sm. 224° (B. 25, 1649). — III, 201.
5) Formaldehydoxyfluoron (B. 27, 2888).
6) β-Naphtofuran-1-Carbonsäure. Sm. 191—192° (B. 30, 1703).

C13H8O4
                    C 68,4 - H 3,5 - O 28,1 - M. G. 228.
                 1) 1,3-Dioxyxanthon. Sm. 247° (B. 24, 1896, 3981). — III, 204.
                 2) 1,6-Dioxyxanthon (Isoeuxanthon) (B. 27, 1991). - II, 206.
                 3) 1,7-Dioxyxanthon (Euxanthon). Sm. 240°. Na<sub>2</sub>, K<sub>2</sub>, Mg, Ca, Ba (A. 51, 430; 155, 257; 254, 298; 259, 159; 290, 159; B. 10, 1397; 15, 1675; 17, 808; 24, 3983; 27, 1989; J. pr. [1] 33, 205; Soc. 73, 671).
                    III, 205.
                 4) 3,4-Dioxyxanthon + 3H<sub>2</sub>O. Sm. 240° (wasserfrei) (A. 269, 310; B. 24,
                    969). — III, 204.
                 5) 3,6-Dioxyxanthon (Isoeuxanthon). Zers. bei 300-350° (B. 18, 1986;
                    30, 971). - III, 205.

 β-Isoxanthon (β-Dioxycarbonyldiphenylenoxyd). Sm. oberh. 330° (B. 16,

                    863). — III, 206.
                 7) Säure (aus 3-Oxybenzol-1-Carbonsäure). Sm. 225° (J. pr. [2] 28, 304).
                    - II, 1516.
C_{13}H_8O_5
                    C 63,9 — H 3,3 — O 32,8 — M. G. 244.
                 1) 1,3,7-Trioxyxanthon + 2H<sub>2</sub>O (Gentisein). Sm. 315° (M. 12, 207).
                    III, 209.
                 2) 7,8-Dioxy-2-[2-Furanyl]-1,4-Benzpyron. Sm. 224—225° (B. 29, 2435).
                      - III, 728.
                 C 60,0 — H 3,1 — O 36,9 — M. G. 260.

1) Anhydropyrogallolketon (A. 209, 270). — III, 210.

2) Verbindung (aus Datiscetin). Sm. 260° (A. 277, 274). — III, 580.
C_{13}H_8O_6
 C13 H8 O7
                     C 56,5 — H 2,9 — O 40,6 — M. G. 276.
                 1) ?-Hexaoxy-9-Ketofluoren. Zers. bei 250° (B. 12, 1248). — III, 242.
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 $\mathbf{C}_{13}\mathbf{H}_{8}\mathbf{N}_{4}$

C 70.9 - H 3.6 - N 25.4 - M. G. 220.

1) Azimid d. 2-2-Amidophenyl] benzimidazol. Sm. 207-208°. HCl.

C13H8Cl9

(HCl,AuCl₃ + 2H₂O) (B. 31, 315). — IV, 1292. 1) 3,6-Dichlorfluoren. Sm. 128° (Soc. 43, 170; B. 16, 1103; A. 290, 245). - II, 245.

 $C_{13}H_8Cl_4$ C13 H8 Br2

 $\mathbf{C}_{13}\mathbf{H}_{9}\mathbf{N}_{3}$

 $C_{13}H_{10}O$

1) Verbindung (aus o-Methylendiphenylenoxyd) (B.10, 1398, 1401). - II, 992. 1) α-Dibromfluoren. Sm. 166-167° (165°) (A. ch. [5] 7, 490; B. 16, 1081, 1103; A. 290, 239). — II, 245.

2) β-Dibromfluoren. Sm. 162—163° (A. 193, 137; J. 1877, 416). — II, 245.

γ-Dibromfluoren (J. 1877, 416). — II, 245.

4) Dibrom-γ-Methylenbiphenyl. Sm. 162° (Soc. 37, 708). — II, 246.

 $\mathbf{C}_{13}\mathbf{H}_{9}\mathbf{N}$

4) Dibrom-γ-Methylenbiphenyl. Sm. 162° (Soc. 37, 708) → II, 246. C 87,1 → H 5,0 → N 7,8 → M. G. 179.

1) Akridin. Sm. 107°; Sd. oberh. 360°. HCl + H₂O, (2HCl, HgCl₂), (2HCl, PtCl₄), (HCl, AuCl₃), (HJ, J), (HJ, J₂), HNO₂ + 3 H₂O, H₂SO₃, H₂CrO₄, Pikrat, + NaHSO₃ (A. 158, 265; 224, 3; B. 13, 103; 16, 2829; 17, 102, 196, 438, 1370; 18, 124, 690; 19, 2452; 22, 3343; 25, 1735; 26, 3086; 27, 3364; 28, 1335; 29, 1190; M. 18, 124). — IV, 405.

2) Phenanthridin. Sm. 104°; Sd. oberh. 360°. HCl, (HCl, HgCl₂), (2HCl, PtCl₄), Pikrat (B. 22, 3340; 29, 1183; C. 1897 [1] 413; A. 266, 146; 276, 250). — IV, 407.

3) α-Anthrapyridin. Sm. 275° (B. 28, 1659) — IV, 410

3) α-Anthrapyridin. Sm. 275° (B. 28, 1659). — IV, 410.

3) α-Anthrapyridin. Sm. 166° (2 HCl, PtCl₄) (B. 28, 1658). — IV, 410.
4) β-Anthrapyridin. Sm. 166° (2 HCl, PtCl₄) (B. 28, 1658). — IV, 410.
5) α-Naphtochinolin. Sm. 52°; Sd. 338°₇₁₉. HCl, (2 HCl, PtCl₄ + 2 H₂O), HNO₃, H₂SO₄, H₂Cr₂O₇ + 6 H₂O, Pikrat (M. 2, 162; 4, 460; B. 23, 1235; 24, 2474; J. pr. [2] 57, 68, 85). — IV, 408.
6) β-Naphtochinolin. Sm. 93,5°; Sd. 349,5—350°₇₂₁. HCl + 2 H₂O, (HCl, ClJ), (2 HCl, PtCl₄ + 2 H₂O), H₂Cr₂O₇, Pikrat (B. 15, 896; 18, 1616; 2O, 3155; 22, 264; 23, 1240; 24, 2643; 29, 708; M. 4, 438; J. pr. [2] 57, 40, 85). — IV, 409.

49, 85). — IV, 409.

7) Nitril d. 1-Phenylbenzol-4-Carbonsäure. Sm. 84-85° (A. 172, 111;

282, 143). — **II**, 1463.

8) Verbindung (aus 4-Amidodiphenylketon; Benzophenylnitril?). Sm. 1180 (A. 210, 276; B. 14, 1841). — III, 184. C 75,3 — H 4,3 — N 20,3 — M. G. 207. 1) 3-Phenyl-1,2,4-Benztriazin. Sm. 123° (B. 27, 1691). — IV, 1186. 2) Nitril d. Azobenzol-4-Carbonsäure. Sm. 100—101° (B. 19, 3022;

23, 3256). — IV, 1460.

1) αα-Dichlor-4-Chlordiphenylmethan (p-Chlorbenzophenonchlorid). Fl. C₁₈H₉Cl₈ (B. 26, 28). — II, 228.

C₁₃H₉Br $\mathbf{C}_{13}\mathbf{H}_{9}\mathbf{Br}_{3}$

1) Bromfluoren. Sm. 102° (B. 16, 1103; A. 290, 238). — II, 245.
1) Bromfluorenbromid (A. ch. [5] 7, 494). — II, 246.
2) ?-Tribrom-2-Methylbiphenyl. Sm. 167—169° (G. 25 [1] 133).

C 85,7 - H 5,5 - O 8,8 - M. G. 182.1) 9-Oxyfluoren (Fluorenalkohol). Sm. 153° (A. ch. [5] 7, 504; B. 29, 229). **- II**, 1081.

2) 2-Methyl-α-Naphtofuran. Sm. 34-35°; Sd. 297-299° (B. 19, 1304).

3) 1-Methyl- β -Naphtofuran. Sm. 59° (B. 19, 1305). — III, 734.

4) Anhydrid d. 2, 2'-Dioxydiphenylmethan (Xanthen, Methylendiphenylenoxyd). Sm. 105°; Sd. 300—301° (315°) (B. 14, 191; 15, 1124, 1678; 16, 862; **26**, 72; *J.* pr. [2] **23**, 350; [2] **28**, 280). — II, 991.

5) Anhydrid d. α-Oxy-2-Oxydiphenylmethan? (Cyklophenylenbenzylidenoxyd). Sm. 170-210°. Na (M. 16, 271).

6) Diphenylketon (Benzophenon). Sm. 48-48,5°; Sd. 305° (296-297°), (95°_{0}) . Lit. bedeutend. - III, 178.

7) Allotropes Diphenylketon. Sm. 26—26,5° (A. 159, 378; 282, 323; J. r. 24, 621; B. 22, 550). — III, 179.

8) Aldehyd d. 1-Phenylbenzol-2-Carbonsäure. Sd. oberh. 310° (184°₂₁) (C. 1897 [1] 413; M. 19, 586).

9) Aldehyd d. 1-Phenylbenzol-4-Carbonsäure. Sm. 57°; Sd. 184°₁₁ (Bl.

[3] 17, 810). 10) Verbindung (Keton aus Aluminiumphenylat). Sm. 97°; Sd. 280° (B. 15, 359).

 $\mathbf{C}_{13}\overline{\mathbf{H}}_{10}\mathbf{O}_{2}$ C 78,8 — H 5,1 — O 16,1 — M. G. 198. 1) **Xanthydrol** (B. **26**, 1276). — II, 1114. C13H10O2

 $C_{18}H_{10}O_{3}$

2) 1,9-Dioxyfluoren? Sm. 201—201,5° (B. 31, 3035).

3) 2-Oxydiphenylketon. Sm. 40-41°; Sd. 250°₅₈₀. Na + C₂H₆O (B. 24, 3685; **29**, 824; A. **291**, 14; M. **17**, 104). — III, 193.

4) 3-Oxydiphenylketon. Sm. 116° (B. 24, 4044). - III, 193.

5) 4-Oxydiphenylketon. Sm. 1340 (A. 210, 249; 275; 269, 319; 290, 165; B. 6, 1245; 9, 1919; 10, 1969; 11, 1350, 2268; 14, 650, 1840; 24, 3894, 4040). — III, 193.

6) γ-Keto-γ-Phenyl-α-[2-Furanyl] propen (Furalacetophenon). Sd. 3170
 (B. 29, 2248). — III, 728.

7) 1-Phenylbenzol-2-Carbonsäure. Sm. 110-111°; Sd. 343-344°. K + H₂O, Ca + 2 H₂O, Ba + H₂O, Ag (A. 166, 374; 193, 120; 257, 100; 266, 143; 279, 260; J. pr. [2] 28, 305; G. 25 [1] 133; B. 28, 2552; 29, 231; M. 19, 587). — II, 1461.

8) 1-Phenylbenzol-3-Carbonsäure. Sm. 160-161° (166°). NH4, Na+ $2 H_2 O$, $Ca + 3 H_2 O$, $Ba + 3 \frac{1}{2} H_2 O$, Ag (A. 203, 132; M. 3, 808; Bl. 49, 98; [3] 7, 182; B. 27, 3390; 28, 2547). — II, 1462.

9) 1-Phenylbenzol-4-Carbonsäure. Sm. 218-219° (223-224°). K, Mg, Ca, Ba (A. 172, 112; 174, 213; 257, 100; 282, 141; B. 8, 1467; 28, 1556; G. 25 [1] 131). — II, 1462.

10) β -[1-Naphtyl]akrylsäure. Sm. 205—207° (211—212°). Ag (G. 11, 394;

B. 22, 2153; Bl. [3] 17, 813). — II, 1463. 11) β -[2-Naphtyl]akrylsäure. Sm. 196° (Bl. [3] 17, 815). 12) Acenaphten-?-Carbonsäure. Sm. 217° (A. 244, 58). — II, 1463.

13) Phenylester d. Benzolcarbonsäure. Sm. 14. 253, 254, 255, 261, 314°. + AlCl₃ (A. 53, 94; 75, 75; 90, 191; 171, 141; 210, 255; 281, 381; J. 1879, 675; G. 11, 65; Bl. [3] 9, 1049; J. pr. [2] 26, 63; B. 18, 1716; 27, 3183; 30, 1771; Ph. Ch. 10, 421). — II, 1145.

14) Verbindung (aus 2,2'-Diamidodiphenylketon). Sm. 115° (A. 283, 176).

15) Verbindung (aus Sesgnoien $C_{13}\hat{H}_{10}$). Sm. 170° (B. 14, 2240). — II, 247. C 72,9 — H 4,6 — O 22,5 — M. G. 214.

1) 2,4-Dioxydiphenylketon (Benzoresorcin). Sm. 144° (A. 210, 258; B. 27, 1997). — III, 199.

2) 2,5-Dioxydiphenylketon (Benzohydrochinon). Sm. 1250 (B. 24, 1343).

— III, 199. 3) 3,4[?]-Dioxydiphenylketon + ${}^{1}/{}_{2}$ H $_{2}$ O (Benzobrenzkatechin). Sm. 145° (wasserfrei), (134°) (A. 210, 262; G. 27 [1] 287). — III, 199.

4) 2,2'-Dioxydiphenylketon. Sm. 59-60°; Sd. 330-340° u. Zers. (J. pr. [2] 28, 285; B. 19, 2609; A. 283, 175). — III, 195.
5) 2,3'-Dioxydiphenylketon. Sm. 126° (121-222°) (B. 23, 2578; A. 283,

177). — III, *197*.

6) 2,4'-Dioxydiphenylketon. Sm. 142° (143-144°). Na₂, Ag₂+H₂O (B. 14, 656; 23, 2578; Am. 5, 85; A. 269, 318; 283, 177). — III, 197.

7) 3,3'-Dioxydiphenylketon. Sm. 162—163° (163—164°) (B. 13, 836; 23, 2578; 27, 2296; A. 218, 356; 283, 175). — III, 198.

8) 3,4'-Dioxydiphenylketon. Sm. 197° (200°) (A. 283, 178; B. 27, 2295).

— III, 198. 9) 4,4'-Dioxydiphenylketon. Sm. 210° (206°) (A. 194, 335; 202, 126; 217, 231, 388; 218, 354; 269, 319; 283, 175, 179; B. 6, 951; 11, 1348, 1434, 1748; 23, 2578; M. 3, 477; Am. 5, 86). — III, 198.

10) 3-Oxy-1-Phenylbenzol-2-Carbonsäure. Sm. 1590 (B. 28, 112, 1257;

31, 3034). — **II**, 1695.

11) 6-Oxy-1-Phenylbenzol-2-Carbonsäure + $\mathrm{H}_2\mathrm{O}$. Sm. 154° (wasserfrei). Ca (A. 284, 316, 320). — II, 1695.

12) 1-[2-Oxyphenyl]benzol-2-Carbonsäure. Ag (J. pr. [2] 28, 249; B. 21, 981; A. 284, 316). — II, 1695.

13) 1-[4-Oxyphenyl]benzol-2-Carbonsäure (A. 284, 323). — II, 1695.

- 14) 2-Oxybenzolphenyläther-1-Carbonsäure. Sm. 113°; Sd. 355°. NH₄, Ca $+ 2 H_2 O$, Ba $+ 6 H_2 O$, Ag (B. 21, 502, 982; A. 257, 78; M. 17, 65). - II, *1495*.
- 15) 3-Oxybenzolphenyläther-1-Carbonsäure. Sm. 145°. Ba $+3\frac{1}{2}$ H₂O (B. **21**, 980). — II, 1517.
- 16) 4-Oxybenzolphenyläther-1-Carbonsäure. Sm. 159,5° (J. pr. [2] 28, 199; B. 21, 980). — II, 1526.

- 17) β -[2-Oxy-1-Naphtyl]akrylsäure (β -Naphtocumarsäure). Sm. 170° (B. 16, $\mathbf{C}_{13}\mathbf{H}_{10}\mathbf{O}_{3}$ 686). — II, 1694.
 - 18) β -Furanyl- α -Phenylakrylsäure (Furalphenylessigsäure). Sm. 143 bis 144° (B. 31, 282).
 - 19) Phenylester d. 2-Oxybenzol-1-Carbonsäure (Salol). Sm. 42-42,5°; Sd. 172—173°₁₂ (J. pr. [2] **31**, 472; [2] **51**, 210; A. **269**, 324; **273**, 83). - II, 1493.
 - 20) Phenylester d. 4-Oxybenzol-1-Carbonsäure. Sm. 1760 (J. pr. [2] 28, 214). **— II**, *1525*.
 - 21) Diphenylester d. Kohlensäure. Sm. 78° (88°); Sd. 301 302° (*J. pr.* [2] **1**, 405; [2] **27**, 41 Anm.; [2] **27**, 42; [2] **31**, 477; [2] **36**, 316; *B.* 17, 1287; **27**, 1371, 3410; *Bl.* [3] **19**, 695). II, 663.
 - 22) Monobenzoat d. 1,2-Dioxybenzol. Sm. 130-131° (132°) (B. 26, 1076; A. 301, 104). — II, 1149.
 - 23) Monobenzoat d. 1,3-Dioxybenzol. Sm. 135—1360 (A. 301, 104).
 - 24) Monobenzoat d. 1,4-Dioxybenzol. Sm. 162-163° (B. 26, 1909). II, 1150.
- C'67.8 H 4.3 O 27.8 M. G. 230. $C_{13}H_{10}O_4$
 - 2,3,4 [oder 3,4,5]-Trioxydiphenylketon + H₂O (Alizaringelb). Sm. 140—141° (wasserfrei). Na, K, Pb (B. 23 [2] 43; 24 [2] 378; 30, 2593; A. 269, 297; G. 27 [2] 24). III, 201.
 - 2) 2,4,4'-Trioxydiphenylketon $+ 2H_2O$. Sm. 200–201° (B. 27, 1999).
 - III, 202. 3) **2,2',4'-Trioxydiphenylketon.** Sm. 133—134° (B. **14**, 658; Am. 5, 89; A. **269**, 323). — III, 200.
 - 4) 4-Oxy-1-[4-Oxyphenyl]benzol-2-Carbonsäure. Sm. 270° (A. 207, 346). · II, 1881.
 - 5) 2-Oxynaphtalinmethyläther-1-Ketocarbonsäure + H_2O . Sm. 151° (Bl. [3] 17, 310).
 - 6) 4-Oxynaphtalinmethyläther-1-Ketocarbonsäure. Sm. 164—165° u. Zers. (Bl. [3] 17, 306).
 - 7) 1-Acetoxylnaphtalin-2-Carbonsäure. Sm. 158° (B. 20, 2700). II, 1688.
 - 8) 3-Acetoxylnaphtalin-2-Carbonsäure. Sm. 176—177° (B. 27, 2624). II. 1691.
 - 9) Aldehyd d. 4-Benzoxyl-2-Methylfuran-5-Carbonsäure. Sm. 55° (B. **28** [2] 786).
 - 10) Acetat d. Oxyphenylcumalin. Sm. 65° (A. 282, 202). II, 1680.
 - 11) Monobenzoat d. 1,2,3-Trioxybenzol. Sm. 140° (A. 301, 105).
 - 12) Monobenzoat d. Maltol. Sm. 115—116° (B. 27, 3118). III, 726.
 13) Verbindung (aus Gentisin) (A. 180, 347). III, 210.
 C 63,4 H 4,0 O 32,5 M. G. 246.
- C13H10O5
 - 1) **2,4**; **2',4'-Tetraoxydiphenylketon** + H₂O (Isoeuxanthonsäure). Sm. bei 200° (A. **254**, 302; B. **30**, 971). III, 205.
 - 2) 2,4,3',4'-Tetraoxydiphenylketon $+ 2H_2O$. Sm. $201-202^{\circ}$ (199°) (B.
 - 27, 2000; 30, 2593). III, 205. 3) 2,5,2',6'-Tetraoxydiphenylketon (Euxanthonsäure). Sm. 200 — 202°.
 - Pb₂ (A. **155**, 259; **254**, 300). III, 205. 4) 2, $\mathbf{2}'$, $\mathbf{3}'$, $\mathbf{4}'$ -Tetraoxydiphenylketon + $\mathbf{H}_2\mathbf{0}$. Sm. 149° (wasserfrei). Na
 - $+ H_2O$. Sm. 149° (wasserfrei). Na $+ H_2O$ (B. 23 [2] 44; A. 269, 307). III, 204.
 - 5) 1-Keto-4-Phenyl-2, 3-Dihydro-R-Penten-3, 5-Dicarbonsäure (Phenythronsäure). Sm. 192—193°. Ca $+ 3H_2O$, Ba $+ H_2O$, Ag (A. 250, 213). II, 1970.
 - 6) ε -Keto- α -[3,4-Dioxyphenyl]- $\alpha \gamma$ -Pentadiën-3,4-Methylenäther- ε -Carbonsäure (Piperonylenbrenztraubensäure). Sm. 165-167° (B. 28, 1191). — II, 1968. C 59,5 — H 3,8 — O 36,6 — M. G. 262.
- $\mathbf{C}_{13}\mathbf{H}_{10}\mathbf{O}_{6}$
 - 1) 3,5-Dioxy-4-Keto-1-[3,4,5-Trioxybenzyliden]-1,4-Dihydrobenzol
 - (Formopyrogallaurin) (B. 31, 145). 2) 3,4,2',3',4'-Pentaoxydiphenylketon + 2H₂O. Sm. 192—193° (wasser-
 - frei) (B, 30, 2591). 3) 3,4,2',4',6'-Pentaoxydiphenylketon + H_2O (Maklurin; Moringerberger) säure). Sm. 200° (wasserfrei). Pb $+ H_2O$, Pb₅ $+ 2H_2O$ (A. 127, 351;

185, 114; B. 27, 1628; 28, 1393; Fr. 14, 118; J. 1850, 528; Soc. 67, 933). — III, 207.

 $C_{13}H_{10}O_6$

4) 3,4,3',4',5'-Pentaoxydiphenylketon + H₂O. Sm. 266° (wasserfrei) (B. 30, 2591).

5) a - [3,4-Dioxyphenyl] - $a\gamma$ -Butadiën-3,4-Methylenäther- $\delta\delta$ -Dicarbonsäure (Piperonylenmalonsäure). Sm. 205-206 (B. 28, 1189). - II, 2019. 6) 2-Aethylester d. 1,3-Diketo-2,3-Dihydroinden-2,4-Dicarbonsäure.

Fl. Na₂ (B. **31**, 2085).

7) Diacetat d. 6,7-Dioxy-1,2-Benzpyron (Diacetyläskuletin). Sm. 133 bis 134° (A. 107, 248; 161, 79; B. 13, 1591; 32, 288). — III, 568.

8) Diacetat d. 7,8-Dioxy-1,2-Benzpyron (D. d. Daphnetin). Sm. 129 bis 130° (B. 12, 112; 17, 935; 32, 287). — II, 1950. 9) Diacetat d. Verb. $C_9H_8O_4$ (aus Brasilin). Sm. 148—149° (B. 25, 21).

- III, *656*.

10) Verbindung (aus 2-Phenylbenzisoxazol-?-Disulfonsäure). Sm. 1890 (M. 15, 652). C = 53.1 - H = 3.4 - O = 43.5 - M. G. 294.

 $C_{13}H_{10}O_8$ C13H10O9

1) Sordidin. Sm. 210° (*J.* **1875**, 863; *G.* 7, 281; **24** [2] 325). — **II**, 2058. C 50,3 — H 3,2 — O 46,4 — M. G. 310.

1) α -Keto- α -Phenylpropan- $\beta\beta\gamma$ 2-Tetracarbonsäure. K_4 (A. 242, 59). **— II**, 2090.

2) Säure (aus Kamala). Sm. 232° (Soc. 63, 985). — III, 671.

 $C_{13}H_{10}N_2$

C 80,4 — H 5,2 — N 14,4 — M. G. 194.

1) Diphenyleyanamid. Sm. 73—74° (B. **26** [2] 607). — II, 451.

2) polym. Diphenyleyanamid. Sm. 292° (B. **7**, 848). — II, 451.

3) Di[Phenylimido] methan (α-Carbodiphenylimid). Fl. HCl, 2HCl, (2HCl, PtCl₄), (2 + 2HCl, PtCl₄) (B. 7, 10, 849, 1306; 9, 810; 14, 1486; 15, 339; 25, 2887; 27, 2261, 2696; 28, 1009; 30, 1090; <math>Am. 17, 108; C. 1899 [1] 830). — II, 452.

4) β -Carbodiphenylimid. Sm. 158-160°; Sd. 235-236°₆₅ (B. 25, 2888;

26, 3064; 27, 2261, 2696; 28, 1009; J. pr. [2] 53, 139). — II, 452.
5) γ-Carbodiphenylimid. Sm. 96-98° (Ph. Ch. 12, 148; B. 26, 3064; 27, 2260, 2696; 28, 1010; 29, 270; J. pr. [2] 53, 139). — II, 452. 6) polym. Carbodiphenylimid. Sm. 168—170° (B. 7, 11, 849; J. pr. [2]

58, 461). — II, 452.

7) 1-[1-Naphtyl]imidazol. Sm. 62°. (2HCl, PtCl₄), Pikrat (B. 25, 2373). - IV, 502

8) 2-Phenylindazol. Sm. 83—84°; Sd. 344—345°. (2HCl, ZnCl₂), (2HCl, PtCl₄) (B. 23, 2640; 24, 961; 27, 2899). — IV, 866. 9) 3-Phenylindazol. Sm. 107—108° (u. 115—116°). HCl, Pikrat (B. 29,

1269). — IV, 1011. 10) 2-Phenylbenzimidazol. Sm. 280° (291°). HCl, (2HCl, PtCl₄ + $3 H_2 O$), (HCl, AuCl₃), HJ + H₂O, (HJ, J₂), HNO₃, H₂SO₄ + $1\frac{1}{2}$ H₂O, Oxalat (A. 208, 302; 210, 347; 273, 347; Am. 17, 401; B. 24, 2386; 29, 1498). - IV, 1006.

11) 2-Methyl-1,9-Naphtdiazin $+4H_2O$ (s-Methylphenanthrolin). Sm. 81

bis 82° (108—109° wasserfrei) (B. **22**, 249). — **IV**, 1011.
12) 2-Methyl-5,10-Naphtdiazin (2-Methylphenazin). Sm. 117°; Sd. bei 350° u. Zers. (2 HCl, PtCl₄ + 3 u. 6 H₂O), Pikrat (B. **19**, 726; **29**, 1874; A. 236, 345). — IV, 1009.

13) 2-Methyl-1,10-Naphtisodiazin $+2H_2O$ (o-Methylphenanthrolin). Sm. 53° (75—76° wasserfrei) (B. **22**, 253). — IV, 1011.

14) 5-Methyl-4,10-Naphtisodiazin (5-Methylphenanthrolin). Sm. 95-96°; Sd. oberh. 300°. $HCl + 4H_2O$, (2HCl, $PtCl_4 + 2H_2O$), $H_2Cr_2O_7$, Pikrat (M. 5, 523; B. 23, 3674). — IV, 1010.

15) 9-Methyl-4,10-Naphtisodiazin + 3H₂O (9-Methylphenanthrolin).

49-50° (64-65° wasserfrei); Sd. oberh. 350°. HCl + H₂O, (2HCl, PtCl₄ + H₂O), H₂SO₄ + H₂O, H₂Cr₂O₇, Pikrat (B. **22**, 246). — **IV**, 1010.

16) 6-Methyl-5,10-Naphtisodiazin (2-Methylchinochinolin). Sm. 206°; Sd. über 360°. HCl, (2HCl, PtCl₄), H₂Cr₂O₇, Pikrat (A. **279**, 21). — IV, 1011.

17) α-Amidoakridin. Sm. 209° (B. 17, 437). — IV, 1012.

18) P-Amido-β-Naphtochinolin. Sm. 1580. HCl (J. pr. [2] 57, 65). — IV, 1012.

19) Verbindung (aus Phenylhydrazin u. Benzonitril). Sm. 1020 (J. pr. [2] $C_{13}H_{10}N_{2}$

C 70.3 - H 4.5 - N 25.2 - M. G. 222. $C_{18}H_{10}N_4$

1) 1,4-Diphenyl-1,2,3,5-Tetrazol. Sm. 106-1070 (B. 29, 1854; 30, 449). **– IV**, 1268.

2) 3-Phenylazoindazol. Sm. 185,5—186° (A. 305, 343).

1) αα-Dichlordiphenylmethan (Benzophenonchlorid). Sd. 305° u. Zers. (A. 187, 217; B. 3, 752; 5, 908). — II, 228. $\mathbf{C}_{13}\mathbf{H}_{10}\mathbf{Cl}_{2}$

 $\mathbf{C}_{13}\mathbf{H}_{10}\mathbf{Br}_{2}$

 αα-Dibromdiphenylmethan. Fl. (Bl. 33, 339). — II, 229.
 ?-Dibrom-4-Methylbiphenyl. Sm. 113—115° (Soc. 51, 89). — II, 230. 3) P-Dibrom-4-Methylbiphenyl. Sm. 148—150° (Soc. 51, 89); — II, 230°. 1) 4,4'-Dijod-2-Methylbiphenyl. Sm. 114—116° (B. 28, 2550). 2) 4,4'-Dijod-3-Methylbiphenyl. Sm. 109° (B. 28, 2546).

 $C_{13}H_{10}J_2$

 $\mathbf{C}_{13}\mathbf{H}_{10}\mathbf{S}$ 1) Diphenylthioketon (Thiobenzophenon). Fest. Sd. 174°₁₄ (B. 21, 341; **28**, 2877; **29**, 2944). — III, 191.

2) polym. Diphenylthioketon (polym. Thiobenzophenon). Sm. 146,50 (B. 11, 924; **21**, 343). — III, 191

3) Methylendiphenylensulfid. Sm. 128°; Sd. 340°₇₈₀ (A. 263, 14). — II, 992.

 $C_{13}H_{10}S_3$ 1) Trithiënylmethan. Sm. 49—50° (B. 30, 2038). $\mathbf{C}_{13}\mathbf{H}_{11}\mathbf{N}$

1) C 86,2 — H 6,1 — N 7,7 — M. G. 181.

1) α-Imidodiphenylmethan. Fl. HCl (B. 24, 3516). — III, 187.

2) Benzylidenamidobenzol (Benzylidenamilin). Sm. 48—49° (54°); Sd. bei 300° (A. Spl. 3, 353; A. 111, 254; 148, 336; 241, 331; 260, 237; J. 1850, 488; M. 9, 696; B. 11, 248; 15, 2029 Anm.; 20, 1587; 23, 3338; 24, 754; 29, 2147; C. 1895 [2] 90). — III, 29.
3) polym. Anhydro- α -Oxy-4-Amidodiphenylmethan = $(C_{13}H_{11}N)_x$. Sm.

- 220—225° u. Zers. (B. 30, 1137). 4) 4-Amidofluoren. Sm. 124—125° (B. 17, 108). II, 638. 5) 9-Amidofluoren (Fluorenamin). Sm. 50—60° (161°). HCl (A. 252, 37; (B. **29**, 231). — **II**, 638.
- 6) α -Phenyl- β -[2-Pyridyl]äthen (o-Stilbazol). Sm. 90,5—91°; Sd. 324 bis 325°₇₅₀. HCl + 4H₂O, (HCl, HgCl₂ + H₂O), (2HCl, PtCl₄ + 2H₂O), (HCl, AuCl₃), (HJ, J₃) (B. 20, 2719; 21, 818). — IV, 395.

 7) 2-Methyl-α-Naphtindol. Sm. 132°. Pikrat (A. 239, 237). — IV, 394.

 8) 3-Methyl-α-Naphtindol. Sm. 198° (B. 25, 2699). — IV, 394.

 9) 2-Methyl-β-Naphtindol. Sd. 314—320°₂₂₃. Pikrat (A. 236, 181). —

IV, 394.

10) 9-Methylcarbazol. Sm. 87°. Pikrat (A. 202, 23). — IV, 392.
11) 5,10-Dihydroakridin. Sm. 169° (A. 158, 278; B. 16, 1972; 28, 1335). — IV, 396. 12) isom. Dihydroakridin (A. 158, 281). — IV, 396.

 $C_{13}H_{11}N_3$

13) 9,10-Dihydrophenanthridin. Sm. 90° (A. 266, 151). — IV, 396. C 74,6 — H 5,3 — N 20,1 — M. G. 209.

1) α -Methylenamido - α -Methylenhydrazon - α - [2 - Naphtyl] methan (Dimethylen-2-Naphtenylhydrazidin). Sm. 277° u. Zers. (B. 30, 1880; A. 298,

36). — IV, 1168. 2) 5-Amido-2-Phenylbenzimidazol. Sm. 286—288° (281°). 2 HCl, 2 HNO₃, $H_2SO_4 + 2H_2O$ (A. 208, 309; Bl. [3] 17, 619; [3] 19, 520). — IV, 118 $\stackrel{\circ}{0}$. 2-[2-Amidophenyl]benzimidazol. Sm. 211 $\stackrel{\circ}{0}$. 2HCl, (2HCl, PtCl₄)

3) 2-[2-Amidophenyl] benzimidazol.

(B. 30, 3066). — IV, 1181. 4) 2-[4-Amidophenyl] benzimidazol. Sm. 240° (Bl. [3] 17, 619). —

5) 2-Phenylimido-2,3-Dihydrobenzimidazol (Phenyl-o-Phenylenguanidin). Sm. 190°; Sd. 440—450° u. Zers. HCl, (2HCl, PtCl₄), H₂SO₄ (B. **24**, 2499). — **IV**, 566.

6) 3-Phenyl-3,4-Dihydro-1,2,3-Benztriazin. Sm. 128° u. Zers. (2 HCl, PtCl₄), Pikrat (B. **25**, 448). — IV, 1148. 7) **2,8-Diamidoakridin.** Sm. 281° (B. **27**, 2320). — IV, 1182.

8) Nitril d. ββ-Diphenylhydrazidoameisensäure (Phenylanilcyanamid).
 Sm. 97°. 2 HCl, Pikrat (G. 22 [2] 380). — IV, 742.
 C 65,8 — H 4,6 — N 29,5 — M. G. 237.

 $C_{13}H_{11}N_5$ 1) 4-[4-Amidophenyl]-1-Phenyl-1,2,3,5-Tetrazol. Sm. 156°. H₂SO₄ (B. 31, 946). — IV, 1325.

 $\mathbf{C}_{13}\mathbf{H}_{11}\mathbf{Cl}$ $C_{13}H_{11}Br$

- 1) α-Chlordiphenylmethan. Sm. 14° (B. 7, 1128; 15, 361). II, 228.
- 1) α-Bromdiphenylmethan. Sm. 45°; Sd. 184°₂₀ (Bl. 33, 339, 587; A. 298, 232). — II, 228.
 - 2) 3-Brommethylbiphenyl (Bl. [3] 7, 181; A. ch. [6] 15, 242). II, 230.
 - 3) 2 [oder 3]-Brom-4-Methylbiphenyl. Sm. 127-1290 (Soc. 47, 589; 51, 87). — II, 230.

4) 4'-Brom-4-Methylbiphenyl. Sm. 27-30° (Soc. 51, 88). — II, 230. C 84,8 - H 6,5 - O 8,7 - M. G. 184.

 $C_{13}H_{12}O$

- 1) α -Oxydiphenylmethan (Diphenylcarbinol). Sm. 67,5—68°; Sd. 297 bis 298°_{748} (180°_{20}) (A. 133, 6; 184, 174; 298, 232; Bl. 35, 304; [3] 21, 290; J. pr. [2] 26, 110; [2] 54, 138). II, 1077.
- 2) 2-Oxydiphenylmethan (2-Benzylphenol) (Soc. 49, 406). II, 896.
- 3) 4-Oxydiphenylmethan (4-Benzylphenol). Sm. 80—81° (84°); Sd. 320 bis 322° (325—330°) (J. 1872, 405; 1873, 391; 1875, 438; B. 14, 1844; 15, 152; 16, 2719; Soc. 37, 723; 41, 34; 57, 972; G. 28 [1] 219). II, 896.

4) 2-Oxymethylbiphenyl. Sd. 181% (M. 19, 592).

- 5) 3-Oxymethylbiphenyl (3-Phenylbenzylalkohol). Fl. (A. ch. [6] 15, 245). **– II**, 1079.
- 6) Phenyläther d. Oxymethylbenzol. Sm. 38-39°; Sd. 286-287° (A. 143, 81; 161, 337; 217, 43). — II, 1049.
- 7) Aethyl-1-Naphtylketon. Sd. 305-307°. Pikrat (Bl. [3] 15, 62). — III, 175.
- 8) Aethyl-2-Naphtylketon. Sm. 60°; Sd. 312-314° (Bl. [3] 15, 63; [3] 17, 313). — III, *175*. C 78,0 — H 6,0 — O 16,0 — M. G. 200.

 $C_{13}H_{12}O_{2}$

- 1) α-Oxy-?-Oxydiphenylmethan (Benzhydrylphenol). Sm. 161° (A. 210, 253). — II, 1111.
- 2) Di[4-Oxyphenyl]methan. Sm. 158°. Na, Na, Ba (A. 194, 318; 283, 163; B. 27, 1814). — II, 992.

3) 4,4'-Dioxy-2-Methylbiphenyl. Sm. 155-157° (B. 28, 2551).

- 4) Diphenyläther d. Dioxymethan. Sm. 20°; Sd. 293-295° (298,8°) (A. ch. [5] 30, 269; A. 240, 201; C. 1895 [1] 825; Soc. 69, 166). — ÍÍ, 655. 5) Monobenzyläther d. 1, 3-Dioxybenzol (A. 221, 376). — II, 1050.
- 6) Monobenzyläther d. 1,4-Dioxybenzol. Sm. 122-122,5° (A. 221, 369). - II, 1050.
- 7) 1-Naphtylglycidäther. Sd. 263 ° 200 u. Zers. (B. 24, 2149). II, 857. 8) Methyläther d. Methyl-2-Oxy-1-Naphtylketon. Sm. 57—58°; Sd. 179—183° 6. Pikrat (B. 23, 1209; Bl. [3] 15, 636; [3] 17, 312). III, 174. 9) Aethyl-1-Oxy-2[?]-Naphtylketon. Sm. 81° (J. pr. [2] 43, 95). III, 176.
- 10) Methyläther d. Methyl-1-Oxy-2-Naphtylketon. Sm. 71-72°; Sd.

oberh. 350° (B. 23, 1208). — III, 174.

- 11) 2-Naphtyläther d. α-Oxy-β-Ketopropan. Sm. 85° (B. 28, 1254). 12) ?-Dimethyl-6-Phenyl-1, 2-Pyron (Dimethylphenylcumalin). Sm. 100 bis 101° (B. 27, 846; G. 26 [2] 344; 29 [1] 1). — Π , 1680. 13) β -[1-Naphtyl] propionsäure. Sm. 148° (B. 22, 2156). — Π , 1460. 14) 1-Aethylnaphtalin-?-Carbonsäure. Sm. 132° (A. 244, 57). — Π , 1460.
- 15) Aldehyd d. 4-Oxynaphtalinäthyläther-1-Carbonsäure. Sm. 72° (Bl. 3] 17, 812).

16) Methylester d. 2-Naphtylessigsäure. Fl. (B. 29, 2375).

- 17) Aethylester d. Naphtalin-l-Carbonsäure. Sd. 309° (B. 1, 42). II, 1445. 18) Aethylester d. Naphtalin-2-Carbonsäure. Sd. 308-309° (A. 180, 320). — II, *1453*.
- 19) 2-Naphtylester d. Propionsäure. Sm. 51° (A. 301, 112). C 72,2 — H 5,5 — O 22,2 — M. G. 216.

C13H12O3

α-Oxy-2,4'-Dioxydiphenylmethan (Am. 5, 88). — II, 1114.
 Methysticol. Sm. 94° (M. 10, 790). — III, 173.

3) 3,4-Methylenäther d. ε -Keto- α -[3,4-Dioxyphenyl]- $\alpha\gamma$ -Hexadiën. Sm. 89° (B. 28, 1193). — III, 172.

4) 4-Oxynaphtalinäthyläther-1-Carbonsäure. Sm. 214°. Na, Ca (A. 244, 73). — II, *1689*.

5) Methylester d. α -Oxy- α -[1-Naphtyl]essigsäure. Sm. 79° (B. 24, 549). - II, 1693.

- $C_{13}H_{12}O_3$
- 6) Methylester d. α -Oxy- α -[2-Naphtyl] essigsäure. Sm. 75° (B. 24, 548). **– II**, 1692.
- 7) Aethylester d. 2-Oxynaphtalin-1-Carbonsäure. Sm. 55° (B. 20, 2702)
- 8) Aethylester d. 5-Oxynaphtalin-1-Carbonsäure. Sm. 73° (C. 1899) [1] 289).
- 9) Aethylester d. 1-Oxynaphtalin-2-Carbonsäure. Sm. 49° (B. 20, 2700). - II. 1687.
- 10) Aethylester d. 3-Oxynaphtalin-2-Carbonsäure. Sm. 85°; Sd. 290 bis 291° (B. **25**, 3635). — II, 1691.
- 11) Aethyl-1-Naphtylester d. Kohlensäure. Sm. 31° (B. 13, 702). II, 858.

C19H19O4

- C $^{\circ}$ 67,2 H 5,2 O 27,6 M. G. 232. 1) **s-Di**[1,2-Dioxyphenyl]methan. Sm. 220° u. Zers. (B. 26, 255). II, 1038.
- 2) s-Di[1,3-Dioxyphenyl]methan. Zers. bei 250° (B. 25, 947). II, 1038. 3) s-Di[?-Dioxyphenyl]methan? Zers. bei 260° (M. 3, 646). II, 1038.
- 4) Methylbaptigenetin. Sm. 129—130° (C. 1897 [2] 1077).
- 5) Dehydrodiaeetylpäonol. Sm. 160° (B. 25, 1284). III, 135. 6) α -[3,4-Dioxyphenyl]- $\alpha\gamma$ -Pentadiën-3,4-Methylenäther- δ -Carbonsäure (α-Methylpiperinsäure). Sm. 208—209° (B. 28, 1187). — II, 1871.
- 7) 6-Oxy-4-Keto-2-Phenyl-1,2,3,4-Tetrahydrobenzol-3-Carbonsäure (Phenyldihydroresorcylsäure). Sm. 95° u. Zers. (J. pr. [2] 43, 391; B. 27, 2055; A. **294**, 274). — II, 1877.
- 8) α -Acetoxyl- α -[2-Naphtyl] essigsäure. Sm. 150° (B. 24, 548). II, 1693.
- 9) Aethylester d. 1,3-Dioxynaphtalin-2-Carbonsäure. Sm. 83-840 (A. **298**, 383).
- 10) Aethylester d. 3,4-Dioxynaphtalin-2-Carbonsäure. Sm. 84-84,5° (B. 28, 3093).
- Aethylester d. 3,5-Dioxynaphtalin-2-Carbonsäure. Sm. 148—150°
 (B. 26, 673). II, 1875.
- 12) Aethylester d. 1,3-Diketo-2-Methyl-2,3-Dihydroinden-2-Carbonsäure. Sm. 72-74° (A. 246, 355). - II, 1875.
- 13) Acetat d. 7-Oxy-4,5-Dimethyl-1,2-Benzpyron. Sm. 195° (J. pr. [2] **26**, 71; B. **17**, 2189). — II, 1784.
- 14) Benzoat d. α -Oxy- γ -Keto- β -Aethanoyl- α -Buten. Sm. 71° (A. 297, 64).
- 15) Verbindung (aus Kamala) (Soc. 63, 985). III, 671.

 $C_{13}H_{12}O_{5}$

- C 62.9 H 4.8 O 32.2 M. G. 248.1) Methylbergaptensäure. Sm. 138° (M. 12, 384). — II, 2014.
- 2) $\alpha \gamma$ -Lakton d. γ -Oxy- α -Keto- β -Phenylpropan- $\alpha \gamma$ -Dicarbonsäure--Aethylester (Aethylester d. Ketophenylparakonsäure). Sm. 104—105°. Na, Cu (B. 25, 3448; 26, 2144; Soc. 73, 347). — II, 2013.

3) Verbindung (aus Quercetin). Pb₃ (J. 1864, 562). — III, 605.

C13H12O6

- C 59,1 H 4,5 O 36,4 M. G. 264. 1) Di[3,4,5-Trioxyphenyl]methan. Sm. 241° u. Zers. (B. 25, 947; 31, 144). — II, 1043.
- 2) Formaldehydphloroglucid (C. 1896 [2] 486).
 3) Kastaniengerbsäure (Z. 1867, 76; 1868, 728).
- 4) β -[3,4-Diacetoxylphenyl]akrylsäure. Sm. 190—191° (B. 11, 656). —
- 5) $\alpha [3, 4-Dioxyphenyl] \beta$ -Buten-3, 4-Methylenäther- $\delta \delta$ -Dicarbonsäure (βγ-Dihydropiperonylenmalonsäure). Sm. 121° (B. 28, 1190). — II, 2015.
- 6) α ,2-Lakton d. α -Oxy- β -Acetoxyl- α -Phenyläthan- β ,2-Dicarbonsäure- β -Methylester. Sm. 108° (B. 25, 407). II, 2006. C 55,7 — H 4,2 — O 40,0 — M. G. 280.

 $C_{13}H_{12}O_7$

- 1) Benzol-1-Carbonsäure-3-Ketocarbonsäure-4-[Isopropyl- α -Carbonsäure] + xH₂O (Iregenontricarbonsäure). Sm. 227° (B. 26, 2685). -II, 2048.
- γ-Keto-β-Phenyl-β-Methylpropan-γ, 2, 4-Tricarbonsäure + 2H₂O (Jonegenontricarbonsäure). Sm. 140—145° u. (207—208° das zweite Mal). Ag₃ (B. 26, 2697). II, 2048.
- 3) 5,6,7-Trioxy-1,2-Benzpyron-5,6,7-Trimethyläther-4-Carbonsäure. Sm. 209° (G. 25 [2] 371).

 $C_{13}H_{12}O_{8}$

4) α , 2-Lakton d. $\alpha\alpha$ -Dioxy- α -Phenylbutan- $\beta\beta$, 2-Tricarbonsäure. K_{α} , $C_{13}H_{12}O_7$ Ag_3 (A. **242**, 52). — **II**, 2071.

5) Trimethylester d. Benzol-1,3-Dicarbonsäure-2-Ketocarbonsäure.

Sm. 168° (A. 290, 210).

6) Acetat d. Cotarniaktonsäurelakton. Sm. 174° (A. **254**, 344). — II, 2040. C 52,7 — H 4,0 — O 43,2 — M. G. 296.

1) 3,4,5-Triacetoxylbenzol-1-Carbonsäure. Sm. 151°. BiO (J. 1857, 313; A. 163, 210; Bl. [3] 9, 706; [3] 11, 565, 937, 938). — II, 1922. 2) isom. ?-3,4,5-Triacetoxylbenzol-1-Carbonsäure. Sm. 165—166° (B.

17, 1503; A. 246, 125). — II, 1922.

3) Capsuläscinsäure (Z. 1867, 83). — II, 2075.

4) Triacetat d. 3,5,6-Trioxy-2-Methyl-1,4-Benzochinon (B. 12, 2045). **– III**, 362.

5) Verbindung (aus d. Triäthylester d. 2,4,6-Trioxybenzol-1,3,5-Tricarbonsäure). Sm. 168—170° (B. **21**, 1767). — II, 2089. 6) Verbindung (aus Harn) (B. **27** [2] 598). C 36,8 — H 2,8 — O 60,4 — M. G. 424.

Propan - ααγγ-Tetracarbonsäure - ββ-Di [Methyldicarbonsäure]. K₈
 (Bl. [3] 7, 19). — I, 873.
 C 79,6 — H 6,1 — N 14,3 — M. G. 196.

 $\mathbf{C}_{13}\mathbf{H}_{12}\mathbf{N}_2$

 $C_{13}H_{12}N_4$

 $\mathbf{C}_{13}\mathbf{H}_{12}\mathbf{O}_{16}$

1) Phenylimidophenylamidomethan (Diphenylformamidin). Sm. 138 bis

139° (135°). HCl, (2HCl, PtCl₄), Pikrat. Lit. bedeutend. — II, 345.

2) 1-Phenylamidoimidomethylbenzol (Phenylbenzenylamidin). Sm. 114° (111—112°). HCl, (2HCl, PtCl₄), HJ, HNO_§ (J. pr. [2] 38, 336; [2] 50, 91; [2] 54, 118; A. 184, 350; 192, 31; 265, 138; B. 13, 918; 30, 1782). — IV, 841.

3) 4-Amido-1-Phenylimidomethylbenzol (4-Amidobenzylidenanilin). Sm. 110° (J. pr. [2] **56**, 111; B. **31**, 2251).

4) 2-Amido-1-Benzylidenamidobenzol. Sm. 60-61° (B. 29, 1498). — IV, 563.

5) Diamidofluoren. Sm. 157°. Sulfat (A. 203, 99). — IV, 993.

6) α-Hydrazondiphenylmethan (Diphenylmethylenhydrazin). Sm. 98°; Sd.

225—230°₅₅. HCl (J. pr. [2] $4\dot{\mathbf{a}}$, $\dot{\mathbf{1}}$ 94). — III, 187. 7) stabil. α -Phenyl- β -Benzylidenhydrazin (Phenylhydrazon d. Benzolcarbons surealdehyd). Sm. 157—158° (153°) (B. 17, 2096; 28, 1452; 29, 2147; 30, 1242; 31, 1249; Bl. [3] 15, 845; [3] 17, 481; A. 190, 134; 227, 343; 257, 227; 305, 170). — IV, 748.

8) lab. α -Phenyl- β -Benzylidenhydrazin. Sm. 136° (B. 31, 1249).

9) 2-Methylazobenzol. Sd. $180-181^{\circ}_{20}$ (B. 28, 2544; 31, 992, 2205). — IV, 1382

10) 3-Methylazobenzol. Sm. 18-19°; Sd. 175°₁₉ (B. **28**, 2549; **31**, 991). -IV, 1382.

11) 4-Methylazobenzol. Sm. 63° (71—72°; 66—67°); Sd. 311—313°₇₆₀ (B. 17, 466; 31, 991; Soc. 67, 929; A. 303, 369). — IV, 1382. 12) α -[3-Amidophenyl]- β -[2-Pyridyl]äthen + $^{1}/_{2}$ H₂O. Sm. 85°. (2 HCl, PtCl₄ + H₂O) (B. 23, 2717). — IV, 993.

13) 2-[1-Naphtyl]-4,5-Dihydroimidazol. Sm. 131°. HCl, (HCl, HgCl₂), $(2 \text{ HCl}, \text{ PtCl}_4), \text{ HNO}_3, \text{ H}_2 \text{SO}_4, \text{ Pikrat}, + \text{HgCl}_2 (B. 25, 2139).$

IV. 955. 14) 2-[2-Naphtyl]-4,5-Dihydroimidazol. Sm. 116°. HCl, (HCl, HgCl₂), $(2\text{HCl}, \text{PtCl}_4), \text{HNO}_2, \text{HNO}_3, \text{H}_2\text{SO}_4, \text{Pikrat}, + \text{HgCl}_2 (B. 25, 2137).$

15) 2-Phenyl-1, 3-Dihydroindazol. Sm. bei 98° (B. 24, 963). — IV, 849.
 C 69,6 — H 5,4 — N 25,0 — M. G. 224.

1) α -Phenylazo- α -Phenylhydrazonmethan (Formazylwasserstoff). $117-119^{\circ}$. + AgNO₃ (B. **25**, 3186, 3204; **27**, 2927; **A. 287**, 368; **J.** pr. [2] 52, 430; [2] 53, 475). — IV, 1226.

2) α-Imido-α-Phenylazoamido-α-Phenylmethan. Sm. 1840 (Pinner, Imidoäther 170). — IV, 1582

3) Methenyldiphenylazidin. Sm. 1850 (B. 17, 2002). - IV, 1226. 4) 1-Aethyl-5-[2-Naphtyl]-1,2,3,4-Tetrazol. Sm. 55° (B. 30, 1882; A. 298, 40). — IV, 1278.

5) ? - Diamido - ? - Methyl - 5, 10 - Naphtdiazin. HCl (A. 236, 344). -IV, 1285.

- $C_{13}H_{12}N_6$ C 61,9 - H 4,8 - N 33,3 - M. G. 252.
 - 1) 5-[2-Amido-l-Naphtyl]azo-3-Methyl-1, 2, 4-Triazol. Sm. 270° u. Zers. (A. 303, 41). — IV, 1491.
- Phenyl-2-Methylphenyljodoniumjodid. Sm. 165° u. Zers. (B. 31, 918).
 Phenyl-4-Methylphenyljodoniumjodid. Sm. 170° u. Zers. (B. 31, 920). $C_{19}H_{12}J_{2}$
- 1) α-Merkaptodiphenylmethan (Thiobenzhydrol). Hg (B. 11, 926). C13H12S II, 1079.
 - 2) Methyläther d. ?-Merkaptobiphenyl. Sm. 107-108 (B. 20, 2927).
 - **II**, 895. 3) Phenyläther d. 2-Merkapto-1-Methylbenzol. Sd. $304,5^{\circ}_{784}$ (306,5 $^{\circ}_{780}$)
 - (A. 263, 14; B. 28, 2322). II, 820.
 - 4) Phenyläther d. 3-Merkapto-1-Methylbenzol. Sm. -6,5°; Sd. 309,5°, 260 (B. 28, 2323).
 - 5) Phenyläther d. 4-Merkapto-l-Methylbenzol. Sm. 15,7°; Sd. 311,5°, 280 (B. 28, 2323).
- 1) Phenyl-4-Methylphenyldisulfid. Fl. (B. 19, 3133). II, 825. $C_{13}H_{12}S_{2}$
 - 2) Diphenyläther d. Dimerkaptomethan. Sm. 40° (B. 25, 3429; J. pr. [2] **51**, 313). — **II**, 783.
- C 85,2 H 7,1 N 7,6 M. G. 183. $\mathbf{C}_{13}\mathbf{H}_{13}\mathbf{N}$
 - 1) **2-Phenylamido-1-Methylbenzol.** Sm. 41°; Sd. 305°_{727,5} (Bl. **25**, 248;
 - J. pr. [2] 48, 461; A. 238, 363). II, 458. 2) 3-Phenylamido-1-Methylbenzol. Sd. 300—305° (J. pr. [2] 33, 542). - II, 477.
 - 3) 4-Phenylamido-1-Methylbenzol. Sm. 87°; Sd. 334,5°. HCl (A. 132, 291; **140**, 347; **214**, 218; **238**, 363; B. **14**, 2345; **17**, 2634; J. pr. [2] 48, 455). — II, 485.
 - 4) α-Amidodiphenylmethan (Benzhydrylamin). Sd. 288-289°. HCl, (2HCl, PtCl₄ + H₂O), H₂CO₃ (Bl. 33, 587; B. 19, 3233; 26, 2168; 31, 1772; J. r. 26 [1] 84). — II, 635. 5) 2-Amidodiphenylmethan. Fl. HCl (Sm. 175°), H₂SO₄ (B. 26, 3086;
 - 27, 2786; 29, 1303). II, 634.
 - 6) 3-Amidodiphenylmethan. Sm. 46° (B. 15, 2092). II, 634.
 - 7) 4-Amidodiphenylmethan. Sm. 34-35° (B. 16, 2718). II, 634.
 - 8) Methyldiphenylamin. Sd. 282° (A. 174, 181; 235, 21; B. 8, 1043; Bl. 23, 2; Z. 1871, 469). — II, 341.

 - 9) isom. Methyldiphenylamin. Sd. 270°₅₂₈ (Z. 1871, 468). II, 341.
 10) Phenylbenzylamin. Sm. 32°; Sd. 298—300°. HCl, (2HCl, PtCl₄), HBr, Oxalat, + CdCl₂ (A. 138, 226; 241, 330; B. 11, 1760; 15, 2031; 30, 1789; 31, 2672). II, 516.

 - 11) 4'-Amido-4-Methylbiphenyl (B. 28, 405). 12) ?-Amido-4-Methylbiphenyl. Sm. 93—97°. HCl (J. 1876, 419). II. 636.
 - 13) Tetraäthenylpyridin (Tetravinylpyridin). Sd. 276—278°. (HCl, HgCl₂),
 - (2HCl, PtCl₄), (HCl, AuCl₈) (B. **25**, 2776). **IV**, 379. 14) α-Phenyl-β-[2-Pyridyl] äthan (Dihydrostilbazol). Sm. —3°; Sd. 289,5°₇₈₆. $HCl + HgCl_2$, $(2HCl, PtCl_4)$, $(HCl, AuCl_3)$ (B. 21, 821). — IV, 378.
 - 15) **2,6-Dimethyl-4-Phenylpyridin.** Sm. 54,5—55°; Sd. 287°₇₈₁. HCl + $3 \, \text{H}_2\text{O}$, (2HCl, PtCl₄ + $4 \, \text{H}_2\text{O}$), HNO₈, Pikrat (B. **20**, 2591). IV, 378.
 - 16) **2-Methyl-1, 2-Dihydro-\beta-Naphtindol.** Sd. 190 2000₂₀ (A. **236**, 183). - IV, 378.
 - 17) 1,2,3,4-Tetrahydro-α-Naphtochinolin. Sm. 46,5°. HCl (B. 24, 2475). **- IV**, 378.
 - 18) 1,2,3,4-Tetrahydro- β -Naphtochinolin. Sm. 93,5°. HCl (B. 24, 2643).
 - IV, 379. 19) Base (aus Rohanilin). Sm. 46,5—47,5°. HCl, (2 HCl, PtCl₄), HNO₃ (B. 8, 968; **10**, 960). — **IV**, 379.
- $C_{13}H_{13}N_3$ C 73.9 - H 6.2 - N 19.9 - M. G. 211.
 - Diphenylguanidin (Melanilin). Sm. 147°. Salze meist bekannt (A. 67, 131; 90, 93; 175, 36; B. 2, 460; 7, 937, 1246; 12, 772). Π, 348.
 α-Phenylamido-α-Phenylhydrazonmethan. Sm. 90—91° (J. pr. [2] 57,
 - 223). IV, 1096.
 - 3) Phenylimido- β -Phenylhydrazidomethan. Sm. 106—108° (J. pr. [2] **53**, 470).

C18H14O9

C13H14O8

4) α -Phenyl- β -[2-Amidobenzyliden]hydrazin. Sm. 221—222° u. Zers. $C_{13}H_{13}N_3$ (J. pr. [2] **53**, 462; B. **25**, 1753; **31**, 2186). — **IV**, 752. 5) α -Phenyl- β -[3-Amidobenzyliden]hydrazin. Sm. 162° (J. pr. [2] **53**, 458). — IV, 753. 6) α-Phenyl-β-[4-Amidobenzyliden]hydrazin. Sm. 1750 (J. pr. [2] 53,

461; [2] **56**, 103). — **IV**, 753

7) Methyldiazoamidobenzol. Fl. (B. 19, 2035). - IV, 1561. 8) P-Methyldiazoamidobenzol. Sm. 90-91° (B. 30, 1409).

9) 1-Phenylamido-4-Methyldiazobenzol. Sm. 90—91° (A. 137, 60; B. 7, 1619; 14, 2445; 20, 3005; 28, 228, 246, 875; 29, 1900; 30, 1409).

10) 1-Benzylamidodiazobenzol. Sm. 72° (B. 21, 1016). — IV, 1572.
11) 4-Methylamidoazobenzol. Sm. 180°. HCl (B. 17, 1401). — IV, 1356.
12) 3-Amido-2-Methylazobenzol. Sm. 63—64° (Soc. 67, 932). — IV, 1382.
13) 3-Amido-4-Methylazobenzol. Sm. 105—107° (Soc. 67, 932). — IV, 1382.

14) 4'-Amido-4-Methylazobenzol. Sm. 147°. HCl, (2HCl, PtCl₄), AgOH (B. 10, 666). — IV, 1382.

15) 2- [α-Phenylhydrazonäthyl]pyridin. Sm. 155° (B. 24, 2528). — IV, 799.
 16) 3- [α-Phenylhydrazonäthyl]pyridin. Sm. 137° (B. 22, 598). — IV, 779.

17) Verbindung (aus Phenylazo-2-Nitrophenylmethan). Sm. 218-2200 (B. 25, 2903). — IV, 1385. C 65,3 — H 5,4 — N 29,3 — M. G. 239.

C13 H13 N5

1) Diazo[3-Amido-α-Imidobenzyl]amidobenzol (Amidobenzamidindiazobenzol) (B. 28, 487). — IV, 1582. 2) Di[Phenylazo]methylamin. Sm. 112—113° (B. 22, 934). — IV, 1567.

3) Verbindung (aus 1,2,3,4,5-Pentaamido-R-Penten) (B. 22, 922). — IV, 1315.

1) Methyldiphenylphosphin. Sd. 284° (A) 207, 210). — IV, 1658. 2) Phenylbenzylphosphin oder C₂₅H₂₄P₂? Sm. 169—171° (B. 15, 1961). $\mathbf{C}_{13}\mathbf{H}_{13}\mathbf{P}$

— IV, 1666.

1) Methyldiphenylarsin. Sd. 306° (A. 207, 199). — IV, 1688. $C_{13}H_{13}As$ C13H14O C 83.8 - H 7.5 - O 8.6 - M. G. 186.

1) Methyläther d. 2-Oxy-1,4-Dimethylnaphtalin. Sm. 68° (B. 12, 1575; 16, 428). — II, 894.

2) norm. Propyläther d. 1-Oxynaphtalin. Sd. 298-299₇₆₂ (G. 15, 84). **- II**, 857.

3) Propyläther d. 2-Oxynaphtalin. Sm. 39,5-40°. Pikrat (Bl. [3] 19, 367).

4) Isopropyläther d. 2-Oxynaphtalin. Sm. 41°. Pikrat (Bl. [3] 19, 367). 5) ε -Keto- α -Phenyl- $\alpha \gamma$ -Heptadiën. Sm. $108-110^{\circ}$ (B. 29, 614). III. 173.

6) γ -Keto- α -Phenyl- ε -Methyl- α δ -Hexadiën. Sd. 178—179°₁₄ (B. 14, 351, 2461). — III, 173.

7) 1-Keto-5-Methyl-3-Phenyl-1,2,3,4-Tetrahydrobenzol. Sm. 35-36°;

Sd. 202—202,5°₈₀ (A. 281, 84, 85; 288, 353). — III, 173.

8) Verbindung (aus d. Aethylester d. αγ-Diacetyl-β-Phenylpropancarbonsäure). Sd. 197—198,5° (J. pr. [2] 49, 25). C 77,2 — H 6,9 — O 15,8 — M. G. 202.

1) 1,3-Diketo-2-Aethyl-6-Methyl-1,2,3,4-Tetrahydronaphtalin. Sm. 63°; Sd. 182°₂₀ (Bl. [3] 3, 122). — III, 279.

2) 5-Methyl-8-Isopropyl-1,2-Benzpyron (Methylpropylcumarin). Sm. 53°; Sd. 220—230° (B. 17, 1648). — II, 1669.

3) γ -Oxy- β -Phenyl- α -[2-Furyl] propan. Fl. (B. 23, 2852). — III, 697. 4) Pyroguajacin. Sm. 180,5°; Sd. 258°₈₀₋₉₀. K₂ (A. 52, 402; 106, 381; 119, 277; J. 1854, 612; M. 1, 594; 19, 96). — III, 645.
5) Cinnamenylangelikasäure. Sm. 125—127°. Ag (J. 1877, 792; Bl. [3]

5, 172). — II, 1444.

6) 2-Phenyl-1, 2, 3, 4-Tetrahydrobenzol-5-Carbonsäure. Sm. 158°. Ag (A. 282, 149). — II, 1444.

7) Aethylester d. 1,2-Dihydronaphtalin-4-Carbonsäure. Sd. 305-306°₇₄₈ (B. 31, 1899).

8) Verbindung (aus Bitterfenchelöl) (*Bl.* [3] **17**, 580). C 71,5 — H 6,4 — O 22,0 — M. G. 218.

1) 6-Oxy-4-Keto-2-[4-Methoxylphenyl]-1,2,3,4-Tetrahydrobenzol (Anisylhydroresorcin). Sm. bei 185° (A. 294, 310). 2) γ -Benzoyl- β -Methyl- α -Buten- α -Carbonsäure. Sm. 101° (G. 29 [1] 6).

 $C_{13}H_{14}O_{8}$

 $C_{13}H_{14}O_4$

- 3) 3-Keto-1,1,5-Trimethyl-2;3-Dihydroinden-2-Carbonsäure (Jongenogonsäure). Sm. 237° (B. 26, 2694). — II, 1684.
- 4) Anhydrid d. Benzol-1-Carbonsäure-2-[α-Aethylpropyl-α-Carbonsäure] (A. d. Diäthylhomophtalsäure). Sm. 53° (B. 20, 2494). — II, 1859.
- 5) Methylester d. β-Acetyl-α-Phenylpropen-γ-Carbonsäure (M. d. Benzallävulinsäure). Sd. 200—230°₈₈ (A. 254, 194). II, 1683.
 6) Aethylester d. 1-Benzoyl-R-Trimethylen-1-Carbonsäure. Sd. 280
- bis 283°_{780} (Soc. 47, 836). II, 1682. 7) Aethylester d. 2,4-Dimethylbenzfuran-1-Carbonsäure. Sm. 55°; Sd.
- $298 300^{\circ}_{798}$ (B. 19, 1299). II, 1679.
- 8) Aethylester d. γ -Keto- α -Phenyl- α -Buten- β -Carbonsäure (Ae. d. Benzalacetessigsäure). Sm. 59—60° (60—61°); Sd. 295—297° u. ger. Zers. (B. 14, 347; 29, 172; A. 218, 177; 281, 63). — II, 1680. 9) Acetat d. β -Benzoyl- α -Oxy- α -Buten. Sd. 167—168°₁₃ (A. 281, 397). —

- 10) Harz (aus Waras von Flemingia congesta). Sm. unterh. 100° (Soc. 73, 664).
 11) Verbindung (aus Diacetylaceton). Sm. 170° (B. 28, 1827).
 12) Verbindung (aus Methylenbisdihydroresorcin). Sm. 165° (B. 30, 1802). C 66,7 — H 6,0 — O 27,3 — M. G. 234.

 1) Diäthyläther d. Aeskuletin. Sm. 109° (B. 16, 2107). — III, 568.

 - 2) α -[4-Isopropylphenyl]äthen- $\beta\beta$ -Dicarbonsäure + H₂O (Cuminalmalonsäure). Sm. 89—90° (137° wasserfrei) (B. 22, 2267; 31, 2616). II, 1871.
 - 3) Lakton d. α -[2, 3, 4-Trioxyphenyl-3, 4-Diäthyläther] äthen- β -Carbonsäure (Daphnetindiäthyläther). Sm. 72° (B. 17, 1084). — II, 1950.
 - 4) $\alpha \gamma$ -Lakton d. α -Oxy- α -Phenylpropan- γ -Carbonsäure- β -Carbonsäureäthylester (Aethylester d. Phenylparakonsäure). Sd. über 360° (250 bis 252°₁₀₀) (B. 17, 417; A. 256, 65). — II, 1955.

 5) 1,6-Laktond.3-Pseudobutyl-1-Oxymethylbenzol-5,6-Dicarbonsäure.
 - Sm. 273° (B. 31, 1347).
 - 6) Dimethylester d. 1-Phenyl-R-Trimethylen-2, 3-Dicarbonsäure. Sm. 63°; Sd. 200-214°₂₀ (B. **25**, 1152). — II, 1868.
 - 7) Achylester d. α_{γ} -Diketo- α -Phenylbutan- β -Carbonsäure (A. d. Benzoylacetessigsäure). Sd. 202°₅₀. Cu + 2H₂O (A. 187, 1; 226, 220; 266, 99; 282, 163; B. 18, 2131; 25, 1046; 30, 954). II, 1867.
 - 8) Aethylester d. β -Benzoxylpropen- α -Carbonsäure (Ae. d. β -Benzoyl-
 - oxyisocrotonsäure). Sm. 43° (A. 276, 202). II, 1867. 9) Aethylester d. β -Benzoxyl- α -Methylakrylsäure. Sm. 55° (B. 25, 1051). — II, 1154.
- 10) Aethylester d. β-Acetoxyl-α-Phenylakrylsäure. Sd. 184°₁₈ (A. 291,
- 11) Aethylester d. β -Acetoxyl- β -Phenylakrylsäure (Aethylester d. Acetylbenzoylessigsäure). Sm. $27-28^{\circ}$; Sd. 176°_{18} (A. 282, 164). — II, 1644.
- 12) Aethylester d. 4[oder 5]-Oxy-1,6[oder 1,3]-Dimethylbenzfuran-2-Carbonsäure. Sm. 173° (A. 283, 255). III, 732.
 13) Aethylester d. Dimethylphtalidearbonsäure? Sm. 105—106° (G. 23)
- 1] 291). II, 1869.
- 14) Aethylester d. Cannabinolaktonsäure. Sm. 105° (Soc. 75, 34).
- 15) Diacetat d. γγ-Dioxy-α-Phenylpropen. Sm. 84-85° (G. 20, 158). -
- 16) Diacetat d. 3,4-Dioxy-1-Propenylbenzol. Sm. 96,5°; Sd. 305-308° (B. **25**, 1475). — II, 980.
- 17) Drimin. Sm. 256° (A. 286, 371). III, 630. 18) Usnetol. Sm. 179° (G. 12, 238). II, 2058. C 62,4 H 5,6 O 32,0 M. G. 250.
- $C_{13}H_{14}O_{5}$
 - 1) Trimethyläther d. ?-Trioxy-4-Methyl-1, 2-Benzpyron (Tr. d. ?-Trioxy-
 - 4-Methyleumarin). Sm. 113—113,5°. 2 + KJ (G. 23 [2] 611). II, 2017.
 2) Methylhydrobergaptensäure. Sm. 122° (M. 12, 391). II, 2008.
 3) Daphnetildiäthyläthersäure. Sm. 154° (B. 17, 1085). II, 2004.

 - α-Keto-α-Phenylpentan-γγ-Dicarbonsäure (α-Aethyl-β-Benzoylisobernsteinsäure). Sm. 150°. (NH₄)₂, K₂, Ca + H₂O (B. 21, 3453). II, 1966.
 δ-Keto-β-Phenylpentan-αα-Dicarbonsäure (Acetonylbenzylmalonsäure). Sm. 115°. Ba + 2H₂O (A. 294, 321).
 - 6) 1-Methylbenzol-3-Ketocarbonsäure-4-[Isopropyl- α -Carbonsäure] (Iregenondicarbonsaure). Sm. 227° (B. 26, 2684) — II, 1967.

RICHTER, Lex. d. Kohlenstoffverb.

- 7) ?-Dioxybenzfurandiäthyläther-1-Carbonsäure (Dioxycumarildiäthyl-C18H14O5 äthersäure). Sm. 1950 (B. 16, 2119). — II, 1960.
 - 8) α ,2-Lakton d. α -Oxy- γ -Keto- α -[3,4-Dioxyphenyl]butan-3,4-Dimethyläther-2-Carbonsäure (Mekonindimethylketon). Sm. 1170 (M. 12, 475; 14, 393). — II, 2008.
 - 9) $\alpha \gamma$ -Lakton d. $\alpha \gamma$ -Dioxy- α -Phenylpropan- $\beta \gamma$ -Dicarbonsäure- β -Aethylester (Aethylester d. Phenyloxyparakonsäure). Sm. 86-880 (B. 26, 2147). — II, 2007.
 - 10) Aethylester d. 6-Oxy-4-Keto-2-Furanyl-1, 2, 3, 4-Tetrahydrobenzol-3-Carbonsäure. Sm. 102° (A. **294**, 299). C 58,6 — H 5,2 — O 36,1 — M. G. 266.
- C13H14O6 1) Propionylopiansäure. Sm. 111° (B. 19, 2289). — II, 1941.
 - 2) Acetylsinapinsäure. Sm. 281° (181—187°) (Am. 6, 57; C. 1897 [1] 822; B. 30, 2330). — II, 1958.
 - 3) α -[2, 3, 4, 5-Tetraoxyphenyl] propen-?-Dimethyläther-?-Methylenäther-β-Carbonsäure (Apioncrotonsäure). Sm. 209°. Ca + 5H₂O, Ag (B. 22, 2487). — II, 2007.
 - 4) α -Phenylbutan- $\beta\beta\gamma$ -Tricarbonsäure (B. 23, 654). II, 2016.
 - 5) α, 2-Lakton d. α-Oxy-4, 6-Diäthoxylphenylmethan-α, 2-Dicarbonsäure (3,5-Diäthoxylphtalidearbonsäure). Sm. 172-1730 (A. 296, 354).
 - 6) α,2-Lakton d. α-Oxy-α-[3,4-Dioxyphenyl]äthan-3,4-Dimethyläthereta, 2-Dicarbonsäure-eta-Methylester (Methylester d. Mekoninessigsäure).
 - Sm. 124° (B. 19, 2292). Π, 2045.

 7) Dianhydrid d. α-Säure C₁₃H₁₈O₈ (aus Santonsäure). Sm. 151—152° (G. 22 [1] 201; G. 1896 [2] 1114). Π, 2067.

 8) Dianhydrid d. β-Säure C₁₃H₁₈O₈ (aus Santonsäure). Sm. 134—135° (G. 22 [1] 203; G. 1896 [2] 1114). Π, 2068.

 - 9) β -Monäthylester d. α -Phenyläthan- $\beta\beta2$ -Tricarbonsäure. Fl. K_2 , Ag_2 (A. **242**, 37). — II, 2014.
 - 10) Triacetat d. ααα-Trioxyphenylmethan (A. 135, 89). II, 1107.
 - 11) Triacetat d. 2,4,6-Trioxy-1-Methylbenzol. Sm. 52° (M. 19, 227). 12) Triacetat d. 3,4,5-Trioxy-1-Methylbenzol. Sm. 99° (M. 19, 569).
 - 13) Triacetat d. 2-Oxy-1-Dioxymethylbenzol. Sm. 100-1010 (Bl. 33, 53;
 - A. 148, 205). III, 67. 14) Triacetat d. 3-Oxy-1-Dioxymethylbenzol. Sm. 76° (B. 15, 2047). —
 - 15) Triacetat d. 4-Oxy-1-Dioxymethylbenzol. Sm. 93—94° (B. 10, 65).
- III, *82*. C 55.3 - H 4.9 - O 39.7 - M. G. 282.C13H14O7
 - 1) Cubebensäure (oder $C_{28}H_{30}O_7 + H_2O$) (J. 1864, 411; 1870, 881; 1873, 863). — II, 1114.
 - 2) Trimethylester d. 5-Oxy-1-Methylbenzol-2,3,4-Tricarbonsäure. Sm. 78-80° (B. 30, 1741).
 3) Monäthylester d. Monobenzoylweinsäure (A. Spl. 5, 279). II, 1154.

 - 4) Diäthylester d. 2-Oxybenzol-1,3,5-Tricarbonsäure + H₂O. Sm. 148° (wasserfrei). Na + H₂O (*J. pr.* [2] **14**, 121). — **II**, 2047. C 52.3 — H 4.7 — O 42.9 — M. G. 298.
- C13 H14 O8 1) Säure (aus d. α -Säure $C_{18}H_{18}O_8$). Sm. 250—251° u. Zers. Ba + H_2O (G. 23 [2] 460). - II, 2071.
 - 2) α^3 -Methylester- β -Aethylester d. α -Oxy- α -[2,4,6-Trioxyphenyl]äthen-
- α³, β-Dicarbonsaure. Sm. 128—130° (Soc. 71, 1111).
 C 43,1 H 3,8 0 53,0 M. G. 362.
 Monomethylester d. Isohydromellithsaure. Ag₅ (B. 28, 1274). C13H14O19 $C_{13}H_{14}N_2$ C 78,8 — H 7,1 — N 14,1 — M. G. 198.
 - 1) Di[Phenylamido]methan (Methylendiphenyldiamin). Sm. 64-65°; Sd. 209—210°. (2HCl, PtCl₄) (B. 7, 1255; 27, 1805; G. 14, 353; A. 302, 349). — II, 442.
 - 2) 2,4'-Diamidodiphenylmethan. Sm. 88° (A. 283, 162). IV, 973. 3) 3,3'-Diamidodiphenylmethan. Sm. 47-48°. (2HCl, PtCl₄) (B. 27,
 - 2322). IV, 973. 4) 3,4'-Diamidodiphenylmethan. Sm. 89—90° (B. 27, 2294). — IV, 973. 5) 4,4'-Diamidodiphenylmethan. Sm. 88—89° (93°). HCl, H₂SO₄ (B. 5, 796; 23, 2578; 25, 302; 27, 1810; 28, 1341; A. 283, 161; D.R.P. 53 937;
 - C. 1898 [2] 158). IV, 973.

- $C_{13}H_{14}N_{2}$
- 6) Phenyl-2-Amidobenzylamin. Sm. 86—87° (81—82°). 2HCl (B. 23, 2193; 25, 449; 27, 2900; J. pr. [2] 47, 353; [2] 51, 261). IV, 626. 7) Phenyl-4-Amidobenzylamin. Sm. 88° (49—50°). 2HCl (B. 6, 1063;
- 30, 69). IV, 640.
- 8) 2-Amido-1-Benzylamidobenzol (2-Amidophenylbenzylamin) (A. 290, 293; J. r. 27, 582). — IV, 556.
- 9) 4-Amido-1-Benzylamidobenzol. Sm. 30°. 2HCl (Soc. 55, 591; A. 263, 302). **— IV**, 586.
- 10) Phenyl- α -Amidobenzylamin (α -Amido- α -Phenylamidophenylmethan).
- Sm. 114,5—115°. HCl, (2 HCl, PtCl₄) (B. 13, 918). IV, 625.
 11) 4-Amido-1-[4-Methylphenyl]amidobenzol (4-Amidophenyl-4-Methylphenylamin). Sm. 118° (A. 255, 166; 303, 382). IV, 585.
 12) 2'-Amido-4-Methyldiphenylamin. Sm. 76—77° (74°) (B. 23, 3455; 29,
- 1874; A. 303, 378). IV, 556.
- 13) 4-,4'-Diamido-2-Methylbiphenyl. 2 HCl (B. 28, 2549). IV, 975.
- 14) 4,4'-Diamido-3-Methylbiphenyl (B. 28, 2545). IV, 975.
- 15) isom. P-4, 4'-Diamido-3-Methylbiphenyl. Sm. 115° (B. 23, 3223). IV, 975.
- 16) s-Phenylbenzylhydrazin. Sm. 155,5°; Sd. 230—260° (i. V.). (B. 26, 679, 1023). — IV, 811.
- 17) uns-Phenylbenzylhydrazin + H_2O . Sm. 26°. HCl (A. 227, 361; 252, 286; G. 22 [2] 219; 27 [2] 244). - IV, 811.
- 18) 2-Methyl-s-Diphenylhydrazin. Sm. 101° (B. 28, 2544).
- 19) 3-Methyl-s-Diphenylhydrazin. Sm. 59-61° (B. 28, 2549). IV, 1502.
- 20) 4-Methyl-s-Diphenylhydrazin. Sm. 86-87° (A. 303, 369). IV, 1502.
- 21) s-Dihydrobenzylidenphenylhydrazin. Sm. 127-1280 (B. 23, 2883). **IV**, 748.

- 22) β -[1-Naphtyl]hydrazonpropan. Sm. 71° (A. 232, 241). IV, 928. 23) β -[2-Naphtyl]hydrazonpropan. Sm. 65,5° (A. 236, 175). IV, 930. 24) 4,5-Dimethyl-2-[β -Phenyläthenyl]imidazol. Sm. 201—202°. (2 HCl, PtCl₄) (Soc. 57, 11), - IV, 976.
- 25) 4-Phenylamido-2,6-Dimethylpyridin. Sm. 335-338° (B. 20, 165; 23, 274). — IV, 824.
- 26) 2,6-Dimethyl-4-[3-Amidophenyl]pyridin. Sm. 110°. (2HCl, PtCl₄) (G. 17, 471). - IV, 976.
- Sd. 319—323°₇₈₀. (2HOI, 1...) (R **21**, 3100). IV, 27) Di[2-Methyl-?-Pyridyl]methan. Sd. 319—323°, (2HCl, 4HgCl₂), (2HCl, PtCl₄), (2 + 4HCl, 3AuCl₃ + 1¹/₂H₂O) (B. 21, 3100). — IV, 976. 28) 4,6-Dimethyl-2-Benzyl-1,3-Diazin. Sm. 80°; Sd. 274° (B. 26, 2125).
- **IV**, 976. 29) 4,6-Dimethyl-2-[4-Methylphenyl]-1,3-Diazin. Sm. 128°; Sd. 294°
- (B. 26, 2125). IV, 976. 30) 6-Amido-1,2,3,4-Tetrahydro- α -Naphtochinolin. 2HCl (B. 24, 2479).
- **IV**, 976. 31) Nitril d. 3,3-Diäthylpseudoindol-2-Carbonsäure. Sd. 163-164027 (G. 28 [2] 410). C 69,0 — H 6,2 — N 24,8 — M. G. 226.
- $\mathbf{C}_{13}\mathbf{H}_{14}\mathbf{N}_{4}$
- 1) 2-Amido-4-Methylamidoazobenzol (B. 19, 549). IV, 1360.
- 2) 4,6-Diamido-3-Methylazobenzol. HCl (B. 13, 717). IV, 1383.
- 3) Amidomethylindiamin (A. 236, 343). IV, 1278.
- 1) Phenyläther d. 4-Merkapto-1,2-Dimethylbenzol. Sd. 181,5% (B. 28, 2324).
- $C_{13}H_{14}S$ $C_{13}H_{15}N$
- C 84,3 H 8,1 N 7,6 M. G. 185.1) 1-norm. Propylamidonaphtalin. Sd. 316-3180771 (B. 25, 2324). -II, 599.
- 2) 2-norm. Propylamidonaphtalin. Sd. 322-3240 (B. 25, 2325). -II, 602.
- 3) 2,5-Dimethyl-1-[4-Methylphenyl]pyrrol. Sm. 45-46°; Sd. 255°,774 (B. **18**, 309). — **IV**, 72.
- 4) 2-Isobutylchinolin. Sd. 270—271°. (2HCl, PtCl₄), Pikrat (A. 242, 282). - IV, 340.
- 5) ?-Diäthylchinolin. Sd. 282,8—284,8°. (HCl, HgCl₂), (2HCl, PtCl₄) (B. 19, 3001; **20**, 2735). — **IV**, 340.
- 6) 3,6-Dimethyl-2-Aethylchinolin. Sm. 54°; Sd. 287—288°₇₂₀. (2 HCl, $PtCl_4 + 2H_2O$), Pikrat (B. 18, 3384). — IV, 340.

7) 3,7-Dimethyl-2-Aethylchinolin. Sm. 40—41°; Sd. 288—292°. (2 HCl, PtCl₄ + 2 H₂O), Pikrat (B. 18, 3398). — IV, 341. 8) 3,8-Dimethyl-2-Aethylchinolin. Sm. 44°; Sd. 279—280°₇₁₇ (2 HCl, $C_{13}H_{15}N$

PtCl₄), Pikrat (B. 18, 3400). — IV, 341.

9) 2,5,6,8-Tetramethylchinolin. Sm. 20°; Sd. 297—300°. H₂Cr₂O₇ (B. 17, 1710). — IV, 341. 10) P-Tetramethylchinolin. Sm. 84°; Sd. 284-285°. (2 HCl, PtCl₄), H₂SO₄,

H₂Cr₂O₇ (B. **19**, 1394). — **IV**, 341. 11) P-Tetramethylchinolin. Sd. 265—273°. (2 HCl, PtCl₄) (B. **18**, 3144). —

12) 3-Isobutylisochinolin. Sd. 278°₇₄₅ (B. **30**, 897). — **IV**, 341. 13) Pentahirolin. Fl. (Z. **1867**, 429). — **IV**, 343. C 73,3 — H 7,0 — N 19,7 — M. G. 213.

 $C_{13}H_{15}N_3$

1) 4-Amidophenyl-2-Amidobenzylamin. Sm. 114° (J. pr. [2] 54, 272). **— IV**, 627.

2) α-Phenyl-α-[2-Amidobenzyl]hydrazin. Sm. 102°; Sd. 254° (B. 25, 2901; **27**, 2901). — IV, 1129.

3) P-[4-Methylphenyl]azo-1-Aethylpyrrol. Sm. 620 (B. 19, 2257). —

IV, 1483. C 83,0 — H 8,5 — O 8,5 — M. G. 188.

1) γ-Keto-α-[4-Isopropylphenyl]-α-Buten (Cuminolaceton). Sd. 180 his 181°_{23} (A. 223, 147). — III, 167. 2) γ -Keto- $\delta\delta$ -Dimethyl- α -Phenyl- α -Penten (Benzalpinakolin). Sm. 41°

(B. 30, 2269).

3) 5-Keto-1-Methyl-3-Phenylhexahydrobenzol. Sd. 168-1700 (A. **303**, 265).

4) Benzoylhexahydrobenzol(Hexahydrobenzophenon). Sm. 54° (B. 30, 1942). C 76.5 - H 7.8 - O 15.7 - M. G. 204.

1) Methylallyläther d. 3,4-Dioxy-1-Allylbenzol. Sd. 267—270° (J. 1877, 581). — II, *974*.

2) Methyläther d. γ -Keto- δ -Methyl- α -[4-Oxyphenyl]- α -Penten (p-Anisalmethylisopropylketon). Sm. 28°; Sd. 217—219° (A. 294, 334).

3) $\delta \zeta$ -Diketo- ζ -Phenyl- β -Methylhexan. Sd. 183—184% (B. 20, 2181). **— III**, 274.

4) $\gamma \varepsilon$ -Diketo- ε -Phenyl- $\beta \beta$ -Dimethylpentan. Sd. 161—165 $^{o}_{25}$ (B. 30, 2272). 5) 2,4-Diacetyl-1,3,5-Trimethylbenzol. Sm. 46 o ; Sd. 310 o (B. 29, 1413,

2567; **30**, 1272). — III, *274*.

6) 1-Phenylhexahydrobenzol-2-Carbonsäure. Sm. 104-105°. Ag (Soc. **57**, 316). — **II**, *1434*. 7) 1-Phenylhexahydrobenzol-4-Carbonsäure. Sm. 202°. Ag (A. 282,

146). — II, 1435. 8) isom. 1-Phenylhexahydrobenzol-4-Carbonsäure. Sm. 113°. Ag (A. 282,

150). — II, *1435*. 9) α -[4-Isopropylphenyl]- α -Propen- β -Carbonsäure (Cumenylcrotonsäure).

Sm. 90—91°. Ag (J. 1877, 791). — II, 1434. 10) Lakton d. δ -Oxy- γ -Benzylcapronsäure. Sm. 54—56°; Sd. 216—218°₁₅ (A. 268, 127). — II, 1594. 11) Lakton d. 5-Oxymethyl-3-Pseudobutyl-1-Methylbenzol-6-Carbon-

säure (Butylmethylphtalid). Sm. 85,5°; Sd. 275° (B. 31, 1347) 12) Hexenylester d. Benzolcarbonsäure. Sm. 105°; Sd. 275—280° (A. ch.

[5] **27**, 69). — **II**, 1141.

13) Acetat d. 2- $[\alpha$ -Oxyäthyl]-2,3-Dihydroinden. Sd. 188—190 $^{\circ}_{70}$ (Soc. 65, 243). — II, 1071.

14) Benzoat d. δ-Oxy-α-Hexen. Sd. 259—261° (Bl. [3] 15, 885).

C 70,9 — H 7,3 — O 21,8 — M. G. 220.

1) 3-Methyläther-4-Acetylmethyläther d. 3,4-Dioxy-1-Allylbenzol (Acetonyleugenol). Fl. (B. 27, 2465). — II, 974.

2) 3-Methyläther-4-Acetylmethyläther d. 3, 4-Dioxy-1-Propenylbenzol (Acetonylisoeugenol). Fl. (B. 27, 2465). — II, 977

3) β -[4-Oxy-2-Methyl-5-Isopropylphenyl]akrylsäure (p-Thymoakrylsäure). Sm. 280° (B. 16, 2104). — II, 1669.

4) 4-0xy-1-Phenylhexahydrobenzol-4-Carbonsäure. Sm. 1450 (A. 282, 148). — II, 1669.

5) α -Keto- α -Phenylhexan- γ -Carbonsäure. Sm. 56° (Bl. [3] 17, 410).

 $C_{13}H_{16}O$

 $C_{13}H_{16}O_{2}$

 $C_{13}H_{16}O_{3}$

- $C_{13}H_{16}O_{3}$
- 6) ε -Benzoylpentan- α -Carbonsäure (ε -Benzoylcapronsäure). Sm. 81—82°. Ag (Soc. 55, 350). — II, 1669.
- 7) α-Benzoyl-α-Aethylbuttersäure. Sm. 128—130° (B.16, 2131). II, 1669.
- 8) β -[4-Isopropylbenzoyl] propionsäure. Sm. 72° (B. 28, 3217).
- 9) β-[o-Methyläthylbenzol] propionsäure. Sm. 78° (B. 28, 3217).
- 10) β -[2,4,5-Trimethylbenzoyl] propionsäure. Sm. 105° (98°) (B. 20, 1378; **28**, 3216). — II, *1669*.
- 11) β -[2,4,6-Trimethylbenzoyl] propionsäure. Sm. 109° (106°) (B. 28, 1269, 3216). **— II**, *1669*.
- 12) Pentamethylbenzolketocarbonsäure. Sm. 120°. Na + $3\,\mathrm{H}_2\mathrm{O}$, Ba + $5\,\mathrm{H}_2\mathrm{O}$, Cu + $5\,\mathrm{H}_2\mathrm{O}$ (B. 22, 1218). II, 1669. 13) Säure (aus dem Diketon $\mathrm{C}_{13}\mathrm{H}_{14}\mathrm{O}_{2}$). Sm. 73—74°. Ba (Bl. [3] 3, 124).
- **II**, 1669.
- 14) 1α , 6α -Lakton d. 3-Methyl-1- $[\alpha\beta$ -Dioxyäthyl]benzol-6-Isopropyl- α -Carbonsäure (Dehydroirenoxylakton). Sm. 154—155° (B. 26, 2683; 31, 809 Anm.). — III, 167.
- 15) **Methylester** d. α -[2-Methoxylphenyl]- α -Buten- β -Carbonsäure (M. d. α-o-Butyrcumarmethyläthersäure). Sd. 282° (Soc. 39, 435). — II, 1662.
- 16) Methylester d. isom. α -[2-Methoxylphenyl]- α -Buten- β -Carbonsäure.
- Sd. 292° (Soc. 39, 437). II, 1662.

 17) Aethylester d. β-[2-Aethoxylphenyl]akrylsäure (Ae. d. α-o-Cumaräthyläthersäure). Sd. 290—291° (Soc. 39, 412). II, 1629.
- 18) Aethylester d. isom. β -[2-Aethoxylphenyl]akrylsäure (β -Modif.). Sd. $302-304^{\circ}$ (Soc. 39, 412). II, 1629.
- 19) Aethylester d. β -Oxy- β -Phenylakryläthyläthersäure. Sd. 154 bis 155°_{9} (Am. 20, 137).
- 20) Aethylester d. α-Benzoylbuttersäure. Sd. 225°_{281—232} (Soc. 47, 241). **– II**, 1664.
- 21) Aethylester d. γ -Keto- α -Phenylbutan- β -Carbonsäure (Ae. d. Benzylacetessigsäure). Sd. 283-284° (A. 187, 12; 204, 180; 268, 123). -II, 1664.
- 22) Aethylester d. α-Keto-α-Phenylbutan-δ-Carbonsäure. Sd. 315° (A. 302, 220).
- 23) Aethylester d. 1,2,4-Trimethylbenzol-5-Ketocarbonsäure. Sd. 175
- bis 176% (Bl. [3] 17, 370). 24) Aethylester d. 1,3,5-Trimethylbenzol-2-Ketocarbonsäure. Sd. 164 bis 165°₁₀ (Bl. [3] **17**, 371).
- 25) Isoamylester d. Benzolketocarbonsäure. Sd. 179—1820₄₀ (B. 12, 630). - II, 1598.
- 26) Benzoat d. ζ -Oxy- β -Ketohexan. Fl. (A. 289, 193).
- C 66,1 H 6,8 O 27,1 M. G. 236. $C_{13}H_{16}O_4$
 - 1) Methylenbisdihydroresorcin. Sm. 132—1330 (1300) (A. 278, 31 Anm.; **294**, 271). — II, 906.

 - 2) β-[2,4-Dioxyphenyl]akryl-2,4-Diäthyläthersäure. Sm. 106,5° (B. 19, 1780). II, 1774.
 3) isom. β-[2,4-Dioxyphenyl]akryl-2,4-Diäthyläthersäure. Sm. 200° (B. 19, 1780). II, 1774.
 - 4) β -Acetoxyl- β -Phenyl- $\alpha\alpha$ -Dimethylpropionsäure. Sm. 137%. Ca + $2 H_2 O$, Ba + $2 H_2 O$ (A. **227**, 72). — II, 1591.
 - 5) α -Acetoxyl- α -[4-Isopropylphenyl]essigsäure. Sm. $60-61^{-6}$ (G. 21) [1] 46). — II, *1592*.
 - 6) δ -Keto- β -[4-Methoxylphenyl]pentan- α -Carbonsäure. Sm. 104° (A. **294**, 331).
 - 7) γ-Phenylpentan-αβ-Dicarbonsäure. Sm. 153—155° (B. 22, 1818; Ph. Ch. 8, 464). — II, 1859.
 - 8) 1-Propylbenzol-4-[Aethyl- $\beta\beta$ -Dicarbonsäure] (Cumylmalonsäure). Sm. 165° (B. 22, 2269). II, 1859.
 - 9) Benzol-1-Carbonsäure-2-[α-Aethylpropyl-α-Carbonsäure] (Diäthylhomophtalsäure). Sm. 148°. Ag₂ (B. **20**, 2495). — II, 1859.
 - 10) Methylester d. β-[2,4-Dioxyphenyl]propen-2,4-Dimethyläther-α-Carbonsäure. Sd. 310—320° (B. 17, 2132). — II, 1780.
 - 11) Methylester d. α -[3,4-Dioxyphenyl] propen 3,4-Dimethyläther- β -Carbonsäure. Sm. 65-66° (B. 15, 2070). — II, 1781.

 $C_{13}H_{16}O_4$

12) Methylester d. Oxyessig-[3-Methoxyl-1-Propenylphenyl]-4-Aethersäure. Sm. 90° (G. 23 [1] 553). — II, 980.

13) Dimethylester d. β-Phenylpropan-αγ-Dicarbonsäure. Sm. 86-870

(B. 31, 1828).

14) Dimethylester d. 1-Methylbenzol-3-[Aethyl- $\beta\beta$ -Dicarbonsäure]. Sd. bci 300° (B. 23, 110). — II, 1855. 15) Monäthylester d. 1-Methylbenzol-3-[Aethyl- $\beta\beta$ -Dicarbonsäure]. NH₄

(B. 23, 111). — II, 1855. 16) Diäthylester d. Phenylmethandicarbonsäure (D. d. Phenylmalonsäure). Sd. 285° u. ger. Zers. (B. 27, 1093; 29, 1864). — II, 1840. 17) Diäthylester d. 1-Methylbenzol-3,5-Dicarbonsäure. Sm. 350 (A.

147, 301). — II, 1846. 18) Diäthylester d. Benzol-l-Carbonsäure-2-Methylcarbonsäure (D. d. o-Homophtalsäure). Sd. 291,5-292,5° (B. 20, 2500). - II, 1842. 19) Diäthylester d. Benzol-l-Carbonsäure-4-Methylearbonsäure. Sd. 312

bis 313° (G. 21, 63). — II, 1844. 20) Diacetat d. 3,5-Di[Oxymethyl]-1-Methylbenzol. Sd. 244°₁₂₀ (Bl. 40, 111). — II, 1098.

21) Diacetat d. 3, 6-Dioxy-1, 2, 4-Trimethylbenzol. Sm. 112° (B. 27, 1430).

- II, 970.

22) Diacetat d. 2,4-Dioxy-1,3,5-Trimethylbenzol. Sm. 63°; Sd. 305° (A. 215, 102). — II, 970.

23) γ -Benzoat d. $\alpha \alpha \gamma$ -Trioxybutan- $\alpha \alpha$ -Aethylidenäther (Acetaldehydoaldolbenzoat). Sm. 86—87° (A. 293, 328; Am. 18, 553). C 61,9 — H 6,3 — O 31,7 — M. G. 252.

C12H16O5

1) ε -Oxypentanphenyläther- $\beta\beta$ -Dicarbonsäure (γ -Phenoxylpropylisobernsteinsäure). Sm. 118° u. Zers. Ag₂ (B. 26, 2571). — II, 667.

2) δ-Oxybutan-4-Methylphenyläther-αα-Dicarbonsäure. Sm. 116—119° (B. 25, 3045). - II, 750.

3) α -[2,4,5-Trimethoxylphenyl]propen- β -Carbonsäure. Sm. 157° (B. **32**, 291).

4) Methylester d. Methylsinapinsäure. Sm. 91-91,50 (C. 1897 [1] 822; B. **30**, 2331).

5) Methylester d. Aeskuletintrimethyläthersäure. Sm. 109° (B. 15, 2082). — II, 1950.

6) Dimethylester d. α - Oxy - α - Phenyläthanmethyläther - $\beta\beta$ -Dicarbonsäure (D. d. Oxybenzylmalonmethyläthersäure). Na (B. 26, 1877). II, 1951.

7) β -Aethylester d. α -Oxy- α -Phenylpropan- $\beta\gamma$ -Dicarbonsäure (Ae. d.

Phenylitamalsäure). Fl. CuOH (B. 17, 417). — II, 1955. 8) Aethylester d. Sinapinsäure + H₂O. Sm. 80-81° (C. 1897 [1] 822; B. 30, 2330).

9) Diäthylester d. 5-Oxy-1-Methylbenzol-2,4-Dicarbonsäure. Sm. 45° $(50-51^{\circ})$. Na, K (B. 26, 354; A. 297, 44). — II, 1948.

10) Diäthylester d. Oxymalonphenyläthersäure. Sd. 230-240% (B. 24, 3001). — **II**, 667.

11) Diäthylester d. Methylphenyläther-a-Carbonsäure-2-Carbonsäure. Fl. (B. 17, 2997). — II, 1497.

12) Propylester d. Opiansäure. Sm. 103° (B. 20, 882). — II, 1941.

13) Diacetat d. 2-Aethoxyl-1-Dioxymethylbenzol. Sm. 88-89° (A. 146, 372). — III, *67*. C 58,2 - H 5,9 - O 35,8 - M. G. 268.

C19 H16 O6

1) β -Pikroerythrin (Bl. 2, 424). — II, 1752.

2) Trimethylester d. 1-Methyl-1,2-Dihydrobenzol-1,3,5-Tricarbonsäure. Sm. 76° (A. 305, 138).

3) Diäthylester d. 3,5-Dioxy-1-Methylbenzoldikohlensäure. Sd. 310 bis 312° (A. 226, 86). — II, 961.

4) Diäthylester d. 2,6-Dimethyl-1,4-Pyron-3,5-Dicarbonsäure. Sm. 79 bis 80° (B. 19, 22; 20, 152; G. 21, 298). — II, 2005.

5) 1-Propylester d. 3,4-Dioxybenzoldimethyläther-1,2-Dicarbonsäure (P. d. Hemipinsäure). Sm. 111,5—112,5° (125—125,5°) (M. 16, 121, 126). · II, 1996.

6) 2-Propylester d. 3,4-Dioxybenzoldimethyläther-1,2-Dicarbonsäure (P. d. Hemipinsäure). Sm. 119—120° (131—132°) (M. 16, 118, 126). — II, 1996.

- $C_{13}H_{16}O_{7}$
- C 54,9 $\stackrel{\frown}{=}$ H 5,6 $\stackrel{\frown}{=}$ O 39,4 $\stackrel{\frown}{=}$ M. G. 284.

 1) Helicin + $^8/_4$ H₂O. Sm. 175° (wasserfrei). + NaHSO₃ (A. 56, 64; 154, 19; 210, 126; J. 1864, 588; Am. 1, 309; B. 14, 304, 2559; 16, 800; 18, 1600; J. pr. [2] 37, 332). III, 68.

 2) Isohelicin. Zers. bei 250° (B. 14, 317). III, 68.

 3) Anhydrid d. α-Säure C₁₃H₁₆O₈ (aus Santonsäure). Sm. 192—193° (G. 22 [1] 200; G. 1896 [2] 1114). II, 2067.

 - 4) Diäthylester d. 6-Aethoxyl-1,2-Pyron-3,5-Dicarbonsäure. Sm. 940 (B. 22, 1415; 26, 1492; A. 297, 86).
 - 5) Diäthylester d. Mekonäthyläthersäure. Sm. 61° (J. pr. [2] 23, 439; **26** [2] 454; *C.* **1897** [1] 408). — II, 2042. C 52,0 — H 5,3 — O 42,7 — M. G. 300.
- $C_{13}H_{16}O_{8}$ 1) Triacetylshikiminsäure (B. 24, 1283). -

 - Säure (aus Myrrhe) (B. 23 [2] 494). III, 560.
 α-Triacetylchinid. Sm. 132° (B. 22, 1458, 1459). I, 805.
 β-Triacetylchinid. Sm. 139° (B. 22, 1460). I, 805.
 C 78,0 H 8,0 N 14,0 M. G. 200.
- $C_{13}H_{16}N_2$
 - 1) 4-Phenylhydrazon-6-Methyl-1,2,3,4-Tetrahydrobenzol. Sd. 200 bis 205°₁₅ (A. **281**, 101).
 - 2) 2,5-Dimethyl-1-[m-Amidotolyl]pyrrol. Sm. 75°; Sd. 312°₇₅₁ (A. 236,
 - 312). IV, 526. 3) 1-Methylphenylamido-2,5-Dimethylpyrrol. Sm. 41°; Sd. 300°₇₅₈ (A. 236, 310; 253, 23). — IV, 525.
 - 4) 4,5-Dimethyl-3-Aethyl-1-Phenylpyrazol. Sd. 150°₇₅. (2HCl, PtCl₄ + 2 H₂O) (G. 23 [1] 323). — IV, 529.
 - 5) P-Amido-3, 6-Dimethyl-2-Aethylchinolin. Sm. 148—149° (B. 18, 3392).
 - IV, 943.
 6) Nitril d. γ-[2-Methylphenyl]imidopentan-β-Carbonsäure. Sm. 124°
 (Bl. [3] 4, 645). II, 473.
 C 68,4 H 7,0 N 24,6 M. G. 228.
- $C_{13}H_{16}N_4$
- 1) ?-Tetraamidodiphenylmethan. Sm. 161° (A. 218, 341). IV, 1277. C 83,4 - H 9,1 - N 7,5 - M. G. 187. $C_{13}H_{17}N$
 - 1) 3-Amido-5-Methyl-1-Phenyl-1, 2, 3, 4-Tetrahydrobenzol. Sd. 165°_{20} .
 - HCl, (2HCl, PtCl₄) (B. 31, 2471).

 2) Benzaldiacetonin. Fl. HCl, HJ (B. 17, 1797). IV, 233.

 3) 3-Amylindol. Sd. 345—347°₇₅₈ (A. 248, 109). IV, 230.

 4) 1-Isoamylindol. Sd. 276° (B. 30, 2821).

 - 5) 1,3,3-Trimethyl-2-Aethyliden-2,3-Dihydroindol. Sd. 260° u. Zers.
 - HJ, Pikrat (G. 28 [1] 191; 28 [2] 56). 6) 2-Methylen-1,3-Dimethyl-3-Aethyl-2,3-Dihydroindol. Sd. 245 bis 250°₇₅₀. HJ, Pikrat (B. 29, 2474; G. 28 [2] 379). — IV, 230.
 - 7) 2-Methylen-3, 3-Dimethyl-1-Aethyl-2, 3-Dihydroindol. HJ, Pikrat (G. 29 [1] 86).
 - 8) 3,3-Dimethyl-2-Isopropylpseudoindol. Sm. 80°; Sd. 250—260° $_{750}$ (B. **31**, 1498; G. **28** [2] 431).
 - 9) 2-Methyl-3, 3-Diäthylpseudoindol (?-Diäthyl-1, 2-Dihydrochinolin). Sd. 255—257°₇₅₀. Pikrat (A. 242, 359; B. 29, 2476; 31, 1495; G. 28 [2] 89, 343, 405). IV, 230.
 10) 1,2,3,4,7,8,9,10-Oktohydro-α-Naphtochinolin. Sm. 47—48°; Sd. 287.
 - 216 $^{0}_{37,5}$. HCl, (2HCl, PtCl₄), H₂SO₄, Pikrat (B. 24, 2484). IV, 231.
 - 11) 1,2,3,4,7,8,9,10-Oktohydro-β-Naphtochinolin. Sm. 60,5°; Sd. 325°₇₂₇.
 - HCl, (2HCl, PtCl₄ + 2H₂0) (B. 24, 2654). IV, 232. 12) isom. Oktohydro-β-Naphtochinolin. Sm. 91°; Sd. 321°₇₂₇. HCl, (2HCl,
 - PtCl₄), Nitrit (B. 24, 2653). IV, 231.

 13) Oktohydroakridin. Sm. 48°; Sd. 320°. HCl (B. 16, 2831). IV, 231.

 14) 6-Methyl-3,4,8,9-Tetrahydrojulol (p-Methyljulolidin). HJ (B. 25,
 - 2804). IV, 232. 15) γ -Methyl-3,4,8,9-Tetrahydrojulol (γ -Methyljulolidin). Sd. 283—2870 u. ger. Zers. Pikrat (B. 25, 118). — IV, 194.
 - 16) Nitril d. ε-Phenyl-β-Methylpentan-ε-Carbonsäure. Sd. 276° (B. 22, 1236). — II, 1400.
- 1) Turmerylchlorid. Fl. (Am. 4, 368; 6, 81). III, 546. C 82,1 H 9,5 O 8,4 M. G. 190. $C_{13}H_{17}C1$ $C_{13}H_{18}O$
 - 1) 5-Oxy-1-Methyl-3-Phenylhexahydrobenzol. Fl. (A. 303, 260).

C, . H, . O

2) γ -Keto- α -[4-Propylphenyl]butan. Sd. 260 — 265 $^{\circ}_{758}$ (B. 22, 2271). — III. 156.

3) Hexylphenylketon. Sm. 17°; Sd. 270°, 40 (B. 19, 2987; Bl. 47, 50). —

4) Aethyl-3-Propyl-4-Methylphenylketon. Sd. 266-269° (J. pr. [2] 47, 425). — III, 156.

5) Aethyl-5-Isopropyl-2-Methylphenylketon. Sd. 2540 (J. pr. [2] 43, 532). — III, 156.

6) Aethyl-2,3,5,6-Tetramethylphenylketon. Sm. 79°; Sd. 265-270° (B. 28, 325). — III, 156.

7) Methyl-3-Methyl-5-Pseudobutylphenylketon (5-Acetyl-3-Pseudobutyl-1-Methylbenzol). Sm. 47°; Sd. 260° (B. 31, 1345).

8) Methyl-2, 3, 4, 5, 6-Pentamethylphenylketon. Sm. 85° (74-75°); Sd. 285-286° (270-280°) (B. 22, 1218; 28, 3209). — III, 156. 9) ?-Acetyl-3-Pseudobutyl-1-Methylbenzol. Sd. 255-258° (B. 31, 1345).

10) Turmerol. Sd. 285-290° (158-163°₁₁) (Am. 4, 368; 6, 81; 18, 111). - III, 546.

C13H18O2

 $C_{13}H_{18}O_{3}$

C 75,7 — H 8,7 — O 15,5 — M. G. 206.

1) Diäthyläther d. γγ-Dioxy-α-Phenylpropen. Sd. 264-266° (B. 31,

2) Methylpropyläther d. 3,4-Dioxy-1-Allylbenzol. Sd. 263-265° (J. **1877**, 580). — **II**, *974*.

3) Methylisopropyläther d. 3,4-Dioxy-1-Allylbenzol. Sd. 252-2540 (J. 1877, 581). — II, 974.

4) Isoamylidenäther d. $\alpha\beta$ -Dioxy- α -Phenyläthan. Sd. 148% (Bl. [3] 21, 231).

5) Methyläther d. ?-Acetyl-3-Oxy-4-Isopropyl-1-Methylbenzol. Sd.

155°₂₀ (Bl. [3] **19**, 138). 6) Methyläther d. Methyl-6-Oxy-3-tert. Butylphenylketon. Sd. 262

bis 205°₇₄₉ (Am. 17, 115). — III, 155. 7) 5-Pseudobutyl-1,3-Dimethylbenzol-2-Carbonsäure. Sm. 168° (B. 31, 1346).

8) Methylester d. Pentamethylbenzolcarbonsäure. Sm. 67,5°; Sd. 299 bis 300° (B. 22, 1221). — II, 1400.

9) Aethylester d. isom. δ -[?]-Phenylvaleriansäure. Sd. 144—146 $^{\circ}_{15}$ (A.

261, 304). — II, 1393. 10) Aethylester d. 4-Isopropylphenylessigsäure. Sd. 264—265° (G. 21 [1] 55). — **II**, *1395*

11) Aethylester d. 1,2,4,5-Tetramethylbenzol-3-Carbonsäure. Sm. 47

bis 48° (J. pr. [2] 52, 531).

12) Amylester d. 1-Methylbenzol-3-Carbonsäure. Sd. 266—268°₇₂₅ (C. 1899 [1] 467).

13) β -Methylbutylester d. 1-Methylbenzol-2-Carbonsäure. Sd. 265 bis 268° (Bl. [3] 15, 292).

14) β -Methylbutylester d. 1-Methylbenzol-4-Carbonsäure. Sd. 271 bis 272° (Bl. [3] **15**, 293).

15) β-Methylbutylester d. Phenylessigsäure. Sd. 265-266 _{722.7} (Bl. [3]

16) Phenylester d. Oenanthsäure. Sd. 275-280° (C. r. 39, 257). -II, 662.

17) norm. Hexylester d. Benzolcarbonsäure. Sd. 272 ° 770 (B. 16, 745). **– II**, 1141.

18) Acetat d. ?-Oxy-1-[tert.] Amylbenzol. Sd. 264—266° (B. 26, 1646). - II, 776.

19) Acetat d. 4-Pseudobutyl-1-Oxymethylbenzol. Sd. 137° (Bl. [3] 19, 69). 20) Acetat d. 5- $[\alpha$ -Oxyäthyl]-1,2,4-Trimethylbenzol. Sd. $254-257^{\circ}$ u. ger. Zers. (B. 31, 1006).

21) Acetat d. 2-[α-Oxyäthyl]-1,3,5-Trimethylbenzol. Sd. 252° (B. 31, 1008). C 70,3 — H 8,1 — O 21,6 — M. G. 222.

1) Diäthyläther d. Aethyl-2, 4-Dioxyphenylketon. Sm. 76° (B. 23, 1207). - III, 143.

2) δ -Oxy- γ -Benzylcapronsäure. Ba (A. 268, 127). — II, 1594. 3) ζ -Oxyhexanphenyläther- γ -Carbonsäure. Sm. 63°; Sd. 322—323° (B. 31, 2138).

- C19H19O9
- 4) α-Oxypropion-[2-Methyl-5-Isopropylphenyl]äthersäure. Sm. 74° (G. **12**, 49). — **II**, 767.
- 5) α-Oxypropion-[3-Methyl-6-Isopropylphenyl] athersaure, Sm. 48°, Ra. Ag (G. 12, 50). — II, 771.
- 6) 5-Oxy-4-Isopropyl-1-Methylbenzoläthyläther-2-Carbonsäure. Sm. 159° (A. **244**, 69). — II, 1589.
- 7) Methylester d. Methylencamphercarbonsäure. Sm. 62-63° (A. 281, 390). — II, *1594*.
- 8) Aethylester d. 4-Oxy-1-Isobutylbenzol-3-Carbonsäure. Sd. 2760 (J. pr. [2] 36, 395). — II, 1588.
- 9) Aethylester d. α-Oxy-α-[4-Isopropylphenyl]essigsäure. Sm. 40-41° (G. 21 [1] 44). — II, 1592
- 10) Aethylester d. 6-Oxy-1,2-Dimethylbenzoläthyläther-4-Carbonsäure. Sm. 50-51° (Soc. 75, 194).
- 11) Aethylester d. 6-Oxy-1, 3-Dimethylbenzoläthyläther-4-Carbonsäure.
- Sm. 51° (B. 27 [2] 595). 12) Isoamylester d. 2-Oxybenzolmethyläther-1-Carbonsäure. Sd. über 300° (A. 92, 315). — II, 1494.
- 13) 2-Aethoxylphenylester d. Valeriansäure. Sd. 2620 (C. 1899 [1] 706).
- 14) Aethylester-3-Methyl-6-Isopropylphenylester d. Kohlensäure. Sd. 259—262° (J. pr. [2] 27, 504). — II, 771.
- 15) Acetat d. Oxymethylencampher. Sm. 63-64°; Sd. 290-293° (A, 281, 370). — III, 115. C 65,5 - H 7,5 - O 26,9 - M. G. 238.
- $C_{13}H_{18}O_{4}$
- 1) Ketodilakton (aus Pulegon). Sm. 104° (A. 304, 22).
- 2) Aldehyd d. 2,3,4-Trioxybenzoltriäthyläther-1-Carbonsäure. Sm. 70° (B. 17, 1088). — III, 107.
- 3) Aldehyd d. ?-Trioxybenzoltriäthyläther-1-Carbonsäure. (B. 16, 2112). — III, 107.
- 4) Methylester d. Campheroxalsäure. Sm. 74,5—75° (Am. 20, 334).
- 5) Aethylester d. 3,4-Dioxybenzoldiäthyläther-1-Carbonsäure. Sm. 56 bis 57° (M. 5, 81). — II, 1742.
- 6) Aethylester d. 3,5-Dioxybenzoldiäthyläther-1-Carbonsäure. Sm. 19
- bis 20°; Sd. 212°₅₀ (A. 164, 121; 296, 351). II, 1747.

 7) Isoamylester d. 3,5-Dioxy-l-Methylbenzol-4-Carbonsäure. Sm. 76° (A. 125, 356; 139, 37). — II, 1752.
- 8) Isoamylester d. 2-Methoxylphenylkohlensäure. Sd. 200-210° (Bl. [3] **19**, 893).
- 9) Acetat d. 3,4,5-Trioxy-1-Propylbenzoldimethyläther. Sm. 87° (B.
- 11, 331). II, 1024. 10) Crotonharz. Sm. 90° (C. 1895 [2] 799). C 61,4 - H 7,1 - O 31,5 - M.G. 254. $C_{13}H_{18}O_{5}$
 - 1) 2,3,4-Trioxybenzoltriäthyläther-1-Carbonsäure. Sm. 100,5°. Ba, Ag (B. 17, 1088, 2101). — II, 1918.
 - 2) 3,4,5-Trioxybenzoltriäthyläther-1-Carbonsäure. Sm. 112°. Ba, Ag
 - (B. 17, 2099). II, 1921. 3) 2,5,?-Trioxybenzoltriäthyläther-1-Carbonsäure. Sm. 134° (B. 16, 2113). — II, 1926.
 - 4) Monomethylester d. Ketonsäure $C_{12}H_{16}O_5$. Sm. 90° (C. 1896 [2] 1115).
 - 5) Diäthylester d. δ -Keto- β_{ε} -Heptadiën- β_{ζ} -Dicarbonsäure. Fl. (B.
 - 6) Diäthylester d. 4-Keto-6-Methyl-1,2,3,4-Tetrahydrobenzol-1,3-Di-
 - carbonsäure. Sd. 190-205°₂₁ (A. 281, 96). II, 1930. 7) Diäthylester d. 2,4-Dimethylfuran-3-Carbonsäure-5-Methylcarbonsäure (D. d. Methylmethronsäure). Sd. 279-280° u. ger. Zers. (A. 250, 201). — III, 719. C 57.8 — H 6.6 — O 35,5 — M. G. 270.
- $C_{18}H_{18}O_6$
- 1) Benzylidensorbit. Sm. 163-175° (A. ch. [6] 22, 424). III, 9.
- Diäthylester d. δζ-Diketo-γ-Hepten-γε-Dicarbonsäure (D. d. Methenyldiacetessigsäure). Sm. 96° (B. 26, 2733; A. 297, 35).
 Diäthylester d. Dikonsäure (J. pr. [2] 8, 392). I, 825.
- 4) Diäthylester d. 2,5-Diketo-l-Methylhexahydrobenzol-l,4-Dicarbonsäure (D. d. Methylsuccinylbernsteinsäure). Sd. 181-1820 (B. 26, 232).

5) Diathylester d. 3,5 - Diketo - 1 - Methylhexahydrobenzol - 2,6 - Di-C13 H18 O6 carbonsäure. Sm. 85°; + H₂O Sm. 75° (B. 27, 2344; A. 289, 169). - II, 1992.

C13 H18 O7

- 11, 1852. C 54,5 — H 6,3 — O 39,2 — M. G. 286. 1) Salicin. Sm. 201° (198°). Na, Pb₂. Lit. bedeutend. — III, 608. 2) Methylarbutin + H₂O. Sm. 175—176° (A. 177, 334; 206, 165; B. 15, 1841; 16, 800; Am. 6, 337). — III, 572.

3) isom. Methylarbutin $+ \frac{1}{2}$ H₂0. Sm. 168–169° (Am. 5, 177). — III, 572. 4) Verbindung (aus 1,2-Dioxybenzol u. Acetochlorhydrose). Sm. 156,5 bis 157° (Am. 6, 339). — II, 909.

5) Verbindung (aus Glykose u. Benzaldehyd) (A. **244**, 22). — III, 7. C 51,6 — H 5,9 — O 42,4 — M. G. 302.

1) α-Säure (aus Santonsäure). Sm. 176°. Ca₂, Ag₄ (G. **22** [1] 197; **23** [2] 457; C. 1896 [2] 1114). — II, 2067. $C_{13}H_{18}O_{8}$

2) β-Säure (aus Santonsäure). Sm. 130° (G. 22 [1] 202; C. 1896 [2] 1114).

- II, 2068. C 49,1 - H 5,6 - O 45,3 - M. G. 318. $C_{13}H_{18}O_{9}$

1) 2-Oxybenzol-1-Carbonsäurealdehydglykose (A. 244, 22). — III, 66.

2) Tetracetat d. Arabinose. Fl. (Am. 15, 655).

3) Tetracetat d. Xylose. Sm. 123,5—124,5° (126°) (Am. 15, 654; C. 1895 [1] 373). C 46,7 — H 5,4 — O 47,9 — M. G. 334.

 $C_{13}H_{18}O_{10}$

1) Pentamethylester d. Propan-ααββγ-Pentacarbonsäure. Sm. 87-88° (B. 29, 1742).

C 77,2' - H 8,9 - N 13,9 - M. G. 202. $C_{13}H_{18}N_2$

1) 6-Amido-1,2,3,4,7,8,9,10-Oktohydro-α-Naphtochinolin. Sm. 970 (B. 24, 2491). — IV, 889. 2) Nitril d. β -[4-Methylphenyl] amidoisocapronsäure. Sm. 62—63° (B.

25, 2049). — II, 509.

 $\mathbf{C}_{13}\mathbf{H}_{18}\mathbf{Br}_{2}$ 1) ?-Isopropyl-1- $[\alpha\beta$ -Dibrombutyl]benzol. Sm. 77° (J. 1877, 381). — II, 173.

2) isom. P-Isopropyl-1- $[\alpha \beta$ -Dibrombutyl] benzol. Fl. (Soc. 35, 141). — II, 173. C'82.5 - H 10.1 - N 7.4 - M. G. 189.

 $C_{13}H_{19}N$

1) 5-Amido-1-Methyl-3-Phenylhexahydrobenzol. Sm. 180--185₄₀. HCl (A. 303, 267).

2) 2-[β-Phenyläthyl] hexahydropyridin (Stilbazolin). Sd. 288°. HCl, (2HCl, $PtCl_4$), (HCl, AuCl₃) (B. **21**, 822). — **IV**, 210.

3) 2, 6-Dimethyl-4-Phenylhexahydropyridin. Sd. 274°₇₈₁. (2HCl, PtCl₄), HNO_8 (B. 20, 2592). — IV, 210.

4) Methylbenzylhexahydropyridin. Sd. 245°. (2 HCl, PtCl₄) (B. 15, 424). - IV, 9.

5) Phoronpyrrolin. Fl. HCl, (HCl, SnCl₂) (B. 23, 1371). — IV, 211.

2-Methyl-3,3-Diäthyl-2,3-Dihydroindol (4,4-Diäthyl-1,2,3,4-Tetrahydrochinolin). Sm. 217°. HCl, Pikrat (B. 29, 2480; 31, 1495; G. 28
 [2] 351). — IV, 210.
 3,6-Dimethyl-2-Aethyl-1,2,3,4-Tetrahydrochinolin. Sd. 285—286°. HCl, (2 HCl, PtCl₄ + 2 H₂O) (B. 18, 3387). — IV, 210.
 3,8-Dimethyl-2-Aethyl-1,2,3,4-Tetrahydrochinolin. Sd. 274—276°, 240.
 3,8-Dimethyl-2-Aethyl-1,2,3,4-Tetrahydrochinolin. Sd. 274—276°, 240.

(B. 18, 3401). — IV, 210.

9) 1,2,4,4 oder 1,3,4,4-Tetramethyl-1,2,3,4-Tetrahydrochinolin. Fl. Pikrat (G. 28 [1] 193).

 $\mathbf{C}_{13}\mathbf{H}_{19}\mathbf{Cl}$ $C_{13}H_{20}O$

- 1) 5-Chlor-3-Hexyl-1-Methylbenzol. Sd. 273—275° (B. 29, 171). C 81,3 - H 10,4 - O 8,3 - M. G. 192.
- 1) 5-Oxy-3-Hexyl-1-Methylbenzol. Sd. 160—162°₁₈ (A. 288, 346). 2) 3-Oxy-?-Dipropyl-1-Methylbenzol. Fl. (G. 12, 510). II, 776.
- 2) 3-Oxy-P-Dipropyl-1-Methylbenzol. Fl. (G. 12, 510). II, 776. 3) 3-Oxy-P-Diisopropyl-1-Methylbenzol. Sd. 251° (G. 12, 508). II, 776.
- 4) $2 [\alpha Oxypropyl] 4 Propyl 1 Methylbenzol. Sd. bei 300° (J. pr. [2])$ **43**, 532). — II, 1067.

5) δ -[4-Oxyphenyl]heptan. Sm. 70—71°; Sd. 281°_{777.6} (J. r. 23, 540). —

 Methyläther d. Phenol C₁₂H₁₈O (Panicol). Sm. 285° (B. 20 [2] 558; **21** [2] 840; **22** [2] 506). — **II**, 776.

C,3H,0

 $C_{13}H_{20}O_2$

 $C_{13}H_{20}O_3$

- 7) Aethyläther d. 4-Oxy-1-[tert.]-Amylbenzol. Sd. 259-2610 (B. 15, 1991). — II, 775.
- 8) norm. Propyläther d. 3-Oxy-4-Isopropyl-1-Methylbenzol. Sd. 2430 (A. 243, 48). — II, 770.
- 9) Propyläther d. 3-Oxy-P-Propyl-1-Methylbenzol. Sd. 235-240 (G. 12, 332). — II, 765.
- 10) Isopropyläther d. 3-Oxy-P-Isopropyl-1-Methylbenzol. Sd. 230—235° (G. 12, 505). II, 766.
 11) norm. Heptylphenyläther. Sd. 266,8° (A. 243, 36). II, 654.
- 12) Allo-Lemonylidenaceton. Sd. 157—159°₁₂ (J. pr. [2] 57, 89). 13) Citriodorylidenaceton. Sd. 149—152°₁₂ (J. pr. [2] 58, 79). 14) Pulegenaceton. Sm. 72—73°; Sd. 148—153°₈ (Bl. [3] 21, 112).
- 15) Iron (γ-Keto-α-[1,1,3-Trimethyl-1,2,3,4-Tetrahydro-2-Phenyl]-α-Buten).
 Sd. 144°₁₆ (B. 26, 2679; 31, 811). III, 116.
- 16) α-Jonon (γ-Keto-α-[2, 2, 6-Trimethyl-1, 2, 3, 4-Tetrahydro-1-Phenyl]-α-Buten). Sd. 126—128°₁₂ (B. 26, 2693; 31, 849, 867, 874, 1893, 2328; Bl. [3] 15, 1007; J. pr. [2] 57, 494). III, 117.
 17) β-Jonon (Isojonon). Sd. 140°₁₈ (B. 31, 870, 1895, 2328; J. pr. [2] 57, 494).
- 18) **Pseudojonon** (\varkappa -Keto- $\beta\zeta$ -Dimethyl- $\beta\zeta\vartheta$ -Undekatriën). Sd. 143—145 $^{\circ}_{12}$ (B. 26, 2692; 31, 840, 1892, 2318; Bl. [3] 15, 1007; J. pr. [2] 57, 493; [2] 58, 84). — III, 117.

 19) Lactucol. Sm. 160—162° (A. 238, 224). — III, 635.

- 20) Tuberon. Sd. 167°₁₅ (Bl. [3] 21, 307).
 21) Verbindung (aus Drachenblut). Sd. 256—260° (M. 1, 613). III, 556.
- 22) Verbindung (aus Aceton u. 3-Keto-1-Methylhexahydrobenzol). Sd. 179 bis 183° (i. V.) (B. 29, 2959; A. 300, 271). C 75.0 - H 9.6 - O 15.4 - M. G. 208.
 - 1) 3,5-Dioxy-2,4,6-Triäthyl-l-Methylbenzol. Sm. 142-1440 (M. 11, 319). **– II**, 961.
- 2) Propylisobutyläther d. 1,4-Dioxybenzol. Sd. 244—245° (M. 6, 911). **- II**, 940.
- 3) Aethylisoamyläther d. 1,4-Dioxybenzol. Sd. 251-252° u. Zers. (M.
- 6, 911). II, 940. 4) Aethyläther d. Oxymethylencampher. Sd. 269—270° (A. 281, 368; J. pr. [2] 50, 142). — III, 115.
- 5) Triäthenyläthylisopropylessigsäure. Sd. 280-300° (A. 202, 324, 325). **- I**, 537.
- 6) Acetat d. Verb. $C_{11}H_{18}O$ (aus Dipenten). Sd. 258—261° (B. 32, 60). 7) Acetat d. Verb. $C_{11}H_{18}O$ (aus Limonen). Sd. 259—263° (B. 32, 60).
- 8) Acetat d. Verb. C₁₁H₁₈O (aus Pinen). Sd. 252—256° (B. 32, 59).
- 9) Verbindung (aus Terpenylsäure). Sd. 195-196° (A. 208, 81). I, 757. C 69,6 - H 8,9 - O 21,4 - M. G. 224.
- 1) Triäthyläther d. ααα-Trioxyphenylmethan. Sd. 220-225° (A. 135, 88). — II, 1107.
- 2) $\alpha\alpha$ -Diäthyläther- β -[2-Methylphenyl] äther d. $\alpha\alpha\beta$ -Trioxyäthan. Sd. 262° (B. 30, 1705).
- 3) $\alpha \alpha$ -Diäthyläther- β -[3-Methylphenyl] äther d. $\alpha \alpha \beta$ -Trioxyäthan. Sd. 262—263° (267—268°) (B. 30, 1441, 1705).
- 4) $\alpha \alpha$ -Diäthyläther- β -[4-Methylphenyl] äther d. $\alpha \alpha \beta$ -Trioxyäthan (p-Kresoxylacetal). Sd. 262—263° (270°) (B. 30, 1439, 1704).
- 5) Digitosäure $+ \frac{1}{2}$ H₂O. Sm. 210° (B. **26** [2] 686; **27** [2] 882).
- 6) Methylester d. Methylcamphocarbonsäure. Sm. 85° (Bl. [3] 7, 75). **- I**, 629.
- 7) Aethylester d. Camphocarbonsäure. Sd. 276° u. ger. Zers. (B. 18,
- 3113; 24, 3708, 3391). I, 628. 8) Aethylester d. 1-Keto-2-Isopropyl-5-Methyl-1, 2, 3, 4-Tetrahydro-
- benzol-2-Carbonsäure. Sd. 157—158°₁₈ (B. 30, 643).

 9) Aethylester d. 1-Keto-3-Isopropyl-5-Methyl-1,2,3,4-Tetrahydrobenzol-2-Carbonsäure. Sd. 1700, (A. 288, 326).
- 10) Aethylester d. 1-Keto-3-Isopropyl-5-Methyl-1,2,3,4-Tetrahydrobenzol-4-Carbonsäure. Sd. 170°₁₇ (A. 288, 326).
- 11) Aethylester d. Säure C₁₁H₁₆O₃ (aus Isolauronolylchlorid). Sd. 185 bis 190°₁₇. K (*Bl.* [3] **17**, 845).

12) Acetat d. Oxymethylenmenthon. Sd. 160-1620 (A. 281, 395). -C13H20O3 C 65,0 — H 8,3 — O 26,7 — M. G. 240. C13H20O4 1) Cerinsäure (A. 45, 292). — III, 627. 2) Hydrosedanolidearbonsäure. Ag (B. 30, 1433). 3) Anhydrid d. δ -Keto- $\beta\beta\zeta\zeta$ -Tetramethylheptan- $\alpha\eta$ -Dicarbonsäure. Sm. 49° (A. 304, 12). 4) Diäthylester d. $\alpha \zeta$ -Heptadiën- $\delta \delta$ -Dicarbonsäure (D. d. Diallylmalonsaure). Sd. 240° (A. 204, 171; Soc. 49, 209; J. pr. [2] 39, 452). — I, 733. C 60,9 — H 7,8 — O 31,3 — M. G. 256.

1) Urechitoxin + H₂O (J. 1878, 974). — III, 615. C 57,3 — H 7,3 — O 35,3 — M. G. 272. $C_{13}H_{20}O_{5}$ C13H20O6 1) Hydroxycampherylmalonsäure. Sm. 178° u. Zers. (A. 257, 302). — Diäthylester d. βζ-Diketoheptan-γε-Dicarbonsäure (D. d. αγ-Diacetylpropan-αγ-Dicarbonsäure). Sd. 190—210°₂₀ u. Zers. (A. 281, 94). 3) Diäthylester d. βε-Diketohexan-δ-Carbonsäure-η-Methylcarbonsäure (D. d. αβ-Diacetylglutarsäure). Sm. 92°; Sd. 240—250°₁₄₀ u. Zers. (B. 19, 47; J. pr. [2] 53, 559). — I, 820.
4) Diäthylester d. 2, 6-Dimethyltetrahydro-1, 4-Pyron-3, 5-Dicarbon-1, 100° (Diacetylglutarsäure). säure. Sm. 102°; Sd. 195—200°₈₈ (B. **29**, 995). 5) Triäthylester d. β-Buten-ααβ-Tricarbonsäure. Sd. 285—287° (B. **17**, 2833). — **I**, 819. 6) Triacetat d. $\delta \zeta \eta$ -Trioxy- α -Hepten. Sd. 193°_{45} (*J. r.* **21**, 469). — I, 416. C 54,2 — H 6,9 — O 38,9 — M. G. 288. $C_{13}H_{20}O_7$ 1) Monacetat d. Anhydroenneaheptitdimethylenäther. Sm. 107° (A. **290**, 154). 2) Triacetat d. Alkohols C₇H₁₀O₄ (aus Diallylcarbinol). Sd. 250-270⁶₁₃₀₋₁₄₀ (A. 185, 139; J. pr. [2] 35, 18; [2] 41, 59). — 1, 417. C 51,3 — H 6,6 — O 42,1 — M. G. 304. $C_{13}H_{20}O_{8}$ Nonan-γγηη-Tetracarbonsäure. Krystalle. Zers. bei 192—195°. Ag₄ (Soc. 59, 833; 61, 704). — I, 862. 2) Nonan- $\delta\delta\zeta\zeta$ -Tetracarbonsäure. Sm. 167° u. Zers. (A. 256, 189). — I, 862. 3) Methyltriäthylester d. Aethan- $\alpha \alpha \beta \beta$ -Tetracarbonsäure. Sm. 58° (Soc. 67, 773). 4) Tetracetat d. αγ-Dioxy-ββ-Di[Oxymethyl]propan (Tetracetat d. Pentaerythrit). Sm. 84° (A. 265, 327). — I, 416.
 C 46,4 — H 5,9 — O 47,6 — M. G. 336. C13H20O10 1) Opheliasäure. 3PbO (J. 1869, 772). — II, 2094. $C_{39,0} - H_{5,0} - O_{56,0} - M.G._{400}$ $\mathbf{C}_{13}\mathbf{H}_{20}\mathbf{O}_{14}$ 1) Tangsäure (C. 1897 [2] 1054). $\mathbf{C}_{13}\mathbf{H}_{20}\mathbf{N}_{2}$ C 76,5 — H 9,8 — N 13,7 — M. G. 204. 1) α -Phenylhydrazonheptan (Oenantholphenylhydrazon). Sd. 240°₇₇ (B. 16, 663). — IV, 748.

2) Pentamethylen-1,2-Xylylendiamin. Sd. 180—182°₂₀ (B. 31, 1703).
3) α-[3-Amidophenyl]-β-[2-Piperidyl]äthan. Sd. 200—205°₂₅ (B. 23, 2718). **– IV**, 863. 4) α -[6-Methyl-3-Pyridyl]- α -[1-Hexahydropyridyl]äthan (Collidinpiperidin). Sd. $279-282^{\circ}_{759}$. 2 HCl (B. **28**, 2275). — **IV**, 864. C 67,2 — H 8,6 — N 24,1 — M. G. 232. $C_{13}H_{20}N_4$ 1) Alkaloïd (aus Hefe) (Z. 1868, 572, 573). — III, 887. C 81,7 — H 11,0 — N 7,3 — M. G. 191. 1) P-Amido-l-Heptylbenzol. Sd. 175°₁₀ (Bl. 47, 50). — II, 565. 2) Aethylisoamylamidobenzol. Sd. 262°. (2 HCl, PtCl₄) (A. 74, 156). — $\mathbf{C}_{13}\mathbf{H}_{21}\mathbf{N}$ II, 336. 3) 6-Dimethylamido-3-Pseudobutyl-1-Methylbenzol. Sd. 250—251°. $(2 \text{ HCl}, \text{ PtCl}_4)$ (B. 17, 2339). — II, 564. 4) 5-Amido-3, 6-Diäthyl-1, 2, 4-Trimethylbenzol. Sd. 286—290° (B. 19, 2383). — II, 565 5) 2,6-Dimethyl-4-Hexylpyridin. Sd. 249-251°_{718,5}. (2HCl, PtCl₄), 2+

 $AgNO_3$ (A. **246**, 41). — IV, 140.

PtCl₄) (B. 20, 1751). — II, 535.

6) Verbindung (Base aus Dibenzylhydroxylamin). Sm. 83-84°. (2HCl,

- $C_{13}H_{21}N_3$ C 71,2 - H 9,6 - N 19,2 - M. G. 219.
 - 1) Aethyl-[4-Methyl-2-Isopropylphenyl] guanidin (A. 221, 175).
 - 2) α-Diäthylamido-β-Phenylhydrazonpropan. Fl. (B. 28, 2227). IV, 767.
- 1) 5-Chlor-3-Methyl-1-Hexyl-1, 2-Dihydrobenzol. Sd. 148-150% (B. C13 H21 Cl **29**, 171).
- 1) Diäthyl-2,4,5-Trimethylphenylphosphin. Sd. 274—275°. $\mathbf{C}_{13}\mathbf{H}_{21}\mathbf{P}$ PtCl₄) (A. **294**, 33). — IV, 1679.
 - 2) Diathyl-2,4,6-Trimethylphenylphosphin. Sm. 170°. (2HCl, PtCl₄) (A. 294, 46). - IV, 1680.
- $C_{13}H_{22}O$ C 80.4 — H 11.3 — O 8.2 — M. G. 194.
 - 1) 1-Keto-3-Hexyl-5-Methyl-1,2,3,4-Tetrahydrobenzol. Sd. 166--1680 (A. 288, 344, 360).
 - 2) β -Keto- ϑ -Methyl- ε -Isopropyl- $\gamma \varepsilon$ -Nonadiën. Sd. 123—125% (C. 1895)
 - 3) Zeorin (oder $C_{52}H_{88}O_4$). Sm. 249—251° (230—231°) (J. 1875, 863; G. 7, 281; 24 [2] 325; A. 284, 130; 288, 49; 295, 225; J. pr. [2] 58, 482), - II, 2058.
 - 4) Acetat d. 5-Oxy-3-Isobutyl-1-Methyl-?-Tetrahydrobenzol. Sd. 132 bis 134°₁₈ (A. **289**, 150).
- C 74.3 H 10.5 O 15.2 M. G. 210. $C_{13}H_{22}O_{2}$

C13 H22 O3

- 1) Acetat d. Homolinalool. Sd. 111—117° [6. 29, 694]. 2) Propionat d. 1-Borneol. Sd. 118° [6. 31, 1775].
- 3) Aethylester d. α-Dekin-κ-Carbonsäure (Ae. d. Dehydroundekylensäure). Sd. 145°₁₅. Ag + AgNO₃ (B. 29, 2238).

 4) Aethylester d. Undekolsäure. Sd. 197°₄₉ (B. 28, 1448).

 5) Isobutylester d. Isolauronolsäure. Sd. 241—243° (Bl. [3] 15, 1196).

 6) Harz (aus Euphorbium) (J. 1868, 810). — III, 558.

- C 69,0 H 9,7 O 21,2 M. G. 226.
- 1) Hydrodigitosäure. Sm. 210° (B. 26 [2] 686; 32, 341).
- 2) $\alpha \gamma$ -Lakton d. γ -Oxynonan- $\alpha \beta$ -Dicarbonsäure- β -Aethylester (Aethylester d. Hexylparakonsäure). Sd. 325-326° (A. 304, 326).
- 3) Aethylester d. β -Keto- γ -Deken- γ -Carbonsäure. Sd. 145 $^{\circ}_{10}$ (B. 31, 737).
- 4) Aethylester d. β-Keto-P-Deken-P-Carbonsäure (Ae. d. Acetyloktenylcarbonsaure). Sd. 270—271° (A. 257, 314). — I, 625. C 64,4 — H 9,1 — O 26,4 — M. G. 242.
- C13H22O4 1) Monäthylester d. Oxycamphocarbonsäure. Sm. 44-45° (B. 22 [2] 576). **— I**, *728*.
 - 2) isom. Monäthylester d. Oxycamphocarbonsäure. Sm. 77-78° (B. 22 [2] 576). — I, 728.
 - 3) Aethylester d. $\beta \vartheta$ -Diketo- γ -Methylnonan- γ -Carbonsäure (Ae. d. Diacetylmethylcapronsäure). Sd. $255-260^{\circ}_{220}$ (Soc. 55, 345). — I, 695.
 - 4) al-Methyl-o-Aethylester d. d-Camphersäure. Sd. 276,5—2770,46 (B. **25**, 1798). — **I**, 725.
 - 5) o-Methyl-al-Aethylester d. d-Camphersäure. Sd. 278°₇₄₇ (B. 25, 1799). **–** I, 725.
 - 6) Diäthylester d. α-Hepten-δδ-Dicarbonsäure (D. d. Propylallylmalonsäure). Sd. 240-241° (B. 29, 1856, 1864).
 - 7) Diäthylester d. ε -Methyl- α -Hexen- $\delta\delta$ -Dicarbonsäure (D. d. Allylisopropylmalonsäure). Sd. 232—238° (B. 29, 1856, 1865).
 - 8) Diäthylester d. ε-Methyl-β-Hexen-αβ-Dicarbonsäure (D. d. Isobutyl-
 - itakonsäure). Sd. 268° (A. **256**, 101). I, 722.

 9) Diacetat d. 1,2-Dioxy-1,2-Dimethyl-R-Heptamethylen. Sd. 199 bis 202°₆₅ (Soc. **59**, 226). — **I**, 415.
- C 60,5 H 8,5 O 31,0 M. G. 258. $C_{13}H_{22}O_5$
 - 1) δ -Keto- $\gamma \varepsilon$ -Diäthylheptan- $\gamma \varepsilon$ -Dicarbonsäure (Tetraäthylacetondicarbonsäure). Sm. 70° (A. 261, 179). I, 772.
 - 2) δ -Keto- $\beta\beta\zeta\zeta$ -Tetramethylheptan- $\alpha\eta$ -Dicarbonsäure (Phorondiessig-
 - säure). Sm. 110°. Ba + 3H₂O, Ag₂ (A. 304, 8).
 Diäthylester d. δ-Ketoheptan-γε-Dicarbonsäure (D. d. s-Diäthylaceton-dicarbonsäure). Sd. 216°₁₅₀ (A. 261, 181). I, 770.

13 II. 4) Diäthylester d. β -Keto- γ -Methylhexan- $\gamma\delta$ -Dicarbonsäure (D. d. C13H22O5 α-Methyl-β-Aethyl-α-Acethernsteinsäure). Sd. 275-280° (A. 216, 43; B. 29, 979). — I, 770. 5) Diäthylester d. β -Keto- γ -Aethylpentan- γ δ -Dicarbonsäure. Sd. 270 bis 275° (B. 29, 979). 6) Diäthylester d. β-Keto-γ-Aethylpentan-γε-Dicarbonsäure (D. d. α -Acetyl- α -Aethylglutarsäure). Fl. (A. 268, 111). 7) Diäthylester d. γ-Keto-βδ-Dimethylpentan-βδ-Dicarbonsäure (D. d. Tetramethylacetondicarbonsäure). Sd. 146-152⁵/₂₅ (A. 289, 56).
 8) Diisobutylester d. β-Ketopropan-αγ-Dicarbonsäure. Sd. 220⁶/₁₂₀ (B. **29**, 2053). C 56,9 — H 8,0 — O 35,0 — M. G. 274. C13 H29 O8 1) Diäthylester d. Camphoronsäure. Fl. (A. 159, 293; 292, 101; B. 28,

2689). — I, 814.

2) Diäthylester d. β -Acetoxyl- β -Methylbutan- γ δ -Dicarbonsäure (D. d. Acetyldiaterebinsäure). Fl. (A. 180, 69). — I, 754.

3) γγ-Diäthylester d. β-Methylpentan-γγε-Tricarbonsäure. Sm. 68 bis 69°; Sd. bei 300°. Ag (A. 292, 217; Soc. 69, 1508).
4) Triäthylester d. Butan-ααβ-Tricarbonsäure. Sd. 276°_{754,7} (A. 242, 114; B. 21, 2190; 23, 636; 29, 1868; A. ch. [6] 27, 256). — I, 810.
5) Triäthylester d. Butan-ααβ-Tricarbonsäure. Sd. 175—176°₁₈ (A. 297, 114).

111; G. 26 [2] 261; Soc. 71, 1065).

6) Triäthylester d. Butan- $\alpha\beta\beta$ -Tricarbonsäure. Sd. 281,6° (B. 23, 638). **– I**, 810.

7) Triäthylester d. Butan-αγγ-Tricarbonsäure. Sd. 164,5—1650 (A. **292**; 209).

8) Triäthylester d. Butan- $\beta\beta\gamma$ -Tricarbonsäure. Sd. 278° (268—271°; 273—275°) (B. 18, 2346; 23, 636, 639; A. 234, 54). — I, 811.

C13H22O7

 $C_{13}H_{24}O_{2}$

 $\mathbf{C}_{13}\mathbf{H}_{24}\mathbf{O}_{8}$

C13 H24 O4

9 Triathylester d. β-Methylpropan-ααβ Tricarbonsäure. Sd. 277,3° (272—275°) (B. 18, 2350; 23, 636; A. 242, 127, 210). — I, 811.
10) Triacetat d. P-Trioxyheptan. Fl. (J. pr. [2] 49, 51).
11) Triacetat d. γεζ-Trioxy-β-Methylhexan. Sd. 276-280° (B. [3] 13, 123). C 53,7 — H 7,6 — O 38,6 — M. G. 290.
11) Triacetat d. γεζ-Trioxy-β-Methylhexan. Sd. 276-280° (B. [3] 13, 123). C 53,7 — H 7,6 — O 38,6 — M. G. 290.

1) Diäthylester d. Trilaktylsäure. Sd. 270° (A. ch. [3] 63, 101). — - I, 558.

 2) Aethylisoamylester d. β-Oxypropan-αβγ-Tricarbonsäure (Ae. d. Citronensäure) (A. 91, 322). — I, 840.
 1) 2-Methyl-5-Oktylthiophen. Sm. 10°; Sd. 270° (B. 19, 648). — III, 747. C 79,6 — H 12,2 — O 8,2 — M. G. 196. $C_{13}H_{22}S$ $C_{13}H_{24}O$

1) Angusturaöl. Sd. 266° (J. 1858, 444). — III, 485. C 73,6 — H 11,3 — O 15,1 — \dot{M} . G. 212.

ββ-Diketo-γη-Diathylnonan (Diacetyldiathylpentan). Sd. 207—208°₁₁₀ (Soc. 57, 32). — I, 1021.
 Methylester d. Amenylamylessigsäure. Sd. 240—250° (A. 218, 76).

- I, 523.

3) Aethylester d. α-Deken-?-Carbonsäure. Sd. 263,5 - 265,5° (B. 23, 2357; Soc. 49, 207). — I, 523.

4) Aethylester d. Petroleumsäure. Sd. 236—240°₇₈₉ (B. 7, 1218). — I, 523.

5) Propylester d. Campholsäure. Sd. 228° (Bl. [3] 11, 495).

6) Isopropylester d. Isocampholsäure. Sd. 245 – 246° (Bl. [3] 13, 773). 7) Acetat d. 5-Oxy-3-Isobutyl-1-Methylhexahydrobenzol. Sd. 132 bis

134°₁₈ (A. **289**, 150).

 S) Isovalerat d. δ-Oxy-ζ-Methyl-α-Hepten. Sd. 220—222° (Bl. [3] 15, 887).
 C 68,4 — H 10,5 — O 21,1 — M. G. 228. 1) Chiratogenin (J. 1869, 772). — III, 576.

2) Convolvulinolsäure (siehe auch $C_{15}H_{30}O_3$). Sm. $42-42.5^{\circ}$. Ba $+H_2O_3$

 Cu + ½, ½, 0 (A. 83, 133; 95, 165).
 Aethylester d. β-Ketodekan-γ-Carbonsäure (Ae. d. Heptylacetessigsäure). Sd. 271-273° (A. 200, 105). — I, 612.
 Aethylester d. sec. Heptylacetessigsäure. Sd. 250-260° (B. 13, 1074). 1651) — I, 612. C 63.9 - H 9.8 - O 26.2 - M.G. 244.

1) Undekan- $\alpha\lambda$ -Dicarbonsäure (Brassylsäure). Sm. 114° (112°). Ca + H_2O ,

Ba + 2H,0, Cu + H₂O, Ag₂ (J. pr. [2] 48, 73, 331; A: 143, 45; B. 26, 645; 29, 811).

C13 H24 O4

2) Undekan- $\delta \theta$ -Dicarbonsäure ($\alpha \varepsilon$ -Dipropylpimelinsäure). Sm. 95–96°. Ag₂ (Soc. **59**, 837; **61**, 701). — I, 689. 3) $\beta \theta$ -Dimethylnonan- $\gamma \eta$ -Dicarbonsäure (Diisopropylpimelinsäure). Sm. 96—98° (Soc. **59**, 840; **61**, 701). — **I**, 689.

4) Diäthylester d. Heptan-αε-Dicarbonsäure. Sd. 198-200° (Soc. 65, 991).

5) Diäthylester d. Heptan-αη-Dicarbonsäure (D. d. Azelaïnsäure). Sm. 260° u. Zers. (Z. 1865, 298). — I, 685.
6) Diäthylester d. Heptan-βζ-Dicarbonsäure (D. d. αε Dimethylpimelin-

säure). Sd. $190-191^{\circ}_{80}$ (Soc. 59, 577, 831). — I, 686.

7) Diäthylester d. β -Methylhexan- $\alpha\alpha$ -Dicarbonsäure (D. d. β -Hexylmalonsäure). Sd. 251° (B. 16, 789).

8) Diäthylester d. β -Methylpentan-s-Carbonsäure- δ -Methylcarbonsäure. Sd. 262—263° (B. 31, 2590).

9) Dipropylester d. β -Methylbutan- α δ -Dicarbonsäure. Sd. 156% (Bl. [3]) **13**, 823).

10) Isobutylester d. d-α-Valeroxylbuttersäure. Sd. 256° (Bl. [3] 15, 491).

11) Diisobutylester d. Propan-αγ-Dicarbonsäure (D. d. norm. Brenzweinsäure). Sd. 270° (B. 23, 2943). — I, 667.

12) Heptylester d. 1-α-Acetoxylbuttersäure. Sd. 258° (Bl. [3] 15, 488).

13) Aethyl-norm. Heptylester d. Bernsteinsäure. Sd. 291,40 (A. 253, 302). **— IV**, 656.

14) Propyl-norm. Oktylester d. Oxalsäure. Sd. 291,1° (A. 253, 297). —

15) Diacetat d. $\gamma \delta$ -Dioxy- $\beta \zeta$ -Dimethylheptan. Sd. 240—242° (M. 11, 391). **I**, 414.

16) Diisovalerat d. αγ-Dioxypropan. Sd. 269-270° (A. ch. [5] 14, 498). **— I**, 428. C 60,0 - H 9,2 - O 30,8 - M. G. 260.

 $C_{12}H_{24}O_{5}$

 $\mathbf{C}_{13}\mathbf{H}_{24}\mathbf{O}_{13}$

 $C_{13}H_{25}N$

 $\mathbf{C}_{13}\mathbf{H}_{25}\mathbf{N}_{3}$

 $C_{13}H_{26}O$

1) Cardsäure. Sm. 89° (C. 1896 [1] 112).

2) Diäthylester d. γ-Oxy-βδ-Dimethylpentan-βδ-Dicarbonsäure. Sd. 150—160° (C. 1898 [2] 416).
 3) Diisopropylester d. 1-α-Oxyäthanisopropyläther-αβ-Dicarbonsäure.

Sd. bei 148°_{25} (Soc. **73**, 289).

4) Dibutylester d. 1- α -Oxyäthanmethyläther- $\alpha\beta$ -Dicarbonsäure. Sd. 172°₂₅ (Soc. **67**, 971).

5) Diisovalerat d. αβγ-Trioxypropan (Glycerindiisovalerin) (A. ch. [3] 41, 255). — I, 429.

C 56.5 - H 8.7 - O 34.8 - M. G. 276. $C_{13}H_{24}O_{6}$

Diäthylester d. γγ-Dioxypropandiäthyläther-α α-Dicarbonsäure. Sd. 166—168°₂₆ (Soc. 75, 13).

2) Diäthylester d. $\alpha\beta$ -Dioxypropandiäthyläther- $\alpha\beta$ -Dicarbonsäure. Sd. 157°_{15} (Am. 20, 144).

 $\mathbf{C}_{13}\mathbf{H}_{24}\mathbf{O}_{10}$

C 45,9 — H 7,0 — O 47,1 — M. G. 340.

1) Verbindung (aus Strophantin). Sm. 207° (B. 31, 537).

C 40,2 — H 6,2 — O 53,6 — M. G. 388.

1) Laktosecarbonsäure. Ca (A. 272, 198). — I, 872.

2) Maltosecarbonsäure. Ca (A. 272, 200). — I, 873.

C 80,0 — H 12,8 — N 7,2 — M. G. 195.

1) Nitril d. Dodekan-α[?]-Carbonsäure. Sd. 275° (B. 19, 1438). — I, 1467. C 70,0 - H 11,2 - N 18,8 - M. G. 223.

1) Tetraäthylglutarimidin. (2HCl, PtCl₄) (B. 23, 2946). — I, 1165.

C 78.8 - H 13.1 - O 8.1 - M. G. 198.

1) 5-Oxy-3-Hexyl-1-Methylhexahydrobenzol. Sd. 147-149° (A. 289,

2) β-Ketotridekan (Methylundekylketon). Sm. 28°; Sd. 263° (B. 12, 1667; **15**, 1724). — **I**, 1004.

3) η-Ketotridekan (Dihexylketon; Oenanthon). Sm. 30; Sd. 264° (253—254°) (A. 108, 182; 117, 81; Soc. 57, 533; 63, 462). — I, 1004.

4) Keton (aus Natriumacetat u. Natriumisoamylat). Sd. 265—275° (A. 218,

62). — I, 1004.

C 72,9 — H 12,2 — O 14,9 — M. G. 214. 1) Dodekan-?-Carbonsäure. Sm. 40,5°; Sd. 236°₁₀₀. Ca, Ag (B. 12, 1669; C13H26O2 19, 1440). — I, 441. 2) Aethylester d. Umbellulsäure. Sd. 253-255° (Am. 4, 206). - I, 440. 3) Aethylester d. Methyldibutylessigsäure. Sd. 227-230° (J. r. 11, 214). **— I**, 440. 4) β -Methylbutylester d. Caprylsäure. Sd. 250—253 $^{\circ}_{727}$ (Bl. [3] 15, 283). 5) norm. Heptylester d. norm. Capronsäure. Sd. 259,4 $^{\circ}$ (A. 233, 281). - I, 432. 6) norm. Oktylester d. Valeriansäure. Sd. 260,2° (A. 233, 277). -I, 426. 7) Oktylester d. Isovaleriansäure. Sd. 249—251° (A. 152, 6). — I, 428. C 67,8 — H 11,3 — O 20,9 — M. G. 230. $C_{13}H_{26}O_{3}$ 1) Methylester d. Oxylaurinsäure. Fl. (C. 1897 [1] 419). C 63,4 - H 10,6 - O 26,0 - M. G. 246. $\mathbf{C}_{13}\mathbf{H}_{26}\mathbf{O}_4$ 1) Aleuritinsäure. Sm. 101,5°. Mg, Ba, Pb (C. 1899 [1] 688). C 74,3 — H 12,4 — N 13,3 — M. G. 210. $\mathbf{C}_{13}\mathbf{H}_{26}\mathbf{N}_{2}$ 1) αβ-Di[1-Hexahydropyridyl]propan. Sd. 268-269 ₇₄₅ (C. 1898 [2] 353; Bl. [3] 21, 311). 2) $\alpha \gamma$ -Di[1-Hexahydropyridyl]propan + 8H₂O. Sd. 274—275°. (2HCl, $PtCl_4$), $(2HCl, 2AuCl_3)$ (B. 28, 2219; Bl. [3] 19, 353; [3] 21, 353). IV, 10. 3) isom. $\alpha \gamma$ -Dipiperidylpropan. Sm. 52-54°; Sd. 195°₂₆. 2 HCl (B. 21, 3101). — IV, 493. 4) Trimethyldipiperidyl. Sd. 205-212°. (2 HCl, PtCl₄) (B. 19, 2597). -IV, 492. Sd. 300—315°. (2 HCl, PtCl₄), (2 HCl, 5) Base (aus Piperpropylalkinjodid). 2 AuCl_s) (B. **15**, 1148). — **IV**, 18. C 79,2 — H 13,7 — N 7,1 — **M**. G. 197. $\mathbf{C}_{13}\mathbf{H}_{27}\mathbf{N}$ 1) 2,6-Dimethyl-4-Hexylhexahydropyridin. Sd. 239—242°₇₁₈. HCl (A. 246, 48). — IV, 43. Chlortridekan (Tridekylchlorid). Sd. 258-260° (J. 1863, 530). — I, 157.
 C 78,0 — H 14,0 — O 8,0 — M. G. 200. $\mathbf{C}_{13}\mathbf{H}_{27}\mathbf{Cl}$ $C_{13}H_{28}O$ η-Oxytridekan (Dihexylcarbinol). Sm. 41—42° (Soc. 57, 536). — I, 240.
 C 72,2 — H 13,0 — O 14,8 — M. G. 216. $C_{13}H_{28}O_{2}$ Dihexyläther d. Dioxymethan + H₂O. Sd. 174-175° (Bl. [3] 11, 757).
 C 67,2 - H 12,1 - O 20,7 - M. G. 232. $C_{13}H_{28}O_{3}$ 1) Triisobutyläther d. Trioxymethan (Orthoameisensäuretriisobutyläther). Sd. 220—222° (B. 12, 118). — I, 312. 30. 220-222 (B. 12, 118). — 1, 312.
 2 αγ-Diisoamyläther d. αβγ-Trioxypropan. Sd. 272-274° (269-270°) (A. Spl. 1, 238; C. 1898 [1] 238). — 1, 313.
 3) Aethyldiisoamyläther d. Trioxymethan (Orthoameisensäureäthyldiisoamyläther). Sd. 225° (B. 16, 357). — 1, 312.
 C 62,9 — H 11,3 — O 25,8 — M. G. 248. C13H28O4. 1) Tetraäthyläther d. Tetra[Oxymethyl]methan (Tetraäthyläther d. Pentaerythrit). Sd. 220—225° (J. pr. [2] 56, 96). 2) Tetrapropyläther d. Tetraoxymethan (Orthokohlensäuretetrapropyläther). Sd. 224,20 (A. 205, 252). - I, 316. 3) Eugenol-norm. Propylenäther. Sm. 82,5° (J. 1877, 582).
 C 78,4 — H 14,6 — N 7,0 — M. G. 199.
 1) α-Amidotridekan. Sm. 27°; Sd. 265°. HCl, (2 HCl, PtCl₄), H₂SO₄ (B. 19, $C_{13}H_{29}N$

> [2] 36, 122; B. 26 [2] 934). — I, 1151. 1) Di[Pentachlorphenylester] d. Kohlensäure. Sm. 265-268° (Bl. [3]

C 72,9 - H 14,0 - N 13,1 - M. G. 214.

1436). — I, 1138.

13, 954).

 $\mathbf{C}_{13}\mathbf{H}_{30}\mathbf{N}_{2}$

C₁₈O₈Cl₁₀

1) Di[Dipropylamido] methan. Sd. 225-230° (215-225°) u. Zers. (J. pr.

C₁₃-Gruppe mit drei Elementen.

C₁₃H₂NBr₁₁ 1) ?-Undekabrom-4-Phenylamido-1-Methylbenzol. Sm. 296° (A. 239, 59). — II, 485.

C₁₃H₃OBr, 1) Heptabrommethylendiphenylenoxyd. Sm. 136° (B. 10, 1402). — II, 992,

- C₁₃H₄OBr₆ 1) Hexabronmethylendiphenylenoxyd. Zers. bei 220-230° (B. 10, 1402). - II, 992.
- $C_{13}H_4O_4Br_4$ 1) ?-Tetrabrom-1,6-Dioxyxanthon. Sm. 280° (B. 27, 1995).
- 1) Pentachlorphenylester d. Benzolcarbonsäure. Sm. 159-1600 (Bl. [3] C13 H5 O, C15 **13**, 343).
- $C_{13}H_5O_2Br_3$ 1) P-Tribromxanthon (A. 257, 87). III, 196.
- C₁₃H₅O₄Br₃ 1) ?-Tribrom-3,4-Dioxyxanthon. Sm. noch nicht bei 360° (A. 269, 312). III, 204.
- $C_{13}H_5O_{10}N_3$
- C 43,0 H 1,4 O 44,1 N 11,5 M. G. 363.

 1) P-Trinitro-1,7-Dioxyxanthon. NH₄ (J. pr. [1] 37, 397). III, 206.
 1) 3,6-Dichlor-9-Ketofluoren. Sm. 158° (Soc. 43, 170; A. 290, 245). $\mathbf{C}_{13}\mathbf{H}_{6}\mathbf{OCl}_{2}$ III, 240.
- 2) P-Dichlor-9-Ketofluoren. Sm. 188—189° (M. 16, 810). III. 240. 1) ?-Dibrom-9-Ketofluoren. Sm. 1330 (B. 19, 3156; M. 16, 821). — III, 241. $\mathbf{C}_{13}\mathbf{H}_{6}\mathbf{OBr}_{2}$
- 2) ?-Dibrom-9-Ketofluoren. Sm. 142,5° (B. 16, 1081; A. 290, 239; M. **16**, 813). — **III**, 241.
 - 3) ?-Dibrom-9-Ketofluoren. Sm. 197—198° (B. 16, 1081, 1103; M. 16, 812, 821; Soc. 43, 165). III, 241.
 4) ?-Dibrom-9-Ketofluoren. Sm. 262° (M. 16, 822). III, 241.
 C 70,3 H 2,7 O 14,4 N 12,6 M. G. 222.
- $\mathbf{C}_{13}\mathbf{H}_6\mathbf{O}_2\mathbf{N}_2$ 1) Nitrosocarbazoakridon. Sm. 128,5° (G. 23 [1] 4). — III, 241.
- 1) 2,3,4,6-Tetrachlorphenylester d. Benzolcarbonsäure. Sm. 114,50 $\mathbf{C}_{13}\mathbf{H}_{6}\mathbf{O}_{2}\mathbf{Cl}_{4}$ $(113-115^{\circ})$ (B. 27, 549 Anm.; A. 261, 246). — II, 1145.
- C₁₃H₆O₂Br₂ 1) Dibromxanthon (Dibromcarbonyldiphenylenoxyd). Sm. 212° (Soc. 43,
- $\begin{array}{c} \textbf{C}_{13}\textbf{H}_{6}\textbf{C}_{2}\textbf{D}_{12} & \textbf{1} & \textbf{Distribution of phromear only in phery tenoxy u.} & \textbf{Sin. 212} & \textbf{(Soc. 43, 193; A. 254, 284; B. 7, 399).} & \textbf{III, 196.} \\ \textbf{C}_{13}\textbf{H}_{6}\textbf{O}_{3}\textbf{Br}_{2} & \textbf{1} & \textbf{P-Dibrom-1-Oxyxanthon.} & \textbf{Sm. 222}^{\circ} & \textbf{(B. 27, 1994).} & \textbf{III, 201.} \\ \textbf{2} & \textbf{P-Dibrom-2-Oxyxanthon.} & \textbf{Sm. 207}^{\circ} & \textbf{(B. 27, 1994).} & \textbf{III, 201.} \\ \textbf{3} & \textbf{P-Dibrom-4-Oxyxanthon.} & \textbf{Sm. 269} \\ \textbf{272}^{\circ} & \textbf{(B. 27, 1994).} & \textbf{III, 201.} \\ \textbf{4} & \textbf{P-Dibrom-4-Oxyxanthon.} & \textbf{Sm. 274} \\ \textbf{273} & \textbf{472} & \textbf{472} & \textbf{472} \\ \textbf{274} & \textbf{274} & \textbf{274} & \textbf{374} \\ \textbf{275} & \textbf{374} & \textbf{374} \\ \textbf{275} & \textbf{374} & \textbf{374} \\ \textbf{271} & \textbf{374} & \textbf{374} & \textbf{374} & \textbf{374} \\ \textbf{271} & \textbf{374} & \textbf{374} & \textbf{374} & \textbf{374} \\ \textbf{374} & \textbf{374} & \textbf{374} & \textbf{374} & \textbf{374} \\ \textbf{374} & \textbf{374} & \textbf{374} & \textbf{374} & \textbf{374} \\ \textbf{374} & \textbf{374} & \textbf{374} & \textbf{374} & \textbf{374} \\ \textbf{375} & \textbf{374} & \textbf{374} & \textbf{374} & \textbf{374} \\ \textbf{375} & \textbf{374} & \textbf{374} & \textbf{374} & \textbf{374} & \textbf{374} \\ \textbf{375} & \textbf{374} & \textbf{374} & \textbf{374} & \textbf{374} \\ \textbf{375} & \textbf{374} & \textbf{374} & \textbf{374} & \textbf{374} \\ \textbf{375} & \textbf{374} & \textbf{374} & \textbf{374} & \textbf{374} \\ \textbf{375} & \textbf{374} & \textbf{374} & \textbf{374} & \textbf{374} \\ \textbf{375} & \textbf{374} & \textbf{374} & \textbf{374} & \textbf{374} \\ \textbf{375} & \textbf{374} & \textbf{374} & \textbf{374} & \textbf{374} \\ \textbf{375} & \textbf{374} & \textbf{374} & \textbf{374} & \textbf{374} \\ \textbf{375} & \textbf{374} & \textbf{374} & \textbf{374} & \textbf{374} \\ \textbf{375} & \textbf{374} & \textbf{374} & \textbf{374} & \textbf{374} \\ \textbf{375} & \textbf{374} & \textbf{374} & \textbf{374} & \textbf{374} \\ \textbf{375} & \textbf{374} &$
- 131). **III**, *198*.
 - 131). III, 198.

 2) ?-Bromphenylester d. 3,5,?-Tribrom-2-Oxybenzol-1-Carbonsäure. Sm. 164° (J. pr. [2] 51, 212). II, 1506. C 61,4 H 2,4 0 25,2 N 11,0 M. G. 254.

 1) Dichinoyltolazin + 2H₂O (B. 20, 324). IV, 621.

 1) ?-Dichlor-1,7-Dioxyxanthon (J. pr. [1] 37, 397). III, 206.

 1) ?-Dibrom-1,3-Dioxyxanthon. Sm. 245° (B. 27, 1995). III, 204.

 2) ?-Dibrom-1,7-Dioxyxanthon. Sm. 280° (B. 27, 1995). III, 206. C 57,8 H 2,2 0 29,6 N 10,4 M. G. 270.

 1) 2.7-Divitro 9-Ketoflyoven. Sm. 290° (B. 29, 232, 4, 203, 104). —
- $C_{13}H_6O_4N_2$
- $\mathbf{C}_{13}\mathbf{H}_{6}\mathbf{O}_{4}\mathbf{Cl}_{2}$
- $\mathbf{C}_{18}\mathbf{H}_6\mathbf{O}_4\mathbf{Br}_2$
- $C_{13}H_6O_5N_2$ 1) 2,7-Dinitro-9-Ketofluoren. Sm. 290° (B. 29, 232; A. 203, 104). — III, 241.
- 2) P-Dinitro-9-Ketofluoren. Sm. 220° (M. 16, 824). III, 241.
 3) Dinitropseudobiphenylenketon. Sm. 310° (B. 29, 233). III, 242.
 C 54,5 H 2,1 O 33,6 N 9,8 M. G. 286.
 1) a-Dinitroxanthon. Sm. 190° (B. 10, 1401; J. pr. [2] 28, 292; A. 254, $\mathbf{C}_{13}\mathbf{H}_{6}\mathbf{O}_{6}\mathbf{N}_{2}$
 - 286). III, 196. 2) β-Dinitroxanthon. Sm. 262° (260°) (B. 10, 1401; 16, 862; Soc. 43, 189; J. pr. [2] 28, 292; A. 254, 286). — III, 196.
 - 3) Lakton d. P-Dinitro-1-[2-Oxyphenyl]benzol-2-Carbonsäure. Sm. 235° (J. pr. [2] 28, 302). II, 1696. C 43,1 H 1,6 O 39,8 N 15,5 M. G. 362.
- $C_{13}H_6O_9N_4$
 - 1) 2,4,2',4'-Tetranitrodiphenylketon. Sm. 172° (B. 27, 2318).
- 2) P-Tetranitrodiphenylketon. Sm. 225° (A. 218, 341). III, 182. C 39,6 H 1,5 O 44,7 N 14,2 M. G. 394. $C_{13}H_6O_{11}N_4$
- 1) Di[2,4-Dinitrophenylester] d. Kohlensäure. Sm. 125,50 (J. pr. [2] 1, 407). — II, 685. C 33.5 — H 1.3 — O 41.2 — N 24.0 — M. G. 466.
- $\mathbf{C}_{13}\mathbf{H}_{6}\mathbf{O}_{12}\mathbf{N}_{8}$ 1) Di[2, 4, 6-Trinitrophenyl] formamidin. Sm. 183-184° (J. pr. [2]
- **53**, 477). $\mathbf{C}_{13}\mathbf{H}_{6}\mathbf{O}_{13}\mathbf{N}_{8}$ - H 1,2 - O 43,2 - N 23,2 - M. G. 482. 1) s-Di[2, 4, 6-Trinitrophenyl]harnstoff. Sm. 203° u. Zers. (Soc. 63, 1018). · II, 380.
- 1) ?-Heptabrom-4-Phenylamido-1-Methylbenzol. Sm. 185° (A. 239, 58). $\mathbf{C}_{13}\mathbf{H}_{8}\mathbf{NBr}_{7}$ **– II**, 485.

C13H7O9N3

 $C_{13}H_7OCl$ 1) P-Trichlordiphenylketon. Sm. 131° (Soc. 73, 428). C₁₃H₇OCl₃ 1) P-Brom-9-Ketofluoren. Sm. 104° (Soc. 43, 165; B. 16, 1103; A. 290, C₁₃H₇OBr 239). — III, 240. 2) P-Brom-9-Ketofluoren. Sm. 122° (B. 19, 3155; M. 16, 821). — III, 240. 3) Bromisobiphenylenketon. Sm. 104° (B. 21, 2007). — III, 242. C 74,6 — H 3,3 — O 15,3 — N 6,7 — M. G. 209. C13H7O2N α-Anthrapyridinchinon. Sm. 280° (B. 27, 1926). — IV, 186.
 β-Anthrapyridinchinon. Sm. 179° (B. 27, 1925). — IV, 186. 3) 5, 6-Diketo-5, 6-Dihydro-α-Naphtochinolin (α-Naphtochinolinchinon). Sm. 205-207° u. Zers. (M. 4, 461). - IV, 409. 1) 2,4,6-Trichlorphenylester d. Benzolcarbonsäure. Sm. 70° (B. 18, $\mathbf{C}_{13}\mathbf{H}_7\mathbf{O}_2\mathbf{Cl}_3$ 1164). — II, 1145. 1) P-Bromxanthon. Sm. 125-129° (A. 254, 285). - III, 196. $C_{13}H_7O_9Br$ 2) Lakton d. ?-Brom-1-[2-Oxyphenyl]benzol-2-Carbonsäure. Sm. 1930 (J. pr. [2] **28**, 302). — **II**, 1695. C₁₈H₇O₂Br₃ 1) 2,4,6-Tribromphenylester d. Benzolcarbonsäure. Sm. 81,5° (B. 18, 1168). — II, 1145. C 69,3 — H 3,1 — O 21,3 — $N_{6,2}$ — M. G. 225. $\mathbf{C}_{13}\mathbf{H}_7\mathbf{O}_8\mathbf{N}$ 1) 2-Nitro-9-Ketofluoren. Sm. 220° (218,5° cor.) (A. 203, 103; M. 16, 824; B. 31, 1696). — III, 241. C₁₃H₇O₃Br₈ 1) ?-Tribrom-2-Oxybenzolphenyläther-1-Carbonsäure. Sm. 176°. Ag (A. 257, 86). — II, 1495. 2) Phenylester d. ?-Tribrom-2-Oxybenzol-1-Carbonsäure. Sm. 1920 (J. pr. [2] 51, 212). — II, 1506. 3) 4-Bromphenylester d. 3,5-Dibrom-2-Oxybenzol-1-Carbonsäure. Sm. 195° (C. 1898 [1] 229, 1251). 4) ?-Tribromphenylester d. 2-Oxybenzol-1-Carbonsäure (Tribromsalol; Cordol) (C. **1898** [1] 857). C 64,7 — H 2,9 — O 26,5 — N 5,8 — M. G. 241. C13H7O4N 1) Lakton d. ?-Nitro-1-[2-Oxyphenyl]benzol-2-Carbonsäure. Sm. 2240 (J. pr. [2] 28, 301). — II, 1696. C 58,0 — H 2,6 — O 23,8 — N 15,6 — M. G. 269. $\mathbf{C}_{13}\mathbf{H}_7\mathbf{O}_4\mathbf{N}_3$ 1) Dinitroakridin (A. 158, 277). — IV, 406. $C_{13}H_7O_4Br$ 1) ?-Brom-3,4-Dioxyxanthon. Sm. noch nicht bei 360° (A. 269, 312). - III, 204. C 54.7 - H 2.4 - O 28.1 - N 14.7 - M. G. 285. $\mathbf{C}_{13}\mathbf{H}_7\mathbf{O}_5\mathbf{N}_3$ 1) 4,6-Dinitro-1-Phenylbenzoxazol. Sm. 218-219° (A. 210, 394). -II, 1179. 2) P-Dinitro-2-Phenylbenzisoxazol. Sm. 239—241° (B. 25, 3296). — IV, 410. $C_{13}H_7O_6Br_3$ 1) Tribrom-3,4,2',4',6'-Pentaoxydiphenylketon+ $H_2O(Tribrommaklurin)$ (A. 185, 117). — III, 207. 2) Diacetyltribromäskuletin. Sm. 180—182° u. Zers. (B. 13, 1592). — III, 568. $\mathbf{C}_{13}\mathbf{H}_7\mathbf{O}_8\mathbf{N}_3$ C 46.8 - H 2.1 - O 38.4 - N 12.6 - M. G. 333.1) Aldehyd d. 2-Oxybenzol-2, 4, 6-Trinitrophenyläther-1-Carbonsäure. Sm. 154° (G. 26 [2] 557). 2) 2,4,6-Trinitrophenylester d. Benzolcarbonsäure (A. 75, 78). — II, 1146.

II, 1146.
3) 2,4-Dinitrophenylester d. 3-Nitrobenzol-1-Carbonsäure. Sm. 161° (B. 18, 3322; 19, 2021, 2980; J. 1885, 1451). — II. 1232.

(B. 18, 3322; 19, 2021, 2980; J. 1885, 1451). — II, 1232. 4) 3,4-Dinitrophenylester d. 3-Nitrobenzol-1-Carbonsäure. Sm. 149° (B. 19, 2980). — II, 1232.

5) ?-Dinitrophenylester d. 3[P]-Nitrobenzol-1-Carbonsäure. Sm. 150° (A. 90, 201). — II, 1146.
 C 44,7 — H 2,0 — O 41,2 — N 12,0 — M. G. 349.
 1) 2-Nitrophenylester d. 3,5-Dinitro-2-Oxybenzol-1-Carbonsäure.

2-Nitrophenylester d. 3,5-Dinitro-2-Oxybenzol-1-Carbonsäure.
 Sm. 100° (J. pr. [2] 43, 385). — II, 1511.
 2) 4-Nitrophenylester d. 3,5-Dinitro-2-Oxybenzol-1-Carbonsäure.
 Sm. 176° (J. pr. [2] 43, 386). — II, 1511.

- C 42.7 H 1.9 O 43.8 N 11.5 M. G. 365. $C_{13}H_7O_{10}N_8$ 1) P-Trinitro-2, 3, 4 [oder 3, 4, 5]-Trioxydiphenylketon. Sm. 118° (A. 269, 305). **— III**, 202.
- C 39.7 H 1.8 O 40.7 N 17.8 M. G. 393. $\mathbf{C}_{13}\mathbf{H}_{7}\mathbf{O}_{10}\mathbf{N}_{5}$ 1) Tetranitro - o - Amidophenylbenzolcarbonsäure (B. 12, 1405). — IV, 394.
- $C_{13}H_7N_2Br_3$ 1) ?-Tribrom-2-Phenylindazol. Sm. 204° (B. 27, 50). IV, 867. 1) Azimid d. P-Brom-2-[2-Amidophenyl]benzimidazol. Sm. 131-1320 $\mathbf{C}_{13}\mathbf{H}_{7}\mathbf{N}_{4}\mathbf{Br}$
 - 2) Azimid d. isom. ?-Brom-2-[2-Amidophenyl]benzimidazol. Sm. 1460 (B. **31**, 320).
- 1) 4,4'-Dichlordiphenylketon. Sm. 144-145° (A. 264, 175). III, 180. C₁₃H₈OCl₂
- 2) Dichlorxanthen. Sm. 148—149° (G. 28 [1] 237).

 1) 2,4'-Dibromdiphenylketon. Sm. 51—52° (B. 27, 1453). III, 180.

 2) 3,3'-Dibromdiphenylketon. Sm. 141° (B. 23, 3614). III, 180.

 3) 4,4'-Dibromdiphenylketon. Sm. 172—173° (B. 24, 3768; A. 264, 163; $\mathbf{C}_{13}\mathbf{H}_8\mathbf{OBr}_2$
- **296**, 232). III, 180. $C_{13}H_8OJ_2$
- 1) 2,2'-Dijoddiphenylketon. Sm. 106—107° (B. 31, 3033).
 2) 4,4'-Dijoddiphenylketon. Sm. 233—234° (A. 264, 165). III, 180.
 1) Thioxanthon. Sm. 209°; Sd. 371—373°₇₁₅ (A. 263, 8). III, 197.
 C 69,6 H 3,6 O 14,3 N 12,5 M. G. 224. C₁₈H₈OS $\mathbf{C}_{13}\mathbf{H}_8\mathbf{O}_2\mathbf{N}_2$
 - 1) α -Nitroakridin. Sm. 214° (A. 158, 275). IV, 406. 2) β -Nitroakridin. Sm. 154° (A. 158, 275). IV, 406. 3) ?-Nitro- α -Naphtochinolin. Sm. 151° (J. pr. [2] 57, 84). 4) ?-Nitro- β -Naphtochinolin. Sm. 165° (J. pr. [2] 57, 63). 5) Chinonphenotolazin (B. 23, 2796). III, 359.
 - 6) 1,4-Benzochinon-α-Methylphenazin (B. 23, 2795). III, 340. 7) Anhydro-3-[α-Oximidobenzyl] pyridin-2-Carbonsäure. Sm. 193° u.
 - Zers. (M. 17, 524). IV, 157.

 8) 4,10-Naphtisodiazin-5-Carbonsäure (Phenanthrolincarbonsäure). Sm. 277° u. Zers. $2 \text{Ca} + 10 \text{H}_2 \text{O}$ (M. 5, 527). — IV, 1019.
 - 9) 4,10-Naphtisodiazin-9-Carbonsäure + H₂O (Phenanthrolinearbonsäure). Sm. 208—209° (B. 22, 251). — IV, 1019.
 - 10) Phenylimid d. Pyridin-2, 3-Dicarbonsäure. Sm. 228°. (2HCl, PtCl₄) (B. **27**, 1789). — IV, 161.
 - 11) Phenylimid d. Pyridin-3,4-Dicarbonsäure. Sm. 212-215,5° (M. 11, 145). — IV, 164.
- C₁₃H₈O₂Cl₂ 1) 2,4-Dichlorphenylester d. Benzolcarbonsäure. Sm. 97° (J. 1887, 1301). **— II**, *1145*.
- C₁₃H₈O₂Br₂ 1) P-Dibrom-2-Oxydiphenylketon. Sm. 126° (M. 17, 106). III, 195. 2) ?-Dibrom-1-Phenylbenzol-2-Carbonsäure. Sm. 212°. Ba (B. 16, 1082). **- II**, 1462.
 - 3) 2-[oder 3-]Brom-1-[4-Bromphenyl]benzol-4-Carbonsäure. Sm. 202 bis 204° (Soc. 47, 589; 51, 89). — II, 1463. 4) isom. ?-Brom-1-[4-Bromphenyl] benzol-4-Carbonsäure. Sm. 231 bis
 - 234° (Soc. 47, 589; 51, 89). II, 1463.
- 5) P-Dibromphenylester d. Benzolcarbonsäure (A. 90, 198). C₁₃H₈O₂Br₄ 1) s-Tetrabrom-4,4'-Dioxydiphenylmethan. Sm. 225°. HBr (A. 194, 326). — II, 993.
- 1) ?-Dijodphenylester d. Benzolcarbonsäure. Sm. 95—96° (B. 16, 1903). $\mathbf{C}_{13}\mathbf{H}_{8}\mathbf{O}_{9}\mathbf{J}_{9}$ **– II**, *1146*. C 65,0 - H 3,3 - O 20,0 - N 11,7 - M. G. 240. $\mathbf{C}_{13}\mathbf{H}_{8}\mathbf{O}_{3}\mathbf{N}_{2}$
- 1) 5-Keto-5,10-Dihydro-α-Chinochinolin-3-Carbonsäure. Sm. 318—319° u. Zers. Ba $+ 4H_2O$ (B. 28, 123). — IV, 1020.
 - 2) 2-Oxy-1,4-Naphtisodiazin-3-Carbonsäure (Oxynaphtazincarbonsäure) (B. **24**, 2369). — **IV**, 1019.
- 3) Nitril d. β-[2-Furanyl]-α-[4-Nitrophenyl]akrylsäure. Sm. 171—173° (B. 23, 2853). III, 713.
 C 58,2 H 2,9 O 17,9 N 20,9 M. G. 268. $\mathbf{C}_{13}\mathbf{H}_8\mathbf{O}_8\mathbf{N}_4$ 1) 6-Nitro-4-Keto-3-Phenyl-3,4-Dihydro-1,2,3-Benztriazin. Sm. 190°
- (J. pr. [2] 53, 219). IV, 1555.1) Phenylester d. 3,5-Dichlor-2-Oxybenzol-1-Carbonsäure. Sm. 115 $\mathbf{C}_{13}\mathbf{H}_8\mathbf{O}_3\mathbf{Cl}_2$
- bis 116° (G. 28 [1] 156). 2) Di[4-Chlorphenylester] d. Kohlensäure. Sm. 142° (Bl. [3] 19, 367). 82*

C₁₈H₈O₈Br₂ 1) Phenylester d. 3,5-Dibrom-2-Oxybenzol-1-Carbonsäure. Sm. 128°

2) Di[4-Bromphenylester] d. Kohlensäure. Sm. 1690 (1710) (B. 23,

(B. 26, 1463; J. pr. [2] 51, 211). — II, 1505.

695; **28**, 979). — **II**, 673 1) Diphenylketonsulfon (Benzophenonsulfon). Sm. 186-187° (B. 6, 1112; C₁₃H₈O₃S A. 263, 10). — III, 192. 2) isom. Diphenylketonsulfon. Sm. 174-175° (B. 8, 992). - III, 192. C 60,9 - H 3,1 - O 25,0 - N 10,9 - M. G. 256. $\mathbf{C}_{13}\mathbf{H}_{8}\mathbf{O}_{4}\mathbf{N}_{2}$ 1) Dinitrofluoren. Sm. 199-201° (255-260° u. Zers.) (A. ch. [5] 7, 498; A. 193, 140; B. 11, 849). — II, 246. 2) Dinitroderivat (aus d. Kohlenw. C₁₄H₁₉). Sm. 181° (J. pr. [2] 53, 373).
 3) ?-Nitro-α-Naphtochinolin. Sm. 138° (J. pr. [2] 57, 84).
 4) Dioxychinontolazin (B. 20, 323, 3150). — IV, 621. 5) Amidophenoxazoncarbonsäure. Sm. noch nicht bei 300°. NH4, Ca (B. **29**, 1759). C 54.9 - H 2.8 - O 22.5 - N 19.7 - M. G. 284. $\mathbf{C}_{13}\mathbf{H}_{8}\mathbf{O}_{4}\mathbf{N}_{4}$ 1) Verbindung (aus m-Nitrobenzaldehyd u. m-Nitranilin). Sm. 153° (B. 23, 2775). — III, 30. C 57,3 — H 2,9 — O 29,4 — N 10,3 — M. G. 272. $C_{13}H_8O_5N_2$ 1) 2,2'-Dinitrodiphenylketon. Sm. 188° (J. 1847/48, 666; A. 133, 10; 194, 349; 283, 165, 167; B. 5, 797; 11, 1747; 27, 2111). — III, 181. 2) 2, 3'-Dinitrodiphenylketon. Sm. 126° (A. 283, 166, 167; B. 27, 2110). **— III**, 181. 3) 2,4'-Dinitrodiphenylketon. Sm. 196-197° (A. 194, 371; 283, 167, 169; B. 24, 2578; 27, 2110). — III, 181. 4) 3,3'-Dinitrodiphenylketon. Sm. 148—149° (151°) (A. 194, 349; 283, 166, 167; B. 27, 2111, 2296, 2322). — III, 181. 5) 3, 4'-Dinitrodiphenylketon. Sm. 1720 (1750) (A. 283, 169; B. 27, 2111, 2294). — III, 181. 6) 4,4'-Dinitrodiphenylketon. Sm. 189° (A. 194, 370; 218, 350; 283, 168; B. 11, 1747; 27, 2110). — III, 181. C 52,0 — H 2,7 — O 26,7 — N 18,6 — M. G. 300. $\mathbf{C}_{13}\mathbf{H}_{8}\mathbf{O}_{5}\mathbf{N}_{4}$ 1) 5- oder 6-Amido-1-[4-Oxyphenyl]-1,2,3-Benztriazol-18-Carbonsäure. Sm. 269° u. Zers. (A. 273, 126). — IV, 1155. C 54,2 - H 2,8 - O 33,3 - N 9,7 - M. G. 288. $\mathbf{C}_{13}\mathbf{H}_{8}\mathbf{O}_{6}\mathbf{N}_{2}$ 1) 3-Nitro-1-[4-Nitrophenyl]benzol-4-Carbonsäure. Sm. 252°. (A. 210, 192). — II, 1463. 2) 2,4-Dinitrophenylester d. Benzolcarbonsäure (A. 75, 77). — II, 1146. 3) 2-Nitrophenylester d. 3-Nitrobenzol-1-Carbonsäure. Sm. 1260 (B. 18, 3320). — II, 1232. 4) 3-Nitrophenylester d. 3-Nitrobenzol-1-Carbonsäure. Sm. 129° (B. **19**, 2980). — **II**, *1232*. 5) 4-Nitrophenylester d. 3-Nitrobenzol-1-Carbonsäure. Sm. 135,5° (B. **19**, 2020). — **II**, 1232. $C_{13}H_8O_6Br_2$ 1) Diacetyldibromäskuletin. Sm. 177° (B. 13, 1595). — III, 568. $\mathbf{C}_{13}\mathbf{H}_8\mathbf{O}_7\mathbf{N}_9$ C 51,3 - H 2,6 - O 36,8 - N 9,2 - M. G. 304.1) ?-Dinitro-2-Oxybenzolphenyläther-1-Carbonsäure. Sm. 153%. Ca $+4 H_2 O$, Ba $+4 H_2 O$, Ag (A. 257, 82). — II, 1495. 2) Phenylester d. 3,5-Dinitro-2-Oxybenzol-1-Carbonsäure. Sm. 1830 (J. pr. [2] 43, 383). — II, 1511. 3) Di[2-Nitrophenylester] d. Kohlensäure (J. pr. [2] 27, 42). $\mathbf{C}_{13}\mathbf{H}_{8}\mathbf{O}_{7}\mathbf{N}_{4}$ C 47,0 - H 2,4 - O 33,7 - N 16,9 - M. G. 332. 2,4-Dinitrophenyläther d. α-Oximido-α-[3-Nitrophenyl]methan
 d. anti-m-Nitrobenzaldoxim). Sm. 188° (B. 27, 1656). — III, 47. 2) P-Dinitrophenylamid d. 2-Nitrobenzol-1-Carbonsäure. Sm. 178° (B. 10, 1708). — II, 1231.

3) 2,4-Dinitrophenylamid d. 3-Nitrobenzol-l-Carbonsäure. Sm. 1650

4) isom. Dinitrophenylamid d. 3-Nitrobenzol-1-Carbonsäure. Sm. 2020

5) isom. Dinitrophenylamid d. 3-Nitrobenzol-1-Carbonsäure. Sm. 2120

1) 9-Ketofluoren-P-Disulfonsäure. Ca (A. 207, 345). — III, 241.

(B. 10, 1708). — II, 1234.

(B. **10**, 1708). — **II**, *1231*.

(B. 10, 1708). — II, 1231.

 $\mathbf{C}_{13}\mathbf{H}_{8}\mathbf{O}_{7}\mathbf{S}_{2}$

- C 48.8 H 2.5 O 40.0 N 8.7 M. G. 320. $C_{13}H_8O_8N_2$ 1) ?-Dinitro-2,3,4[oder 3,4,5]-Trioxydiphenylketon. Sm. 133° u. Zers. (A. **269**, 305). — III, 202.
- \dot{C} 44,8 H 2,3 \dot{O} 36,8 N 16,1 M. G. 348. $C_{13}H_8O_8N_4$ 1) 2,4,2',4'-Tetranitrodiphenylmethan. Sm. 172° (A. 218, 339; 283, 153; \vec{B} . 5, 795; 27, 2317). — II, 229. C 41,5 — H 2,1 — O 34,0 — N 22,3 — M. G. 376.
- $\mathbf{C}_{13}\mathbf{H}_8\mathbf{O}_8\mathbf{N}_6$ 1) s-2-Nitrobenzyliden-2,4,6-Trinitrophenylhydrazin. Sm. 215° (G. **24** [1] 576). — **IV**, 752. 2) s-3-Nitrobenzyliden-2,4,6-Trinitrophenylhydrazin. Sm. 250-2510
- $(G. \ 24 \ [1] \ 577). \rightarrow IV, 752.$ $C_{13}H_8O_8S_2$ 1) Xanthondisulfonsäure. Ba + H₂O (Soc. 43, 192). - III, 197.
- 2) 2,2'-Lakton d. 1-[2-Oxyphenyl] benzol-2-Carbonsäure-?-Disulfonsäure. Ba + H_2O (J. pr. [2] 28, 302). — II, 1696. C 42.8 - H 2.2 - O 39.6 - N 15.4 - M. G. 364. $\mathbf{C}_{13}\mathbf{H}_{8}\mathbf{O}_{9}\mathbf{N}_{4}$
- 1) Tetranitrodiphenylharnstoff. Sm. 189° (über 200°) (B. 10, 690, 1296; 11, 1541; J. pr. [2] 34, 426). — II, 379.
 - 2) 2, 4, 6-Trinitrophenyläther d. 4-Nitro-1-Oxymethylbenzol. Sm. 108° (A. **224**, 119). — **II**, 1060.
- C 39,8 H 2,0 O 36,7 N 21,4 M. G. 392. $\mathbf{C}_{13}\mathbf{H}_8\mathbf{O}_9\mathbf{N}_6$ 1) s-Di[?-Dinitrophenyl]harnstoff (J. pr. [2] 52, 230).
- 2) 3,5,3',5'-Tetranitro-4,4'-Diamidodiphenylketon. Zers. bei 250—260° (R. 7, 234). III, 185.
 1) 5-Chlorakridin. Sm. 119°. Pikrat (A. 276, 48). IV, 406. $\mathbf{C}_{13}\mathbf{H}_{8}\mathbf{NC1}$
- 2) 9-Chlorphenanthridin. Sm. $116,5^{\circ}$ (A. 276, 251). IV, 407. 1) 3-Brom-β-Naphtochinolin. Sm. 117—118° (J. pr. [2] 57, 60). C₁₃H₂NBr 1) 1-Naphtylamidoeyanurchlorid.
 2) 2-Naphtylamidoeyanurchlorid.
 3 54° (B. 19, 243).
 4 11, 624.
 5 24.
 6 24.
 7 256.
 18 24.
 19 2056.
 11 624. $\mathbf{C}_{13}\mathbf{H}_{8}\mathbf{N}_{4}\mathbf{Cl}_{2}$
- C₁₃H₈N₄Br₂ 1) Azimid d. 2-[2-Amidophenyl] benzimidazoldibromid. Sm. 112° (B.
- 31, 319). $C_{13}H_9ON$ C 80.0 - H 4.6 - O 8.2 - N 7.2 - M. G. 195.
 - 1) **4-Biphenylisocyanat** (B. 13, 1965). II, 634. 2) 4-Amido-9-Ketofluoren (Amidofluorenon). Sm. 138°. HCl (A. 284, 310). **— III**, 241.

 - 3) 9-Oximidofluoren. Sm. 195° (193—194°). HCl, Na (M. 5, 195; A. 252, 36; B. 29, 230; C. 1897 [1] 413). III, 240.
 4) 4-Benzoylpyridin. Sd. bei 300° (B. 27, 1925).
 5) 1-Phenylbenzoxazol. Sm. 103°; Sd. 313—314° (oberh. 360°). (2HCl, PtCl₄), (HCl, AuCl₃) (B. 7, 1319; 9, 1526; 16, 630; 31, 1063; A. 210, 384; Am. 17, 399). II, 1176.
 - 6) 2-Phenylbenzisoxazol (Phenylindoxazen). Sm. 83—84°; Sd. 331—336°
 - (B. 25, 1498, 3294; 26, 1251, 1658). IV, 410.

 7) 2-[2-Furanyl]chinolin. Sm. 92°; Sd. oberh. 300°. (2HCl, PtCl₄ + 2H₂O), (HCl, AuCl₃), H₂Cr₂O₇, Pikrat (A. 242, 287). IV, 410.

 8) 1-Oxyakridin. Sm. oberh. 250° (B. 24, 2042). IV, 406.

 9) 5-Keto-5,10-Dihydroakridin (Akridon). Sm. 354° (B. 25, 1734; 26, 1965; 27, 3364; 29, 1190; A. 276, 45; 291, 16). IV, 406.

 - 10) 9-Oxyphenanthridin. Sm. noch nicht bei 349° (A. 266, 144; 276, 246). - IV, 407.
 - 11) 9-Keto-9,10-Dihydrophenanthridin (Phenanthridon). Sm. 2890 (2920) (C. 1897 [1] 413; A. 276, 248; 284, 312; B. 26, 1964; 29, 230, 1188). · IV, 407.

 - 12) 5-Oxy-α-Naphtochinolin. Sm. bei 270° u. Zers. HCl (J. pr. [2] 57, 82).
 13) ?-Oxy-β-Naphtochinolin. Sm. 208—211° (J. pr. [2] 57, 66).
 14) ?-Oxy-β-Naphtochinolin. Sm. noch nicht bei 250° (B. 18, 202). IV, 410.
 - 15) Nitril d. β -[2-Furanyl]- α -Phenylakrylsäure. Sm. 42—43° (A. 250, 159). — III, 712.
 - Verbindung (aus 9-Oximidofluoren). Sm. 287° (A. 252, 39). III, 240.
 Verbindung (aus Benzol u. 2-Nitrobenzylchlorid). Sm. 169° (M. 17, 396).
- C 70,0 H 4,0 O 7,2 N 18,8 M. G. 223. $\mathbf{C}_{13}\mathbf{H}_{9}\mathbf{ON}_{8}$ 1) 3-[3-Pyridyl]-5-Phenyl-1,2,4-Oxdiazol (Nikotenylazoximbenzenyl). Sm. 139° (B. 24, 3442). — IV, 145.

2) 4-Keto-3-Phenyl-3,4-Dihydro-1,2,3-Benztriazin. Sm. 150-1510 $\mathbf{C}_{13}\mathbf{H}_{9}\mathbf{ON}_{3}$ (C. 1897 [1] 413). 1) 2-Chlordiphenylketon. Sd. bei 330° (B. **26**, 29). — III, 180. 2) 3-Chlordiphenylketon. Sm. 82-83° (B. **24**, 57). — III, 180. 3) 4-Chlordiphenylketon. Sm. 77-78° (75,5-76°) (B. **6**, 547; **23**, 3609; C₁₈H₉OCl A. 252, 6). — III, 180. 4) Chlorid d. Biphenyl-2-Carbonsäure (A. 279, 260). 1) Benzyläther d. 2,4,6-Trichlor-1-Oxybenzol. Sd. 160-175% (G. 28, C₁₈H₉OCl₈ 1) 2-Bromdiphenylketon. Sm. 42° (B. 25, 1498). — III, 180. $\mathbf{C}_{13}\mathbf{H}_{9}\mathbf{OBr}$ 2) 3-Bromdiphenylketon. Sm. 81,5° (77°) (A. 264, 170; B. 6, 447). — III, 180. 1) 2-Joddiphenylketon. Fl. (B. 26, 1745). — III, 180. 2) 4-Joddiphenylketon. Sm. 102—103° (A. 264, 167). — III, 180. C₁₈H₉OJ C 73,9 — H 4,3 — O 15,2 — N 6,6 — M. G. 211.

1) p-Nitrofluoren. Sm. 154° (A. ch. [5] 7, 497; B. 17, 107). — II, 246.
2) 9-Oximido-1-Oxyfluoren. Sm. 169—170° (B. 31, 3034).
3) 5-Oxy-1-Phenylbenzoxazol. Sm. 216—217° (M. 19, 498). C18HOON 4) Phenyläther d. 1-Oxybenzoxazol. Sm. 56°; Sd. 310° (J. pr. [2] 42, 455). — II, 707 5) 2,10-Diketo-8-Methyljulol ($\alpha_1 \alpha_2$ -Diketo- γ_1 -Methyljulol). Sm. 245° (B. **25**, 108). — **IV**, 193. 6) 2,4-Dioxyakridin. (2 HCl, PtCl₄) (B. **25**, 1758). — **IV**, 407. 7) α -Naphtindol-2-Carbonsäure. Sm. 202° (A. **239**, 232). — **IV**, 402. 8) β -Naphtindol-2-Carbonsäure. Sm. 226° u. Zers. (A. **236**, 180). — IV, 403. 9) Carbazolsäure. Sm. 271—272°. Ba, Ag (G. 12, 272). — IV, 403. 10) 1,8-Anhydrid d. 8-Acetylamidonaphtalin-l-Carbonsäure. Sm. 125° (J. pr. [2] 38, 167). - II, 1450.11) Lakton d. Säure C₁₈H₁₁O₈N (aus 2-Methylpyrrol). Sm. 157° (B. 19, 2203). - IV, 69. 12) Lakton d. Säure C₁₈H₁₁O₈N (aus 3-Methylpyrrol). Sm. 215° (B. 19, 2202). — IV, 69. 13) Methylimid d. Naphtalin-1,8-Dicarbonsäure. Sm. 205° (G. 25 [1]) 249; B. 28, 361). — II, 1880. C 65,3 — H 3,7 — O 13,4 — N 17,6 — M. G. 239. C13H9O2N3 1) 2-[?-Nitrophenyl]indazol (2 isom. Formen). Sm. 1840 u. 1740 (B. 27, 48, 49). — IV, 867. 2) ?-Nitro-2-Phénylbenzimidazol. Sm. 196º (A. 208, 308). — IV, 1007.
 3) 2-[4-Nitrophenyl]benzimidazol. Sm. 322º (B. 27, 2191). — IV, 1007. 4) 1-Naphtylhydrazoncyanessigsäure. Sm. 125° (J. pr. [2] 52, 168). -IV, 1457. 5) 2-Naphtylhydrazoncyanessigsäure. Sm. 150°. Ag (J. pr. [2] 52, 170). - IV, 1457. 6) 1-Phenyl-1, 2, 3-Benztriazol-5-Carbonsäure. Sm. 272° (B. 22, 3288). · IV, 1154. 7) Nitril d. 5-Nitro-2-Phenylamidobenzol-1-Carbonsäure. Sm. 170° B. 23, 3444). — II, 1283. 8) Nitril d. 3-Nitro-4-Phenylamidobenzol-1-Carbonsäure. Sm. 1260 (B. 23, 3442). — II, 1285. 9) Phenylamidoimid d. Cinchomeronsäure. Sm. oberh. 260° (M. 11, 147). - IV, 799. $C_{13}H_9O_2N_5$ C 58,4 — H 3,4 — O 12,0 — N 26,2 — M. G. 267. 1) 4-[4-Nitrophenyl]-1-Phenyl-1, 2, 3, 5-Tetrazol. Sm. 199-200 (B. 31, 477). — IV, 1269. C₁₃H₉O₂Cl 1) 2-Chlor-1-Oxydiphenylketon. Sm. 1760 (B. 30, 1771). 2) Phenylester d. 2-Chlorbenzol-1-Carbonsäure. Sm. 37° (B. 31, 2173). 3) 2-Chlorphenylester d. Benzolcarbonsäure. Sd. 213-2140 (314-3160)

4) 4-Chlorphenylester d. Benzolcarbonsäure. Sm. 930 (870) (A. 53, 96;

(J. 1887, 1301; C. 1895 [1] 835). — II, 1145.

- 2) 1-[4-Bromphenyl]benzol-4-Carbonsäure. Sm. 193-1940 (Soc. 51, 88; B. **27**, 3394). — II, 1463.
- 3) Phenylester d. 3-Brombenzol-1-Carbonsäure. Sm. 65° (J. 1879, 676; 1880, 375). — II, *1222*.
- 4) Phenylester d. 4-Brombenzol-1-Carbonsäure. Sm. 1170 (Am. 9, 86). - II, 1222.
- 5) 4-Bromphenylester d. Benzolcarbonsäure. Sm. 102° (A. 90, 197; J. pr. [2] **51**, 213; G. **28** [1] 216). C 68,7 — H 3,9 — O 21,1 — N 6,2 — M. G. 227.
- $C_{13}H_{9}O_{3}N$
 - 1) 2-Nitrodiphenylketon. Sm. 105° (B. 18, 2403; A. 283, 166). III, 181.
 - 2) 3-Nitrodiphenylketon. Sm. 94° (92°) (B. 15, 2092; 18, 2401; 29, 3035; A. 283, 167). — III, 181.
 - 3) 4-Nitrodiphenylketon. Sm. 138° (B. 16, 2717; A. 283, 167). —
 - 4) 4-Oxy-3-Keto-2 [oder 5]-Methylphenoxazin. Sm. 215-216° (B. 29,
 - 2076). IV, 411. 5) Benzoat d. 4-Oximido-1-Keto-1,4-Dihydrobenzol. Sm. 172—174°
 - (B. 17, 400; A. 277, 97). III, 331. 6) 3-Benzoylpyridin-2-Carbonsäure. Sm. 147°. Ag (M. 17, 516; B. 20, 1209). — IV, 157.
 - 7) 4-Benzoylpyridin-3-Carbonsäure. Sm. 216° (B. 27, 1925). IV, 157. 8) 5-Benzoylpyridin-3-Carbonsäure. Sm. 199—201°. Cu, Ag (A. 280,
 - 50). IV, 157.
 - 9) 3-Benzoylpyridin-4-Carbonsäure. Sm. 210—211° (M. 18, 447). 10) Aldehyd d. 1-[4-Nitrophenyl]benzol-4-Carbonsäure. Sm. 115—120°
 - (B. 28, 525). III, 64.
 - 11) Methoxylimid d. Naphtalin-1,8-Dicarbonsäure. Sm. 211° (G. 25 [1] 253; B. 28, 363). — II, 1880. C = 61,2 - H = 3,5 - O = 18,8 - N = 16,5 - M. G. 255.
- $\mathbf{C}_{13}\mathbf{H}_{9}\mathbf{O}_{3}\mathbf{N}_{3}$ 1) 5-Nitro-3-Keto-2-Phenyl-1, 3-Dihydroindazol. Zers. oberh. 260° (B. 30, 1100). — IV, 741.
 - 2) Imid d. $\alpha \gamma$ -Dicyan- β -[2-Oxyphenyl]propan- $\alpha \gamma$ -Dicarbonsäure (J. pr. [2] **50**, 22). — II, 1957.
- 1) Phenylester d. 5-Chlor-2-Oxybenzol-1-Carbonsäure. Sm. 81-830 $C_{13}H_9O_3C1$ (G. **28** [1] 155).
- 1) Phenylester d. 5-Brom-2-Oxybenzol-1-Carbonsäure. Sm. 1120 (A. C₁₃H₉O₃Br **273**, 123; J. pr. [2] **51**, 211). — II, 1505.
 - 2) Phenylester-4-Bromphenylester d. Kohlensäure. Sm. 101° (B. 28, 982).
- $\mathbf{C}_{13}\mathbf{H}_{9}\mathbf{O}_{4}\mathbf{N}$
- C 64,2 H 3,7 O 26,3 N 5,8 M. G. 243.

 1) 5-Nitro-2-Oxydiphenylketon. Sm. 124—124,5° (B. 31, 1696).

 2) Oxim d. 1,7-Dioxyxanthon. Sm. 233—235° u. Zers. (M. 13, 417). III, 206.
 - 3) ?-Nitro-1-Phenylbenzol-2-Carbonsäure. Sm. 221—222°. Ca, Ba (A. **193**, 123). — **II**, 1462.

 - 4) 1-[4-Nitrophenyl]benzol-4-Carbonsäure. Sm. 222—225° (B. 29, 166). 5) 1-[4-Nitrophenyl]benzol-4-Carbonsäure? Sm. 189° (B. 28, 525). II, 1463.

 - 6) 1,4-Benzochinonamidobenzol-2-Carbonsäure (Bl. [3] 15, 1026). 7) 2-Phenylpyridin-2²,3-Dicarbonsäure. Sm. 230 -235°. Ca $+2H_2O$, Cu + 4 H₂O, Ag₂ + 1½ H₂O, HCl, (2 HCl, PtCl₄ + 3 H₂O) (M. 4, 463; Ph. Ch. 2, 902; 3, 398). — IV, 384. 8) 3-Phenylpyridin-2, 3²-Dicarbonsäure + H₂O. Sm. 207° (wasserfrei).

 - K₂ + 3 H₂O, K + 2 H₃O, Ca + 3 H₂O, Ba + $\frac{4^{1}}{2}$ H₂O, Cu + 4 H₂O, Ag, HCl, (2 HCl, PtCl₄ + $\frac{2^{1}}{2}$ H₂O) (M. 4, 442; Ph. Ch. 3, 397). IV, 384. 9) 4-Phenylpyridin-3,5-Dicarbonsäure + H₂O (Phenyldinikotinsäure). Sm. 229-230° (245-246° u. Zers. wasserfrei). Cu + 2 H₂O (A. 241, 13).
 - IV, 385.
 10) Aethylester d. Phtalylcyanessigsäure. α-Derivat Sm. 190-192°; β-Derivat Sm. 140—141° (A. ch. [7] 1, 480). — II, 1874.
 - 11) 2-Nitrophenylester d. Benzolcarbonsäure. Sm. 58° (55°) (A. 210, 386; G. 11, 74; B. 16, 630; 18, 3320). — II, 1146.
 - 12) 3-Nitrophenylester d. Benzolcarbonsäure. Sm. 95° (B. 19, 2979). - II, 1146.

C₁₂H₀O₄N 13) 4-Nitrophenylester d. Benzolcarbonsäure. Sm. 142° (A. 210, 377; G. 11, 78; B. 19, 2020). — II, 1146. С 57,6 — Н 3,3 — О 23,6 — N 15,5 — М. G. 271.

1) 3-Nitro-1-[3-Nitrobenzyliden]amidobenzol. Sm. 1140 (J. 1870, 760).

 $\mathbf{C}_{13}\mathbf{H}_{9}\mathbf{O}_{4}\mathbf{N}_{3}$

– III, 30. 2) ?-Nitroazobenzol-2-Carbonsäure. Sm. 135° (B. 27, 49). — IV, 1461. 3) 1,8-Anhydrid d. ?-Nitro-5-Acetylamidonaphtalin-1-Carbonsäure. Sm. bei 250°. — II, 1452. C 52,1 — H 3,0 — O 21,4 — N 23,4 — M. G. 299. $C_{18}H_9O_4N_5$ 1) 5-Methyl-1-[2,4-Dinitrophenyl]-1,2,3-Benztriazol. Sm. 186° (B. 23, 3428). - IV, 1146. 1) P-Brom-2, 3, 4 [oder 3, 4, 5]-Trioxydiphenylketon. Sm. 149° (A. 269, $\mathbf{C}_{19}\mathbf{H}_{9}\mathbf{O}_{4}\mathbf{Br}$ 306). — III, 202. С 60,2 — H 3,5 — О 30,9 — N 5,4 — М. G. 259. $C_{13}H_{9}O_{5}N$ 1) 5-Nitro-2-Oxybenzolphenyläther-1-Carbonsäure. Sm. 171-1720. Ba (B. 30, 740). 2) 3-Nitro-4-Oxybenzolphenyläther-1-Carbonsäure. Sm. 174-175°. + Toluol, Ba (B. 30, 739). 3) 4-Oxybenzol-4-Nitrophenyläther-1-Carbonsäure. Sm. 236—237° (B. **29**, 2084). 4) 4-Oxy-?-Phenylpyridin-2,6-Dicarbonsäure + H₂O (Phenylammonchelidonsäure) (M. 6, 296). — IV, 173. 5) Phenylester d. 3-Nitro-2-Oxybenzol-1-Carbonsäure. Sm. 1010 (J. pr. 2] 43, 381). — II, 1508. 6) Phenylester d. 5-Nitro-2-Oxybenzol-1-Carbonsäure. Sm. 150-1510 (J. pr. [2] 43, 379). - II, 1509.7) Monobenzoat d. 4-Nitro-1, 3-Dioxybenzol (G. 15, 273). — II, 1150. C 54.3 - H 3.1 - O 27.9 - N 14.6 - M. G. 287. $C_{13}H_9O_5N_3$ 1) α -Oximido-3,3'-Dinitrodiphenylmethan. Sm. 205—207° (B. 20, 510). - III, 190. 2) 2,4-Dinitrophenyläther d. α -Oximido- α -Phenylmethan (D. d. Antibenzaldoxim). Sm. 139—140° (B. 27, 1655). — III, 42. 3) P-Nitrooxyazobenzol-2-Carbonsäure (B. 17, 340). — IV, 1463. 4) 3'-Nitro-4-Oxyazobenzol-3-Carbonsäure. Sm. 237° u. Zers. Ba (A. 251, 188). — IV, 1469. 5) 3-Nitrophenylamid d. 3-Nitrobenzol-1-Carbonsäure. Sm. 1870 (B. 7, 1268; 8, 37). — II, 1234. 6) 2-Nitrophenylamid d. 4-Nitrobenzol-1-Carbonsäure. Sm. 216° (Bl. [3] 17, 618). 7) 2,4-Dinitrophenylamid d. Benzolcarbonsäure. Sm. 220° (Bl. [3] 19, 519). C 45,5 - H 2,6 - O 23,3 - N 28,6 - M. G. 343. $C_{13}H_9O_5N_7$ 1) Verbindung (aus Methyl-4,4'-Dinitro-2,2'-Diamidodiphenylamin) (B. 31, 1463). — IV, 1526. 1) ?-Brom-2,2',3',4'-Tetraoxydiphenylketon. Sm. 200° (A. 269, 311). $\mathbf{C}_{18}\mathbf{H}_{9}\mathbf{O}_{5}\mathbf{Br}$ **– III**, 204. C18HO6N C 56,7 - H 3,3 - O 34,9 - N 5,1 - M. G. 275.1) ?-Nitro-2, 3, 4 [oder 3, 4, 5]-Trioxydiphenylketon. Sm. 123° (A. 269, 303). — III, 202. 2) Methylimid d. Phtalylweinsäure. Sm. 180° (B. 30, 3041). C 51,5 — H 3,0 — O 31,7 — N 13,8 — M. G. 303. C18H9O6N8 1) Trinitrodiphenylmethan. Sm. 109-1100 (A. 283, 155). 2) 4,?-Dinitro-2-Benzoylamido-1-Oxybenzol. Sm. 220°. $K+2H_2O$, $Mg+6H_2O$, $Ba+5H_2O$, $Zn+3H_2O$, Ag (A. 205, 74; 210, 388; B. 16, 633). — II, 1178.

3) 2,6-Dinitro-4-Benzoylamido-1-Oxybenzol. Sm. 250° u. Zers. K +

5) 2-[2,4-Dinitrophenyl]amidobenzol-1-Carbonsäure. Sm. 262-264.

6) Dinitro-o-Amidophenylbenzolcarbonsäure (B. 12, 1405). — IV, 394. 7) 2,4-Dinitro-6-Amidophenylester d. Benzolcarbonsäure. Sm. 218

Sm. 236° (239°).

 H_2O , $Ca + 4^{1}/_2H_2O$, $Ba + 3H_2O$, Pb (Am. 5, 28). — II, 1179. 4) 3,5-Dinitro-4-Phenylamidobenzol-1-Carbonsäure. Sm. 2

 $Na + 3H_2O$, $Ca + 7H_2O$ (B. 28, 3064; Am. 19, 18, 207).

bis 219° (A. 205, 74; 210, 395). — II, 1147.

Ba (B. 18, 1448). — II, 1248.

C₁₃H₉O₆N₃ 8) 3-Nitro-4-Amidophenylester d. 3-Nit₁ obenzol-1-Carbonsaure. Sm. 225° (A. 210, 380). — II, 1232.

9) Amid d.?-Dinitro-2-Oxybenzolphenyläther-1-Carbonsäure. Sm. 166° (A. **257**, 83). — II, 1495.

 $\dot{\mathbf{C}}$ 47,1 — $\dot{\mathbf{H}}$ 2,7 — $\dot{\mathbf{O}}$ 29,0 — $\dot{\mathbf{N}}$ 21,2 — $\dot{\mathbf{M}}$. G. 331. $\mathbf{C}_{13}\mathbf{H}_{9}\mathbf{O}_{6}\mathbf{N}_{5}$

1) s-Benzyliden-2,4,6-Trinitrophenylhydrazin. Sm. 248° (267°) (G. 24 [1] 576; J. pr. [2] 50, 273). — IV, 748.

2) s-2-Nitrobenzyliden-2,4-Dinitrophenylhydrazin. Sm. 192° (G. 24 [1] 567). — IV, 752.

3) s-3-Nitrobenzyliden-2,4-Dinitrophenylhydrazin. Sm. 268° u. Zers. (*G.* **24** [1] 567). — IV, 752. C 48.9 — H 2.8 — O 35.1 — N 13.2 — M. G. 319.

 $\mathbf{C}_{13}\mathbf{H}_{9}\mathbf{O}_{7}\mathbf{N}_{8}$

1) ?-Trinitro-4-Oxydiphenylmethan. Sm. 148°. K (Soc. 41, 223, 361; B. 15, 364, 1581). — II, 897.

2) 2,4,6-Trinitrophenyläther d. 1-Oxymethylbenzol. Sm. 1470 (A. 224, 131). — II, 1049.

3) 2,4-Dinitrophenyläther d. 4-Nitro-1-Oxymethylbenzol. Sm. 2010 (1980) (A. 217, 177, 180, 182; 224, 105, 114; B. 14, 899). — II, 1060.
 4) 2,6-Dinitrophenyläther d. 4-Nitro-1-Oxymethylbenzol. Sm. 1370

(A. **224**, 117). — **II**, 1060.

5) Benzyläther d. 2,4,6-Trinitro-l-Oxybenzol. Sm. 115°. + Natriumbenzylat (Am. 20, 452).

6) 5-[2,4-Dinitrophenyl|amido-2-Oxybenzol-1-Carbonsäure. Sm. 2720 (A. 273, 123). - II, 1513. $\dot{\mathbf{C}}$ 44,9 — $\dot{\mathbf{H}}$ 2,6 — $\dot{\mathbf{O}}$ 32,3 — $\dot{\mathbf{N}}$ 20,2 — $\dot{\mathbf{M}}$. $\dot{\mathbf{G}}$. 347.

C18H9O7N5

- 1) 2-Oxybenzyliden-2,4,6-Trinitrophenylhydrazin. Sm. 275° u. Zers. (G. 24 [1] 577). — IV, 759. 2) 4-Oxybenzyliden-2,4,6-Trinitrophenylhydrazin. Sm. 284° (G. 24 [1]
- 578). IV, 760. $C \stackrel{4}{6}, \stackrel{6}{6} - H \stackrel{2}{7} - O \stackrel{38}{3} = N \stackrel{12}{5} - M. G. \stackrel{335}{3}$

 $C_{13}H_9O_8N_3$

- 1) Methyläther d. 2,4,6-Trinitro-2'-Oxydiphenyläther. Sm. 117-118° (Bl. [3] 17, 949).

[2] **38**, 275). — **11**, 1449.

4) Aethylester d. γ-Trinitronaphtalin-1-Carbonsäure. Sm. 150° (J. pr. [2] **38**, 275). — **11**, 1449. $\dot{\mathbf{U}}$ 43,0 — $\dot{\mathbf{H}}$ 2,5 $\dot{\mathbf{U}}$ 0 35,2 — \mathbf{N} 19,3 — \mathbf{M} . G. 363.

C18H9O8N5

Methyldi[2,4-Dinitrophenyl]amin. Sm. 210° (B. 31, 1461).
 C 41,1 — H 2,4 — O 38,0 — N 18,5 — M. G. 379.

 $\mathbf{C}_{18}\mathbf{H}_{9}\mathbf{O}_{9}\mathbf{N}_{5}$ 1) 2-Oxy-1-Tetranitrophenylamidomethylbenzol. Sm. 66° u. Zers. (A. **241**, 346). — II, 742.

C₁₃H₉NCl₂

1) α-Chlor-α-[4-Chlorphenyl]imido-α-Phenylmethan (Benz-4-Chloranilidimidehlorid). Sm. 68° (B. 31, 241).

2) α -Chlor- α -[4-Chlorphenyl]- α -Phenylimidomethan. Sm. 105—106° (A. **252**, 7). — **III**, 189.

3) 1-[2,5-Dichlorbenzyliden]amidobenzol. Sm. 71,5-72° (B. 29, 876; A. 296, 70).

4) P-Dichlor-I-Benzylidenamidobenzol. Sm. 84° (M. 9, 697). — III, 29.
1) Methyltetrachlordiphenylamin. Sm. 96—97° (B. 8, 1040). — II, 341.
1) Methyltetrabromdiphenylamin. Sm. 129° (B. 8, 926). — II, 342. C₁₃H₉NCl₄ $\mathbf{C}_{13}\mathbf{H}_{9}\mathbf{NBr}_{4}$ 2) 2-Tetrabromphenylamido-1-Methylbenzol. Sm. 156° (A. 239, 58).

- II, 485. $C_{13}H_9NS$ 1) P-Acenaphtylsenföl. Sm. 96° (B. 21, 1459). — II, 634.

2) 4-Biphenylsenföl. Sm. 58° (B. 13, 1964). — II, 634. 3) 1-Phenylbenzthiazol. Sm. 115°. (HCl, AuCl₃) (B. 12, 2360; 13, 17, 1223, 1236; 15, 2033; 19, 1068; 27, 2809; A. 259, 301; Am. 17, 401; Bl. [3] 11, 893). — II, 1176.

1) 2-[3-Chlorphenyl] indazol. Sm. 110° (J. pr. [2] 52, 378). — IV, 866. 2) 2-[4-Chlorphenyl] indazol. Sm. 138° (B. 24, 964). — IV, 866. $\mathbf{C}_{13}\mathbf{H}_{9}\mathbf{N}_{2}\mathbf{C}\mathbf{l}$

1) 6-Brom-1-Phenylbenzimidazol. Sm. 110° (A. 303, 325). 2) 5-Brom-2-Phenylbenzimidazol. Sm. 200°. HCl, HNO₃, H₂SO₄ (B. 8, $\mathbf{C}_{13}\mathbf{H}_{9}\mathbf{N}_{2}\mathbf{Br}$ 565; **10**, 1710). — **IV**, 1007.

3) P-Brom-2-Phenylindazol. Sm. 1470 (B. 27, 50). — IV, 866. C12HON,Br 4) 2-[4-Bromphenyl]indazol. Sm. 147° (B. 24, 965). — IV, 866.

C.H.N.J $C_{13}H_{10}ON_{2}$

- 1) 6-Jod-1-Phenylbenzimidazol. Sm. 161° (A. 303, 337). C 74,3 — H 4,8 — O 7,6 — N 13,3 — M. G. 210.
- 1) Benzolazobenzoyl. Fl. (A. 190, 127; B. 30, 319). IV, 1478. 2) 5-Methyl-3-[1-Naphtyl]-1,2,4-Oxdiazol. Sm. 36° (B. 20, 224). II, 1446.
- 3) 5-Methyl-3-[2-Naphtyl]-1,2,4-Oxdiazol. Sm. 87° (85°) (B. 20, 226, 227). — II, 1455.
- 4) 1-Phenylamidobenzoxazol. Sm. 1730. (2 HCl, PtCl₄) (B. 16, 1826). II, 709.
- 5) 1-Phenylimido-1, 2-Dihydrobenzoxazol. Sm. 230° u. Zers. (J. pr. [2] 42, 441). — II, 708.
- 6) 2-[2-Oxyphenyl]benzimidazol. Sm. 222,5°. $HCl + H_2O, H_2SO_4 + 4H_2O$ (A. 210, 345). — IV, 1008.
- 7) 2-Oxy-3-Phenylindazol. Sm. 125—126° (B. 29, 1267). IV, 1012.
- 8) P-Oxy-3-Phenylindazol. Sm. 212° (B. 29, 1267). IV, 1012. 9) 2-[4-Oxyphenyl]indazol. Sm. 195° (B. 24, 966). IV, 867.
- 10) 3-Keto-1-Phenyl-2,3-Dihydroindazol. Sm. 209°. Na + 5 H₂O (B. **32**, 787).
- 11) Carbonylbenzidin. Zers. bei 250° (B. 14, 2178). IV, 964. 12) Nitril d. 4-Acetylamidonaphtalin-1-Carbonsäure. Sm. 189,5° (B. 28, 1840).
- 13) Nitril d. β-[2-Furanyl]-α-[4-Amidophenyl]akrylsäure. Sm. 111—112° (B. 23, 2854). - III, 713.
- 14) Nitril d. 4-[2-Fural]amidobenzol-1-Methylcarbonsäure. Sm. 93 bis 94° (B. 23, 2854). — III, 724. C 65.5 - H 4.2 - O 6.7 - N 23.5 - M. G. 238.

 $C_{13}H_{10}ON_4$

- 1) Dicyan-2-Naphtenylamidoxim. Sm. 118-119 u. Zers. (B. 23, 1463). **- II**, 1455.
- 2) 4-Phenylazo-1, 3-Phenylenharnstoff (Chrysoïdinharnstoff). Sm. noch nicht bei 300°. HCl, (2 HCl, PtCl₄), HNO₃ (J. pr. [2] 38, 123). — IV, 1360.
- 3) 4-[4-Oxyphenyl]-1-Phenyl-1, 2, 3, 5-Tetrazol. Sm. 190-191° (B. 31, 947). **— IV**, *1269*.
- 4) 4-Keto-1, 3-Diphenyl-3, 4-Dihydro-1, 2, 3, 5-Tetrazol. Sm. 110°. HCl, (2HCl, PtCl₄), H₂SO₄, Pikrat (B. 29, 1689). — IV, 1231.
- 5) 1-Nitroso-2-Phenylimido-2, 3-Dihydrobenzimidazol (B. 24, 2503). IV, 566.
- 6) 4-Keto-3-Phenyl-3,4-Dihydro-1,2,3-Benztriazin. Sm. 135° u. Zers. (B. **32**, 792).
- 7) 2,4-Betain d. 1-Phenyl-1,2,3,5-Tetrazol-2-Phenyloxydhydrat. Explodirt bei 174° (C. 1898 [2] 1050).
- $\mathbf{C}_{13}\mathbf{H}_{10}\mathbf{OCl}_{6}$ 1) 1, 2, 3, 4, 5, 6 - Hexachlorhexahydrodiphenylketon. Sm. 215° (Soc. 73, 427).
- C₁₃H₁₀OBr₂ 1) ?-Dibrom- α -Oxydiphenylmethan. Sm. 163° (A. 133, 12). II, 1078. 2) ?-Dibrom-4-Oxydiphenylmethan. Sm. 175° (J. 1873, 440). II, 897.
- γ-Keto-γ-[2-Thiënyl]-α-Phenylpropen (Zimmtsäurethiënylketon). Sm. 80° (B. 19, 2895). III, 768.
 Phenylester d. Benzolthiolcarbonsäure. Sm. 56° (B. 9, 1634). $C_{18}H_{10}OS$
 - II, 1290. C'69,0 - H 4,4 - O 14,2 - N 12,4 - M. G. 226.

 $\mathbf{C}_{13}\mathbf{H}_{10}\mathbf{O}_{2}\mathbf{N}_{2}$

- 1) 4-Nitroso-1-[2-Oxybenzyliden]amidobenzol. Sm. 245° (A. 286, 153).
- 2) 2-Oxy-1-[4-Nitrosophenyl] imidomethylbenzol. Sm. 2450 (A. 286, 153). — III, 73.
- 3) 2-Nitrobenzylidenamidobenzol. Sm. 69,5°; Sd. 220°₁₅ (B. 31, 2609 Anm.).
- 4) 3-Nitrobenzylidenamidobenzol. Sm. 61° (J. 1870, 760). III, 30. 5) 4-Nitrobenzylidenamidobenzol. Sm. 93° (B. 14, 2526). III, 30.
- 6) 3-Nitro-1-Benzylidenamidobenzol. Sm. 730 (J. 1870, 760; M. 9, 697).
- · III, 29 7) 4-Nitro-1-Benzylidenamidobenzol. Sm. 117—118° (115°) (B. 25, 2503; *M.* 9, 697). — III, 29.
- 8) α -Cyan- $\hat{\beta}$ -Acetoxyl- α -[2-Cyanphenyl] propen (Pseudodiacetylcyanbenzyleyanid). Sm. 137—138° (B. 25, 3565). — II, 1964.

- C₁₃H₁₀O₂N₂ 9) 2-Keto-5-Methyl-3-[1-Naphtyl]-2, 3-Dihydro-1, 3, 4-Oxdiazol. Sm.
 - 89° (B. 24, 4184). IV, 926. 10) 2-Keto-5-Methyl-3-[2-Naphtyl]-2,3-Dihydro-1,3,4-Oxdiazol. Sm. 125° (B. 24, 4179). — IV, 929.
 - 11) α -[3-Nitrophenyl]- β -[2-Pyridyl] äthen. Sm. 120°. (HCl, HgCl_o), (2 HCl,

 - 11) α-[3-Nitropheny]-p-[2-Pyrhuy]athen. Sm. 120°. (Hell, HgCl₂), (2 Hell, PtCl₄), Pikrat (B. 23, 2716). IV, 395.
 12) Orcirufamin (B. 23, 724; A. 286, 155). II, 965.
 13) α-Diamidoxanthon. Sm. 209°. 2 Hell (A. 254, 288). III, 197.
 14) β-Diamidoxanthon. Sm. noch nicht bei 300°. 2 Hell, (2 Hell, PtCl₄), H₂SO₄ (B. 16, 863; A. 254, 287; Soc. 43, 190). III, 197.
 15) 2-Oxy-1-Methylphenazon. Sm. 265-275° (A. 290, 302). IV, 1009.
 16) 2-Oxy-1-Methylphenazon. Sm. 265-275° (A. 290, 302). Sm. bri 2650.

 - 16) 7,8-Dioxy-2-Methyl-5,10-Naphtdiazin (Dioxytolazin). Sm. bei 265° (B. **24**, 1338). — **IV**, 1010.
 - 17) Azobenzol-2-Carbonsäure. Sm. 95°. Ag (B. 24, 3060; 27, 48). IV, 1460.
 - 18) Azobenzol-4-Carbonsäure. Sm. 237—238°. K, Ba (B. 19, 3023; A. 303, 384). — IV, 1460.
 - 19) 1,8-Anhydrid d. 5-Acetylamido-8-Amidonaphtalin-l-Carbonsäure.
 - Sm. 280°. II, 1451. 20) Aldehyd d. 4-Oxyazobenzol-3-Carbonsäure. Sm. 128° (A. 251, 182). **- IV**, 1476.
 - 21) Aldehyd d. 4-Oxyazobenzol-4'-Carbonsäure. Sm. 195° (J. pr. [2] 56, 121). — IV, 1476.
 - 22) Aethylester d. 2,5-Dimethylbenzimidazol-1-Methylcarbonsäure. Sm. 130,5° (A. 273, 287). — IV, 883.
 - 23) Nitril d. β -Acetoxyl- α -[2-Cyanphenyl]- α -Propen- α -Carbonsäure. Sm.
 - 137—138° (B. **25**, 3565; **27**, 829). **24) Phenylnitrosamid d. Benzolcarbonsäure.** Sm. 67° (75—76°) (B. **25**, 3632; **27**, 653; **30**, 213, 623). — II, *1162*. C 55,3 — H 3,5 — O 11,3 — N 29,8 — M. G. 282.
- $C_{13}H_{10}O_{2}N_{6}$
 - 1) α-Phenylhydrazondi [5-Keto-4,5-Dihydro-3-Pyrazolyl] methan. Sm. 113° (B. **26**, 2055). — IV, 801.
 - 2)-5-Phenylamidodiazo-3-Triazobenzol-1-Carbonsäure (B. 21, 1564). IV, *1556*.
- $\mathbf{C}_{13}\mathbf{H}_{10}\mathbf{O}_{2}\mathbf{Cl}_{2}$ 1) Methyläther d. ?-Dichloracetyl-1-Oxynaphtalin. Sm. bei 100° (B. 31, 172).
 - 2) Aethylester d. 5,8-Dichlornaphtalin-1-Carbonsäure. Sm. 61° (J. pr. [2] **38**, 152). — **II**, *1447*.
 - 3) Aethylester d. 5,8-Dichlornaphtalin-2-Carbonsäure. Sm. 66° (B. 17, 1605; J. pr. [2] **43**, 419). — II, 1456.
 - 4) Aethylester d. ?-Dichlornaphtalin-2-Carbonsäure (vom Sm. 282°).
 - Sm. 72° (*J. pr.* [2] **43**, 425). II, 1456. 5) **Aethylester** d. ?-Dichlornaphtalin-2-Carbonsäure (vom Sm. 254°). Sm. 86—87° (J. pr. [2] 43, 426). — II, 1456.
- $C_{13}H_{10}O_9Br_9$ 1) $\alpha\beta$ -Dibrom- β -[1-Naphtyl] propionsäure. Sm. 189° u. Zers. (B. 22, 2156). - II, 1460.
- 1) **2,2'-Methylendiphenylensulfon.** Sm. 170° (A. **263**, 15; Soc. **73**, 408). $C_{13}H_{10}O_{2}S$ · II, 992.
 - 2) 2-Merkaptobenzolphenyläther-1-Carbonsäure (Diphenylsulfid-2-Carbonsäure). Sm. 166°. NH₄, K (A. 263, 4). — II, 1514.
 - 3) Diphenylester d. Thiokohlensäure. Sm. 106°; Sd. 336-340° u. Zers. (B. 21, 346; 27, 1369, 3410). — II, 663. C 64,5 — H 4,1/— O 19,8 — N 11,6 — M. G. 242.
- $\mathbf{C}_{13}\mathbf{H}_{10}\mathbf{O}_{3}\mathbf{N}_{2}$
 - 1) 2-Oxy-1-[4-Nitrophenyl] imidomethylbenzol. Sm. 115° (B. 6, 339). - III, 73.

 - 2) 5-Nitro-2-Amidodiphenylketon. Sm. 161,5° (B. 31, 1695). 3) 3-Nitro-4-Amidodiphenylketon. Sm. 135° (B. 24, 3772). III, 183. 4) 2-Nitro-2'-Amidodiphenylketon. Sm. 149—150° (B. 31, 3033).

 - 5) α-Oximido-2-Nitrodiphenylmethan (B. 26, 1250). III, 190.
 - 6) 2-Phenylnitrosamidobenzol-l-Carbonsäure. Sm. 120-1250 u. Zers. $+ C_6 H_6$. Ag (B. **32**, 790).
 - 7) 4-Oxyazobenzol-2-Carbonsäure. Sm. 205° (213°) u. Zers. (B. 24, 1696; A. 263, 234). — IV, 1470.

- Sm. 211º u. Zers. (218º). Na, Ba C₁₃H₁₀O₃N₂ 8) 4-Oxyazobenzol-3-Carbonsäure. (B. 13, 716; 24, 1696; A. 263, 224). — IV, 1468.
 - 9) 6-Oxyazobenzol-3-Carbonsäure. Sm. 219,5—221° (B. 30, 993). —
 - 10) 4'-Oxyazobenzol-3-Carbonsäure. Sm. 220°. Ba + 31/2 H.O. (B. 14, 2033; **20**, 907). — IV, 1462.
 - 11) 3-[α-Oximidobenzyl] pyridin-2-Carbonsäure. Na (M. 17, 523). —
 - IV, 157. 12) Aldehyd d. 2,4-Dioxyazobenzol-4'-Carbonsäure. Zers. oberh. 300° (J. pr. [2] 56, 122). — IV, 1476.
 - 13) Phenylamidoformiat d. 4-Oximido-1-Keto-1,4-Dihydrobenzol. Zers. bei 110° (B. 22, 3105). — III, 331.
 - 14) Phenylamid d. 2-Nitrobenzol-1-Carbonsäure. Sm. 1550 (C. 1897) [1] 413).
 - 15) Phenylamid d. 3-Nitrobenzol-1-Carbonsäure. Sm. 153-154° (B. 21, 2245). — II, 1233.
 - 16) Phenylamid d. 4-Nitrobenzol-l-Carbonsäure. Sm. 204°. II. 1236.
 - 17) 2-Nitrophenylamid d. Benzolcarbonsäure. Sm. 940 (A. 208, 301). **– II**, 1163.
 - 18) 3-Nitrophenylamid d. Benzolcarbonsäure. Sm. 155,5° (B. 7, 498;
 10, 1078, 1716; A. 208, 297). II, 1163.
 - 19) 4-Nitrophenylamid d. Benzolcarbonsäure. Sm. 199° (B. 7, 463, 1315; **9**, 774; **10**, 1708; *A*. **208**, 294). — **П**, *1163*. С 57,8 — **Н** 3,7 — О 17,8 — **N** 20,7 — **М**. **G**. 270.
- $C_{13}H_{10}O_{3}N_{4}$ 1) 2,2'-Bidiazodiphenylketon. Sulfat (B. 31, 3033). — IV, 1558.
- 1) Fluorensulfonsäure. K, Ba $+ 2H_2O$, Cd $+ 6H_2O$ (Soc. 43, 166). -C13 H10 O3 S II, 246.
- $C_{13}H_{10}O_{3}Hg_{2}1$) Carbonat d. Quecksilberphenyloxydhydrat (J. pr. [2] 1, 181). IV, 1705.
- $\mathbf{C}_{13}\mathbf{H}_{10}\mathbf{O_4N_2}$
- C 60,5 H 3,9 O 24,8 N 10,8 M. G. 258. 1) $\alpha\alpha$ -Dinitrodiphenylmethan. Sm. 78—78,5° (B. 23, 3491). II, 229.
 - 2) 2,4'-Dinitrodiphenylmethan. Sm. 118° (A. 194, 366; 283, 153, 158; B. 27, 2110). — II, 229.
 - 3) 3,3'-Dinitrodiphenylmethan. Sm. 172° (174°) (B. 5, 795; 27, 2295, 2321; D.R.P. 67 001). — II, 229.
 - 4) 3,4'-Dinitrodiphenylmethan. Sm. 101—102° (103—104°) (B. 15, 2092;
 - 27, 2111, 2293; A. 283, 159). II, 229. 5) 4,4'-Dinitrodiphenylmethan. Sm. 1830 (A. 194, 369; 283, 153, 160;
 - B. 5, 795; 27, 2110). II, 229. 6) ?-Nitro-4-Methylbiphenyl. Sm. 153—157° (J. 1876, 420). — II, 230.
 - 7) 4-Nitro-2-Benzoylamido-1-Oxybenzol. Sm, über 200° u. Zers. (A. 205, 73). — II, 1178.
 - 8) ?- 2-Nitrophenylamido 2-Methyl-1,4-Benzochinon. Zers. bei 2000 (B. 23, 2796). — III, 359.
 - 9) 2-[2-Nitro-4-Methylphenyl]amido-1,4-Benzochinon. Zers. bei 300° (B. 23, 2795). — III, 340.

 - 10) Trioxymethylaposafranon. Zers. bei 250—255° (B. 31, 2440).
 11) 5-Nitro-2-Phenylamidobenzol-1-Carbonsäure. Sm. 247—248°. Na $+2H_2O$, Ba $+5H_2O$ (B. 23, 3441). — II, 1283.
 - 12) 3-Nitro-4-Phenylamidobenzol-1-Carbonsäure. Sm. 254°. Na, Ba + 3 H₂O (B. 22, 3282). — II, 1285.
 - 13) 2',4'-Dioxyazobenzol-3-Carbonsäure? (B. 14, 2034). IV, 1464.
 - 14) Phenylazo-β-Resorcylsäure. Sm. 189° u. Zers. (A. 263, 244). IV, 1474.
 - 15) 4-Nitrobenzylester d. Phenylamidoameisensäure. Sm. 123° (A. 302,
 - 16) Phenylamid d. 5-Nitro-2-Oxybenzol-1-Carbonsäure. Sm. 2240 (A. 210, 343). — II, 1509.
 - 17) 2-Nitrophenylamid d. 2-Oxybenzol-1-Carbonsäure. Sm. 154° (A. 210, 345). — II, 1500.
 - 18) 3-Nitrophenylamid d. 2-Oxybenzol-1-Carbonsäure. Sm. 217—218°
 - (B. 6, 337; J. 1875, 746). II, 1500.

 19) 4-Nitrophenylamid d. 2-Oxybenzol-1-Carbonsäure. Sm. 229—230° (J. 1875, 747). — II, 1500.

C₁₃H₁₀O₄N₂20) Verbindung (aus 3,4-Diamido-1-Methylbenzol u. Tetraoxychinon) (B. 20, 3150). — IV, 621. C 54,5 — H 3,5 — O 22,4 — N 19,6 — M. G. 286.

 $\mathbf{C}_{13}\mathbf{H}_{10}\mathbf{O}_{4}\mathbf{N}_{4}$

1) s-Benzyliden-2,4-Dinitrophenylhydrazin. Sm. 235° (203°) (J. pr. [2] 50, 264, 270; G. 24 [1] 565). — IV, 748.
2) Di[2-Nitrophenyl]formamidin. Sm. 124—125° (J. pr. [2] 52, 430).
3) Di[3-Nitrophenyl]formamidin. Sm. 198—199° (195—196°; 200°) (Am.

13, 518; J. pr. [2] 52, 430; [2] 53, 474). — II, 346. 4) Di[4-Nitrophenyl]formamidin. Sm. 236-237° (J. pr. [2] 52, 430;

[2] **53**, 475).

5) 1,3-Dinitro-5-Methyl-5,10-Dihydro-5,10-Naphtdiazin. Sm. 240° u. Zers. (B. 26, 2374). — IV, 993.

C 49,7 - H 3,2 - O 20,4 - N 26,7 - M. G. 314. $C_{13}H_{10}O_4N_6$

> 1) $\alpha \alpha$ -Dinitro- $\alpha \alpha$ -Di[Phenylazo]methan. Sm. 75° u. Zers. (B. 26, 3010). **IV**, 1374.

2) Di[3-Nitrophenyl]formazylwasserstoff (B. 28, 1695). 3) Di 4-Nitrophenyl formazylwasserstoff (B. 28, 1695).

C₁₃H₁₀O₄Cl₂ 1) Methylester d. 2,3-Dichlor-1-Acetoxylinden-1-Carbonsäure. Sm. 75—76° (B. 19, 2501; A. 283, 350). — II, 1679.

 $C_{13}H_{10}O_4Br_2$ 1) Aethylester d. ?-Dibrom-1,3-Dioxynaphtalin-2-Carbonsäure. Sm. 159—160° (A. 298, 386).

C13H10O4S 1) Diphenylsulfon-2-Carbonsäure + H₂O. Sm. 99° (152° wasserfrei) (A. **263**, 7). — II, 1514.

Diphenylsulfon-4-Carbonsäure. Sm. 273°. Na+1/4H₂O, Ca+1/₂H₂O, Ba+1/4H₂O, Pb, Cu, Ag (B. 11, 119; Am. 20, 304). — II, 1307.
 Diphenylketon-2-Sulfonsäure. K + H₂O (Am. 17, 356). — III, 192. C 56,9 — H 3,6 — O 29,2 — N 10,2 — M. G. 274.

 $\mathbf{C}_{13}\mathbf{H}_{10}\mathbf{O}_{5}\mathbf{N}_{2}$

1) P-Dinitro-2-Oxydiphenylmethan. Sm. 81-82°. K+H₂O, Ba (Soc. **49**, 408). — **II**, 896.

2) ?-Dinitro-4-Oxydiphenylmethan. Sm. 87-88°. K, Ba (Soc. 41, 222; **49**, 406). — **II**, 897.

3) 2-Nitrophenyläther d. 2-Nitro-1-Oxymethylbenzol. Sm. 1540 (B. 25, 3584). — II, 1058.

4) 2-Nitrophenyläther d. 4-Nitro-1-Oxymethylbenzol. Sm.1290 (A. 224, 107). — II, 1059.

5) 4-Nitrophenyläther d. 4-Nitro-l-Oxymethylbenzol. Sm. 1830 (A. 224, 110). — II, *1059*.

6) 2,4-Dinitrophenyläther d. Oxymethylbenzol. Sm. 1490 (A. 224, 128). - II, 1049.

7) 2,6-Dinitrophenyläther d. Oxymethylbenzol. Sm. 76° (A. 224, 130). - II, 1049.

8) 3-Nitro-4-[2-Oxyphenyl]amidobenzol-l-Carbonsäure. Sm. 260-261° (B. **22**, 3288). — II, 1286.

9) $\alpha \gamma$ -Dicyan- β -[2-Oxyphenyl] propan- $\alpha \gamma$ -Dicarbonsäure. Ag₂ (J. pr. [2] **50**, 22). — II, 1957.

10) 8-Nitro-5-Acetylamidonaphtalin-1-Carbonsäure. Sm. 262° u. Zers. $Ca + 6H_2O$ (J. pr. [2] 38, 247). — II, 1452.

11) P-Nitro-P-Acetylamidonaphtalin-2-Carbonsäure. Sm. 270° (J. pr. [2] **42**, 297). — П, *1459*. С 51,7 — Н 3,3 — О 26,5 — N 18,5 — М. G. 302.

 $C_{13}H_{10}O_5N_4$

1) 3,5-Dinitro-4-Phenylnitrosamido-1-Methylbenzol. Sm. 1230 (Am.

- 2) s-Di[2-Nitrophenyl]harnstoff. Sm. 225° (Bl. [3] 21, 156). 3) s-Di[3-Nitrophenyl]harnstoff. Sm. 247—250° (233°) (B. 7, 1235; 16, 50; J. pr. [2] 52, 213, 229; Bl. [3] 21, 151). — II, 379.
- 4) s-Di[4-Nitrophenyl]harnstoff. Sm. über 260°; subl. bei 310° (J. pr. [2] **52**, 233; Bl. [3] **21**, 149).
- 5) 2-Oxybenzyliden-2,4-Dinitrophenylhydrazin. Sm. 248° (237°) (J. pr. [2] $\mathbf{50}$, 265, 270; G. $\mathbf{24}$ [1] 566). — \mathbf{IV} , 759.

6) 4-Oxybenzyliden-2,4-Dinitrophenylhydrazin. Sm. 1570 (G. 24 [1] 566). — IV, 760.

7) 2,4-Dinitrophenyläther d. α-Oximido-α-Amido-α-Phenylmethan (D. d. Benzenylamidoxim). Sm. 184° (B. 27, 1656). — II, 1200.

C₁₃H₁₀O₅Br₂ 1) Methylester d. 2,2-Dibrom-3-Acetoxyl-1-Keto-2,3-Dihydroinden-3-Carbonsäure (B. 21, 2387). — II, 1866. 1) 1-Benzoxylbenzol-4-Sulfonsäure. K, Ca, Ba, Pb+2H₂O, Cu+6H₂O,

C13H10O5S Ag (Z. 1868, 76). — II, 1146. C 53,8 — H 3,4 — O 33,1 — N 9,7 — M. G. 290.

C13H10O6N2

1) Monobenzyläther d. Dinitro-1, 4-Dioxybenzol. Sm. 137° . + NH₃, $+2NH_3$ (A. **221**, 372). — II, 1050. 2) Aethylester d. 4,5-Dinitronaphtalin-l-Carbonsäure. Sm. 1430 (J. pr.

[2] 38, 257). — II, 1449. 3) Aethylester d. 5,8-Dinitronaphtalin-1-Carbonsäure. Sm. 129° (J. pr. [2] **38**, 268). — **II**, 1449.

Aethylester d. P-Dinitronaphtalin-1-Carbonsäure. Sm. 137° (J. pr. [2] 38, 270). — II, 1449.
 Aethylester d. 1,8-[oder 4,5-]Dinitronaphtalin-2-Carbonsäure. Sm.

165° (J. pr. [2] 42, 287). — II, 1458. 6) Aethylester d. ?-Dinitronaphtalin-2-Carbonsäure (vom Sm. 226°). Sm. 141° (J. pr. [2] **42**, 300). — II, 1458.

C 49.1 - H 3.1 - O 30.2 - N 17.6 - M. G. 318. $C_{13}H_{10}O_6N_4$

1) 2,4,6-Trinitro-1-Methylphenylamidobenzol. Sm. 108° (Soc. 59, 717). **– II**, 342.

2) 2,4,6-Trinitro-3-Phenylamido-1-Methylbenzol. Sm. 151°. Na (Am. 12, 6; 14, 344). — II, 477.

3) s-Phenyl-[3,5-Dinitro-2-Oxyphenyl]harnstoff. Zers. oberh. 2000 (J. pr. [2] 48, 434). — II, 734.

 $C_{13}H_{10}O_6Br_2$ 1) α , 2-Lakton d. β -Brom- α -Oxy- α -[6-Bromphenyl] \ddot{a} than- β , 2, 4-Tricarbonsäure- β , 4-Dimethylester. Sm. 168° (A. 293, 168). 1) 2,4[β]-Dioxydiphenylketon-2'-Sulfonsäure + 3H₂O.

 $NH_4 + 1\frac{1}{2}H_2O$, $C_{13}H_{10}O_6S$ $K_3, Ca+4H_2O, Ba+6H_2O, Pb+7H_2O, Ag+2H_2O (Am. 9, 373; 11, 76; 14, 455; 17, 545; B. 22, 762). — 111, 200. C 51,0 — H 3,3 — O 36,6 — N 9,1 — M. G. 306.$

 $C_{13}H_{10}O_7N_2$

1) Aethylester d. ?-Nitro-3-Oxynaphtalin-2-Carbonsäure. Sm. 1980 (J. pr. [2] 48, 536). — II, 1692.

C13H10O7N4

C 46,7 — H 3,0 — O 33,5 — N 16,8 — M. G. 334.

1) Methyläther d. 4-[2,4,6-Trinitrophenyl]amido-1-Oxybenzol. Sm. 165° (Soc. 59, 718). — II, 718.

C 43,1 — H 2,8 — O 30,9 — N 23,2 — M. G. 362.

 $\mathbf{C}_{13}\mathbf{H}_{10}\mathbf{O}_{7}\mathbf{N}_{6}$

1) 1-Methyloxydhydrat d. 5-Nitro-1-[2,4-Dinitrophenyl]-1,2,3-Benztriazol (B. 31, 1462). — IV, 1526.
 1) Diphenylketon-3,3' oder 3,4'-Disulfonsäure. Ba (Soc. 73, 404).

 $C_{13}H_{10}O_{7}S_{2}$ 2) Diphenylketon-P-Disulfonsäure. Ba, Cu (A. 194, 314). - III, 192.

 $C_{13}H_{10}O_8Br_2$ 1) 2,6-Dibrom-3,4,5-Triacetoxylbenzol-1-Carbonsäure. Sm. 168 o (B. 3, 643; Bl. [3] 9, 116; [3] 11, 567). — II, 1924.

1) Phenyl-α-Chlorbenzylidenamin (Benzanilidimidchlorid). Sm. 39-40°; $\mathbf{C}_{13}\mathbf{H}_{10}\mathbf{NCl}$ Sd. 310° (A. 108, 218; 184, 82; B. 13, 509; 19, 989). — II, 1162. 2) 3-Chlor-1-Benzylidenamidobenzol. Sd. 338° (M. 9, 697). — III, 29.

 $C_{13}H_{10}NBr_3$ 1) Methyltribromdiphenylamin. Sm. 98° (B. 8, 926). — II, 341.

C₁₃H₁₀NBr₇ 1) Verbindung (aus 4-Phenylamido-1-Methylbenzol). Sm. 254^o (A. 239, 59). - II, 485.

 $C_{13}H_{10}N_2Cl_2$ 1) Phenylimido-2, 4-Dichlorphenylamidomethan. Sm. 159° (Am. 18, 388). 2) α-Phenyl-β-[2,5-Dichlorbenzyliden]hydrazin. Sm. 104—105° (B. 29, 876; A. **296**, 69). — IV, 751.

 $C_{13}H_{10}N_2Br_2$ 1) Di[3-Bromphenyl]formamidin. Sm. 1350 (J. pr. [2] 52, 430).

1) Thiocarbo-2,4'-Diamidobiphenyl. Sm. 238° (B. 22, 3014). — IV, 960.
2) Thiocarbobenzidin (J. 1860, 356; B. 5, 239). — IV, 965.
3) isom. Thiocarbobenzidin (B. 5, 240). — IV, 965.
4) 1-Phenyl-3-Thiënylpyrazol. Sm. 54°; Sd. oberh. 300°. (2HCl,PtCl₄) $\mathbf{C}_{13}\mathbf{H}_{10}\mathbf{N}_{2}\mathbf{S}$

(G. 21 [2] 277). - IV, 869.

5) 2-Merkapto-1-[1-Naphtyl]imidazol. Sm. 242° u. Zers. 2+PtCl₄, Ag (B. 25, 2371). - IV, 504.

6) 1-Phenylamidobenzthiazol. Sm. 159°. (2 HCl, PtCl₄), (HCl, AuCl₃), Pikrat (B. 12, 1130; 13, 12; 20, 1796; 24, 1410). — II, 797.

 $C_{13}H_{10}N_3Cl$ 1) 3-[3-Chlorphenyl]-3,4-Dihydro-1,2,3-Benztriazin. Sm. 146—147° u. Zers. (J. pr. [2] 52, 379). — IV, 1148.

- 367). **IV**, *1144*.
 - 2) 3-[4-Bromphenyl]-3,4-Dihydro-1,2,3-Benztriazin. Sm. 164°. HCl, (2HCl,PtCl₄), (2HCl,AuCl₈), Pikrat (J. pr. [2] 52, 393). IV, 1148.
- 1) αβ-Di[Phenylimido]thioharnstoff (Diphenylthiocarbodiazon) (A. 212, C13H10N4S 322). — IV, 685.
 - 2) 5-Phenylamido-3-[3-Pyridyl]-1,2,4-Thiodiazol (Nikotenylazosulfimcarbonanilid). Sm. 241° (B. 24, 3445). — IV, 145. C 79,2 — H 5,6 — O 8,1 — N 7,1 — M. G. 197.
- $\mathbf{C}_{18}\mathbf{H}_{11}\mathbf{ON}$ 1) 2-Oxy-1-Phenylimidomethylbenzol (Salhydranilid). Sm 50,5°. Cu, CHN (A. 104, 373; 150, 194; 241, 344; 266, 140; B. 6, 339; M. 18, 126). — III, 72.
 - 2) 4-Oxy-1-Phenylimidomethylbenzol. Sm. 190-1910 (B. 10, 1272). III, 85.

 - 3) 2-Benzylidenamido-1-Oxybenzol. Sm. 89° (A. 266, 140). III, 32. 4) 4-Benzylidenamido-1-Oxybenzol. Sm. 183° (181°) (B. 25, 2753, 3248; **26**, 394). — III, 32.
 - 5) 2-Amidodiphenylketon. Sm. 105-106°. HCl, H₂SO₄ (B. 18, 2403;

 - 19, 2431; 27, 3483; 29, 1304; A. 291, 12). III, 182. 6) 3-Amidodiphenylketon. Sm. 87° (B. 18, 2401). III, 183. 7) 4-Amidodiphenylketon. Sm. 124°. (2HCl, PtCl₄), H₂SO₄ (A. 210, 268; B. 13, 1013; 14, 1836; 23, 1626). III, 183.
 - 8) α-Oximidodiphenylmethan (Benzophenonoxim). Sm. 139,5—140°. Na, HCl, 2 + Cu₂Cl₂ (B. 15, 2782; 16, 823; 19, 989; 20, 2581; A. 264, 184; 278, 369; M. 5, 203; R. 13, 429; Am. 19, 491). III, 188.
 9) 2 Oximidomethylbiphenyl. Sm. 112,5° (115°) (C. 1897 [1] 413;
 - M. 19, 588).
 - 10) N-Phenyl-syn-Benzaldoxim. Sm. 108,5—109° (B. 27, 1556; 29, 3040; C. 1898 [2] 80). — III, 45.
 - 11) 1,4-Benzochinon-4-Methylphenylimid. Sm. 70° (M. 9, 135). III, 331.
 - 12) Formyldiphenylamin. Sm. 73-74°; Sd. 210-220° (i. V.) (B. 8, 1195; **15**, 2866).

 - 13) 2-Formylamidobiphenyl. Sm. 75° (B. 29, 1183).
 14) 4-Formylamidobiphenyl. Sm. 172° (B. 13, 1967). II, 633.
 - 15) α -[2-Oxyphenyl]- β -[2-Pyridyl]äthen (Oxystilbazol). Sm. 132° (HCl, HgCl₂), (2HCl, PtCl₄) (B. 23, 2697). IV, 395.
 - 160 η-Κετο-γ-[2-Pyrryl]-α-Phenylpropen (Pyrrylcinnamylketon). Sm. 141 bis 142°. Ag (B. 17, 2947). IV, 100.
 17) 3-[4-Methylbenzoyl]pyridin. Sm. 78°. (2HCl, PtCl₄) (M. 18, 457).
 18) Amid d. 1-Phenylbenzol-2-Carbonsäure. Sm. 177° (A. 279, 261). —

 - II, 1462. 19) Amid d. Acenaphten -? - Carbonsäure. Sm. 1980 (A. 244, 58). —
 - II, 1463. 20) Phenylamid d. Benzolcarbonsäure. Sm. 160 — 161° (158°; 163°). Henylamid d. Benzolcarbonsaure. Sm. 160—161° (188°; 168°). + C₂H₅ONa (A. 60, 311; 175, 310; 184, 79; 208, 291; Soc. 37, 745; 69, 94; B. 12, 1613; 20, 1508, 2581; 27, 3183; 28, 2416; J. pr. [2] 41, 306; [2] 52, 60, 216; Bl. [3] 4, 230; 11, 893). — II, 1162. C 69,3 — H 4,9 — O 7,0 — N 18,7 — M. G. 225. 1) 4-Formylamidoazobenzol. Sm. 162° (G. 28 [1] 244). — IV, 1357.
- $\mathbf{C}_{13}\mathbf{H}_{11}\mathbf{ON}_{3}$
- 2) 5-Keto-3-Methyl-1-[5-Chinolyl]-4,5-Dihydropyrazol. Sm. 186° u. Zers. (Soc. 61, 788). — IV, 1160.
- 3) 1-Nitroso-2-[1-Naphtyl]-4,5-Dihydroimidazol. Sm. 155-156° (B. 25, 2140). — IV, 956.
- 4) 1-Nitroso-2-[2-Naphtyl]-4,5-Dihydroimidazol. Sm. 101° (B. 25, 2138). **— IV**, 956.
- 5) Methyläther d. 7-Amido-2-Oxy-5,10-Naphtdiazin. Sm. 216—2170 (B. 29, 1876). IV, 1178.
- 6) 1,3-Diamido-5-Keto-5,10-Dihydroakridin. Sm. 222-223° u. Zers.
- HCl (B. 18, 1450). IV, 404. 7) 2,8-Diamido-5-Keto-5,10-Dihydroakridin (Diamidoakridon). über 350°. $HCl + 4H_2O$, $(2HCl, PtCl_4)$ (B. 27, 2319). — IV, 1182.

C₁₃H₁₁ON₃ 8) Aldehyd d. 1-Phenylamidodiazobenzol-4-Carbonsäure. Sm. 157⁶ (*J. pr.* [2] **56**, 120). — IV, 1579. 9) Phenylamid d. 1-Diazobenzol-1-Carbonsäure (Ph. d. Phenylazocarbon-

säure). Sm. 121-122° (B. 29, 1691). - IV, 674.

10) Benzylidenhydrazid d. Pyridin-3-Carbonsäure. Sm. 149-1520 (B. 31, 2493).

1) 2-Chlor-4-Oxydiphenylmethan. Sd. 318-3210 (G. 28 [1] 220). $C_{13}H_{11}OC1$

2) ?-Chlorphenyläther d. 1-Oxymethylbenzol. Sm. 70-710 (A. 161, 345). - II, 1049.

1) ?-Bromphenyläther d. 1-Oxymethylbenzol. Sm. 59-59,50 (A. 161, $C_{13}H_{11}OBr$ 344). — II, 1049. C 73.2 - H 5.2 - O 15.0 - N 6.6 - M. G. 213.

 $C_{13}H_{11}O_{2}N$

1) 2,5-Dioxy-l-Phenylimidomethylbenzol (B. 14, 1987). — III, 98.

2) 2-Oxyphenyl-2-Oxybenzylidenamin. Sm. 1850 (B. 25, 2755; 26, 394). - III, 73.

3) 4-Oxyphenyl-2-Oxybenzylidenamin. Sm. 135° (B. 25, 2754). — III, 73. 5) labil. α-Nitrodiphenylmethan. Fl. K, Cu + 3 H₂O (J. r. 26, 80). 5) labil. α-Nitrodiphenylmethan. Sm. 90° u. Zers. (B. 29, 2196).

6) 2-Nitrodiphenylmethan. Fl. (B. 18, 2402; 29, 1303; A. 283, 157). - II, 229.

7) 3-Nitrodiphenylmethan. Fl. (B. 15, 2091; A. 283, 158). — II, 229. 8) 4-Nitrodiphenylmethan. Sm. 31° (B. 16, 2716; A. 283, 160). — II, 229.

9) 2-[4-Nitrophenyl]-1-Methylbenzol? Fl. (B. 28, 43; 29, 166).

10) 4-[4-Nitrophenyl]-1-Methylbenzol. Sm. 103-1040 (B. 28, 43, 404, 406; 29, 166).

11) 5-Nitro-2-Phenyl-1-Methylbenzol. Sm. 56—57° (B. 28, 405). 12) P-Nitro-4-Phenyl-1-Methylbenzol. Sm. 141° (J. 1876, 419). — II, 230. 13) 2-Benzoylamido-1-Oxybenzol. Sm. 167° u. Zers. (A. 210, 387; B. 16, 630; **31**, 1062). — **II**, 1176.

14) 3-Benzoylamido-1-Oxybenzol. Sm. 174° (Am. 15, 43). — II, 1177.

15) 4-Benzoylamido-1-Oxybenzol. Sm. 227,5° (A. 175, 299; 210, 378; B. **24**, 4042). — **II**, 1177.

16) Benzyläther d. 4-Nitroso-1-Oxybenzol. Sm. 63,5° (A. 277, 88). — II, 678.

17) 5-Amido-2-Oxydiphenylketon. Sm. 107% HCl (B. 29, 3036). 18) 2-Amido-2'-Oxydiphenylketon. Sm. 222% (A. 269, 321). — III, 195. 19) 5-Phenylamido-2-Methyl-1,4-Benzochinon. Sm. 1480 (A. 287, 151). - III, 359.

20) P-Phenylamido-2-Methyl-1,4-Benzochinon. Sm. 144-1450 (B. 16, 1559). — III, *359*.

21) α -Oximido-2-Oxydiphenylmethan. Sm. 133—134° (M. 17, 109). — III, 193.

22) anti- α -Oximido-3-Oxydiphenylmethan. Sm. 126° (B. 24, 4045). — III, 193.

23) $syn - \alpha - Oximido - 3 - Oxydiphenylmethan.$ Sm. 76° (B. **24**, 4044). — III, 193.

24) anti- α -Oximido-4-Oxydiphenylmethan. Sm. 125° (B. 24, 4040). -III, 194.

25) $syn-\alpha$ -Oximido-4-Oxydiphenylmethan. Sm. 81° (B. 24, 4040). — III, 194.

26) Formiat d. 4-Phenylamido-1-Oxybenzol. Sm. 1780 (B. 17, 2435). II, 719.

27) Benzoylphenylhydroxylamin. Sm. 120-121° (J. pr. [2] 56, 87).

28) 2-Keto-3-[1-Naphtyl]tetrahydrooxazol (Inneres Anhydrid d. α-Naphtylcarbaminsäureäthylester). Sm. 125° (J. pr. [2] 44, 18). — II, 608.

29) 2-Keto-3[2-Naphtyl]tetrahydrooxazol. Sm. 1890 (J. pr. [2] 44, 18). II, 617.

30) 5-Keto-3-Methyl-4-Cinnamyliden-4,5-Dihydroisoxazol. Sm. 175 bis 176° (B. **30**, 1339).

31) 4- $\left[\alpha\gamma$ -Diketobutyl]chinolin. Sm. 64-65°; Sd. 205-207°₁₇. Na, HCl, (2 HCl, PtCl₄), Oxalat (M. 17, 401). — IV, 374.

32) 1-[4-Amidophenyl]benzol-4-Carbonsäure. Sm. 106-110° u. Zers. (B. 29, 167).

- C₁₃H₁₁O₂N 33) 2-Phenylamidobenzol-1-Carbonsäure. Sm. 181° (182°). Ag (A. 276, 43; B. **32**, 790). — II, 1248.
 - 34) ?-Phenylamidobenzol-1-Carbonsäure. Sm. 222°. Na + 4H₂O, Ba $+5 \,\mathrm{H}_2\mathrm{O}$ (B. 18, 2709). — II, 1248.

 - 35) Diphenylamidoameisensäure. K(J.~pr.~[2]58, 368). 36 β -[2-Methyl-6-Chinolyl]akrylsäure. Zers. bei 240—250°. HCl + H2O, $(2 \text{HCl}, \text{PtCl}_4 + 2 \text{H}_2 \text{O}), \text{ HNO}_3 + \text{H}_2 \text{O} (B. 18, 3235). - \text{IV}, 382.$
 - 37) β-[2-Methyl-7-Chinolyl] akrylsäure. Sm. 246° u. Zers. Ca + 3H₂O, Ag + 2(4)H₂O, HCl + H₂O, (2HCl, PtCl₄ + 2H₂O), HNO₃ + H₂O, Pikrat (B. 22, 272). IV, 382.
 38) isom. 2-Methyl-7-Chinolylakrylsäure + H₂O. Sm. 184°. + 1/2 C₂H₆O (Sm. 204°) (B. 22, 273). IV, 382.
 39) Phenylester d. 2-Amidobenzol-1-Carbonsäure. Sm. 70° (J. pr. [2])

 - **36**, 377). II, 1246.
 - 40) Phenylester d. Phenylamidoameisensäure. Sm. 126° (B. 4, 249; 18, 517, 875; Bl. [3] 19, 696). — II, 663.
 - 41) 2-Amidophenylester d. Benzolcarbonsäure. Nicht beständig. (B. **16**, 630).
 - 42) 4-Amidophenylester d. Benzolcarbonsäure. Sm. 153-1540 (A. 210, 379). — II, 1147.
 - 43) Diphenylester d. Imidokohlensäure (Diphenyläther d. Imidodioxymethan). Sm. 54° (A. 287, 319; B. 28, 2468).
 - 44) Amid d. 6-Oxy-1-Phenylbenzol-2-Carbonsäure. Sm. 262—2630 (A. **284**, 322). — II, 1695.
 - 45) Amid d. 2-Oxybenzolphenyläther-1-Carbonsäure. Sm. 131° (A. 257, 79). — II, 1495.
 - 46) Phenylamid d. 2-Oxybenzol-1-Carbonsäure. Sm. 134-135°. K+ $2^{1}/_{2}$ H₂O, Tl (B. 6, 336; 22, 2907; J. pr. [2] 16, 443; A. 210, 342).
 - 47) Phenylamid d. 3-Oxybenzol-1-Carbonsäure. Sm. 154-155° (J. pr. [2] **16**, 445). — II, *1518*.
 - 48) Phenylamid d. 4-Oxybenzol-1-Carbonsäure. Sm. 196-1970 (J. pr. [2] **16**, 444). — **II**, 1530.
 - 49) 1-Naphtylamid d. Acetylameisensäure. Sm. 102—103° (A. 279, 98).
 - 50) Acetylamid d. Naphtalin-2-Carbonsäure. Sm. 160° (150-152°). (B. 11, 1487; 25, 1437). — II, 1454.
 - 51) Nitril d. 6-Oxy-4-Keto-2-Phenyl-1,2,3,4-Tetrahydrobenzol-3-Car-
 - bonsäure. Sm. bei 180° u. Zers. (A. 294, 283). 52) Nitril d. 3,5-Diketo-1-Phenylhexahydrobenzol-2-Carbonsäure. Sm. 175° u. Zers. Na (B. 27, 2058). — II, 1877.
- C 64,7 H 4,6 O 13,3 N 17,4 M. G. 241. $C_{13}H_{11}O_{2}N_{3}$
 - 1) α-Phenylimido-α-Amido-α-[3-Nitrophenyl]methan. Sm. 72—73°. HCl (A. 265, 152). — IV, 841.
 - 2) 1-Amido-2-[4-Nitrobenzyliden]amidobenzol. Sm. 1340 u. Zers. (B. 27, 2190). — IV, 563.
 - 3) 4-[4-Nitrosophenyl]nitrosamido-1-Methylbenzol. Sm. 110° u. Zers. (A. **255**, 164). — II, 486.
 - 4) 4-Nitrosophenylbenzylnitrosamin. Sm. 77° (A. 263, 304). II, 516.
 - 5) Benzyliden-2-Nitrophenylhydrazin. Sm. 186—187° (B. 22, 2803). IV, 748.
 - 6) Benzyliden-3-Nitrophenylhydrazin. Sm. 117-1180 (B. 22, 2813). IV, 748.
 - 7) 2-Nitrobenzylidenphenylhydrazin. Sm. 153° (B. 20, 1343; A. 232, 232; J. pr. [2] 53, 461). — IV, 751.
 - 8) 3-Nitrobenzylidenphenylhydrazin. Sm. 120-121° (B. 17, 2097; 20, 1343; A. 232, 232; J. pr. [2] 53, 456). — IV, 751.
 - 9) 4-Nitrobenzylidenphenylhydrazin. Sm. 155° (B. 20, 1343; A. 232, 232; J. pr. [2] 53, 459). — IV, 752. 10) 3-Nitrodiphenylformamidin. Sm. 145° (Am. 13, 518). — II, 346.

 - 11) Phenylazophenylnitromethan. Sm. 101° u. Zers. (R. 13, 408). IV, 1385.
 - 12) α -Phenylazo- α -[2-Nitrophenyl] methan. Sm. 1540 (B. 25, 2903). IV, 1385.

 $C_{13}H_{11}O_2N_3$ 13) 1-Phenylamidodiazobenzol-13-Carbonsäure. (2HCl, PtCl₄) (A. 137, 62; B. 7, 1619). — IV, 1577.

14) 1-Phenylamidodiazobenzol-3-Carbonsäure (B. 15, 43). — IV, 1578.
 15) 4-Amidoazobenzol-3'-Carbonsäure (B. 31, 2204). — IV, 1461.

- 16) Benzoat d. 3-Amidooximidomethylpyridin (B. d. Nikotenylamidoxim). Sm. 190° (B. 24, 3442). — IV, 145.
- 17) Amid d. 4-Oxyazobenzol-3-Carbonsäure. Sm. 235° (240°) (A. 251, 185; 263, 231). IV. 1468.
 18) Amid d. 4'-Oxyazobenzol-3-Carbonsäure. Sm. 195° (A. 251, 165).
- IV, 1463. C 58.0 H 4.1 O 11.9 N 26.0 M. G. 269. $C_{13}H_{11}O_{2}N_{5}$
 - 1) α-Nitro-α-Phenylazo-α-Phenylhydrazonmethan (Nitroformazyl). Sm. 161° (153°) u. Zers. (B. 8, 1079; 27, 156; A. 256, 36). — IV, 1226.
 - 2) Diazo-[a-Imido-3-Nitrobenzyl]amidobenzol (Nitrobenzamidindiazobenzol). Zers. bei 160° (B. 28, 484). - IV, 1582.
- 1) Aethylester d. 5-Chlornaphtalin-l-Carbonsäure. Sm. 42° (J. pr. [2] C, H, O, Cl 38, 149). — II, 1447.
 - 2) Aethylester d. 8-Chlornaphtalin-l-Carbonsäure. Sm. 50° (J. pr. [2] 38, 151). — II, 1447.
 - 3) Aethylester d. 5-[oder 8-]Chlornaphtalin-2-Carbonsäure. Sm. 45° (J. pr. [2] 43, 412). - II, 1456.
 - 4) Aethylester d. 5-[oder 8-]Chlornaphtalin-2-Carbonsäure. Sm. 290
- (J. pr. [2] 43, 418). II, 1456. C₁₃H₁₁O₂Br 1) Methyläther d. 1-Oxy-?-Bromacetylnaphtalin. Sm. 70° (B. 31, 174). 2) β -Brom- β -[1-Naphtyl] propionsäure. Sm. 216° (B. 22, 2157).
 - II, 1460. 3) Aethylester d. ?-Bromnaphtalin-1-Carbonsäure. Sm. 48-49° (J. pr.
 - [2] **38**, 155). **II**, 1447. 4) Aethylester d. ?-Bromnaphtalin-2-Carbonsäure. Sm. 53-54° (J. pr. [2] **43**, 427). — **II**, 1456.
- $C_{13}H_{11}O_{3}N$ 68,1 - H 4.8 - O 21,0 - N 6,1 - M. G. 229.
 - 1) 2-Nitro-4-Oxydiphenylmethan. Sm. $74-75^{\circ}$. K $+ \frac{1}{2}$ H₂O (Soc. 41, 221). — II, 897.
 - 2) 4'-Nitro-4-Oxymethylbiphenyl (4-[4-Nitrophenyl]-1-Oxymethylbenzol). Sm. 121—122° (B. 28, 527).
 - 3) Phenyläther d. 2-Nitro-1-Oxymethylbenzol. Sm. 63° (A. 305, 113).
 - 4) Phenyläther d. 4-Nitro-1-Oxymethylbenzol. Sm. 91° (A. 224, 104). **– II**, 1059.
 - 5) 2-Nitrophenyläther d. Oxymethylbenzol. Sm. 29° (A. 224, 121). —
 - 6) 4-Nitrophenyläther d. Oxymethylbenzol. Sm. 106° (A. 224, 123). - II, 1049.
 - 7) α-Oximido-4,4'-Dioxydiphenylmethan (M. 5, 199). III, 199.
 - 8) 2-[6-Oxy-3-Methylphenyl]amido-1,4-Benzochinon (A. 226, 72). III, 346.
 - 9) ?-Phenylamido-?-Oxy-2-Methyl-1,4-Benzochinon. Zers. bei 250° (B. **16**, 1560). — **III**, 360.
 - 10) ?-Phenylamido-?-Oxy-2-Methyl-1,4-Benzochinon. Zers. bei 250° (B. 16, 1560).
 - 11) Methyläther d. 5-Phenylamido-2-Oxy-1,4-Benzochinon. Sm. 1890 (A. 262, 253). — II, 934.
 - 12) γ-Oximido-αε-Difural-αδ-Pentadiën. + Hydroxylamin (Sm. 162—164°) (G. **27** [2] 275).
 - 13) 1-Naphtoylamidoessigsäure (α-Naphtursäure). Sm. 1530 (H. 18, 129; B. **27**, 2912). — II, 1445.
 - 14) 2-Naphtoylamidoessigsäure (β -Naphtursäure). Sm. 169 -170° . Ag (H. 18, 125; B. 27, 2910). — II, 1454.
 - 15) 5-Phenylamido-2-Oxybenzol-1-Carbonsäure. Ba + 6H₂O, H₂SO₄ (A. **273**, 118). — II, *1513*.
 - 16) 5-Acetylamidonaphtalin-1-Carbonsäure. Sm. oberh. 280° (J. pr. [2] 38, 245). — II, 1451.
 - 17) 3-Acetylamidonaphtalin-2-Carbonsäure. Sm. 238° (B. 28, 3098).
 - 18) 5-[oder 8-] Acetylamidonaphtalin-2-Carbonsäure. Sm. 291° (J. pr. [2] **42**, 281). — II, 1459.

- C₁₃H₁₁O₃N 19) ?-Acetylamidonaphtalin-2-Carbonsäure. Sm. 258° (J. pr. [2] 42, 296). **– II**, 1459.
 - 20) 4-Oxybenzol-4-Amidophenyläther-l-Carbonsäure. Sm. 193-194°.
 - HCl, H₂SO₄, Ba (B. **29**, 2085). 21) Säure (aus 2-Methylpyrrol). Sm. 170—172° (B. **19**, 2203). **IV**, 69. 22) Säure (aus 3-Methylpyrrol). Sm. 159°. Ag (B. **19**, 2202). **IV**, 69.
 - 23) Methylester d. 1-Pyrrolenoxymethylbenzol-2-Carbonsäure. Sm. 104—105° (B. 17, 2959). IV, 83.
 - 24) Methylester d. 2-Keto-1-Phenyl-1,2-Dihydropyridin-5-Carbonsäure. Sm. 103° (A. 273, 181). — IV, 153.
 - 25) 2-Oxyphenylester d. 2-Amidobenzol-l-Carbonsäure. Sm. 1360 (J. pr. [2] **33**, 22). — **II**, 1246.
- 26) Phenylamid d. 2-Oxyphenylkohlensäure. Sm. 146° (A. 300, 143). C 60.7 - H 4.2 - O 18.7 - N 16.3 - M. G. 257 $C_{18}H_{11}O_{3}N_{3}$
 - 1) Nitroharmin. $HCl + 2H_2O_1 + J_2$ (A. 88, 329). III, 886.
 - 2) 2-Nitro-4-Benzoylamido-1-Amidobenzol. Sm. 2360 (B. 30, 984). —

 - 3) 3-Nitrophenylbenzylnitrosamin. Fl. (B. 19, 3251). II, 517. 4) 4-Nitrophenylbenzylnitrosamin. Sm. 107,5° (B. 19, 3250). II, 517. 5) Phenyl-2-Nitrobenzylnitrosamin. Sm. 84° (B. 27, 2899).

 - 6) ?-Nitrosophenyl-2-Nitrobenzylamin. Sm. 165—167° (B. 27, 2899). 7) 2-Nitro-s-Diphenylharnstoff. Sm. 170° (Am. 19, 315). 8) 3-Nitro-s-Diphenylharnstoff. Sm. 198,5° (197°) (B. 7, 1236; 21, 2573; J. pr. [2] 41, 322). — II, 379.
 - 9) 4-Nitro-s-Diphenylharnstoff. Sm. 212° (202°) (B. 21, 2571; J. pr. [2] 41, 322; Am. 19, 319). — II, 379.
 - 10) Benzenyl-2-Nitrophenylamidoxim. Sm. 1870 u. Zers. (B. 31, 242).
 - 11) 4-Nitrophenyl-2-Oxybenzylidenhydrazin. Sm. 223° (B. 31, 1522). 12) Phenyl-3-Nitro-2-Oxybenzylidenhydrazin. Sm. 138° (A. 305, 190).

 - 13) Phenyl-5-Nitro-2-Oxybenzylidenhydrazin. Sm. 1940 (A. 305, 188). 14) Phenyl-3-Nitro-4-Oxybenzylidenhydrazin. Sm. 175-176° (B. 24,
 - 3776). **IV**, *761*. 15) 3-Nitro-P-Oxy-1-Methylazobenzol (aus 4-Oxy-1-Methylbenzol). Sm. 160
 - bis 161° (Soc. 65, 838). IV, 1421. 16) 2-Nitro-P-Oxy-P-Methylazobenzol (aus 4-Oxy-1-Methylbenzol). Sm. 1180
 - (B. **24**, 2308). **IV**, 1421. 17) 4-Nitro-?-Oxy-?-Methylazobenzol (aus 2-Oxy-1-Methylbenzol). Sm. 200
 - bis 2010 (B. 28, 846). IV, 1421.
 - 18) 4-Nitro-P-Oxy-P-Methylazobenzol (aus 3-Oxy-1-Methylbenzol). Sm. 162,5 bis 163,5° (B. 28, 847). IV, 1421.
 19) Amid d. 3-Nitro-4-Phenylamidobenzol-1-Carbonsäure. Sm. 187°
 - (B. 23, 3443). II, 1285.
 - 20) Phenylamid d. 5-Nitro-2-Amidobenzol-1-Carbonsäure. Sm. 2030 (J. pr. [2] 53, 218).
 - 21) Phenylhydrazid d. 2-Nitrobenzol-1-Carbonsäure. Sm. 1410 (B. 32, 785).
 - 22) Phenylhydrazid d. 4-Nitrobenzol-1-Carbonsäure. Sm. 1980 (B. 22, 328). **— IV**, 669.
 - 23) 2-Nitrophenylhydrazid d. Benzolcarbonsäure. Sm. 166° (B. 22, 2805). **– IV**, $\bar{6}68$.
 - 24) 3-Nitrophenylhydrazid d. Benzolcarbonsäure. Sm. 151° (B. 22, 2811). - IV, 668.
- C 54.7 H 3.9 O 16.8 N 24.6 M. G. 285. $C_{13}H_{11}O_{8}N_{5}$
 - 1) α-Benzoyl-β-[4-Nitrophenyl]azohydrazin (B. 29, 2168). IV, 1567.
- 1) 1,2-Phenylenester d. 4-Methylphenylphosphinsäure. Sm. 81°; Sd. $C_{13}H_{11}O_{3}P$ oberh. 360° (A. 293, 265). — IV, 1669.
- C 63,7 H 4,5 O 26,1 N 5,7 M. G. 245. $C_{13}H_{11}O_4N$
 - 1) Methyläther d. 2-Nitro-2'-Oxydiphenyläther. Sm. 55°; Sd. 213°₁₀ (Bl. [3] 17, 949).
 - 2) Methyläther d. 4-Nitro-2'-Oxydiphenyläther. Sm. 103,5-104°; Sd. 216°₁₀ (Bl. [3] **17**, 949).
 - 3) 4-Monobenzyläther d. 2-Nitro-1,4-Dioxybenzol. Sm. 156-158° (A. **221**, 371). — II, 1050.

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4) 1-Nitro-2-Naphtyläther d. β -Keto- α -Oxypropan. Sm. 145°. + NaHSO. $C_{13}H_{11}O_4N$ (B. **31**, 759).

5) 2-Aethylchinolin-4, 6-Dicarbonsäure (B. 23, 2262). — IV, 370.

6) 2,6-Dimethylchinolin-3,4-Dicarbonsäure. Sm. 233-234°. Ag. + H₂O (J. pr. [2] 57, 482). 7) 2-Methylchinolin-3-Methylcarbonsäure-4-Carbonsäure. Sm. oberh.

280°. Ag₂ (J. pr. [2] **57**, 473).

8) Aethylester d. 4-Nitronaphtalin-1-Carbonsäure. Sm. 540 (B. 28,

9) Aethylester d. 5-Nitronaphtalin-1-Carbonsäure. Sm. 92° (B. 12, 1395; **14**, 1066; **16**, 2252). — II, 1448.

10) Aethylester d. 8-Nitronaphtalin-l-Carbonsäure. Sm. 68-690 (63°)

(B. 12, 1394; J. pr. [2] 38, 158). — II, 1448. 11) Aethylester d. 5-[oder 8-]Nitronaphtalin-2-Carbonsäure (vom Sm. 295°). Sm. 110—111° (B. 12, 1396; 16, 2254; J. pr. [2] 42, 275). II, 1457.

12) Aethylester d. ?-Nitronaphtalin-2-Carbonsäure (vom Sm. 220°). Sm. 82° (B. 12, 1395; J. pr. [2] 42, 273). — II, 1457.

13) Aethylester d.?-Nitronaphtalin-2-Carbonsäure (vom Sm. 279°). Sm. 92°

(B. 18, 1206; J. pr. [2] 43, 409). — II, 1457. 14) Aethylester d.?-Nitronaphtalin-2-Carbonsäure (vom Sm. 285°). Sm. 75° (J. pr. [2] **42**, 304). — II, 1458.

15) Aethylester d. P. Nitronaphtalin - 2 - Carbonsäure (vom Sm. 288°). Sm. 121° (J. pr. [2] 42, 293). — II, 1457.

16) Aethylester d. ?-Nitronaphtalin-2-Carbonsäure (d. ζ-Säure). Sm. 131° (J. pr. [2] 43, 410). - II, 1458.

17) Aethylester d. α -Cyan- β -[3,4-Dioxyphenyl]akryl-3,4-Methylenäthersäure. Sm. 106° (J. pr. [2] 50, 18). — II, 1777.

18) Phenylamid d. 3,4,5-Trioxybenzol-1-Carbonsäure + 2H₂O. Sm. 207°.
Zn, Zn₃, Pb, Bi + 2H₂O, Anilinsalz (B. 15, 2592; Bl. [3] 9, 847; [3] 11, 81; A. 272, 234). — II, 1923.
C 57,1 — H 4,0 — O 23,4 — N 15,4 — M. G. 273.

 $C_{13}H_{11}O_4N_3$

1) 3,5-Dinitro-2-Phenylamido-1-Methylbenzol. Sm. 169° (B. 25, 3007). - II, 458.

2) 3,5-Dinitro-4-Phenylamido-1-Methylbenzol. Sm. 169° (B. 28, 3063; Am. 19, 10, 205).

3) 3, 6-Dinitro-4-Phenylamido-1-Methylbenzol. Sm. 142⁰ (A. 215, 369). - II, 486.

4) 2-[2,4-Dinitrophenyl]amido-1-Methylbenzol. Sm. 101-102° (B. 15, 1236; C. 1898 [2] 342). — II, 458.

5) 4-[2,4-Dinitrophenyl]amido-1-Methylbenzol. Sm. 137° (Z. 1870, 233; B. 9, 980; C. 1898 [2] 342). — II, 486.

6) [4-Nitrobenzyl]nitroamidobenzol (4-Nitrobenzylphenylnitroamin). Sm. $99,5^{\circ}$ (B. **27**, 375). — **IV**, 1529.

7) 2-Nitrophenyl-2-Nitrobenzylamin. Sm. 137° (*J. pr.* [2] **54**, 265). 8) 3-Nitrophenyl-2-Nitrobenzylamin. Sm. 142—143° (*J. pr.* [2] **48**, 561).

- II, 517. 9) 4-Nitrophenyl-2-Nitrobenzylamin. Sm. 202° (J. pr. [2] 54, 271).

- 10) 2-Nitrophenyl-4-Nitrobenzylamin. Sm. 1380 (B. 27, 376). II, 517. 11) 2,4-Dinitrophenylmethylamin. Sm. 167° (B. 15, 1235). — II, 342.
- 12) 5-Keto-3-Methyl-1-Phenyl-4,5-Dihydropyrazol-4-Tartronylimid A. 255, 232). — IV, 548.
- 13) 2,6-Dioxy-3-Phenylhydrazonmethylpyridin-4-Carbonsäure. Phenyl-
- hydrazinsalz (Soc. 69, 1451). IV, 173. 14) Diacetat d. 5,8-Dioximido-5,8-Dihydrochinolin. Zers. bei 160° (B. 24, 157). — IV, 282. C 51,8 — H 3,7 — O 21,3 — N 23,2 — M. G. 301. $C_{13}H_{11}O_4N_5$

1) Di[3-Nitrophenyl]guanidin. HCl, (2HCl, PtCl₄) (A. 67, 156). — II, 349

- 2) isom. Dinitrodiphenylguanidin. Sm. 1900 (B. 7, 1235). II, 349. 3) Methyl-3, 3'-Dinitrodiazoamidobenzol. Sm. 127-1286 (Soc. 53, 667). - IV, 1563.
- 4) Methyl-3,4'-Dinitrodiazoamidobenzol. Sm. 148° (Soc. 53, 666). IV, 1564.

- C₁₃H₁₁O₄N₅ 5) isom. Methyl-3,4'-Dinitrodiazoamidobenzol. Sm. 176—177° (Soc. 53,
 - 668). IV, 1564.
 6) Methyl-4,3'-Dinitrodiazoamidobenzol. Sm. 168° (Soc. 53, 667). IV, 1564.
 - 7) Methyl-4,4'-Dinitrodiazoamidobenzol. Sm. 219° (Soc. 53, 666). IV, 1565.
- C₁₃H₁₁O₄Cl₃ 1) Methylester d. 2, 2, 3-Trichlor-1-Acetoxyl-2, 3-Dihydroinden-1-Carbonsäure. Sm. 114—116° (B. 20, 2894). — II, 1662.
 - 2) Trichlorderivat aus d. Aethylester d. 4[oder 5]-Oxy-1,6[oder 1, 3]-Dimethylbenzfuran - 2 - Carbonsaure. Sm. 1030 (A. 283, 260).
- C₁₃H₁₁O₄Br₃ 1) Tribromderivat aus d. Aethylester d. 4[oder 5]-Oxy-1,6[oder 1,3]-Dimethylbenzfuran-2-Carbonsäure. Sm. 1456 (A. 283, 258). III, 733.
- 1) Verbindung (Säure aus Methylendiphenylenoxyd). Sm. 255-260° u. $C_{13}H_{11}O_4P$ Zers. $(NH_4)_2$, Ag_2 (J. pr. [2] 28, 281). — II, 992. C 59,8 - H 4,2 - O 30,6 - N 5,4 - M. G. 261.
- $C_{18}H_{11}O_5N$ 1) Gem. Anhydrid d. 1-Acetoxylindol-2-Carbonsäure u. Essigsäure.
 - Sm. 107° (B. 29, 650). IV, 237. 2) β -Aethylester d. β -Cyan- α -Keto- α -Phenyläthan- β , 2-Dicarbonsäure (Ae. d. Benzoylcyanessig-o-Carbonsäure). Sm. 121—122°. Ag₂ (A. ch. [7] **1**, 487). — **II**, 1962.
 - 3) Aethylester d. ?-Nitro-3-Oxynaphtalin-2-Carbonsäure. Sm. 160°
 - (J. pr. [2] 48, 535). II, 1691. 4) Diacetat d. 2,8,?-Trioxychinolin. Sm. 225—228° (M. 16, 770). IV, 289.
 - 5) Verbindung (aus d. Diäthylester d. Benzoylamidooxalessigsäure). Sm. 1640 u. Zers. (B. 24, 1259). — II, 1193.
- C 54,0 H 3,8 O 27,7 N 14,5 M. G. 289. $C_{13}H_{11}O_5N_3$
 - 1) Methyläther d. 2-[2,4-Dinitrophenyl]amido-1-Oxybenzol. Sm. 151° (B. **22**, 902). — **II**, 704.
 - 2) Methyläther d. 4-[2,4-Dinitrophenyl]amido-l-Oxybenzol. Sm. 1410 (B. **29**, 1875).
 - 3) 5-[4-Nitro-2-Amidophenyl] amido-2-Oxybenzol-1-Carbonsäure (A. **273**, 125). — II, *1513*.
 - 4) Acetyl-?-Nitrophenylamidoimid d. Citrakonsäure. Sm. 124° (B. 19,
- 1387). IV, $7\bar{\theta}8$. C₁₃H₁₁O₅Cl 1) Aethylester d. P-Chlor-1,6 [oder 1,3]-Dimethylbenzfuranorthochinon-2-Carbonsäure. Sm. 118—1196 (A. 283, 262). — III, 732. C 46.8 - H 3.3 - O 28.8 - N 21.0 - M. G. 333. $C_{13}H_{11}O_6N_5$
 - 1) Methyl-2,4-Dinitrophenyl-4-Nitro-2-Amidophenylamin. Sm. 190° (B. **31**, 1462).
 - 2) β -Phenylamido- α -[3,5-Dinitro-2-Oxyphenyl]harnstoff. Sm. 202 bis 203° u. Zers. Phenylhydrazinsalz (J. pr. [2] 48, 436). — IV, 674.
- $\mathbf{C}_{13}\mathbf{H}_{11}\mathbf{O}_{6}\mathbf{Br}$ 1) $\alpha,2$ -Lakton d. α -Oxy- α -[6-Bromphenyl]äthan- $\beta,2,4$ -Tricarbonsäure- β , 4-Dimethylester. Sm. 102° (A. 293, 170).
- 1) Phenylester d. Phenylphosphorsäure-2-Carbonsäure (Salol-O-Phosphinsäure). Sm. S8°. Pb, Ag₂, Anilinsalz, Phenylhydrazinsalz (B. 31, $\mathbf{C}_{18}\mathbf{H}_{11}\mathbf{O}_{8}\mathbf{P}$ 2174).
- C 53,2 H 3,8 O 38,2 N 4,8 M. G. 293. $C_{13}H_{11}O_7N$ 1) 6-Acetylderivat d. 1,6-Anhydro-6-Amido-3-Acetoxyl-4-Methoxylbenzol-1, 2-Dicarbonsäure. Sm. 205° (B. 19, 2308). — II, 1997.
- $C_{13}H_{11}O_8Br$ 1) 2-Brom-3,4,5-Triacetoxylbenzol-1-Carbonsäure. Sm. 95-96° (Bl. [3])
- 9, 243). II, 1923. $C_{13}H_{11}NBr_2$ 1) Dibromid d. Benzylidenamidobenzol. Sm. 142° u. Zers. (B. 23, 2774). **– III**, 29. 2) $\alpha\beta$ -Dibrom- α -Phenyl- β -[2-Pyridyl] äthan. Sm. 166—167° (B. 20, 2720;
- **21**, 820). IV, 395. $C_{13}H_{11}NS$ 1) α -Thiodiphenylmethylamin. Sm. 99,3° (A. 230, 88; B. 21, 2069). — II, 806.
 - 2) β -Thiodiphenylmethylamin. Sm. 78—79° (B. 21, 2065). II, 806. 3) Phenylamid d. Benzolthiocarbonsäure. Sm. 97,5-98,5° (A. 192, 31; 259, 301; B. 10, 2134; 11, 503; 25, 3525). — II, 1293.

1) 2-Thiocarbonyl-3-[1-Naphtyl]tetrahydrothiazol. Sm. 198-199 (B. C13H11NS2 **21**, 972). — **II**, 609.

 $C_{13}H_{11}N_2Cl$ 1) α -Chlor- α -Phenylimido- α -Phenylamidomethan. Sm. 92—95° u. Zers. (Am. 17, 110).

2) 3-Chlorbenzylidenphenylhydrazin. Sm. 134-135° (A. 262, 136; Soc. 63, 871). — IV, 751.

3) 4-Chlorbenzylidenphenylhydrazin. Sm. 127° (Soc. 63, 873). — IV, 751.

4) Phenylhydrazonphenylchlormethan (Phenylhydrazon d. Benzolcarbon-

säurechlorid). Sm. 131° (B. 27, 322, 2122). — IV, 668.
5) P-Chlor-2-Methylazobenzol. Sm. 143—144° (B. 24, 367). — IV, 1382.
6) P-Chlor-4-Methylazobenzol. Sm. 149—150° (B. 24, 365). — IV, 1382.

 $C_{13}H_{11}N_2Br$ i) s-Phenyl-3-Brombenzylidenhydrazin. Sm. 141—142° (A. 284, 143). - IV, 751.

1) Phenyl-2-Jodbenzylidenhydrazin. Sm. 79° (Soc. 69, 1008). — IV, 751.
2) Phenyl-3-Jodbenzylidenhydrazin. Sm. 155° (Soc. 69, 1009). — IV, 751.
3) Phenyl-4-Jodbenzylidenhydrazin. Sm. 121° (Soc. 69, 1009). — IV, 751. $C_{13}H_{11}N_{2}J$

4) Jodmethylat d. 5,10-Naphtdiazin (J. d. Phenazin). + J (B. 26, 181).

– IV, 1000. 5) Jodnethylat d. Phenanthrolin + H₂O (M. 3, 579). - IV, 998.

6) Jodnethylat d. Pseudophenanthrolin + H₂O (M. 4, 577). - IV, 999.

 $C_{13}H_{11}N_3Cl_2$ 1) Dichlordiphenylguanidin. (2 HCl, PtCl₄) (A. 67, 146). — II, 349. 2) isom. Dichlordiphenylguanidin. Sm. 140-1410 (Bl. 32, 170). — II, 349.

3) α -Phenyl- β -[3,6-Dichlor-2-Amidobenzyliden]hydrazin. Sm. 102 bis 103° (B. 29, 877; A. 296, 80). — IV, 753. C₁₃H₁₁N₃Br₂ 1) Dibromdiphenylguanidin. HCl, (2 HCl, PtCl₄) (A. 67, 148). — II, 349. 2) Methyl-4,4'-Dibromdiazoamidobenzol. Sm. 100—100,5° (Soc. 55, 435). **– IV**, 1562.

 $C_{13}H_{11}N_3J_2$ 1) Dijoddiphenylguanidin. (2HCl, PtCl₄) (A. 67, 153). — II, 349.

1) 2-Chlorphenylat d. 1-Phenyl-1,2,3,5-Tetrazol. Sm. 268° u. Zers. $C_{13}H_{11}N_4Cl$ $2 + \text{PtCl}_4$, $+ \text{AuCl}_8$ (B. 27, 2927). - IV, 1231.

 $C_{18}H_{11}N_4J$ 1) 2-Jod-1, 2-Diphenyl-2, 2-Dihydro-1, 2, 3, 5-Tetrazol. Sm. 237° u. Zers. (B. 27, 2928).

 $\mathbf{C}_{13}\mathbf{H}_{12}\mathbf{ON}_{2}$ C 73.6 - H 5.7 - O 7.5 - N 13.2 - M. G. 212.

> 1) Methyläther d. β -Oxy- α -Cyan- α -[2-Cyanphenyl]- α -Buten. Sm. 66 bis 67° (B. 27, 2243). — II, 1966. 2) s-Diphenylharnstoff. Sm. 235°; Sd. 260°. Lit. bedeutend. — II, 378.

> 3) uns-Diphenylharnstoff. Sm. 189°. Lit. bedeutend. — II, 381.

4) 4-Phenylnitrosamido-l-Methylbenzol. Sm. 82° (45°) (A. **239**, 56; **255**, 163). — **II**, 485.

5) 4-[4-Nitrosophenyl]amido-1-Methylbenzol. Sm. 163° (A. 255, 163). - II, 486.

6) 4-Nitrosomethyldiphenylamin? Sm. 44° (C. 1897 [1] 1165).

7) 4-Nitrosophenylbenzylamin. Sm. 129°. HCl (A. 263, 300). — II, 516.

8) Phenylbenzylnitrosamin. Sm. 58° (A. 227, 360). — II, 516. 9) 2,2'-Diamidodiphenylketon. Sm. 134—135° (131°) (A. 218, 349; 283,

171; B. **27**, 3362; **31**, 3033). — III, 184. 10) 2, 3'-Diamidodiphenylketon. Sm. 80° (B. 23, 2578; A. 283, 173).

III, 184. 11) **2,**4'-Diamidodiphenylketon. Sm. 128—129° (B. **23**, 2578; A. **283**,

171). — III, 184.

12) 3,3'-Diamidodiphenylketon. Sm. 170—171° (165°; 173—174°). 2 HCl, (2 HCl, PtCl₄) (A. 72, 281; 194, 356; 283, 170; B. 5, 797; 27, 2296). - III, 184.

13) 3,4'-Diamidodiphenylketon + H_2O . Sm. 125–126° (wasserfrei) (A. 283, 174; B. **27**, 2294). — III, 185.

14) 4,4'-Diamidodiphenylketon. Sm. 239° (237°; 240—240,5°). HCl, (2HCl, 2SnCl₂), H_2SO_4 (B. 11, 1747; 19, 110; 22, 988; 23, 2578; A. 218, 344; 283, 170; 296, 226). — III, 185.

15) α -Phenylamido- α -Oximidophenylmethan (Benzenylphenylamidoxim). Sm. 136° (138°). HCl (B. 19, 1669; 31, 241; J. pr. [2] 54, 123). — II, 1204; IV, 841.

16) anti-α-Oximido-2-Amidodiphenylmethan. Sm. 156° (B. 24, 2382; **29**, 1264). — III, 190.

- C₁₃H₁₂ON₂ 17) syn-a-Oximido-2-Amidodiphenylmethan. Sm. 125—126° (B. 24, 2384; 29, 1264). III, 191.
 - 18) anti-α-Oximido-4-Amidodiphenylmethan. Sm. 168° (B. 24, 4038).
 III, 191.
 - 19) syn-α-Oximido-4-Amidodiphenylmethan. Sm. 126° (B. 24, 4038). III, 191.
 - 20) 2-Oxybenzylidenphenylhydrazin (Salicylaldehydphenylhydrazon). Sm. 142° (143-144°). Na (B. 17, 575, 3003; 18, 1660; 27, 2288; 30, 1243; 31, 1522; Bl. [3] 17, 316). IV, 759.
 - 21) isom. 2-Oxybenzylidenphenylhydrazin. Sm. 104—105° (B. 27, 2289). IV, 759.
 - 22) 3-Oxybenzylidenphenylhydrazin. Sm. 130—131,5° (A. 248, 102; B. 24, 826). IV, 760.
 - 23) **4-Oxybenzylidenphenylhydrazin.** Sm. 177—178° (A. **248**, 103). **IV**, 760.
 - 24) β -Formyl- $\alpha\alpha$ -Diphenylhydrazin. Sm. 116,5° (B. 25, 1076, 1554). IV, 663.
 - 25) **4-Hydrazidodiphenylketon** (4-Benzoylphenylhydrazin). Sm. 127° u. ger. Zers. HCl (Soc. **55**, 613). III, 186.
 - 26) 4-Oxy-2-Methylazobenzol. Sm. 109° (B. 17, 366). IV, 1420.
 - 27) 4'-Oxy-2-Methylazobenzol. Sm. 102-103°. + H₂O (Sm. 76°), HCl (B. 23, 3257; 24, 366; 30, 1626). IV, 1412.
 - 23) 4-Oxy-3-Methylazobenzol. Sm. 128-130° (B. 17, 131, 363, 879). IV, 1419.
 - 29) 6-Oxy-3-Methylazobenzol. Sm. 108—109° (J. 1879, 465; B. 17, 131, 352, 878). IV, 1420.
 - 30) 4'-Oxy-3-Methylazobenzol + $^{1}/_{9}$ H₂O. Sm. 144-145° (wasserfrei). HCl (B. 24, 368; 31, 2117; A. 287, 161). IV, 1413.
 - 31) 4'-Oxy-4-Methylazobenzol. Sm. 151°. HCl (B. 8, 1030; 20, 905; 30, 1626). IV, 1413.
 - 32) Methyläther d. 4-Oxyazobenzol. Sm. 53,5—54° (G. 12, 110). —
 - IV, 1408.
 33) α -[1-Naphtyl]azo- β -Ketopropan. Sm. 158-160° (G. 21 [1] 266). IV, 1477.
 - 34) 5-Methyl-3-[2-Naphtyl]-4,5-Dihydro-1,2,4-Oxdiazol. Sm. 121—122° (B. 22, 2456). II, 1455.
 - 35) 3- $[\alpha$ -Oximido-4-Methylbenzyl|pyridin. Sm. 167° (M. 18, 458).
 - 36) γ -Amido- α -Keto- α -[4-Chinoly1]- β -Buten. Sm. 1840 (M. 17, 411). IV, 374.
 - 37) 1-Nitroso-1, 2, 3, 4-Tetrahydro-α-Naphtochinolin. Sm. 59,5° (B. 24, 2477). IV. 378.
 - 2477). IV, 378.
 38) 4-Nitroso-1,2,3,4-Tetrahydro-β-Naphtochinolin. Sm. 105,5° (B. 24, 2644). IV, 379.
 - 39) Harmin. Sm. 256—257° u. Zers. HCl + 2H₂O, (2HCl, PtCl₄), H₂SO₄ + H₂O, H₂CrO₄, Dioxalat (A. 64, 365; J. 1854, 525; B. 18, 400; 22, 640; 30, 2481; M. 16, 601). III, 885.
 - 40) Phénylamid d. 2-Ámidőbenzol-1-Carbonsäure. Sm. 126° (131°) (J. pr. [2] 30, 476; C. 1897 [1] 413). II, 1246.
 - 41) Phenylamid d. 3-Amidobenzol-l-Carbonsäure. Sm. 129° (140°). HCl, H₂SO₄ (B. 8, 35; G. 13, 337). II, 1257.
 - 42) 2-Amidophenylamid d. Benzolcarbonsäure. Sm. 140° (Am. 6, 27). IV, 561.
 - 43) 3-Amidophenylamid d. Benzolcarbonsäure. Sm. 125° (260°). HCl, H₂SO₄ (B. 7, 498; A. 208, 298). — IV, 577.
 - 44) 4-Amidophenylamid d. Benzolcarbonsäure. Sm. 128°. HCl, H₂SO₄
 - (A. 203, 295). IV, 594. 45) 4-Methylphenylamid d. Pyridin-3-Carbonsäure. Sm. 150° (C. 1898)
 - [1] 678). 46) **2-Methylphenylamid d. Pyridin-4-Carbonsäure.** Sm. 64,5° (B. **27**, 1787)
 - 47) 4-Methylphenylamid d. Pyridin-4-Carbonsäure. Sm. 104° (B. 27, 1787).
 - 48) α-Phenylhydrazid d. Benzolcarbonsäure (uns-Benzoylphenylhydrazin).
 Sm. 70°. Na, HCl, HBr, HNO₃, H₂SO₄, Pikrat (B. 20, 1713; A. 252, 311). IV, 667.

 $C_{13}H_{12}ON_2$ 49) β -Phenylhydrazid d. Benzolcarbonsäure (s-Benzoylphenylhydrazin). Sm. 168°. Bitartrat (A. 190, 125; 293, 334; B. 19, 1203; 27, 162, 322, 1696; 29, 1725; 30, 1996; J. pr. [2] 54, 204; R. 13, 942; Bl. [3] 15, 665). **–** IV, 667.

50) Nitril d. β-Oxy-α-[2-Cyanphenyl]propenäthyläther-α-Carbonsäure. Sm. 119° (B. **27**, 830). — II, 1964.

51) Nitril d. 1-Keto-3-Propyl-1, 2-Dihydroisochinolin-4-Carbonsäure. Sm. 221° u. Zers. (B. 29, 2393). — IV, 338.

52) Nitril d. 1-Keto-3-Isopropyl-1, 2-Dihydroisochinolin-4-Carbonsäure. Sm. 227—229° u. Zers. (B. 30, 890). — IV, 338.

53) Nitril d. 1-Keto-2-Methyl-3-Aethyl-1, 2-Dihydroisochinolin-4-Carbonsäure. Sm. 135—136° (B. 27, 2234). — II, 1870. $C_{65,0} - H_{5,0} - O_{6,7} - N_{23,3} - M.G._{240}$

 $\mathbf{C}_{13}\mathbf{H}_{12}\mathbf{ON}_4$

1) 2-Oxy-1,2-Diphenyl-2,2-Dihydro-1,2,3,5-Tetrazol. Salze, siehe diese (B. 27, 2927).

2) Phenylhydrazid d. Phenylazocarbonsäure (Diphenylcarbazon). Sm. 157° u. Zers. (A. 263, 274). — IV, 671.

1) 5-Benzoyl-2-Aethylthiophen. Fl. (B. 26, 2461). — III, 767. $\mathbf{C}_{13}\mathbf{H}_{12}\mathbf{OS}$

- 2) 3-Benzoyl-2,5-Dimethylthiophen. Sm. 44-45° (B. 28, 1808). -III, 767.
- 3) isom. Benzoyl-?-Dimethylthiophen. Sm. 56° (B. 28, 1806). III, 767. C 68,4 — H 5,3 — O 14,0 — N 12,3 — M. G. 228.

 $C_{13}H_{12}O_2N_2$

1) 3-[4-Methylphenyl] nitrosamido-1-Oxybenzol. Sm. 1050 u. Zers.

(J. pr. [2] 33, 216). — II, 715. 2) 4-[4-Methylphenyl]nitrosamido-1-Oxybenzol. Sm. 130° u. Zers. (J. pr. [2] 33, 228). — II, 718.

3) 2-Oxy-1-Phenylnitrosamidomethylbenzol. Fl. (B. 27, 1803). —

II, 742. 4) 4-Nitro-3-Phenylamido-1-Methylbenzol. Sm. 110° (B. 26, 581). —

II, 477. 5) 4-[2-Nitrophenyl]amido-1-Methylbenzol. Sm. 68° (69-70°) (B. 23,

1843; A. 303, 377). — II, 486.

6) 2-Nitrophenylbenzylamin. Sm. 74—76° (*J. pr.* [2] **46**, 565). — II, 517. 7) 3-Nitrophenylbenzylamin. Sm. 107° (*B.* **19**, 3250, 3251). — II, 517.

8) 4-Nitrophenylbenzylamin. Sm. 142-1430 (1470) (B. 19, 3250; A. 290, 294). — II, 517.

9) Phényl-2-Nitrobenzylamin. Sm. 57° (B. 19, 1605, 1607). — II, 517.

10) Phenyl-4-Nitrobenzylamin. Sm. 68° (72°). HCl (B. 6, 1062; 30, 69). **–** II, 517.

11) Diphenylmethylhydroxylnitrosamin. Sm. 84-85° (A. 278, 366). — II, 636.

12) α -Oxy- $\alpha\beta$ -Diphenylharnstoff.

Sm. 125° (*J. pr.* [2] **56**, 84). Sm. 165—166° (*J. pr.* [2] **41**, 327). 13) 2-Oxy-s-Diphenylharnstoff. II, 709.

14) s-Acetyl-1-Naphtylharnstoff. Sm. 214—215° (Soc. 71, 1201; 73, 365). 15) s-Acetyl-2-Naphtylharnstoff. Sm. 202-202,5° (Soc. 71, 1203; 73, 366).

16) 2,4-Dioxybenzylidenphenylhydrazin. Sm. 156-160° u. Zers. (A. 248, 105). — IV, 763.

17) labil. 3,4-Dioxybenzylidenphenylhydrazin. Sm. 121-128 a (M. 17, 247). — IV, 763.

18) stabil. 3,4-Dioxybenzylidenphenylhydrazin. Sm. 175-176° u. Zers. (M. 17, 245). — IV, 763.

19) 2', 4'-Dioxy-2-Methylazobenzol. Sm. 178° (175—176°) (B. **15**, 2825; 20, 1579). - IV, 1444.

20) 2',4'-Dioxy-4-Methylazobenzol. Sm. 187° (183-184°) (B. 15, 26, 2821; 20, 906; 27, 658). — IV, 1444. 21) 2',5'-Dioxy-4-Methylazobenzol. Sm. $168-170.5^{\circ}$ (B. **26**, 1910). -

IV, 1447.

22) 3',4'-Dioxy-4-Methylazobenzol. Sm. 175° u. Zers. (B. 26, 1074). -IV, 1441.

23) Dioxymethylazobenzol (Benzolazoorcin). Sm. 183° (B. 10, 1579). IV, 1447.

24) Benzolazosaligenin. Sm. 143-144° (A. 251, 184). - IV, 1451.

- C₁₃H₁₂O₂N₂ 25) Monomethyläther d. 2,4-Dioxyazobenzol. Sm. 114° (115—116°) (B. 21, 604; **22**, 2375). — IV, 1442.
 - 26) 3-Methyläther d. 3,4-Dioxyazobenzol. Sm. 70,5-71,5° (B. 29, 2685). IV, 1440.
 - 27) 2-Methyläther d. 2,4'-Dioxyazobenzol. Sm. 146-147° (B. 32, 125).
 - 28) Monomethyläther d. 4,4'-Dioxyazobenzol. Sm. 142° (B. 32, 124).
 29) Nitrosomethyl-β-Naphtomorpholin. Sm. 190—195° u. Zers. (B. 31, 760).
 - 30) Monoxim d. 4-[αγ-Diketobutyl]chinolin. Sm. 170-1710 (M. 17, 409). - IV, 374.
 - 31) 5-Amido-2-Phenylamidobenzol-1-Carbonsäure. Sm. 233-234° u. Zers. HCl (A. 276, 41). — II, 1274.
 - 32) 3-Amido-4-Phenylamidobenzol-1-Carbonsäure. Sm. 153°. HCl (B. 22,
 - 3286). II, 1274. 33) 4-Amido-1-[4-Amidophenyl]benzol-2-Carbonsäure. Sm. 210° u. Zers. HCl, 2HCl, Ag (B. 24, 3062). — II, 1462.
 - 34) 3-Amido-1-[4-Amidophenyl] benzol-4-Carbonsäure (A. 210, 193). II. 1463.
 - 35) s-Diphenylhydrazin-2-Carbonsäure. Sm. 165—166°. Ba (B. 24, 3061). **– IV**, 1507.
 - 36) s-Diphenylhydrazin-4-Carbonsäure. Sm. 192—193° (A. 303, 388). IV, 1507.
 - 37) α -[1-Naphtyl]hydrazonpropionsäure. Sm. 159° u. Zers. (A. 232, 240).
 - IV, 927.
 38) α-[2-Naphtyl]hydrazonpropionsäure. Sm. 166° (A. 236, 176). IV, 929.

 - 39) Acetat d. 1-Naphtenylamidoxim. Sm. 129° (B. 22, 2457). II, 1446. 40) Acetat d. 2-Naphtenylamidoxim. Sm. 154° (B. 22, 2453). II, 1455.
 - 41) Acetat d. 6-Oxy-4-Methyl-2-Phenyl-1,3-Diazin. Sm. 40-41° (Pinner, Imidoäther 242). — IV, 957. 42) 3-Amidophenylamid d. 2-Oxybenzol-1-Carbonsäure.
 - (A. 1875, 746). IV, 578. 43) 4-Amidophenylamid d. 2-Oxybenzol-1-Carbonsäure.
 - Sm. 158° (J. 1875, 747). — IV, 595. C 60.9 — H 4.7 — O 12.5 — N 21.9 — M. G. 256.

 $C_{13}H_{12}O_{2}N_{4}$

- 1) Nitrodiphenylguanidin. Sm. 131-132° (B. 7, 1236). II, 349.
- α-Nitroso-α-Phenyl-β-Phenylamidoharnstoff (Nitrosodiphenylsemicarbazid). Sm. 174—175° (B. 29, 1691). IV, 674.
 Methyl-4-Nitrodiazoamidobenzol. Sm. 134° (B. 20, 3017). IV, 1563.
- 4) 4-Nitro-2-Methyldiazoamidobenzol. Sm. 1220 (B. 28, 241). IV, 1571. 5) 3'-Nitro-4-Methyldiazoamidobenzol. Sm. 107° (B. 21, 2573). —
- IV, 1571. 6) 4'-Nitro-4-Methyldiazoamidobenzol. Sm. 158,5—161,5° u. Zers. (B. 28,
- 839). IV, 1571.
 7) 4-Nitro-4'[P]-Methylamidoazobenzol. Sm. 134° (B. 20, 3017; 28, 844, 1893). IV, 1358.
- 8) Homoterephtalendiazoximdiäthenyl. Sm. 111,5° (B. 22, 2979). II, 1844.
- 9) Dimethyltolualloxazin. Sm. 205—210° (B. 24, 2367). IV, 946.
- 10) Phenylamid d. Nikotenylamidoximameisensäure (Nikotenylphenyluramidoxim). Sm. 167° (B. **24**, 3444). — **IV**, 145. C 54,9 — H 4,2 — O 11,3 — N 29,6 — M. G. 284.

 $\mathbf{C}_{13}\mathbf{H}_{12}\mathbf{O}_{2}\mathbf{N}_{6}$

- 1) α -Phenylhydrazon $\alpha \alpha$ -Di[5-Keto 4,5-Dihydropyrazol-3-]methan.
- Sm. 113° (*J. pr.* [2] **51**, 59).

 1) Phenylbenzylsulfon. Sm. 148° (*B.* **21**, 1349, 1696). II, 1052.

 2) Phenyl-4-Methylphenylsulfon. Sm. 124,5° (*B.* 11, 116, 2068; **18**, 249; $C_{13}H_{12}O_{2}S$ Am. 20, 303). — II, 824.
- Am. 20, 505). 11, 824.
 3) Allyl-1-Naphtylsulfon. Sm. 67° (J. pr. [2] 53, 500).
 4) Allyl-2-Naphtylsulfon. Sm. 95° (J. pr. [2] 53, 484).
 1) γ-[1-Naphtyl]sulfon-αβ-Thiopropan. Sm. 100—110° (J. pr. [2] 56, 467).
 2) γ-[2-Naphtyl]sulfon-αβ-Thiopropan (J. pr. [2] 56, 464).
 C 63,9 H 4,9 0 19,7 N 11,5 M. G. 244.
 1) s-Di[2-Oxyphenyl]harnstoff. Sm. 125° (J. pr. [2] 52, 241).
 2) s-Di[3-Oxyphenyl]harnstoff. Sm. 220° (J. pr. [2] 52, 236).
 3) s-Di[4-Oxyphenyl]harnstoff. Zers. bei 230° (J. pr. [2] 52, 238). $C_{13}H_{12}O_2S_2$

 $C_{13}H_{12}O_3N_2$

- $C_{13}H_{12}O_3N_2$ 4) 4-Methylamido 3 Acetylamido 1, 2 Naphtochinon. Sm. 245—246° (B. **31**, 2409).
 - 5) 2,3,4-Trioxy-1-Phenylhydrazonmethylbenzol. Sm. 161° (B. **32**, 282). 6) 2,4,5-Trioxy-1-Phenylhydrazonmethylbenzol. Sm. 200° (B. **32**, 283).
 - 7) 2', 4'-Dioxy-2-Oxymethylazobenzol. Sm. 170° (B. 27, 1085). IV, 1451. 8) 1,2-Diacetyl-3-Keto-5-Phenyl-2,3-Dihydropyrazol. Sm. 86° (J. pr.
 - [2] 50, 228; [2] 52, 31) IV, 906. 9) 1-Acetyl-4-[β-Phenyläthenyl]-2,5-Diketotetrahydroimidazol (Acetyl-
 - styrylhydantoïn). Sm. 185° (B. 22, 691). II, 1655.
 - 10) Acetat d. 8-Acetylamido-5-Oxychinolin. Sm. 153-1540 (B. 27, 1940). **– IV**, 912.
 - 11) Acetat d. 5-Acetylamido-8-Oxychinolin. Sm. 206-2070 (B. 27, 1939). - IV, 912.
 - 12) ?-Nitro-10-Keto-8-Methyl-3,4-Dihydrojulol (?-Nitro- α_1 -Keto- γ_1 -Methyljulolin). Sm. 223,8° (B. 24, 851). - IV, 193.
 - 13) ?-Nitro-10-Keto-8-Methyl-3,4-Dihydrojulol (isom. ?-Nitro- α_1 -Keto-1-Methyljulolin). Sm. 149,1° u. Zers. (B. 24, 852). — IV, 193.
 - 14) 3- $[\beta$ -Phenyläthenyl]-1,2,4-Oxdiazol-5- $[Aethyl-\beta$ -Carbonsäure].
 - 114°. Ag (B. 19, 1511). II, 1409. 15) 6-Oxy-2-[4-Methylphenyl]-1,3-Diazin-4-Methylcarbonsäure. Zers.
 - bei 210° (B. 28, 481). IV, 990. 16) 6-Oxy-4-Methyl-2-Phenyl-1,3-Diazin-5-Methylcarbonsäure. 259° u. Zers. (B. 22, 2619). — IV, 990.
 - 17) 4-Oxy-2-Phenyl-1,3-Diazin-4-Aethyläther-5-Carbonsäure. Sm. 193 bis 194°. Ag (B. 30, 1490). — IV, 987.
 - 18) 7-Acetylamido-8-Methylchinolin-5-Carbonsäure. Sm. noch nicht bei 300° . Ag (A. **274**, 359). — IV, 948.
 - 19) Aethylester d. 5-Keto-4-Benzyliden-4,5-Dihydropyrazol-3-Carbon-
 - säure. Zers. oberh. 250° (*J. pr.* [2] **51**, 54). **IV**, 987. 20) **Aethylester d. 4-Keto-2-Phenyl-1,4-Dihydro-1,3-Diazin-5-Carbon**säure (Ae. d. Phenylpyrimidoncarbonsäure). Sm. 214°. Ag, (2 HCl, PtCl,) (B. 30, 822, 1488, 1564). — IV, 987.
 - 21) 2-Methylphenylamidoformiat d. 2-Oximidomethylfuran (Carb o-Toluidofurfursynaldoxim). Sm. 50° (B. 25, 2581). — III, 725.
 - 22) 4-Methylphenylamidoformiat d. 2-Oximidomethylfuran. Sm. 79-80° (B. 25, 2581). - III, 725.
 - 23) Phenylhydrazid d. 2-Oxyphenylkohlensäure. Sm. 157° (A. 300, 144).
 - 24) Acetylphenylamidoimid d. Citrakonsäure. Sm. 94° (B. 19, 1387). IV, 708.
 - 25) Verbindung (aus Benzaldehyd u. p-Nitranilin). Sm. 85-86° (B. 25, 2054). III, 29.
- C 57,4 H 4,4 - $C_{13}H_{12}O_3N_4$ - O 17,6 - N 20,6 - M. G. 272.
 - 1) 4-Nitro-1-Benzyloxamidodiazobenzol. Sm. 181-1820 (B. 30, 2285). - IV, 1583.
 - 2) Verbindung (aus d. Methyläther d. 3,5-Dinitro-2,4-Diamido-1-Oxybenzol u. Brenztraubensäure) (B. 25, 284). — II, 736.

 - 3) α -[1-Naphtyl]sulfon- β -Ketopropan. Sm. 65° (*J. pr.* [2] **55**, 415). 4) α -[2-Naphtyl]sulfon- β -Ketopropan. Sm. 130° (*J. pr.* [2] **55**, 399). 5) Phenylester d. 1-Methylbenzol-4-Sulfonsäure. Sm. 94—95° (*B.* 19, 1833). — II, 668.
 - 6) Verbindung (aus βγ-Dibrompropyl-1-Naphtylsulfon). Sm. 127° (J. pr. [2] **55**, 215).
 - 7) Verbindung (aus $\beta \gamma$ -Dibrompropyl-2-Naphtylsulfon). [2] 53, 488; [2] 55, 216). C 60,0 H 4,6 O 24,6 N 10,8 M. G. 260. Sm. 167° (J. pr.
- $C_{13}H_{12}O_4N_2$
 - 1) 3,5-Dinitro-1-Methylbenzol + Benzol (B. 14, 901).
 - 2) 1-Nitro-2-Naphtyläther d. β -Oximido- α -Oxypropan. Sm. 158° (B. 31,
 - 3) Citro-1,2,4-Toluylendiamin. Zers. bei 187° (B. 21, 665). IV, 606. 4) 1-Phenylpyrazol-3-Carbonsäure-5-Aethyl-β-Carbonsäure. Sm. 165 bis 167° (B. 31, 625).
 - 5) 6-Oxy-2-[4-Aethoxylphenyl]-1,3-Diazin-4-Carbonsäure. Sm. 248° (PINNER, Imidoäther 281). - IV, 987.

- $\mathbf{C}_{13}\mathbf{H}_{13}\mathbf{O}_4\mathbf{N}_2$ 6) Phenylhydrazinderivat d. Oxallävulinsäure + $\mathbf{H}_3\mathbf{O}_4$. Sm. $165-167^{\circ}$ (B. 21, 2586). - IV, 722.
 - 7) Esoanhydrid d. Benzenylamidoximfumarsäureäthylester. Sm. 154°. Ag (B. 31, 2111).
 - 8) Dimethylester d. 1-Phenylpyrazol-3,4-Dicarbonsäure. Sm. 84,5—850 (G. 23 [1] 312, 318). - IV, 543, 544.
 - 9) Dimethylester d. 1-Phenylpyrazol-3,5-Dicarbonsäure. Sm. 127 bis 128° (A. 278, 287). — IV, 544. 10) Dimethylester d. I-Phenylpyrazol-4,5-Dicarbonsäure. Sm. 75—76°
 - (A. **295**, 318). IV, 544.
 - 11) Aethylester d. 2,4-Diketo-l-Phenyl-1,2,3,4-Tetrahydro-1,3-Diazin-6-Carbonsäure (Ae. d. Phenyluracilcarbonsäure). Sm. 185°. Na₂ (J. pr. [2] **56**, 489, 496).
 - 12) Aethylester d. 5-Nitro-2-Methylchinolin-3-Carbonsäure. Sm. 126°. $(2 \text{HCl}, \text{PtCl}_4 + 2 \text{H}_2 \text{O}) (J. pr. [2] 56, 385).$
 - 13) Aethylester d. 8-Nitro-2-Methylchinolin-3-Carbonsäure. Sm. 137°.
 - (2HCl, PtCl₄ + 2H₂O) (J. pr. [2] **56**, 378). 14) $\alpha\beta$ -[4-Methyl-1,3-Phenylenamid] d. Propen- $\alpha\beta\gamma$ -Tricarbonsäure? (Akonitotoluylendiaminsäure). Sm. noch nicht bei 295° (B. 21, 668). -IV, 605.
 - 15) Phenylhydrazid d. 3,4,5-Trioxybenzol-1-Carbonsäure. Sm. 187° u.
 - Zers. (B. 22, 2736). IV, 716. 16) isom. Phenylhydrazid d. 3,4,5-Trioxybenzol-1-Carbonsäure. Sm.
- 138—139° (Bl. [3] 15, 784). \overrightarrow{IV} , 716. C 54,2 H 4,2 O 22,2 N 19,4 M. G. 288. $C_{13}H_{12}O_4N_4$
 - 1) Di[2-Nitrophenylamido]methan. Sm. 195° (B. 25, 2764; 26, 955). II. 442.
 - 2) Di[3-Nitrophenylamido] methan. Sm. 213°. (2HCl, PtCl₄), Pikrat (B. **25**, 2762). — II, 442.
 - 3) Di[4-Nitrophenylamido]methan. Sm. 2320 (B. 25, 2763). II, 442.
 - 4) 2,2'-Dinitro-4,4'-Diamidodiphenylmethan. Sm. 224° (B. 25, 303). IV, 973.
 - 5) 3,3'-Dinitro-4,4'-Diamidodiphenylmethan. Sm. 202° (B. 25, 304).
 - IV, 973.

 6) 4-[2,4-Dinitrophenyl] amido-2-Amido-1-Methylbenzol. Sm. 184° (B. 15, 1237). — IV, 601.
 - 7) 3 oder 4-[2,4-Dinitrophenyl] amido-4 oder 3-Amido-1-Methylbenzol. Sm. 147° (B. **23**, 3429). — **IV**, 612.
 - 8) 3,5-Dinitro-2-[4-Amidophenyl]amido-1-Methylbenzol. Sm. 170° (B.
 - 25, 3007). IV, 585. 9) 3,5-Dinitro-4-[3-Amidophenyl]amido-1-Methylbenzol. Sm. 185° (Am.
- 19, 25, 206). IV, 572. $C_{13}H_{12}O_4Cl_2$ 1) Aethylester d. 3,5 [oder 4,6]-Dichlor-4 [oder 5]-Oxy-1,6 [oder 1,3]-Dimethylbenzfuran-2-Carbonsäure. Sm. 134-1350 (A. 283, 259). III, 732.
- $C_{13}H_{12}O_4Br_2$ 1) Aethylester d. 3,5 [oder 4,6]-Dibrom-4 [oder 5]-Oxy-1,6 [oder 1,3]-Dimethylbenzfuran-2-Carbonsäure. Sm. 123—124° (A. 283, 257).
- 1) 2-Oxydiphenylmethan-?-Sulfonsäure. $K + 2\frac{1}{2}H_2O$ (Soc. 49, 406). $C_{13}H_{12}O_4S$ II, 896. 2) 4-Oxydiphenylmethansulfonsäure. $NH_4 + H_2O$, K, $Ba + H_2O$ (Soc.
- **41**, 220). **II**, 898. 1) Di[Phenylsulfon]methan. Sm. 120-121° (118-119°) (A. 253, 161; $C_{13}H_{12}O_4S_2$
- B. **25**, 3428). II, 783. 1) 1-Naphtylestersulfonsäure d. Aethylxanthogensäure. K (J. pr. [2] $\mathbf{C}_{13}\mathbf{H}_{19}\mathbf{O}_{4}\mathbf{S}_{3}$ **41**, 218). — II, 875.
 - 2) 2-Naphtylester-?-Sulfonsäure d. Aethylxanthogensäure. K (J. pr. [2] 41, 222). — II, 892. C 56,5 — H 4,3 — O 29,0 — N 10,1 — M. G. 276.
- $C_{18}H_{12}O_5N_2$ 1) P-Nitro-4-Oxy-P-Trimethylchinolin-P-Carbonsäure (aus 4-Oxy-2,5,6,8-Tetramethylchinolin). Na + H_2O (B. 21, 529). — IV, 367. C 51,3 — H 3,9 — O 26,3 — N 18,4 — M. G. 304.
- $C_{13}H_{12}O_5N_4$ 1) 3-Aethylester d. 4-Phenylhydrazon-5-Keto-4,5-Dihydropyrazol 3,4°-Dicarbonsäure. Sm. 255° (B. 27, 785; J. pr. [2] 51, 55). — IV, 1489

 $C_{13}H_{12}O_6N_4$

C 48,8 — H 3,7 — O 30,0 — N 17,5 — M. G. 320. 1) 2-Amido-1-Methylbenzol + 1,3,5-Trinitrobenzol (A. 215, 358). 2) 4-Amido-1-Methylbenzol + 1,3,5-Trinitrobenzol (A. 215, 358). 3) 2,4,6-Trinitro-1-Methylbenzol + Amidobenzol. Sm. 83-840 (A. 215,

365). — II, *313*.

4) Methylbenzol + 2,4,6-Trinitro-l-Amidobenzol (B. 11,844). — II, 319. 1) Diphenylmethandisulfonsäure. Sm. 59°. K₂ + H₂O, Ba, Cu (B. 5, C13H12O6S2 796). — II, 229.

2) Diphenylmethan-4,4'-Disulfonsäure (Soc. 73, 409). $C_{13}H_{12}O_7S_2$ 1) 4-Oxydiphenylmethandisulfonsäure (J. 1873, 440). — II, 898. $C_{13}H_{12}O_8Br_2$ 1) α^3 -Methylester- β -Aethylester d. β -Brom- α -[5-Brom-2,4,6-Trioxy-1974]. phenyl]äthen- α^3 , β -Dicarbonsäure. Sm. 139—140° (Soc. 71, 1112). C 37.5 — H 2.9 — O 46.2 — N 13.4 — M. G. 416.

 $C_{13}H_{12}O_{12}N_4$

1) Nitrit d. α-Oxy-2,4,6-Trinitrophenylmethan-αα-Dicarbonsäure. Sm. 109° (B. 28, 3067). 1) s-Diphenylthioharnstoff (Thiocarbanilid). Sm. 150,50 (1530). Lit. be-

 $\mathbf{C}_{13}\mathbf{H}_{12}\mathbf{N}_{2}\mathbf{S}$ deutend. — II, 394. 2) uns-Diphenylthioharnstoff. Sm. 198°. Lit. bedeutend. — II, 396.

1) $\beta\beta$ -Diphenylhydrazidodithioameisensäure (Diphenylthiocarbazinsäure). $C_{13}H_{12}N_2S_2$

Sm. bei 109° u. Zers. (A. **258**, 249). — IV, 677. 1) s-Diphenylselenharnstoff. Sm. 186° u. Zers. (B. **19**, 2351). — II, 401. $\mathbf{C}_{13}\mathbf{H}_{12}\mathbf{N}_{2}\mathbf{S}\mathbf{e}$ 1) 4-Chlor-1-[4-Methylphenyl]amidodiazobenzol. Sm. 129-130°. Ag $\mathbf{C}_{13}\mathbf{H}_{12}\mathbf{N}_{3}\mathbf{C}\mathbf{l}$ (B. 20, 909; Soc. 57, 791). — IV, 1571.

2) 4-Methyl-1-[3-Chlorphenyl]amidodiazobenzol. Sm. 1030 (B. 25, 1365). - IV, 1570.

3) 4-Methyl-1-[4-Chlorphenyl]amidodiazobenzol. Sm. 133° (B. 25, 1363). - IV, 1570.

 $C_{13}H_{12}N_3Br$ 1) 4-Methyl-1-[4-Bromphenyl]amidodiazobenzol. Sm. 126° (B. 21, 2568). **— IV**, 1571.

1) α-Phenylimido-β-Phenylamidothioharnstoff (Diphenylthiocarbazon). $\mathbf{C}_{13}\mathbf{H}_{12}\mathbf{N}_{4}\mathbf{S}$ $Zn + H_2O$ (A. 190, 118; 212, 316). — IV, 685.

1) Phenyl-2-Methylphenyljodoniumchlorid. Sm. 213—214°. 2 + PtCl. $\mathbf{C}_{13}\mathbf{H}_{13}\mathbf{ClJ}$ (B. **31**, 917). 2) Phenyl-4-Methylphenyljodoniumchlorid. Sm. 2080. 2 + PtCl₄ (B.

31, 919). C 78,4 — H 6.5 - 0 8.0 - N 7.0 - M. G. 199.

 $\mathbf{C}_{13}\mathbf{H}_{13}\mathbf{ON}$

1) 2-Oxy-1-Phenylamidomethylbenzol (o-Oxybenzylanilin). Sm. 108°. HCl, (2HCl, PtCl₄) (A. 241, 344; B. 27, 1803). — II, 742.

2) 4-Oxy-1-Phenylamidomethylbenzol. (2HCl, PtCl₄) (A. 241, 355). — II, 754.

3) 3-Benzylamido-1-Oxybenzol. Fl. (C. 1898 [2] 1151)

4) 3-[2-Methylphenyl]amido-1-Oxybenzol. Sd. 370-3750 (J. pr. [2] 34, 70). — II, 714.

5) 3-[4-Methylphenyl]amido-1-Oxybenzol. Sm. 91°; Sd. 350°. HCl (J. pr. [2] 33, 209). — II, 715.

6) 4-[2-Methylphenyl]amido-l-Oxybenzol. Sm. 90°; Sd. 366—368°. HCl (J. pr. [2] 34, 57). - II, 718.

7) 4-[4-Methylphenyl]amido-l-Oxybenzol. Sm. 122°; Sd. 350-360°. HCl pr. [2] 33, 224). — II, 718.

8) 5-Phenylamido-3-Oxy-1-Methylbenzol. Sm. 79°; Sd. 345°. HCl (J. pr. [2] **33**, 539). — II, 746.

9) α -Oxy-2-Amidodiphenylmethan. Sm. 120° (B. 29, 1304).

10) α -Oxy-4-Amidodiphenylmethan. Sm. 121°. HCl (B. 30, 1136). 11) α -Amido-2-Oxydiphenylmethan. Sm. 102—103°. HCl, (2 HCl, E HCl, (2HCl, PtCl₄), HJ, HNO_3 , H_2SO_4 , Oxalat, Tartrat, Pikrat, $Na + 2H_2O$ (M. 15, 654; 16, 267).

12) 2-Amido-4-Oxydiphenylmethan. HCl (B. 15, 1581; Soc. 41, 221). — II, 897.

13) Phenyläther d. 2-Amido-1-Oxymethylbenzol. Sm. $81-82^{\circ}$ (A. 305, 114).

14) Benzyläther d. 4-Amido-I-Oxybenzol. Sm. 56° (A. 287, 182).
15) 2-Formylamido-I,4-Dimethylnaphtalin. Sm. 175° (G. 26 [1] 15).

16) Diphenylmethylhydroxylamin (Benzhydrylhydroxylamin). Sm. 78°. HCl, Oxalat (A. 278, 364). — II, 635.

- $C_{13}H_{13}ON$ 17) 1-[α-Oximidopropyl]naphtalin. Sm. 57—58° (Bl. [3] 15, 63). — III, 175.
 - 18) 2-[α-Oximidopropyl]naphtalin. Sm. 133° (Bl. [3] 15, 64). III, 175. 19) 2-Naphtimidoäthyläther. Fl. HCl (PINNER, Imidoäther 72). — II, 1454.
 - 20) 2,6-Dimethyl-4-[3-Oxyphenyl]pyridin. Sm. 191°. $HCl + 2H_2O$, $(2 \text{HCl}, \text{PtCl}_4)$ (A. 243, 474). — IV, 378.
 - 21) 2-Keto-4,5-Dimethyl-6-Phenyl-1,2-Dihydropyridin. Sm. 166° (G. 29 [1] 11).
 - 22) 4-Keto-2, 6-Dimethyl-1-Phenyl-1,4-Dihydropyridin + H₂O. Sm. 197°; Sd. oberh. 360°. (2HCl, PtCl₄), Pikrat (B. 20, 161; Soc. 51, 499). -
 - 23) Methyl-β-Naphtomorpholin. Sm. 95,5°. HCl, (2 HCl, PtCl₄) (B. 31, 759).
 - 24) 10-Keto-8-Methyl-3,4-Dihydrojulol (α₁-Keto-γ₁-Methyljulolin). Sm. 129,8°. HCl $+ \frac{11}{2}$ H₂O, (2HCl, PtCl₄), H₂CrO₄ (B. **24**, 846; **25**, 121). · IV, 192
 - 25) Aldehyd d. ?-Trimethylchinolin-?-Carbonsäure + 3H₂O. Sm. 73—74° (101,5° wasserfrei) (B. 18, 3145). — IV, 373.
 - 26) Aldehyd (aus 3,6-Dimethyl-2-Aethylchinolin). Sm. 56-57°: Sd. oberh. 300° (B. 18, 3397). — IV, 373.
 - 27) Amid d. 1-Aethylnaphtalin-?-Carbonsäure. Sm. 1660 (A. 244, 57). - II, 1460.
 - 28) Methyl-1-Naphtylamid d. Essigsäure. Sm. 95° (90-91°) (B. 11, 643; 20, 2272). II, 607.
 - 29) Verbindung (aus Methylcarbophenyllutidyliumdehydrid). Sm. 112°. HCl
- + 2 H₂O, (2 HCl, PtCl₄ + 3 H₂O) (B. 17, 2916). IV, 383. C 68,7 H 5,7 O 7,0 N 18,5 M. G. 227. 1) s-2-Amidodiphenylharnstoff. Zers. bei 183° (A. 228, 220). IV, 559. $C_{13}H_{13}ON_{3}$
 - 2) s-3-Amidodiphenylharnstoff. Sm. 187° (A. 228, 222; J. pr. [2] 41, 322). — IV, 575.
 - 3) s-4-Amidodiphenylharnstoff (A. 228, 223). -**- IV**, 590.
 - 4) β-Phenylamido-α-Phenylharnstoff. Sm. 170° (173°) (B. 17, 2884; 29, 1690; A. 263, 280; Soc. 53, 552). — IV, 674.
 - 5) α-Oximido-3,3'-Diamidodiphenylmethan. Sm. 177-178° (B. 20, 511). - III, 191.
 - 6) Acetylbenzoylacetonguanidin. Sm. 146° (J. pr. [2] 48, 515). III, 270.
 - 7) 1-Benzyloxyamidodiazobenzol. Sm. 105°. Cu (B. 29, 104; 30, 2286). **- IV**, *1583.*
 - 8) 5-Amido-4'-Oxy-2-Methylazobenzol. Sm. 172° (B. 15, 2827). —
 - 9) Benzyläther d. 3-Amidooximidomethylpyridin (B. d. Nikotenylamidoxim). Sm. 80° (B. 24, 3446). — IV, 145.
 - 10) 3-Amidophenylamid d. 3-Amidobenzol-1-Carbonsäure. Sm. 129° (B. 7, 1268). - IV, 578.
 - 11) α-Phenylhydrazid d. 2-Amidobenzol-1-Carbonsäure. Sm. 134°. (2HCl, PtCl₄) (A. **301**, 91).
 - 12) β-Phenylhydrazid d. 2-Amidobenzol-1-Carbonsäure. Sm. 170° (J. pr. [2] **33**, 20; B. **32**, 787). — **IV**, 669.
 - 13) Phenylhydrazid d. 3-Amidobenzol-I-Carbonsäure. Sm. 151° (G. 16, 200). — IV, 669.
- 1) 1-Keto-5-Methyl-3-[4-Chlorphenyl]-1,2,3,4-Tetrahydrobenzol. Sm. $C_{13}H_{13}OC1$ 59—60° (A. 303, 255).
- $\mathbf{C}_{13}\mathbf{H}_{13}\mathbf{OJ}$ 1) Phenyl-2-Methylphenyljodoniumoxydhydrat. Chlorid, Jodid, Nitrat, Sulfat (B. 31, 917).
 - 2) Phenyl-4-Methylphenyljodoniumoxydhydrat. Chlorid, Jodid, Nitrat, Bichromat (B. 31, 919). 1) Methyldiphenylphosphinoxyd. Sm. 110-111°; Sd. oberh. 300° (A.
- **229**, 316; B. **18**, 2117). **IV**, 1658. 2) Phenylbenzylphosphinoxyd oder $C_{25}H_{22}O_2P_2$. Sm. $154-155^{\circ}$ (B. 15,

C13H13OP

- 1963). IV, 1666. C 72,6 H 6,0 O 14,9 N 6,5 M. G. 215. $C_{13}H_{13}O_{2}N$ 1) Methyläther d. 1-Acetylamido-2-Oxynaphtalin. Sm. 175° (C. 1897
 - 2) Methyläther d. 6-Acetylamido-2-Oxynaphtalin. Sm. 1830 (C. 1897) [1] 239).

 $C_{19}H_{19}O_{9}N$

3) Methyläther d. 8-Acetylamido-2-Oxynaphtalin. Sm. 145° (C. 1897

4) Aethyläther d. 4-Oxy-1-Furalamidomethylbenzol. Sm. 72-730 (B. 30, 2015).

5) α-[1-Naphtyl]amidopropionsäure. Sm. 161° (B. 25, 2309). — II, 613.

6) α-[2-Naphtyl]amidopropionsäure. Sm. 170-171° (B. 25, 2311). -

7) 5-Dimethylamidonaphtalin-1-Carbonsäure. Sm. 163-165°. (2HCl, PtCl₄) (B. **21**, 3126). — **II**, 1450.

8) 2,5-Dimethyl-1-Phenylpyrrol-13-Carbonsäure. Sm. 134-1350 (B. 19. 559). — IV, 72.

9) 2-Methyl-1-Allylindol-3-Carbonsäure. Sm. 167-168° (B. 26, 2178). - IV, 239.

10) 2-Propylchinolin-4-Carbonsäure. Sm. 152,5°. (2HCl, PtCl₄), Ag + H₂O (C. 1897 [1] 242). — IV, 358.

11) 2-Isopropylchinolin-4-Carbonsäure + $^{1}/_{2}$ H_{2} O (α -Isopropylchinolinsäure). Sm. 146° (wasserfrei). HCl, (2 HCl, PtCl₄ + H_{2} O), (HCl, AuCl₈), Ag (A. 242, 274). — IV, 358.

12) 3-Isopropylchinolin-2-Carbonsäure. Sm. 188-189°. (Ag + HNO₃),

(2 HCl, PtCl₄) (B. 18, 3379). — IV, 358. 13) 3-Methyl-2-Aethylchinolin-8-Carbonsäure. Sm. 221° (215—216°). $Ba + \frac{1}{2}H_2O$ (B. 23, 2268; 28, 2813). — IV, 358.

14) 6-Methyl-2-Aethylchinolin-3-Carbonsäure + H₂O. Sm. 142-143° (wasserfrei). Na + $3 H_2 O$, Ba + $\frac{1}{2} H_2 O$, Cu (B. 18, 3393). — IV, 359.

15) 6-Methyl-2-Aethylchinolin-4-Carbonsäure. Sm. 244-248° u. Zers. Ba, Ag (B. 23, 2266). — IV, 358.

16) P-Trimethylchinolin-P-Carbonsäure. Sm. 224° (B. 18, 3145). — IV, 359.

17) Methylester d. 1-Methylen-2-Methylchinolinammonium-3-Carbonsäure. Sm. 1820 u. Zers. (A. 282, 120). — IV, 352.

18) Methylester d. δ-Cyan-α-Phenyl-αγ-Butadiën-δ-Carbonsäure. Sm. 145° (A. ch. [6] 29, 496). — II, 1442.

19) Aethylester d. α-Cyan-β-[2-Methylphenyl]akrylsäure. Sm. 60° (A. ch. [6] **29**, 486). — **II**, *1427*

20) Aethylester d. α -Cyan- β -[3-Methylphenyl]akrylsäure. Sm. 85° (A. ch. [6] **29**, 476). — II, 1427.

21) Aethylester d. α-Cyan-β-[4-Methylphenyl]akrylsäure. Sm. 94° (A. ch. [6] **29**, 481). — **II**, 1428.

22) Aethylester d. 1-Naphtylamidoameisensäure. Sm. 79° (B. 3, 657). **- II**, 608.

23) Aethylester d. 2-Naphtylamidoameisensäure. Sm. 73° (B. 14, 60). - II, 617.

24) Aethylester d. 3-Amidonaphtalin-2-Carbonsäure. Sm. 115-115,50 (B. 28, 3098).

25) Aethylester d. Chinolin-2-Methylcarbonsäure. Sm. 67° (A. 287, 41). - IV, 355.

26) Aethylester d. 2-Methylchinolin-3-Carbonsäure. Sm. 71°. (2HCl, $PtCl_4 + 2H_2O$) (B. **16**, 1836; **19**, 37). — **IV**, 352.

27) Aethylester d. 2-Methylchinolin-4-Carbonsäure. Sm. 77°. (2HCl, $PtCl_4 + 2H_2O$ (J. pr. [2] **56**, 289).

28) Amid d. 2-Oxynaphtalinäthyläther-1-Carbonsäure. Sm. 161° (A.

- 244, 75). II, 1690. 29) Amid d. 4-Oxynaphtalinäthyläther-1-Carbonsäure. Sm. 244° (A. **244**, 74). — II, 1689.
- 30) 1-Naphtylamid d. α-Oxypropionsäure. Sm. 108° (A. 279, 96) 31) 2-Naphtylamid d. α-Oxypropionsäure. Sm. 137,5° (A. 279, 98).
- 32) Phenylimid d. cis-R-Pentamethylen-1,2-Dicarbonsäure. Sm. 89° (Soc. 65, 589).

C 64,2 - H 5,3 - O 13,2 - N 17,3 - M. G. 243. $C_{13}H_{13}O_{2}N_{3}$

- 1) 4'-Nitro-2'-Amido-2-Methyldiphenylamin. Sm. 118-120° (C. 1898 [2] 343).
- 2) 4'-Nitro-2'-Amido-4-Methyldiphenylamin. Sm. 155-156° (C. 1898) [2] 343).

- C₁₃H₁₃O₂N₃ 3) 2-Amidophenyl-2-Nitrobenzylamin. Sm. 115°. HCl (J. pr. [2] 54. 266). - IV, 556.
 - 4) α-Phenyl-α-[2-Nitrobenzyl]hydrazin. Sm. 72°. HCl (B. 25, 2899). **- IV**, 811.
 - 5) 1-Naphtyläther d. β-Semicarbazon-α-Oxyäthan. Sm. 149-150° (B. 30, 1703).
 - 6) 2-Naphtyläther d. β -Semicarbazon- α -Oxyäthan. Sm. 1820 (B. 30,
 - 7) Nitril d. 3,5-Dioximido-1-Phenylhexahydrobenzol-2-Carbonsäure. Sm. 182º u. Zers. (A. 294, 289).
 - 8) Verbindung (aus Kreatin). Sm. 213° (A. 284, 51). III, 11. C 67,5 H 5,6 O 20,8 N 6,1 M. G. 231.

$C_{13}H_{13}O_{8}N$

- 1) α -Benzoylamido- γ -Keto- β -Aethanoyl- α -Buten. Sm. 101° (A. 297, 67).
- 2) 1-Keto-5-Methyl-3-[3-Nitrophenyl]-1, 2, 3, 4-Tetrahydrobenzol. Sm. 98° (A. 303, 234).
- 3) 1-Keto-5-Methyl-3-[4-Nitrophenyl]-1,2,3,4-Tetrahydrobenzol. Sm. 134º (A. 303, 238).
- 4) α -[2-Acetylamidophenyl]- $\alpha \gamma$ -Butadiën- δ -Carbonsäure. Sm. 253° u. Zers. (B. 18, 2333). — II, 1442.
- 5) β-Oximido-αβ-Diphenylpropionsäure. Sm. 138—139° u. Zers. Ag (J. pr. [2] 55, 316).
- 6) γ-Cyan-α-Keto-α-Phenylpentan-γ-Carbonsäure. Sm. 193°. Ag (Bl. [3]
- **15**, 773). 7) Methylester d. γ-Cyan-α-Keto-α-Phenylbutan-γ-Carbonsäure. Sm. 113° (C. 1895 [2] 918).
- 8) Methylester d. β -Oxy- β -[2-Chinolyl]propionsäure. Sm. 62° (A. 246,
- 178). IV, 366. 9) Aethylester d. α -Cyan- β -[4-Methoxylphenyl]akrylsäure. Sm. 85° (J. pr. [2] 50, 10). — II, 1637
- 10) Aethylester d. γ-Cyan-α-Keto-α-Phenylpropan-γ-Carbonsäure. Sm. 54° (B. 27 [2] 666).
 11) Aethylester d. γ-Cyan-α-Phenyl-β-Ketopropan-γ-Carbonsäure
- (Phenacetylcyanessigsäureäthylester). Ba, Ag (B. 21 [2] 644). II, 1658.
- 12) Aethylester d. α -Cyan- α -[2-Methylbenzoyl] essigsäure. Sm. 35,2°. Ca (B. 21 [2] 644). — II, 1660.
- 13) Aethylester d. 3-Amido-I-Oxynaphtalin-2-Carbonsäure? Sm. 168
- bis 172° (A. 298, 384).

 14) Aethylester d. 6-Oxychinolinmethyläther-4-Carbonsäure (Ae. d. Chininsäure). Sm. 69°. HCl, (2HCl, PtCl₄ + 2H₂O) (M. 17, 327). IV, 362.
- 15) 2-Acetat d. 3-Aethyl-1,2-Benzpyron-2-Oxim (A. d. α-Aethylcumaroxim). Sm. 61° (B. 24, 3463). — II, 1663.
- 16) Acetat d. α -Oxy- α -[2-Furanyl]- β -[2-Pyridyl]äthan (Acetylpikolylfuryl-
- alkein). Fl. (HCl, HgCl₂), (2HCl, PtCl₄) (B. **23**, 2695). **IV**, 333. 17) **Aethylcarbonat d. 4-Oxy-2-Methylchinolin.** Sm. 48°. (2HCl, PtCl₄ + 2H₂O) (B. **21**, 1969). **IV**, 311.
- 18) 1-Naphtylamid d. $\alpha\beta$ -Dioxypropionsäure. Sm. 137° (B. 27 [2] 514). 19) 2-Naphtylamid d. $\alpha\beta$ -Dioxypropionsäure. Sm. 161—162° (C. 1896) 17 997).
- 20) Ketolaktonphenylimid d. β -Acetylpropan- $\alpha \gamma$ -Dicarbonsäure. Sm. 154° (A. **295**, 116). C 60,2 — H 5,0 — O 18,5 — N 16,2 — M. G. 259.
- $C_{13}H_{13}O_{9}N_{3}$
 - 1) 6-Oxy-4-Methyl-5-Aethyl-2-[3-Nitrophenyl]-1,3-Diazin. Sm. 2630 (B. **28**, 485). — **IV**, 977.
 - 2) 5,7-Di[Acetylamido]-8-Oxychinolin. Sm. 240° u. Zers. (J. pr. [2] 53, 543). — IV, 1160.
 - 3) Nitroharmalin. HCl, (2HCl, PtCl₄), H₂SO₄, + Ag₂O (A. 68, 355; 72, 306). — III, 885.
 - 4) 5-[2,4-Diamidophenyl]amido-2-Oxybenzol-1-Carbonsäure. H₂SO₄
 - (A. 273, 124). II, 1513.5) Aethylester d. Phenylacetylhydrazoncyanessigsäure. α-Modif. Sm. 158°; β -Modif. Sm. 166° (J. pr. [2] 57, 207). — IV, 1454.
 - 6) Aethylcarbonat d. 6-Amidooximidomethylchinolin. Sm. 97° (B. 22, 2764). — IV, 350.

 $C_{18}H_{18}O_5N$

 $\mathbf{C}_{13}\mathbf{H}_{13}\mathbf{O}_{3}\mathbf{Cl}_{3}$ 1) etaetaeta-Trichloräthylidenester d. lpha-Oxy-lpha-[2,4,6-Trimethylphenyl]essig-

säure. Sm. 125° (B. **24**, 3545). — II, 1592. 1) Phenyl-α-Oxybenzylphosphinsäure. Sm. 112—114°. Ba + H₂O (A. $C_{13}H_{13}O_{3}P$ 293, 222). — IV, 1663. 2) Monophenylester d. 4-Methylphenylphosphinsäure. Ag (A. 293,

263). — IV, 1668.

3) Diphenylester d. Methylphosphinsäure. Sm. 36-37°; Sd. 190-195°, (B. 31, 1050).

0.63,2. H 0.5,2. O 0.25,9. N 0.5,7. M. G. 0.247. $C_{13}H_{13}O_4N$

Pyridinoacetylbrenzkatechin. Sm. 188°. Chlorid, 2 Chlorid + PtCl₄, Sulfat (J. r. 25, 285). — IV, 112.
 Anhydrid d. β-Phenylacetylamidopropan-αβ-Dicarbonsäure (Anhydrid d. β-Phenylacetylamidopropan-αβ-Dicarbonsäure)

hydrid d. Phenylacetylamidobrenzweinsäure). Sm. 136° (A. 261, 146). — II, 439.

3) Methylester d. $\alpha\beta$ -Dioxy- β -[2-Chinolyl]propionsäure. Sm. 140—141° (A. 287, 37). - IV, 369.

4) Monomethylester d. δ -Phenylamido- $\alpha\gamma$ -Butadiën- $\alpha\gamma$ -Dicarbonsäure. Sm. 140° u. Zers. (B. 17, 2393; A. 273, 180). — II, 441.

5) Aethylester d. α -[4-Nitrophenyl]- $\alpha\gamma$ -Butadiën- δ -Carbonsäure. Sm. 118° (A. 253, 358). — II, 1442.

Lakton d. γ-Acetoximido - α - Oxy - α - Phenylbutan-2-Carbonsäure P Sm. 99-101° (M. 19, 436).

7) Aethylester d. 5-Keto-3-Benzyl-4,5-Dihydroisoxazol-4-Carbon-

säure. Sm. 143°. Ag, + Anilin (A. 298, 379). 8) Aethylester d. 3-Acetoxylindol-2-Carbonsäure. Sm. 138° (B. **14**, 1742). — II, *1440*.

9) 2-Methylphenylimid d. Propan- $\alpha\beta\gamma$ -Tricarbonsäure. Sm. 152° (B.

24, 600). — II, 468. 10) Benzylimid d. Acetyläpfelsäure. Sm. 90° (G. 23 [1] 174). — II, 530.

11) isom. Benzylimid d. Acetäpfelsäure. Sm. 102° (G. 23 [1] 175). — — II, 530. 12) 4-Propionoxylphenylimid d. Bernsteinsäure. Sm. 178° (C. 1897)

[1] 49). 13) Verbindung (aus d. Methylester d. Phenylamidomethylenglutakonsäure).

Sm. 154—155° (A. 273, 181). $C_{13}H_{13}O_4N_3$

C 56,7 - H 4,7 - O 23,3 - N 15,3 - M. G. 275.

1) Triacetylderivat d. 4-Amido-1, 3-Phenylenharnstoff. Sm. 248° (J. pr. [2] **38**, 134). — IV, *1123*. C 51,5 — H 4,3 — O 21,1 — N 23,1 — M. G. 303.

 $C_{13}H_{13}O_4N_5$ 1) Methyldi[4-Nitro-2-Amidophenyl]amin (B. 31, 1462).

 $C_{13}H_{13}O_4Cl_3$ 1) $\alpha,2$ -Lakton d. 4,6-Diäthoxyl-1- $[\beta\beta\beta$ -Trichlor- α -Oxyäthyl]benzol-2-Carbonsäure (3,5-Diathoxyltrichlormethylphtalid). Sm. 113º (A. 296, 352).

C₁₈H₁₈O₄Br 1) Diäthyläther d. Bromäskuletin. Sm. 169° (B. 16, 2118). — III, 568. 2) Lakton d. ?-Brom-α-[2,3,4-Trioxyphenyl-3,4-Diäthyläther]äthen-B-Carbonsäure (Bromdaphnetindiäthyläther). Sm. 1150 (B. 17, 1084).

II, 1950. 3) Aethylester d. 5 [oder 4]-Brom-4 [oder 5]-Oxy-1,6 [oder 1,3]-Dimethylbenzfuran-2-Carbonsäure. Sm. 208° (A. 283, 257). — III, 732.

C 59,3 - H 4,9 - O 30,4 - N 5,3 - M. G. 263. 1) Hydrofuryldicarbolutidinsäure (B. 16, 1607). -

2) Aethylester d. γ -Keto- α -[3-Nitrophenyl]- α -Buten- β -Carbonsäure. Sm. 112° (G. 23 [1] 371; B. 31, 731). — II, 1681.

3) Aethylester d. 1-[4-Nitrobenzoyl]-R-Trimethylen-l-Carbonsäure. Sm. 84° (B. 18, 958). — II, 1682.

4) Benzylimid d. Citronensäure. Sm. 1950 (G. 24 [1] 226). — II, 531. 5) 4-Methylphenylimid d. Citronensäure. Sm. 172,5° (B. 19, 2353). —

 $C_{13}H_{13}O_5Cl$ 1) Aethylester d. 3 [oder 5]-Chlor-4,5 [oder 4,6]-Dioxy-1,6 [oder 1,3]-Dimethylbenzfuran-2-Carbonsäure. Sm. 170—171° (A. 283, 263). — III, 732.

 $C_{13}H_{13}O_5Br$ 1) $\alpha,2$ -Lakton d. ?-Brom- α -Oxy- γ -Keto- α -[3,4-Dioxyphenyl]butan-3,4-Dimethyläther-2-Carbonsäure (Brommekonindimethylketon). Sm. 1240 (M. 14, 396). — II, 2008.

 $C_{13}H_{13}O_6N$

- C 55.9 H 4.7 O 34.4 N 5.0 M. G. 279.
- 1) αγ-Lakton d. α-Oxy-α-[4-Nitrophenyl]propan-γ-Carbonsäure-β-Carbonsäureäthylester. Fl. (R. 6, 13). - II, 1956.
- 2) Aethylester d. $\alpha \gamma$ -Diketo- α -[2-Nitrophenyl]butan- β -Carbonsäure (Ae. d. o-Nitrobenzoylacetessigsäure). Fl. K (A. 221, 323). — II, 1867.
- 3) Aethylester d. $\alpha\gamma$ -Diketo- α -[4-Nitrophenyl]butan- β -Carbonsäure. Sm. 54—55° (B. 22, 203). II, 1867.
- 4) 6-Propionylderivat d. 1,6-Anhydro-6-Amido-3,4-Dioxybenzoldimethyläther-1,2-Dicarbonsäure (Propionylazoopiansäure). Sm. 1390 (B. 19, 2289). — II, 1998.

C 52.9 - H 4.4 - O 38.0 - N 4.7 - M. G. 295. $C_{13}H_{13}O_7N$

- 1) Amid d. 3,4,5-Triacetoxylbenzol-1-Carbonsäure. Sm. 163° (B. 18, 488; A. 263, 257). — II, 1922.
- 1) Phenylester d. Phenylpentahydroxylphosphorsäure-2-Carbonsäure, $C_{13}H_{13}O_7P$ Sm. 62°. Ag₄ (B. 31, 2174). C 40,7 — H 3,4 — O 37,6 — N 18,3 — M. G. 383.

 $C_{13}H_{13}O_{9}N_{5}$

1) Tetraoxim d. Tetracetylleukonsäure. Zers. bei 100° (B. 22, 918). — I, 868. C 42,0 — H 3,5 — O 43,1 — N 11,3 — M. G. 371.

 $\mathbf{C}_{13}\mathbf{H}_{13}\mathbf{O}_{10}\mathbf{N}_{3}$

- 1) Diäthylester d. 2,4,6-Trinitrophenylmethan $\alpha\alpha$ Dicarbonsäure. Sm. 58° (u. 64°). Na (B. 28, 3066; Am. 18, 133).
- C 40.3 H 3.3 O 45.5 N 10.9 M. G. 387. $\mathbf{C}_{13}\mathbf{H}_{13}\mathbf{O}_{11}\mathbf{N}_{3}$
 - 1) Diäthylester d. α-Oxy-2,4,6-Trinitrophenylmethan-αα-Dicarbonsäure. Sm. 117º (B. 28, 3067).
- C₁₃H₁₃NCl₂ 1) 10,10-Diehlor-1,2,3,4,9,10-Hexahydroakridin? Sm. 158-159° (G. 24 [2] 116). — IV, 339.
- C₁₃H₁₃NBr₂ 1) ?-Dibrom-3,6-Dimethyl-2-Aethylchinolin. Sm. 143—144° (B. 18, 3388). — IV, 340.
- C₁₃H₁₈NBr₄ 1) Tetrabromid d. 4-Phenylamido-l-Methylbenzol. Sm. 135° (A. 239, 58). — II, 485.
- C₁₃H₁₃N₂Cl 1) 2-Chlorphenyl-2-Amidobenzylamin. Sm. 58°. HCl (*J. pr.* [2] **52**, 375). - IV, 626.
 - 2) 3-Chlorphenyl-2-Amidobenzylamin. Fl. HCl (J. pr. [2] 52, 378). - IV, 626.
 - 3) 4-Chlorphenyl-2-Amidobenzylamin. Sm. 89-90°. HCl, 2HCl (J. pr. [2] **52**, 381). — IV, 626.
 - 4) Verbindung (aus d. Verb. $C_{13}H_{14}ON_2$). Sm. 97°. HCl (*J. pr.* [2] 47, 108). — II, *1195*.
- C₁₃H₁₃N₂Br 1) 4-Bromphenyl-2-Amidobenzylamin. Sm. 104°. 2HCl, Oxalat (J. pr. [2] **48**, 550; [2] **52**, 389). — **IV**, 627.
- 1) 4-Methylphenylhydrazonphenylphosphin. Sm. 1620 (A. 270, 131). $C_{13}H_{13}N_{2}P$ **- IV**, 1647.
- C,,H,,N,S 1) s-2-Amidodiphenylthioharnstoff. Sm. 141° u. Zers. (A. 228, 212). **– IV**, 560.
 - 2) s-3-Amidodiphenylthioharnstoff. Sm. 148° (A. 228, 214). IV, 576.
 - 3) s-4-Amidodiphenylthioharnstoff. Zers. bei 163-190° (A. 228, 218). **– IV**, 591.
 - 4) Diphenylamidothioharnstoff. Sm. 202° (G. 22 [2] 384). IV, 679.
 - 5) anti-β-Phenylamido-α-Phenylthioharnstoff. Sm. 139° (B. 25, 3106).
 - IV, 679. 6) syn-β-Phenylamido-α-Phenylthioharnstoff. Sm. 176—177° (A. 190,
 - 122; B. 25, 3107; 29, 1686; 30, 846; J. pr. [2] 53, 469). IV, 679.

 7) N-Methyldiamidothiodiphenylamin. 2HCl (A. 230, 130). II, 807.

 C 72,9 H 6,5 O 7,5 N 13,1 M. G. 214.
- C18H14ON. 1) α -Oxy-P-Diamidodiphenylmethan. Sm. 98° (B. 22, 988). — II, 1078.
 - 2) isom. α-Oxy-?-Diamidodiphenylmethan. Sm. 128-129°. 2HCl+
 - $2H_2O$, $H_4SO_4 + 2H_2O$ (A. 218, 351). II, 1078. 3) 2-Amido-1-[2-Oxybenzyl]amidobenzol. Sm. 157° (B. 28, 934). IV, 556.
 - 4) 4-Amido-1-[2-Oxybenzyl]amidobenzol. Sm. 119° (B. 28, 936). IV, 586.
 - 5) 4,4'-Diamido-3'-Oxy-3-Methylbiphenyl. Sm. 177°. H₂SO₄ (B. 20, 3175). — II, 898.

6) Methyläther d. 4-[4-Amidophenyl]amido-1-Oxybenzol. Sm. 1020 C13 H14 ON2 (B. 29, 2684). — IV, 584.

7) Methyläther d. 4-Amido-3-Phenylamido-1-Oxybenzol. Sm. 73º (B. 29, 2681).

- 8) Methyläther d. 4,4'-Diamido-2-Oxybiphenyl. Sm. 1040 (B. 29, 2687).
- 9) 2-Amidophenyläther d. 2-Amido-1-Oxymethylbenzol. Sm. 1180 (A. 305, 115).
- 10) Aethyläther d. 2-Naphtenylamidoxim. Sm. 74-75° (B. 22, 2455). **- II**, 1455.
- 11) 2-Cyanacetylamido-1,2,3,4-Tetrahydronaphtalin. Sm. 175-1760 (C. 1895 [2] 973).
- 12) 5-Keto-4-Isopropyliden-3-Methyl-1-Phenyl-4,5-Dihydropyrazol. Sm. 117° (A. 238, 180; B. 30, 484). — IV, 825.
- 13) 6-Oxy-4,5-Dimethyl-2-Benzyl-1,3-Diazin. Sm. 1810 (B. 22, 1622). **— IV**, 977.
- 14) 6-Oxy-2-Propyl-4-Phenyl-1, 3-Diazin. Sm. 1830 (Pinner, Imidoather 229). — IV, 976.
- 15) 6-Oxy-2-Isopropyl-4-Phenyl-1, 3-Diazin. Sm. 2270 (Pinner, Imidoäther 231). - IV, 976.
- 16) 6-Oxy-4-Methyl-5-Aethyl-2-Phenyl-1, 3-Diazin. Sm. 1670 (B. 22,
- 1625). IV, 977. 17) Aethyläther d. 6-Oxy-4-Methyl-2-Phenyl-1,3-Diazin. Sm. 30—31°; Sd. 300—301°. $HCl + 2H_2O$, (2HCl, $PtCl_4$), $HBr + 2H_2O$, $H^{-1} + \frac{1}{2}H_2O$ (PINNER, Imidoather 243). — IV, 957.
- 18) 5- oder 7-Acetylamido-2,4-Dimethylchinolin. Sm. 212°. H,Cr,O, (A. 274, 371). — IV, 938.
- 19) 6-Acetylamido-5, 8-Dimethylchinolina Sm. 212°. Pikrat (B. 23, 1024). **– IV**, 939.
- 20) 5-Acetylamido-6,8-Dimethylchinolin. Sm. 2010 (B. 23, 3683). IV. 939.
- 21) Harmalin. Sm. 238° u. Zers. $HCl + 2H_2O$, $(2HCl, PtCl_4)$, Il_2CrO_4 (A. 38, 363; 64, 360; B. 18, 400; 30, 2481; M. 16, 601). -
- 22) Nitril d. β -Imido- α -Benzoyl- α -Methylbuttersäure? Fl. (J. pr. [2] 47, 111). — II, 1195.
- 23) Phenylamid d. 2,4-Dimethylpyrrol-3-Carbonsäure. Sm. 80° (A. 236, 329). — IV, 85.
- 24) Verbindung (aus Dipropionitril). Sm. 199°. HCl, HNO₃ (J. pr. [2] 43, 406; [2] 47, 106). — II, 1195. C 64,5 — H 5,8 — O 6,6 — N 23,1 — M. G. 242.
- $C_{13}H_{14}ON_{4}$
 - 1) s-Di[2-Amidophenyl]harnstoff. Sm. 243—245°. (2 HCl, SnCl₂) (Bl. [3] **21**, 157).
 - 2) s-Di[3-Amidophenyl]harnstoff. Sm. 208-209°. 2HCl, (2HCl, SnCl,
 - + $2^{1/2}H_2O$) (Bl. [3] 21, 153). 3) s-Di[4-Amidophenyl]harnstoff. subl. bei 310°. 2HCl, (2HCl, SnCl₂) (B. 10, 1296; A. 293, 377; Bl. [3] 21, 150). IV, 591. 4) 6-Phenylureido-2,4-Dimethyl-1,3-Diazin (Carbanilidokyanmethin).
 - Sm. 225° (J. pr. [2] 31, 373). IV, 1128.
 - 5) Di[Phenylhydrazid] d. Kohlensäure (Diphenylcarbazid). $+ \operatorname{HgCl}_{2}(A. 263, 262; B. 22, 1935; Soc. 53, 551). - IV, 671.$
 - 6) Verbindung (aus 4-Nitroso-1-Amidobenzol u. uns-Methylphenylhydrazin). Sm. 151° (B. 22, 624). IV, 798.
- $C_{18}H_{14}OBr_4$ 1) $\beta\gamma\epsilon\zeta$ -Tetrabrom- δ -Keto- ζ -Phenyl- β -Methylhexan. Sm. 118° (B. 14, 2461 Anm.). — III, 173
- C 67.8 H 6.1 O 13.9 N 12.2 M. G. 230. $C_{13}H_{14}O_{2}N_{2}$ 1) Di[Oxyphenylamido]methan (Methylendiphenylhydroxylamin (C. 1898
 - [2] 1013). 2) **2-[4-M**ethylphenyl]hydrazon-1,3-Diketohexahydrobenzol. Sm. 179°
 - (A. 294, 272). IV, 1478.3) 2-Imido-3-Aethyl-4-Keto-5-[β -Phenyläthenyl]tetrahydrooxazol. Sm. 280° (B. **22**, 689). — II, 1656.
 - 4) 3,5-Diketo-4-Isopropyliden-1-[4-Methylphenyl]tetrahydropyrazol.
 - Sm. 174° (B. 30, 1021). IV, 868. 5) 1-Aethyl-4-[β -Phenyläthenyl]-2,5-Diketotetrahydroimidazol (Aethylstyrylhydantoin). Sm. 162° (B. 22, 688). — II, 1655.

- $C_{13}H_{14}O_{3}N_{2}$ 6) 6-Oxy-2-[\alpha-Oxyisopropyl]-4-Phenyl-1,3-Diazin. Sm. 198° (B. 22.
 - 2626). IV, 977. 7) 6-Oxy-4,5-Dimethyl-2-[α-Oxybenzyl]-1,3-Diazin. Sm. 155°. Ag, Acetat (B. 23, 2951). — \mathbf{IV} , 977
 - 8) Aethyläther d. 4-Oxy-3-Keto-6-Methyl-2-Phenyl-2, 3-Dihydro-1,2-Diazin. Sm. 146° (A. 253, 51). — IV, 821.
 - 9) 22-Aethyläther d. 6-Oxy-4-Methyl-2-[2-Oxyphenyl]-1,3-Diazin. Sm. 146° (B. 23, 2953). — IV, 958.
 - 10) 24-Aethyläther d. 6-Oxy-4-Methyl-2-[4-Oxyphenyl]-1,3-Diazin. Sm. 204° (B. 23, 2954). IV, 958.
 - 11) ?-Nitro-3, 6-Dimethyl-2-Aethylchinolin. Sm. 109°. (2HCl, PtCl, + $2 H_2 O) (B. 18, 3391). - IV, 340.$
 - 12) Aethyläther d. 5-Acetylamido-6-Oxychinolin. Sm. 163-163,50 (J. pr. [2] 48, 30). - IV, 911.
 - 13) Aethyläther d. 5-Acetylamido-8-Oxychinolin. Sm. 155°. (2HCl. PtCl. $+2^{1}/_{2}$ H₂O) (J. pr. [2] 45, 543). — IV, 912.
 - 14) Methylester d. 6-Methyl-2-Aethyl-1, 3-Benzdiazin-4-Carbonsäure.
 - Sm. 30° (B. 28, 733). IV, 950.

 15) Aethylester d. 5-Methyl-1-Phenylpyrazol-4-Carbonsäure. Sm. 55 bis 56° (A. 295, 312). IV, 539.
 - 16) Aethylester d. 5-Amido-2-Methylchinolin-3-Carbonsäure. Sm. 110°. 2 HCl, $PtCl_4 + 2 H_2O$) (J. pr. [2] **56**, 387). — IV, 947.
 - 17) Aethylester d. 8-Amido-2-Methylchinolin-3-Carbonsäure. Sm. 99°. $(2 \text{HCl}, \text{PtCl}_4 + 2 \text{H}_2 \text{O}) (J. pr. [2] 56, 380). - \text{IV}, 947.$
 - 18) Aethylester d. 2,6-Dimethyl-1, 3-Benzdiazin-4-Carbonsäure. Sm. 71°. HCl (B. 28, 727). — IV, 948.
 - 19) Acetat d. 3,5-Dimethyl-1-[4-Oxyphenyl]pyrazol. Sm. 69° (A. 278, 299). — IV, *524*.
 - 20) Ketoimidphenylimid d. β-Acetylpropan-αγ-Dicarbonsäure. Sm. 207,5° (A. **295**, 118).
- 1) α -[2-Naphtyl]sulfon- $\beta\gamma$ -Dimerkaptopropan (J. pr. [2] 56, 465). $C_{13}H_{14}O_{2}S_{3}$ C 63.4 - H 5.7 - O 19.5 - N 11.4 - M. G. 246. $C_{13}H_{14}O_3N_2$
 - 1) γ -Acetylphenylhydrazon- $\beta\delta$ -Diketopentan. Sm. 145—146° (B. 25, 3195). IV, 787.
 - 2) 1-Oximido-5-Methyl-3-[3-Nitrophenyl]-1,2,3,4-Tetrahydrobenzol. Sm. 176° (A. 303, 234).
 - 3) 1-Oximido-5-Methyl-3-[4-Nitrophenyl]-1,2,3,4-Tetrahydrobenzol. Sm. 179—180° u. Zers. (A. 303, 239).
 - 4) 3-Keto-4,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol-1-Methylcarbonsäure. Sm. 215° (J. pr. [2] 54, 212; [2] 55, 159). — IV, 522.
 - 5) 3,4-Dimethyl-1-Phenylpyrazol-5-Oxyessigsäure. Sm. 141° (J. pr. [2] **55**, 163). — **IV**, *522*.
 - 6) 5-Keto-3,4-Dimethyl-1-Phenyl-4,5-Dihydropyrazol-4-Methylcarbonsäure $+ H_2O$. Sm. 102° (103°) (J. pr. [2] 54, 210; [2] 55, 161). IV, 547.
 - 7) 5-Aethyl-3-[2,4-Dimethylphenyl]-1,2,4-Oxdiazol-5[β]-Carbonsäure. Sm. 112° (B. 22, 2446). — II, 1377
 - 8) 1,3-Phenylentrimethylsuccinamidsäure $+1^{1}/_{2}$ H₂O (B. 18, 2410). -IV, 577.
 - 9) Methylester d. 3-Methyl-1-Phenylpyrazol-5-Oxyessigsäure. Sm. 78°
 - (J. pr. [2] 55, 159). IV, 512. 10) Methylester d. 3-Keto-4, 5-Dimethyl-2-Phenyl-2, 3-Dihydropyrazol-1-Carbonsäure. Fl. (J. pr. [2] 54, 208). — IV, 522
 - 11) Aethylester d. 3-Keto-l-Methyl-2-Phenyl-2, 3-Dihydropyrazol-4-
 - Carbonsäure. Sm. 71—72° (Soc. 61, 798). IV, 537. 12) Aethylester d. 3-Keto-5-Methyl-2-Phenyl-2, 3-Dihydropyrazol-1-Carbonsäure. Sm. 28° (J. pr. [2] 54, 189). — IV, 512.
 - 13) Aethylester d. 5-Keto-1-Phenyl-4,5-Dihydrazol-3-Methylcarbon-
 - säure. Sm. 85° (A. 261, 171). IV, 540. 14) Aethylester d. 5 Keto 3 Methyl-1-Phenyl-4, 5-Dihydropyrazol-4-Carbonsäure. Sm. 119-121,5° (B. 29, 1995; Am. 14, 497). - IV, 540.
 - 15) Aethylester d. 5-Keto-4-Methyl-1-Phenyl-4,5-Dihydropyrazol-3-Carbonsäure. Sm. 148—149° (A. 246, 331). — IV, 714.

C₁₃H₁₄O₃N₂ 16) Aethylester d. 3-Phenyl-1,2,4-Oxdiazol-5-Propionsäure. Sd. 255° u. Zers. (B. 18, 2462). — II, 1204.

17) Aethylester d. 3-Keto-6-Phenyl-2, 3, 4, 5-Tetrahydro-1, 2-Diazin-4-

Carbonsäure. Sm. 156° (J. pr. [2] 50, 525). — IV, 949.

18) Aethylester d. 3-Oxy-6 oder 7-Methyl-1,4-Benzdiazin-2-Methylcarbonsäure. Sm. 172—173° (B. 25, 605). — IV, 949. 19) Imid d. β-Phenylacetylamidopropan-αβ-Dicarbonsäure. Sm. 235°

(B. 18, 1041). — II, 440.

 $C_{13}H_{14}O_3Br_2$ 1) Aethylester d. $\alpha\beta$ -Dibrom- γ -Keto- α -Phenylbutan- β -Carbonsäure (Ae. d. Dibrombenzylacetessigsäure). Sm. 97-97,50 (B. 14, 347; A. 218, 179). — II, 1681.

1) β-Oxypropyl-2-Naphtylsulfon. Sm. 137° (J. pr. [2] 53, 486, 490). $C_{18}H_{14}O_8S$ 2) 1-norm. Propylnaphtalin-?-Sulfonsäure. Ba (Richter, Dissert., 1884).
3) Propylnaphtalinsulfonsäure. Na + H₂O (A. 234, 110).
4) Sulfonsäure (eines Kohlenw. C₁₈H₁₄ aus Petroleum). Na + H₂O (A. 234,

110). — II, 220.

C 59,5 — H 5,3 — O 24,4 — N 10,7 — M. G. 262. $C_{13}H_{14}O_4N_2$

1) 7,8-Methylenäther-5,6-Dimethyläther d. 5,6,7,8-Tetraoxy-2,3-Dimethyl-1,4-Benzdiazin. Sm. 176° (B. 23, 2291). — II, 1030. 2) Dimethylester d. 5-Phenylpyrazol-3,4-Dicarbonsäure. Sm. 1050

(B. 26, 259). — IV, 893.
 3) Aethylester d. β-Phenylhydrazon-αγ-Diketobutan-α-Carbonsäure.
 Sm. 115—116° (B. 21, 1705). — IV, 708.

4) α-Imidobenzylmonamid d. Oxalessigsäuremonoäthylester (Aethoxalylacetylbenzenylamidin). Sm. 180° u. Zers. (B. 22, 1629). — IV, 847.

C 53.8 - H 4.8 - O 22.1 - N 19.3 - M. G. 290. $C_{13}H_{14}O_4N_4$

1) P-Di[Acetylamido]-2,4-Diketo-7-Methyl-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. noch nicht bei 345° (J. pr. [2] 51, 516).

2) Aethylester d. α-[N-Aethyl-3-Nitrophenylhydrazon]-α-Cyanessigsäure. Sm. 148-149° (J. pr. [2] 51, 223). - IV, 1455.

 $C_{13}H_{14}O_4Br_2$ 1) Aethylester d. $\alpha\beta$ -Dibrom- β -Acetoxyl- α -Phenylpropionsäure. Sm. 67° (A. **291**, 191).

2) Diacetat d. 4,6-Dibrom-2-Oxy-5-Oxymethyl-1,3-Dimethylbenzol. Sm. 159-160° (A. 302, 86).

3) Diacetat d. 3,6-Dibrom-5-Oxy-2-Oxymethyl-1,4-Dimethylbenzol.

Sm. 105—106° (A. 301, 275).
 Diacetat d. Verb. C₉H₁₀O₂Br₂ (aus Dibrompseudocumenol). Sm. 103 bis 104° (A. 302, 168; B. 32, 21).
 Zimmtaldehyddi[merkaptoessigsäure]. Sm. 142—143° (B. 21, 481). —

 $C_{13}H_{14}O_4S_2$ III, 59.

C 56,1 - H 5,0 - O 28,8 - N 10,1 - M. G. 278. $C_{13}H_{14}O_5N_2$

1) 4-Acetat d. 3-[3,4-Dioxyphenyl]-4-Oximido-4,5-Dihydroisoxazol-

[3,4]-Dimethyläther. Sm. 115° (G. 24 [2] 11). — II, 976. 1) Verbindung (aus d. Verbindung $C_{14}H_{18}O_3N_4$). Sm. 235° (J. pr. [2] 32, $C_{13}H_{14}O_6N_5$ 15). — II, 412.

 $\mathbf{C}_{13}\mathbf{H}_{14}\mathbf{O}_{7}\mathbf{N}_{6}$ C 42,6 - H 3,8 - O 30,6 - N 22,9 - M. G. 366.1) Cyamidoamalinsäure (M. 3, 433). — I, 1403.

C 47,9 - H 4,3 - O 39,2 - N 8,6 - M. G. 326. $\mathbf{C}_{13}\mathbf{H}_{14}\mathbf{O}_{8}\mathbf{N}_{2}$

1) Diäthylester d. 2,4-Dinitrophenylmethandicarbonsäure. (B. 21, 2473). — II, 1840.

1) 1-Chlor-3-Isobutylisochinolin. Sd. 298-300₇₅₈ (B. 30, 896). - $C_{13}H_{14}NC1$ IV, 341.

 $C_{13}H_{14}N_2S$ 1) 2-Methyl-5-[α-Phenylhydrazonäthyl]thiophen. Sm. 127—128° (B. 19, 1860). — III, 764.

 $\mathbf{C}_{13}\mathbf{H}_{14}\mathbf{N}_{3}\mathbf{Cl}$ 1) uns-4-Chlorphenyl-2-Amidobenzylhydrazin. Sm. 95° (J. pr. [2] 52, 387). — IV, 1130.

 $\mathbf{C}_{18}\mathbf{H}_{14}\mathbf{N}_{3}\mathbf{Br}$ 1) uns-4-Bromphenyl-2-Amidobenzylhydrazin. Sm. 119—120°. Oxalat (J. pr. [2] 52, 395). - IV, 1130.

1) $\alpha\beta$ -Di[Phenylamido]thioharnstoff. Sm. bei 150° (A. 190, 118; 212, $C_{13}H_{14}N_{4}S$ 323; 263, 278; C. 1899 [1] 128). — IV, 685. 2) s-Allyl-[4-Methylphenyl] thioharnstoffcyanid (J. 1869, 637). —

II, 498.

C₁₃H₁₅ON

 $\mathbf{C}_{18}\mathbf{H}_{15}\mathbf{ON}_{8}$

 $C_{13}H_{15}O_{2}N$

- C 77,6 H 7,4 O 8,0 N 7,0 M, G. 201. 1) ϵ -Oximido- α -Phenyl- $\alpha \gamma$ -Heptadiën. Sm. 142—143° (B. 29, 614). III, 173.
- 2) 3-Oximido-5-Methyl-1-Phenyl-1,2,3,4-Tetrahydrobenzol. Sm. 1150 (A. **281**, 85; B. **31**, 2465). — III, 173.
- 3) isom. 3-Oximido-5-Methyl-1-Phenyl-1, 2, 3, 4-Tetrahydrobenzol. Sm. 151° (B. 31, 2465).
- 4) γ -Amido- α -Furanyl- β -Phenylpropan. Sd. 282-283°. HCl, (2HCl, PtCl₄), Pikrat (B. 23, 2846). — III, 694.
- 5) P-Oxy-3, 6-Dimethyl-2-Aethylchinolin. Sm. 45°; Sd. 312-316° (B. 18. 3390). **— IV**, *340*.
- 6) 4-Oxy-2,5,6,8-Tetramethylchinolin. subl. bei 285°. (2HCl, PtCl₄) (B. 21, 529). — IV, 341.
- 7) Methyläther d. 1-Oxy-3-Propylisochinolin. Sd. 281°₇₅₆. (2 HCl, PtCl₄), (HCl, AuCl₃), Pikrat (B. 29, 2396). — IV, 338.
- 8) Methyläther d. 1-Oxy-3-Isopropylisochinolin. Sd. 268-270°,779 (B. 30, 893). **— IV**, *339*.
- 9) Aethyläther d. 1-Oxy-3-Aethylisochinolin. Sd. 2740, 764.5. (2 HCl, PtCl₄), Pikrat (B. **27**, 2239). — **IV**, 332.
- 10) 1-Keto-3-Isobutyl-1, 2-Dihydroisochinolin. Sm. 138-139° (B. 30, 896). · IV, 341.
- 11) 1-Keto-2-Methyl-3-Isopropyl-1, 2-Dihydroisochinolin. Sm. 184—186°
- (B. 30, 892). IV, 338. 12) 10-Oxy-8-Methyl-3, 4-Dihydrojulol (α_1 -Oxy- γ_1 -Methyljulolin). Sm. 45° (B. 25, 114). — IV, 194.
- 13) 10-Keto-8-Methyl-3,4,8,9-Tetrahydrojulol $(\alpha_1$ -Keto- γ_1 -Methyljulolidin). Sm. 242° (B. **25**, 112). — **IV**, 193.
- 14) Verbindung (aus Oxybenzol u. 4-Amido-1-Methylbenzol). Sm. 31,1° (Soc. 43, 468). — II, 652. C 68,1 — H 6,5 — O 7,0 — N 18,3 — M. G. 229.

1) Methyläther d. 4-[2,4-Diamidophenyl]amido-l-Oxybenzol. Sm. 118

- bis 120° (*B*. **29**, 1875). IV, *1124*. C 71,9 H 6,9 O 14,7 N 6,4 M. G. 217. 1) α -[4-Methylphenyl]amido- γ -Keto- β -Aethanoyl- α -Buten. Sm. 139
- bis 140° (A. 297, 69). 2) 8-Methyläther d. 4,8-Dioxy-2,5,7-Trimethylchinolin $+ 2H_2O$. Sm.
- 173°. HCl (Soc. **63**, 108). IV, 336. 3) **1,3-Diketo-4,4-Diäthyl-1,2,3,4-Tetrahydroisochinolin** (Diäthylhomo-
- phtalimid). Sm. 144° (B. 20, 2492). II, 1859. 4) 3-Diallylamidobenzol-1-Carbonsäure. Sm. 90°. HCl + H₂O (B. 5, 1041). — II, 1259.
- 5) 4-Diallylamidobenzol-1-Carbonsäure. Sm. 1270 (Am. 7, 198). II, 1271.
- 6) 2-[β-Methyl-γ-Aethylpropenyl]amidobenzol-1-Carbonsäure. Sm. 100°;
 Zers. bei 105° (B. 28, 2814).
- 7) 1-Isobutylindol-2-Carbonsäure. Sm. 152° (B. 30, 2820).
- 8) 3,3-Diäthylpseudoindol-2-Carbonsäure. Sm. 125° (B. 31, 1488; G. 28 [2] 364, 413).
- 9) Lakton d. 1-[1-Piperidyl]oxymethylbenzol-2-Carbonsäure. Sm. 97° (B. 29, 2039). - IV, 16.
- 10) Aethylester d. α -[2-Cyanphenyl]propan- β -Carbonsäure. Sd. 270° (B. 31, 2886).
- 11) Aethylester d. Indol-2-Aethyl-α-Carbonsäure (Ae. d. α-Indolpropionsäure). Sm. 136° (Am. 16, 434). — IV, 240.
- 12) Aethylester d. 1,2-Dimethylindol-3-Carbonsäure. Sm. 95° (A. 236, 157). — IV, 238.
- 13) Aethylester d. 2,5-Dimethylindol-3-Carbonsäure. Sm. 163-163,50 (Am. 16, 431). — IV, 241.
- 14) Aethylester d. 2,7-Dimethylindol-3-Carbonsäure. Sm. 1730 (Am. 16, 433). **— IV**, 241.
- 15) Phenylimid d. Pentan-αγ-Dicarbonsäure. Sm. 167—168° (A. 292, 215).
- 16) Phenylimid d. mal. Pentan-βδ-Dicarbonsäure. Sm. 208-2090 (A.
- 17) Phenylimid d. Pentan-βγ-Dicarbonsäure. Sm. 103-104° (A. 298, 164).

 $C_{13}H_{15}O_2N$ 18) Phenylimid d. β -Methylbutan- $\alpha\beta$ -Dicarbonsaure. Sm. 60—61° (A. 298, 176).

19) Phenylimid d. β-Methylbutan-βγ-Dicarbonsäure. Sm. 129° (A. 285,

234; B. 28, 2161).

20) Phenylimid d. β -Methylbutan- $\beta\delta$ -Diearbonsäure. Sm. 121° (B. 30, 255; C. 1895 [2] 447). 21) Phenylimid d. isom. β -Methylbutan- $\beta\delta$ -Dicarbonsaure. Sm. 95—96°

(Bl. [3] 15, 1238). 22) Phenylimid d. β -Methylbutan- γ δ -Dicarbonsäure. Sm. 213° (95—96°) (Soc. 69, 274; C. 1897 [1] 409).

23) Phenylimid d. $\beta\beta$ -Dimethylpropan- $\alpha\gamma$ -Dicarbonsäure. Sm. 156—157°

(Soc. 69, 1476). 24) 4-Methylphenylimid d. fum. Butan-βγ-Dicarbonsäure. Sm. 120° (A. 285, 231).

25) 4-Methylphenylimid d. mal. Butan- $\beta\gamma$ -Dicarbonsäure. Sm. 153°

(A. 285, 233).

26) 2-Methylphenylimid d. β-Methylpropan-αβ-Dicarbonsäure. Sm. 58 bis 59°; Sd. 108°₁₂ (B. 30, 617).
27) 4-Methylphenylimid d. β-Methylpropan-αβ-Dicarbonsäure. Sm. 112

bis 113° (A. 292, 186; B. 30, 617).

28) 2,4,6-Trimethylphenylimid d. Bernsteinsäure. Sm. 1370 (B. 15,

1018). — II, 555. 29) Nitril d. 4-Acetoxyl-1-Pseudobutylbenzol-3-Carbonsäure. Sd. 287

bis 292° (Am. 16, 639). — II, 1588. 30) Akridinderivat (aus Methylenbisdihydroresorcin). Sm. oberh. 300° u.

 $C_{13}H_{15}O_2N_3$

Zers. (B. **30**, 1803). — **IV**, 342. C 63,7 — H 6,1 — O 13,1 — **N** 17,1 — **M**. G. 245. 1) 4-Acetylamido-3-Keto-1,5-Dimethyl-2-Phenyl-2,3-Dihydrobenzol.

Sm. 197° (A. 293, 64). — IV, 1109. 2) 4-Nitroso-5-Keto-3-Methyl-1-[2,4,5-Trimethylphenyl]-4,5-Dihydro-

pyrazol. Sm. 156° (B. 18, 708). — IV, 814.
3) 4-Nitroso-3-Keto-1,5-Dimethyl-2-[2,4-Dimethylphenyl]-2,3-Dihydropyrazol (M. 12, 220). — IV, 813.

4) 5-Benzoyl-2-Isobutyl-1, 2, 3, 6-Oxtriazin (R. 16, 320).

5) Acetat d. 3-Oxy-5-Isopropyl-1-Phenyl-1, 2, 4-Triazol. Sm. 93° (B. 29, 1950). — IV, *1110*.

6) Nitrosotetrahydroharmin (B. 22, 637). — III, 886.

7) Methylester d. 5-Isopropyl-1-Phenyl-1, 2, 4-Triazol-3-Carbonsäure. Sm. $75-76^{\circ}$ (B. 25, 181). — IV, 1118.

8) Methylester d. α-Cyan-γ-Phenylhydrazonbutan-α-Carbonsäure. Sm.

137—138° (C. **1895** [2] 918). — IV, 692.

9) Aethylester d. Phenylhydrazoncyanessigsäure. Sm. 72° (J. pr. [2] 49, 331). — IV, 1454.
10) Aethylester d. 2,4-Dimethylphenylhydrazoncyanessigsäure. Sm.

166° (J. pr. [2] 49, 347). — IV, 1456.

11) Aethylester d. 2,4-Dimethylphenylazocyanessigsäure. Sm. 74-75°. K (J. pr. [2] 49, 347). — IV, 1456.

12) Butylester d. Phenylazocyanessigsäure. α-Modif. Sm. 118-120°; β-Modif. Sm. 98—101° (C. **1896** [1] 1106).

13) Ketoimidphenylhydrazidanhydrid d. β-Acetylpropan-αγ-Dicarbon-

säure. Sm. 228—229° (A. **295**, 113). — IV, 714. C₁₃H₁₅O₂Br 1) δ -Brom- $\gamma \varepsilon$ -Diketo- ε -Phenyl- $\beta \beta$ -Dimethylpentan. Sm. 106° (B. **30**, 2272).

C₁₂H₁₅O₂Br₃ 1) Isobutyrat d. 4,6-Dibrom-2-Oxy-5-Brommethyl-1,3-Dimethylbenzol. Sm. 152—154° (A. 302, 94).

2) Isobutyrat d. 3,6-Dibrom-5-Oxy-2-Brommethyl-1,4-Dimethylbenzol. Sm. 113° (A. 301, 280). C 66,9 — H 6,4 — O 20,6 — N 6,0 — M. G. 233.

 $C_{13}H_{15}O_3N$

1) $\alpha \gamma$ -Dioxy- β -[2-Chinolyl]- β -Oxymethylpropan (Chinolylbutantriol). Sm. 143°. HCl, (HCl, AuCl₃) (B. 32, 228).

2) 1,1-Dimethyl-3-Aethyl-2,4-Benzoxazin-6-Carbonsäure (Aethylcumazonsäure). Sm. 202°. H₂SO₄ (B. 16, 2585). — II, 1587.

3) β -[2-Propionylamidophenyl] propen-4-Carbonsäure. Sm. 183°. —

- 4) 4,5-Dimethyl-3-Phenyl-4,5-Dihydroisoxazol-5-Methylcarbonsäure. $C_{13}H_{15}O_{3}N$ Fl. Ag (G. 29 [1] 10).
 - 5) Methylester d. α-[4-Methylphenyl] amido-γ-Keto-α-Buten-β-Carbon-säure. Sm. 86-87° (A. 297, 34).
 - 6) Aethylester d. α -Phenylamido- γ -Keto- α -Buten- β -Carbonsäure. Sm.
 - 45—46° (A. 297, 33).
 7) Aethylester d. 3-Oxyindoläthyläther-2-Carbonsäure. Sm. 98° (B. 14, 1742). — II, 1440.
 - 8) Acetat d. α-Phenylacetylamido-γ-Oxypropen. Fl. (B. 27, 3426).

 - 9) Phenylimid d. γ-Oxy-β-Methylbutan-βγ-Dicarbonsäure. Sm. 145 bis 146° (B. 29, 1546, 1624).
 10) Monopiperidid d. Benzol-1,2-Dicarbonsäure (Piperylenphtalamidsäure). Sm. bei 150° (G. 9, 333; A. 227, 194). IV, 17. C 59,7 H 5,7 O 18,4 N 16,1 M. G. 261.
- $C_{13}H_{15}O_3N_3$ 1) Aethylester d. 3-Aethoxyl-1-Phenyl-1, 2, 4-Triazol-5-Carbonsäure. Sm. 82-83° (Soc. 71, 312). - IV, 1113.
- 1) Aethylester d. α-Acetyl-α-Chlor-β-Phenylpropionsäure? Sm. 71 bis 72° (A. 218, 181; 281, 64). — II, 1681.
- 2) Aethylester d. α-Acetyl-β-Chlor-β-Phenylpropionsäure? Sm. 40 bis 41° (A. 218, 180; 281, 64). II, 1681.
 C 62,6 H 6,0 O 25,7 N 5,6 M. G. 249.
 1) Acetylhydrastinin. Sm. 105° (A. 271, 388). III, 106.
- $C_{13}H_{15}O_4N$
 - 2) Acetyltetrahydrochininsäure. Sm. 240—241° (M. 10, 703). IV, 215.
 - 3) Hydrochelidonphenylaminsäure. Sm. 138—139° u. Zers. Ag (A. 267, 65). **— II**, 420.
 - 4) Lakton d. ?-Nitro-5-Oxymethyl-3-Pseudobutyl-1-Methylbenzol-6-Carbonsäure. Sm. 1540 (B. 31, 1347).
 - 5) Lakton d. isom. ?-Nitro-5-Oxymethyl-3-Pseudobutyl-1-Methylbenzol-6-Carbonsäure. Sm. 181° (B. 31, 1347)
 - 6) Methylester d. β -[2-Nitro-4-Isopropylphenyl]akrylsäure (B. 17, 2018). — II, 1433.
 - 7) 3-Aethylester d. Benzol-1-Carbonsäure- $3[\beta]$ -Amidocrotonsäure. Sm. 137° (G. 21, 341). — II, 1264.
 - 8) Aethylester d. 4-Acetylamido-l-Methylbenzol-3-Ketocarbonsäure. Sm. 78-79° (B. 18, 198). II, 1651.
 9) Aethylester d. Benzimidoäthyläther-N-Ketocarbonsäure. Sd. 190
 - bis 195°₁₁ (Am. 20, 73).
 - 10) Acetat d. 2-Diacetylamido-1-Oxymethylbenzol. Fl. (B. 22, 1668). II, 1062.
 - 11) 4-Methylphenylmonamid d. Oxalessigsäuremonäthylester. Sm. 134
- bis 135° (B. **24**, 1253). **II**, 503. C₁₃H₁₅O₄Cl 1) Diacetat d. 5-Chlor-3,6-Dioxy-1,2,4-Trimethylbenzol. Sm. 172°
 - (B. 27, 1429). 2) Diacetat d. 3-Chlor-5,6-Dioxy-1,2,4-Trimethylbenzol. Sm. 162 bis 163° (A. 296, 218).
- C₁₃H₁₅O₄Br 1) Diacetat d. 6-Brom-5-Oxy-2-Oxymethylbenzol-1,4-Dimethylbenzol. Sm. 83—84° (A. 302, 126).
- $C_{13}H_{15}O_4Br_3$ l) 3,4-Dimethyläther-1-Acetat d. P-Dibrom-3,4-Dioxy-1- $[\beta$ oder γ-Brom-γ oder β-Oxypropyl] benzol (B. 28, 2087). C 58,8 — H 5,7 — O 30,2 — N 5,3 — M. G. 265. $C_{13}H_{15}O_5N$
 - 1) Aethylester d. Bernsteinsäuremonophenylamid-3-Carbonsäure. Sm. 174° (G. 15, 548). — II, 1265.
 - 2) Aethylester d. α -[4-Nitrobenzoyl] buttersäure. Sm. 39-40° (Soc. **49**, 450). — **II**, 1664.
 - 3) Aethylester d. γ -Keto- α -[4-Nitrophenyl]butan- β -Carbonsäure (Ae. d. 4-Nitrobenzylacetessigsäure). Sm. 145° (A. 247, 136). II, 1867.
 - 4) Aethylester d. Benzoylamidoacetoxylessigsäure. Sm. 72° (J. pr. [2] 38, 428; [2] 51, 358). II, 1184.
 5) Aethylester d. 4,5,7-Trioxy-2-Methylchinolin-3 oder 6-Carbonsäure.
 - Sm. 262—263° u. Zers. (B. 31, 774).
 - 6) Diacetat d. 2-Acetylamido-3,5-Dioxy-1-Methylbenzol. Sm. 98-990 (B. 30, 1106; M. 19, 508).
 - 7) 1-Acetat-2-Methyläther d. 4-Diacetylamido-1,2-Dioxybenzol. Sm. 101° (M. 18, 475).

8) Monamid d. Benzoyloxybernsteinsäuremonoäthylester. Sm. 96 bis C, H, O, N 97° (B. **19**, 2461). — **II**, 1154.

9) 2-Methylphenylmonamid d. Tricarballylsäure. Sm. 1430 (B. 24, 600). - II, 468.

10) Benzylmonamid d. Acetyläpfelsäure. Sm. 87° (G. 22 [1] 176). — II, 530.

1) Verbindung (aus Cannabinol) (C. 1898 [1] 948). C, H, O, N, C 53,2 — H 5,1 — O 27,3 — N 14,3 — M. G. 293. $C_{13}H_{15}O_5N_3$

1) Säure (aus d. Aethylester d. Benzoylamidoessigsäure) + H₂O. Sm. 172°. Ag (B. 16, 756). — II, 1190.

Ag (B. 16, 750). — II, 1896.
2) Acthylester d. β-[2-Nitrobenzoyl]hydrazonpropan-α-Carbonsäure. Sm. 113° (J. pr. [2] 51, 175).
3) Acthylester d. β-[3-Nitrobenzoyl]hydrazonpropan-α-Carbonsäure. Sm. 106° (J. pr. [2] 51, 175; [2] 52, 274).
4) Acthylester d. β-[4-Nitrobenzoyl]hydrazonpropan-α-Carbonsäure.

(J. pr. [2] 51, 176).

5) 1-Amid-3-Aethylester d. 4-Methyl-1,3-Phenylendioxaminsäure. Sm. bei 210° u. Zers. (A. 268, 341). — IV, 605.

6) 3-Amid-1-Aethylester d. 4-Methyl-1,3-Phenylendioxaminsäure. Zers. bei 220° (A. 268, 343). — IV, 605.

C 55.5 - H 5.3 - O 34.2 - N 5.0 - M. G. 281. $C_{13}H_{15}O_6N$

1) Diäthylester d. 4-Nitrobenzol-l-Carbonsäure-2-Methylcarbonsäure. Sm. 57° (B. 32, 34).

2) Benzylmonamid d. Citronensäure. Sm. 165° u. Zers. Ba + 2H₂O (G. 24 [1] 228). — II, 531. C 50,5 — H 4,8 — O 31,1 — N 13,6 — M. G. 309.

 $C_{13}H_{15}O_6N_3$

1) 2-[2,4-Dinitrophenyl]amidohexahydrobenzol-l-Carbonsäure. Sm. 241° (A. 295, 204).

C 52,5 - H 5,0 - O 37,7 - N 4,7 - M. G. 297. $C_{13}H_{15}O_7N$

1) Monoäthylester d. 2-Oxy-6-Acetoxylpyridin-2-Methyläther-3,5-Dicarbonsäure. Sm. 99-100° (A. 262, 108). — IV, 175.

1) Chlorhelicin + ½ H₂O? Sm. 166° (A. 56, 72; C. 1898 [1] 511). —

 $C_{13}H_{15}O_7C1$ III, 69.

 $C_{13}H_{15}O_7Cl_3$ 1) Trichlorsalicin + H_2O (A. 56, 58). — III, 609. $C_{13}H_{15}O_7Br$ 1) Bromhelicin + H_2O . Sm. 1600 (A. 56, 75; \mathcal{C} . 1898 [1] 511). — III, 70. $\mathbf{C}_{13}\mathbf{H}_{15}\mathbf{O}_{7}\mathbf{Br}_{.}$ 1) Zucker-5-Chlor-2-Oxybenzol-1-Carbonsäure. K, Pb (C. 1898 [1] 499). $\mathbf{C}_{13}\mathbf{H}_{15}\mathbf{O}_{8}\mathbf{Cl}$ $C_{13}H_{15}O_8Cl_3$ 1) Triacetat d. β -Arabinochloral. Sm. 92° (C. 1895 [1] 478).

C 47,4 - H 4,7 - O 43,7 - N 4,2 - M. G. 329. $C_{18}H_{15}O_{9}N$

1) o-Uronitrotoluolsäure. Ba, + Harnstoff + $2^{1}/_{2}$ H₂O (H. 2, 47). -

1) α -[γ -Phenylallyliden]amido- β -Allylthioharnstoff. Sm. 165—166° (B. 27, 626). — III, 61. $C_{13}H_{15}N_3S$

C 72,2 - H 7,4 - O 7,4 - N 13,0 - M. G. 216. $\mathbf{C}_{13}\mathbf{H}_{16}\mathbf{ON}_{2}$

1) Tetrahydroharmin (Dihydroharmalin). Sm. 1990 (B. 22, 637; 30, 2484). - III, 886.

2) Isoamylimesatin (A. 144, 53). — II, 1608.

3) 3-Keto-1,5-Dimethyl-2-[2,4-Dimethylphenyl]-2,3-Dihydropyrazol. Sm. 113°. $HCl + H_2O$ (M. 12, 217). — IV, 813.

4) 5-Keto-3-Methyl-1-[2,4,5-Trimethylphenyl]-4,5-Dihydropyrazol. Sm. 154—155° (B. 18, 707). — IV, 813.

5) 1-Benzoyl-3, 5, 5-Trimethyl-4, 5-Dihydropyrazol. Sm. 236° (J. pr. [2] 50, 548). — IV, 491.

6) 1-Benzoyl-2-Aethyl-5-Methyl-4,5-Dihydroimidazol. Sm. 205° (B. 28,

1179). - IV, 491. 7) 2-Oximidomethyl-3, 3-Diäthylpseudoindol. Sm. 169° (G. 28 [2] 406).

8) 1-Nitroso-1, 2, 3, 4, 7, 8, 9, 10-Oktohydro-α-Naphtochinolin. Sm. 77,5° (B. 24, 2488). — IV, 231.

9) 4-Nitroso-1, 2, 3, 4, 7, 8, 9, 10-Oktohydro-β-Naphtochinolin. Sm. 106° (B. 24, 2661). — IV, 232.

10) isom. 4-Nitrosooktohydro-β-Naphtochinolin. Sm. 122,5° (B. 24, 2657). — IV, 231.

11) Verbindung (aus d. Verb. C₁₃H₁₈O₂N₂ aus Mesitonsäure). Sm. 84° (A. **247**, 105). — IV, 692.

- $C_{13}H_{16}ON_4$ C 63,9 - H 6,5 - O 6,5 - N 23,0 - M. G. 244.
 - Verbindung (aus Phenylamidoguanidin u. Aethylacetessigsäureäthylester)
 (G. 21 [1] 338). IV, 1222.
- 1) $\delta \varepsilon$ -Dibrom γ -Keto- ε -Phenyl- $\beta \beta$ -Dimethylpentan. Sm. 124° (B. 30, $C_{13}H_{16}OBr_2$
- C 67,2 H 6,9 O 13,8 N 12,1 M. G. 232. $\mathbf{C}_{13}\mathbf{H}_{16}\mathbf{O}_{2}\mathbf{N}_{2}$
 - 1) 3,4-Diamido-1-Methylbenzol + 1,2-Dioxybenzol. Sm. 78° (B. 19, 726). — IV, 611.
 - 2) 1,3-Dioximido-2-Aethyl-6-Methyl-1,2,3,4-Tetrahydronaphtalin. Sm. 235° (Bl. [3] 3, 124). — III, 279.

 - 3) Acetylcytisin. Sm. 208° (B. 24, 678). III, 879.
 4) γ-Phenylazo-βδ-Diketoheptan (Benzolazobutyrylaceton). Sm. 55° (B. **22**, 1015). — IV, 1477.
 - 5) 2-Acetyl-5-Keto-3,3-Dimethyl-1-Phenyltetrahydropyrazol. Sm. 104,5 bis 105° (A. **292**, 292). — IV, 490.
 - 6) Aethyläther d. 3-Keto-1,5-Dimethyl-2-[4-Oxyphenyl]-2,3-Dihydropyrazol. Sm. 90—91°. Salicylat (B. 25, 1664, 1852). IV, 514.
 - 7) Aethyläther d. 4-Oxy-3-Keto-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol. Sm. 60° (A. 293, 55). — IV, 513.
 - 8) 6-Acetylamido-l-Acetyl-1, 2, 3, 4-Tetrahydrochinolin. Sm. 1720 (B. **21**, 865). — **IV**, 853.
 - 9) 1 oder 4-Acetyl-3-Keto-2, 2, 7-Trimethyl-1, 2, 3, 4-Tetrahydro-1, 4-Benzdiazin. Sm. 206° (A. 248, 80). — IV, 888.
 - 10) 3-Phenylhydrazonhexahydrobenzol-1-Carbonsäure. Sm. 125° (B. 22, 2183). — IV, 693.
 - 11) Aethylester d. γ-Phenylhydrazon-α-Buten-α-Carbonsäure. Sm. 117,50 (B. **21**, 2493). — **IV**, 693.
 - 12) Aethylester d. α -[2-Methylphenyl]amido- α -Cyanpropionsäure. Sm. 93° (B. 19, 2966). — II, 471.
 - 13) Aethylester d. α -[4-Methylphenyl]amido- α -Cyanpropionsäure. Sm. 80,5° (B. 19, 2967). — II, 508.
 - 14) Aethylester d. 2,5,7-Trimethylbenzimidazol-1-Carbonsäure (B. 5, 923). — IV, 886.
 - 15) Phenylamid d. β -Methylacetylamidocrotonsäure. Sm. 1820 (B. 25, 771). — II, *371*.
- C13H16O2N4 C 60.0 - H 6.1 - O 12.3 - N 21.5 - M. G. 260.
 - 1) 6,7-Di[Acetylamido]-2,4-Dimethylbenzimidazol? Sm. 282°. Pikrat
- $\begin{array}{c} (B.\ 23,\ 3219). & = \ \mathrm{IV},\ 1245. \\ \mathbf{C_{13}H_{16}O_{2}Br_{2}}\ 1) \ \ \mathrm{Isobutyrat} \ \ \mathrm{d.} \ \ 6\ \mathrm{-Brom-5-Oxy-2-Brommethyl-1,4-Dimethylbenzol.} \\ \mathrm{Sm.\ 91^{\circ}}\ (A.\ 302,\ 129). \\ \mathbf{C_{13}H_{16}O_{3}N_{2}} \qquad C\ 62.9 \ \ \mathrm{H}\ 6.4 \ \ O\ 19.3 \ \ \mathrm{N}\ 11.3 \ \ \mathrm{M.\ G.}\ 248. \end{array}$
- $\mathbf{C}_{13}\mathbf{H}_{16}\mathbf{O}_{3}\mathbf{N}_{2}$
 - 1) 3,5-Dioximido-2-[4-Methoxylphenyl]hexahydrobenzol. Sm. 182 bis 184° (A. **294**, 311).
 - 2) 4-Keto-6-[2-Nitrophenyl]-2,2-Dimethylhexahydropyridin (Nitrobenzaldiacetonamin). Fl. HCl, (2 HCl, PtCl₄), Oxalat (A. 227, 374). - III, 37.
 - 3) 4 Keto 6-[3-Nitrophenyl]-2,2-Dimethylhexahydropyridin. HCl, (2HCl, PtCl₄), Oxalat (A. 227, 376). — III, 38.
 - 4) 4-Keto-6-[4-Nitrophenyl]-2,2-Dimethylhexahydropyridin. 142,5°. HCl + H₂O, (2HCl, PtCl₄), Oxalat (A. **227**, 379). — III, 38.
 - 5) Aethylester d. α -Phenylhydrazido- γ -Keto- α -Buten- β -Carbonsäure. Sm. 87—88° (A. 295, 303, 311). IV, 707.
 - 6) Aethylester d. α-[4-Methylphenyl]hydrazon-β-Ketopropan-α-Carbonsäure. Sm. 69—70° (74°) (B. 11, 1420; 17, 1929; 26, 1881). IV, 808.
 - 7) Aethylester d. β -Benzoylhydrazonpropan- α -Carbonsäure. Sm. bei 60° (J. pr. [2] **52**, 273).
 - 8) Phenylamidoformiat d. γ-Oximido-β-Ketohexan (Phenylcarbamidoisonitrosobutylmethylketon). Sm. 92—93° (B. 22, 3108). II, 447.
 9) 4-Isopropylidenhydrazid d. Benzol-1,4-Dicarbonsäure-1-Aethyl-

 - ester. Sm. 259° (J. pr. [2] 54, 80).

 10) Verbindung (aus 3,4-Diamido-1-Methylbenzol u. Chloressigsäureäthylester). Sm. 147° (A. 237, 365). IV, 885.

 11) Verbindung (aus Phenylharnstoff). Fl. (A. 233, 2). II, 376.

C₁₃H₁₆O₃Br₂ 1) Isobutyrat d. 3,6-Dibrom-1-Oxy-4-Keto-1,2,5-Trimethyl-1,4-Dihydrobenzol. Sm. 103—105° (B. 29, 2347).

2) 2-Acetat-5-Aethyläther d. 4,6-Dibrom-2-Oxy-5-Oxymethyl-1,3-Dimethylbenzol. Sm. 88° (A. 302, 81).

3) 5-Acetat-2-Aethyläther d. 3,6-Dibrom-5-Oxy-2-Oxymethyl-1,4-Dimethylbenzol. Sm. 64-66° (A. 301, 270).

Aethylester d. αβ-Dibrom-β-[2-Oxyphenyläthyläther]propionsäure.
 Sm. 78° (Soc. 39, 427). — II, 1563.

1) Aethylester d. Phenylmerkapto-β-Acetylpropionsäure. Sd. 196 bis C13 H16 O3 S 197°_{15} (B. **22**, 309). — II, 789. C 59,1 — H 6,1 — O 24,2 — N 10,6 — M. G. 264.

 $C_{18}H_{16}O_4N_2$

1) Anhydroglyko-3,4-Diamido-1-Methylbenzol. Sm. oberh. 180° u. Zers. $(B. \ 22, \ 93). - IV, \ 621.$

2) Oxim d. Monacetylhydrastinin + 2H₂O. Sm. 90° (139-140° wasserfrei) (B. 22, 1157). — III, 105.

3) γ-Phenylhydrazonpentan-αε-Dicarbonsäure. Sm. 114,50 (107-1080) (B. 21, 1399; A. 253, 223). — IV, 714.

4) Aethylester d. 2,3-Diimido-1,1-Diacetyl-5-Methyl-2,3-Dihydro-R-Penten-4-Carbonsäure. Sm. 153-158° (B. 31, 2945).

5) Aethylester d. Benzoylamidoacetylamidoessigsäure. Sm. 1170 (J. pr. [2] **26**, 194). — II, 1190.

6) Aethylester d. 3,5-Di[Acetylamido]benzol-1-Carbonsäure. Sm. 1840 (J. pr. [2] 51, 528).

7) Aethylester d. 3-Acetylamido-4-Methylphenyloxaminsäure (Acetyltoluylenoxamäthan). Sm. 1920 (A. 268, 310). - IV, 604.

C 53.4 - H 5.5 - O 21.9 - N 19.2 - M. G. 292. $\mathbf{C}_{13}\mathbf{H}_{16}\mathbf{O}_{4}\mathbf{N}_{4}$ 1) Diacetat d. 1-Amidooximidomethyl-4- $[\beta$ -Amido- β -Oximidoäthyl]benzol. Sm. 161,5—162° (B. 22, 2979). — II, 1844.

C₁₃H₁₆O₄Br₂ 1) Monacetat d. 2,6-Dibrom-3,4,5-Trioxy-1-Propylbenzoldimethyl-

äther. Sm. 101,5—102,5° (B. 11, 331; M. 4, 492). — II, 1024.

2) Isoamylester d. 2, 6-Dibrom-3, 5-Dioxy-1-Methylbenzol-4-Carbonsäure. Sm. 73,8°. + PbO (A. 139, 40). — II, 1753.

1) Aethylester d. Phenylsulfonallylessigsäure. Sm. 64,5° (Am. 7, 67). C18H16O4S

C 55,7 — H 5,7 — O 28,6 — N 10,0 — M. G. 280. $\mathbf{C}_{13}\mathbf{H}_{16}\mathbf{O}_{5}\mathbf{N}_{2}$ 1) P-Dinitro-P-Acetyl-3-Pseudobutyl-1-Methylbenzol. Sm. 131° (B.

> 31, 1345). 2) Methyl-?-Dinitro-3-Methyl-5-Pseudobutylphenylketon. Sm. 103° (B. **31**, 1345).

3) Diäthylester d. Phenylen-1-Amidoameisensäure-4-Oxaminsäure (Urethanophenyloxamäthan). Sm. 131-132° (B. 27, 962; A. 293, 378). **— IV**, 593.

C 46,4 — H 4,8 — O 23,8 — N 25,0 — M. G. 336. 1) Difuraltriureid. Sm. 168—169° (G. **23** [1] 388). — III, 724. C18 H16 O5 N6

C₁₃H₁₆O₅Br₂ 1) 2,6-Dibrom-3,4,5-Trioxybenzoltriäthyläther-1-Carbonsäure.

107° (B. **25**, 722). — II, 1924. 1) Diäthylester d. **2**,6-Dimethyl-1,4-Thiopyron-3,5-Dicarbonsäure. $C_{13}H_{16}O_5S$ Sm. 109—111° (B. 20, 2111). — II, 2006.

C 52,7 - H 5,4 - O 32,4 - N 9,5 - M. G. 296. $\mathbf{C}_{13}\mathbf{H}_{16}\mathbf{O}_{6}\mathbf{N}_{2}$

1) Aldehydgalaktonsäurephenylhydrazon. Sm. 166° u. Zers. (B. 22, 1385). **– IV**, 731.

2) 4, 6 - Dinitro - 5 - Pseudobutyl - 1, 3 - Dimethylbenzol - 2 - Carbonsäure. Sm. 236° (B. 31, 1348).
3) Acetat d. 2,5-Dinitro-4-Pseudobutyl-1-Oxymethylbenzol. Sm. 92,5°

(Bl. [3] 19, 70). C 50,5 — H 5,1 — O 35,9 — N 9,0 — M. G. 312.

 $C_{13}H_{16}O_7N_2$

1) Galaktose-2,3-Diamidobenzol-1-Carbonsäure (B. 20, 3117). — II, 1273.

2) Glykose-2,3-Diamidobenzol-1-Carbonsäure. Ba. HCl (B. 20, 2210). **– II**, 1273.

3) Aethylester d. α-Nitro-β-Oxy-β-[4-Nitrophenyl]propionäthyläthersäure. Sm. 52° (A. 229, 221). — II, 1575.

4) Aethylester d. β -[3,5-Dinitro-4-Oxyphenyläthyläther] propionsäure. Sm. 49-50° (A. 225, 82). — II, 1566.

- C 39.4 H 4.0 O 28.3 N 28.3 M. G. 396. $C_{13}H_{16}O_7N_8$
 - Tripyruvintetraureïd (A. ch. [5] 11, 373). I, 1346.
 Dichlorsalicin + H₂O (A. 56, 55). III, 609.
- $\mathbf{C}_{13}\mathbf{H}_{16}\mathbf{O}_{7}\mathbf{Cl}_{2}$
- 1) Trimethyl-1-Naphtylammoniumchlorid. 2 + PtCl₄ (B. 11, 645). - $\mathbf{C}_{13}\mathbf{H}_{16}\mathbf{NCl}$ II, 598.
 - 2) Chlorpropylat d. 2-Methylchinolin. 2+PtCl₄, +AuCl₃ (A. 242, 306). - IV, 308.
 - 3) Chloräthylat d. 2,8-Dimethylchinolin. 2+PtCl₄, +AuCl₃ (A. 242, 311). — IV, *329*.
- 1) Trimethyl-1-Naphtylammoniumjodid. Zers. bei 164° (B. 11, 645). $\mathbf{C}_{13}\mathbf{H}_{16}\mathbf{NJ}$ II, 598.
 - 2) Trimethyl-2-Naphtylammoniumjodid (B. 13, 2055). II, 601.
 - 3) Jodpropylat d. 2-Methylchinolin. Sm. 166-1670 u. Zers. (A. 242,
 - 306). IV, 308. 4) Jodäthylat d. 2,4-Dimethylchinolin. Sm. 214° (J. pr. [2] 33, 406). - IV, 328.
 - 5) Jodäthylat d. 2,8-Dimethylchinolin. Sm. 228-229° (A. 242, 310). **– IV**, 329.
 - 6) Jodmethylat d. 4-Propylchinolin. Sm. 1730 (B. 31, 2375)
 - 7) Jodmethylat d. 7-Isopropylchinolin. Sm. 200° (B. 19, 268). IV, 334.
 - 8) Jodnethylat d. 3-Methyl-2-Aethylchinolin. Sm. 196° u. Zers. (B. 17, 1715). — IV, *335*.
 - 9) Jodmethylat d. 2,4,6 Trimethylchinolin + H_2 (). Sm. $225 226^{\circ}$ (J. pr. [2] 38, 46). - IV, 336.
 - 10) Jodnethylat d. 2,6,8-Trimethylchinolin + H₂O (B. 20, 34). -IV, 337.
- $C_{13}H_{16}N_2Br_2$ 1) Pyridintrimethylenbromid. Sm. 225—226° (C. 1896 [1] 554). IV, 111.
- 1) Anhydrodiacetonphenylthioharnstoff. Sm. 191-1920 (B. 27, 280). $\mathbf{C}_{13}\mathbf{H}_{16}\mathbf{N}_{2}\mathbf{S}$ **II**, 446.
- C 76,8 H 8,4 O 7,9 N 6,9 M. G. 203. $\mathbf{C}_{13}\mathbf{H}_{17}\mathbf{ON}$ 1) Trimethyl-1-Naphtylammoniumhydrat. Chlorid, Jodid (B. 11, 646).
 - II, 598. 2) Trimethyl-2-Naphtylammoniumhydrat (B. 13, 2055). — II, 601.
 - 3) Benzoylamidohexahydrobenzol. Sm. 1470 (A. 278, 104; 302, 27; B. **30**, 2863; C. **1898** [2] 579).
 - 4) 5-Oximido-1-Methyl-3-Phenylhexahydrobenzol. Sm. 105° (A. 303, 266).
 - 5) α-Oximidobenzylhexahydrobenzol (Hexahydrobenzophenonoxim). Sm. 155° (B. 30, 1942, 2862 Anm.).
 - 6) isom. α-Oximidobenzylhexahydrobenzol. Sm. 111° (B. 30, 1943, 2863).
 - 7) 4-Keto-2,2-Dimethyl-6-Phenylhexahydropyridin (Benzaldiacetonamin). Sm. $62-63^{\circ}$; Sd. bei 230° u. Zers. HCl, $(2\,\mathrm{HCl},\mathrm{PtCl_4})$, $\mathrm{HNO_3}$ + $2\,\mathrm{H_2O}$, $\mathrm{H_2SO_4}$, Oxalat (A. 193, 62; B. 16, 2237; J. 1882, 499). — IV, 232.
 - 8) 1-Benzoyl-2-Methylhexahydropyridin. Sm. 44-45° (B. 22, 1054).
 - 9) 4, 4, 6-Trimethyl-2-Phenyl-4, 5-Dihydro-1, 3-Oxazin. Sm. 32° (2HCl, PtCl₄), Pikrat (B. 30, 1319). — IV, 233.
 - 10) Propyloxydhydrat d. 2-Methylchinolin. Chlorid, Jodid, Bichromat
 - $(A. \ 242, 306)$. IV, 308. 11) 1-Acetyl-6,8-Dimethyl-1,2,3,4-Tetrahydrochinolin. Sd. $313,5^{\circ}_{719}$ (B.
 - 24, 2076). IV, 209. 12) Methyläther d. 6-Oxy-3,4,8,9-Tetrahydrojulol. Fl. (2 HCl, PtCl₄) (B. 25, 2806). - IV, 230.
 - 13) Nitril d. ζ -Oxyhexanphenyläther- γ -Carbonsäure. Sd. $315-317^{\circ}$ u. Zers. (B. 31, 2138).

 - 14) Diäthylamid d- β -Phenylakrylsäure. Sm. 66° (C. 1899 [1] 730). 15) Phenylamid d. Hexahydrobenzolcarbonsäure. Sm. 130 131° (B. 30, 2863).
 - 16) 1,2,3,4-Tetrahydro-1-Naphtylmethylamid d. Essigsäure. Sm. 88,5° (B. **22**, 1917). — II, 589.
 - 17) 1,2,3,4-Tetrahydro-2-Naphtylmethylamid d. Essigsäure. Sm. 64 bis 65° (B. 22, 1915). — II, 590.

 $C_{13}H_{17}O_2N_3$

 $C_{13}H_{17}O_{3}N$

C 67,5 - H 7,4 - O 6,9 - N 18,2 - M. G. 231. $C_{13}H_{17}ON_{3}$

1) γ-Semicarbazon-β-Methyl-α-Phenyl-α-Penten (Semicarbazon d. Benzylidendiäthylketon). Sm. bei 1880 (A. 294, 297).

2) 4-Dimethylamido-3-Keto-1, 5-Dimethyl-2-Phenyl-2, 3-Dihydropyrazol. Sm. 108° (A. 293, 66). — IV, 1109.

3) 3-Keto-1, 5-Dimethyl-2-[4-Dimethylamidophenyl]-2, 3-Dihydropyrazol. Sm. 134-135° (C. 1898 [2] 238).

4) 2-Amidooximidomethyl-3,3-Diäthylpseudoindol. Sm. 120-1210 (G. 28 [2] 411).

 $C_{60,2} = H_{6,6} = O_{6,2} = N_{27,0} = M.G.$ 259. $C_{13}H_{17}ON_5$

1) Phenylamidokaffeïdin. H₂SO₄ (B. 27, 3091). 1) Chlormethylpentamethylphenylketon. Sm. 1100 (B. 30, 1713). $C_{13}H_{17}OCl$

1) 2,4,6-Tribrom-5-Oxy-3-Hexyl-1-Methylbenzol. Sm. 137—139° (A. $\mathbf{C}_{13}\mathbf{H}_{17}\mathbf{OBr}_{3}$ 288, 346). C 71,2 — H 7,7 — O 14,6 — N 6,4 — M. G. 219. C13 H17 O2 N

1) ζ-Benzoylamido-β-Ketohexan. Sm. 75-76° (A. 289, 205).

2) N-Butyrylbenzimidoäthyläther. Sd. 167°_{16} (Am. 20, 72). 3) 4-Keto-2,2-Dimethyl-6-[4-Oxyphenyl]hexahydropyridin (p-Oxy-

benzaldiacetonamin). Oxalat (A. 227, 372). — IV, 233.

4) Aethyläther d. 8-Oxy-1-Acetyl-1, 2, 3, 4-Tetrahydrochinolin. Sd. 307°

(B. 17, 759). — IV, 198. 5) Acetat d. 8-Oxy-1-Aethyl-1,2,3,4-Tetrahydrochinolin. Sm. 63 bis 64° (B. 19, 1046). — IV, 200.

6) Isoamyläther d. 3-Oxy-1, 4-Benzoxazin. Sd. 174—175° (Am. 20, 565). 7) β-[2-Diäthylamidophenyl]akrylsäure. Sm. 124° (B. 16, 653; A. 221, 269). — II, *1418*.

8) Citralydencyanessigsäure. Sm. 1229 (B. 31, 3329).

9) isom. ?-Citralydencyanessigsäure. Sm. 80⁹ (B. 32, 120).

10) Aethylester d. β -[4-Methylphenyl]amidocrotonsäure.

(B. 21, 525). — II, 509.
 11) α-Aethylester d. β-Benzylamidocrotonsäure. Sm. 79-80° (2HCl, PtCl₄) (B. 27, 3378; 30, 3003).

12) β -Aethylester d. β -Benzylamidocrotonsäure. Sm. 21 – 21,5° (B. 27, 3378, 3379; **30**, 3003).

13) Methylamid d. δ -Keto- β -Phenylpentan- α -Carbonsäure. Sm. 143°. $2 + \text{Methylamin} + \text{H}_2\text{O}$ (A. **294**, 328).

14) 4-Methylphenylamid d. β-Ketopentan-ε-Carbonsäure. Sm. 123° (A.

15) Phenylacetylamid d. Isovaleriansäure. Sd. $164-165^{\circ}_{18}$ (Am. 18, 700). 16) Verbindung (aus d. α-Aethyläther d. γ-Phenylamido-αβ-Dioxypropan).

Fl. (B. 27, 3424). C 63,2 — H 6,9 — O 12,9 — N 17,0 — M. G. 247.

Aethylester d. β-Cyan-β-[α-Phenylhydrazido] buttersäure. Sm. 110°
 (B. 25, 2071). — IV, 740.

2) Acetat d. γ-Oximido-β-Phenylhydrazonpentan. Sm. 147—148° (A.

262, 312). — IV, 781. $C_{13}H_{17}O_2Br$ 1) Diäthyläther d. β -Brom- $\gamma\gamma$ -Dioxy- α -Phenylpropen. Sd. 170—1710₁₅ (B. **31**, 1017).

2) α-Brom-γ-[P-Propylphenyl] buttersäure. Sm. 148—150° u. Zers. (J. 1877, 380). — II, 1400.

C = 66,4 - H = 7,2 - O = 20,4 - N = 5,9 - M. G. 235.

1) Lophophorin. Fl. HCl, (2HCl, PtCl₄) (B. 29, 226; 31, 1199). — III, 779. 2) Methylanhalonin. HCl, (2HCl, PtCl₄), HJ (C. 1898 [1] 741; B. 31,

3) Piperidylmethyl-3,4-Dioxyphenylketon. Sm. 187-188°. HCl, (2HCl, PtCl₄), H₂SO₄ + H₂O (*J. r.* **25**, 288). — IV, 22. 4) Cantharidinallylimid. Sm. 80° (*G.* 21 [1] 464). — III, 623. 5) α-Benzoylamido-norm. Capronsäure (*Bl.* 30, 481). — II, 1191.

6) δ -Benzoylamidocapronsäure. Sm. 148 δ . Zn + H₂ \hat{O} , Ag (B. 22, 1054).

— II, 1191. 7) α-[2-Methylphenyl]acetylamidobuttersäure. Sm. 114—116° (B. 25,

2318; Ph. Ch. 10, 654). — II, 472. 8) α-[4-Methylphenyl]acetylamidobuttersäure. Sm. 149° (B. 25, 2321; Ph. Ch. 10, 654). — II, 508.

- $\mathbf{C}_{13}\mathbf{H}_{17}\mathbf{O}_{3}\mathbf{N}$ 9) β -[2-Methylphenyl] acetylamidoisobuttersäure. Sm. 219° u. Zers. (B. **25**, 2337; Ph. Ch. **10**, 659). — II, 472.
 - 10) α-[4-Methylphenyl]acetylamidoisobuttersäure. Sm. 144-146° (B. 25, 2344; Ph. Ch. 10, 659). — II, 508.
 - 11) β -[4-Methylphenyl]acetylamidoisobuttersäure. Sm. 206° (B. 25, 2341; Ph. Ch. 10, 657). - II, 508.
 - 12) ζ-Oximido-ζ-Phenylhexan-α-Carbonsäure (Oxim d. ε-Benzoylcapronsäure). Sm. 75° (Soc. 55, 350). — II, 1669.
 - 13) Aethylester d. α -Oximido- α -Phenylbutan- δ -Carbonsäure. Sm. 35 bis 36° (A. 302, 220).
 - 14) Aethylester d. α-Phenylacetylamidopropionsäure. Sd. 294—298° (B. **23**, 2598). — II, 432
 - 15) Aethylester d. β -[4-Methoxylphenyl]imidocrotonsäure. Sm. 46° (B. **21**, 1649). — İI, 722.
 - 16) norm. Butylester d. Benzoylamidoessigsäure. Sm. 40-41° (Bl. 34. 527). — II, *1184*.
 - 17) Isobutylester d. Benzoylamidoessigsäure. Sm. 45-46° (Bl. 34, 527). **- II**, 1184.
 - 18) Isoamylester d. Phenyloxaminsäure. Sm. 50° (A. 254, 11). II, 408.
 - 19) **2-Methoxylphenylester d. Hexahydropyridin-1-Carbonsäure.** Sm. 44°; Sd. 330° (*Bl.* [3] **19**, 81).
 - 20) Acetat d. 3-Acetylamido-5-Oxy-1,2,4-Trimethylbenzol. Sm. 184 bis 186° (B. 17, 886). — II, 764.
 - 21) Benzoat d. β -Hydroxylamido- δ -Keto- β -Methylpentan. Sm. 165° (B. **31**, 1378).
 - 22) Monamid d. 1-Methylbenzol-3-[Aethyl- $\beta\beta$ -Dicarbonsäuremonäthylester]. Sm. 184—186° (B. 23, 110). — II, 1855.
 - 23) Isoamylmonamid d. Benzol-1, 2-Dicarbonsäure (Isoamylphtalamidsäure). Sm. 114-115°. Ag (B. 23, 998). II, 1796.
 - 24) Phenylmonamid d. Pentan-αγ-Dicarbonsäure. Sm. 154,5° (A. 292,215).
 - 25) Phenylmonamid d. fum. Pentan- $\beta\gamma$ -Dicarbonsäure. Sm. 164—165° (A. 298, 164).
 - 26) Phenylmonamid d. mal. Pentan-βγ-Dicarbonsäure. Sm. 139-140° (A. 298, 165).
 - 27) Phenylmonamid d. mal. Pentan- $\beta\delta$ -Dicarbonsäure. Sm. 157° (A. **285**, 236).
 - 28) Phenylmonamid d. β -Methylbutan- $\alpha\beta$ -Dicarbonsäure. Sm. 168—169° (A. 298, 175).
 - 29) Phenylmonamid d. isom. β -Methylbutan- $\alpha\gamma$ -Dicarbonsäure. Sm. 147 bis 148° (Bl, [3] **15**, 1238).
 - 30) Phenylmonamid d. β -Methylbutan- $\beta\gamma$ -Dicarbonsäure. Sm. 134—135° A. 285, 234; B. 30, 292).
 - 31) Phenylmonamid d. β -Methylbutan- $\beta\delta$ -Dicarbonsäure. Sm. 1430 (1460) (B. 30, 255; C. 1895 [2] 447; Soc. 73, 847).
 - 32) Phenylmonamid d. isom. β -Methylbutan- $\beta\delta$ -Dicarbonsäure. Sm.
 - 141,5° (Bl. [3] **15**, 1238). 33) Phenylmonamid d. β-Methylbutan-γδ-Dicarbonsäure. Sm. 145° (Soc. 69, 274; C. 1897 [1] 409).
 34) Phenylmonamid d. ββ-Dimethylpropan-αγ-Dicarbonsäure. Sm. 134° (Soc. 69, 1476; G. 28 [2] 310).

 - 35) 4-Methylphenylmonamid d. mal. Butan- $\alpha\beta$ -Dicarbonsäure. Sm. 164 bis 165° (A. **285**, 233).
 - 36) 4-Methylphenylmonamid d. Butan- $\alpha\gamma$ -Dicarbonsäure. α -Modif. Sm. 98—99°; β-Modif. Sm. 126° (A. **292**, 212).
 - 37) 4-Methylphenylmonamid d. fum. Butan- $\beta\gamma$ -Dicarbonsäure. Sm. 198° (A. **285**, 231).
 - 38) **2-Methylphenylmonamid d.** β -Methylpropan- $\alpha\beta$ -Dicarbonsäure. Sm. 143—143,5° (154—155°) (B. **30**, 615).
 - 39) **4-M**ethylphenylmonamid d. β -Methylpropan- $\alpha\beta$ -Dicarbonsäure. Sm. 180° (185°; 161—162°) (A. 292, 186; B. 30, 616).
- C 59,3 H 6,5 O 18,2 N 16,0 M. G. 263. $C_{13}H_{17}O_3N_3$
 - 1) Aethylester d. β-Phenylamidoformylhydrazonbuttersäure. Sm. 151° (J. pr. [2] 58, 222).

 $C_{13}H_{17}O_5N$

 $C_{13}H_{17}O_5N_3$

C13H17O6N

 $C_{13}H_{17}O_3N_3$ 2) γ -Phenylamidoformiat d. $\beta\gamma$ -Dioximidohexan. Sm. 129—131° (B. 22. 3108). — II, 447.

 ${f C_{13} H_{17} O_3 Br}$ 1) Acetat d. Verb. ${f C_{11} H_{15} O_2 Br}$. Sm. 63-64° (A. 286, 111). — III, 512. ${f C_{13} H_{17} O_4 N}$ C 62,1 — H 6,8 — O 25,5 — N 5,6 — M. G. 251.

- 1) ?-Nitro-5-Pseudobutyl-1, 3-Dimethylbenzol-2-Carbonsäure. Sm. 1900 (B. 31, 1348).
- 2) a-Aethylbenzhydroximbuttersäure. Sm. 72° (B. 29, 2657). 3) α-Aethylbenzhydroximisobuttersäure. Fl. (B. 28, 1378).

4) δ -Oximido- β -[4-Methoxylphenyl]pentan- α -Carbonsäure. Sm. 169° (A. 294, 331).

5) 2,6-Dimethyl-4-Isobutylpyridin-3,5-Dicarbonsäure + 2H₂O. Sm. 273° u. Zers. Ca + $3 H_2 O$, Ba + $5 H_2 O$, HCl (A. 231, 57). – IV.

6) Aethylester d. β-Phenylamidoformoxylbuttersäure (β-Oxybuttersäureäthylesterphenylurethan). Fl. (Bl. [3] 19, 774).

7) Aethylester d. a-Phenylamidoformoxylisobuttersäure (a-Oxylsobuttersäureäthylesterphenylurethan). Sm. 77,5° (Bl. [3] 19, 778).

8) Diäthylester d. Phenylamidomethan-αα-Dicarbonsäure. Sm. 44 bis 45° (Am. 19, 694; B. 31, 1815).

9) Diäthylester d. Phenylmethancarbonsäureamidoameisensäure. Sm.

54° (B. 24, 4153). — II, 1324. 10) Diäthylester d. Phenylamidoessigsäure-2-Carbonsäure. Sm. 75° (A. 301, 350).

11) stab.-Diäthylester d. 2,6-Dimethylpyridin-3,5-Dicarbonsäure. Sm. 73°; Sd. 301—302°. Pikrat (A. 231, 50; 297, 39; G. 25 [2] 85). — IV, 168.

12) lab.-Diäthylester d. 2,6-Dimethylpyridin-3,5-Dicarbonsäure. Sm.

72°. Pikrat (6. **25** [2] 72). — IV, 168. 13) Propylester d. Oxyessig-4-Acetylamidophenyläthersäure. Sm. 66 bis 68° (C. 1898 [1] 1252).

14) Dipropylester d. Pyridin-2, 3-Dicarbonsäure. Sd. über 300° (B. 27,

15) Butylester-4-Acetylamidophenylester d. Kohlensäure. Sm. 117 bis 120° (C. 1897 [1] 469).

16) 4 - Aethoxylphenylmonamid d. Methandicarbonsäuremonoäthylester. Sm. 109° (G. 25 [2] 541).

 $C_{13}H_{17}O_4N_3$ C 55,9 — H 6,1 — O 22,9 — \acute{N} 15,1 — M. G. 279.

1) Aethylester d. γ -[3-Nitrophenyl]hydrazonvaleriansäure. Sm. 156 bis 157° (A. **253**, 62). — IV, 692.

2) Diäthylester d. α -Imidophenylmethan- α , 3-Di[amidoameisensäure] (3-Amidobenzamidindiurethan). Sm. 152—153° (B. **28**, 487). — **IV**, 1137. C 58,4 — H 6,0 — O 30,0 — N 5,2 — M. G. 267.

1) 2-Aethylester d. 1-[α-Oxyisopropyl]benzol-4-Carbonsäure-2-Amidoameisensäure. Sm. 167° u. Zers. (B. 17, 1305). — II. 1587 2) Diäthylester d. 4-Keto-2,6-Dimethyl-1,4-Dihydropyridin-3,5-Di-

carbonsäure. Sm. 221°. (2HCl, PtCl₄) (B. 19, 24; 20, 154). — II, 2005.

3) Aethylcarbonat d. 4-Oxyphenylamidoameisensäurepropylester. Sm. 94-96° (C. 1897 [1] 469). 4) Propylcarbonat d. 4-Oxyphenylamidoameisensäureäthylester. Sm.

54—56° (C. **1897** [1] 469). 5) Phenylamid d. Chinasaure + H₂O. Sm. 174° (A. 110, 342). — II, 422. C 52,9 — H 5,7 — O 27,1 — N 14,2 — M. G. 295.

1) Aethyläther d. ?-Dinitro-8-Oxy-1-Aethyl-1,2,3,4-Tetrahydrochinolin. Sm. 76-77° (B. 19, 1048). - IV, 200.

2) ?-Dinitro-2-Methyl-4-Pseudobutylphenylamid d. Essigsäure. Sm.

199° (B. **30**, 303). C 55,1 — H 6,0 -- O 33,9 — N 4,9 — M. G. 283.

1) 5-Aethylester d. 6-Oxy-2-Keto-1-Aethyl-1, 2-Dihydropyridinäthyläther-3,5-Dicarbonsäure. Sm. 81°. Ag (A. 285, 62).

2) Diathylester d. 6-Oxy-2-Keto-1-Aethyl-1,2-Dihydropyridin-3,5-Dicarbonsäure. Sm. 89,5°. Ag, Aethylaminsalz (A. 285, 90).
3) Diäthylester d. 2,6-Dioxypyridin-2-Aethyläther-3,5-Dicarbon-

säure. Sm. 80-81° (B. 26, 2804; A. 262, 110). — IV, 175. 4) Diäthylester d. 2,6-Diketo-1-Aethyl-1,2,5,6-Tetrahydropyridin-3,5-Dicarbonsäure ($\alpha\gamma$ -Aethylimid d. Propen- $\alpha\alpha\gamma\gamma$ -Tetracarbonsäure- $\alpha\gamma$ -Diäthylester). Sm. 123° (A. 285, 84).

- C 50.1 H 5.5 O 30.9 N 13.5 M. G. 311. $C_{13}H_{17}O_6N_3$
 - 1) 2,4,6-Trinitro-3-Hexyl-1-Methylbenzol. Sm. 131° (A, 289, 166).
- $C_{13}H_{17}O_7N$
- C 52,1 H 5,7 O 37,4 N 4,7 M. G. 299.
- 1) Helicinaldoxim + H_2O . Sm. 190° (B. 18, 1662). III, 77.
- 2) 2-Nitro-3,4,5-Trioxybenzoltriäthyläther-1-Carbonsäure. Sm. 104° (B. **25**, 726). — II, 1924.
- 1) m-Chlorsalicin $+ 2H_2O$. Sm. 154° (wasserfrei) (A. 56, 53; C. 1897 [2] $C_{13}H_{17}O_7Cl$ 1075). — III, 609.
- 1) m-Bromsalicin + 2 H₂O. Sm. 170° (160°) wasserfrei (Z. 1865, 516; C. $C_{13}H_{17}O_7Br$ 1897 [2] 1075). — III, 609.
- 1) m-Jodsalicin $+ 2 H_2 O$. Sm. 192° (wasserfrei) (C. 1896 [2] 738; 1897 $C_{13}H_{17}O_7J$ [2] 1075). C 49,5 — H 5,4 — O 40,6 — N 4,4 — M. G. 315.
- $C_{13}H_{17}O_8N$
 - 1) Nitril d. Tetraacetylarabonsäure. Sm. 117-118° (B. 26, 744). -I, 1480.
- 1) 4,4,6-Trimethyl-2-Phenyl-4,5-Dihydro-1,3-Thiazin, Sm. 34°, (2 HCl. $C_{13}H_{17}NS$ PtCl₄), Pikrat (B. 30, 1320). — IV, 233.
- 1) Chlorbenzylat d. 2-Methyl-1-Aethylimidazol. 2+PtCl₄ (A. 214, $C_{19}H_{17}N_{9}Cl$ 304). — IV, 517. C 71,6 — H 8,2 — O 7,3 -- N 12,8 — M. G. 218.
- $C_{13}H_{18}ON_{9}$
- 1) s-Phenylhexahydrophenylharnstoff. Sm. 180° (A. 278, 104).
- 2) ε-Phenylhydrazon-δ-Keto-β-Methylhexan. Sm. 98° (B. 22, 2122).
- 3) δ -Phenylhydrazon- ε -Keto- β -Methylhexan. Sm. 94° (G. 27 [1] 278). **– IV**, 782.
- 4) Aethylcytisin. $(2 \text{HCl}, \text{PtCl}_4 + 2 \text{H}_2 \text{O}), (\text{HCl}, \text{AuCl}_3). \text{III}, 879.$
- 5) Dimethyleytisin. $(2 \text{HCl}, \text{PtCl}_4 + 2^{1/2} \text{H}_2 \text{O}), (\text{HCl}, \text{AuCl}_3).$ III, 879.
- 6) 4-Keto-2,2-Dimethyl-6-[3-Amidophenyl]hexahydropyridin. Fl. Oxalat (A. 227, 378). IV, 889.

 7) 4-Keto-2,2-Dimethyl-6-[4-Amidophenyl]hexahydropyridin. Fl. Oxalat (A. 227, 380). IV, 889.
- 8) 1-Benzoylamido-2-Methylhexahydropyridin. Sm. 165—166°. HCl (C. 1896 [1] 1126).
- 9) 1-[4-Acetylamidophenyl]hexahydropyridin. Sm. 151°. HCl (B. 21, 2286). — IV, 587.
- 10) 4-0ximido-2,2-Dimethyl-6-Phenylhexahydropyridin(Benzaldiaceton-aminoxim). Sm. 140—141° (B. 29, 523). IV, 232.
- 11) 1-Nitroso-3, 6-Dimethyl-2-Aethyl-1,2,3,4-Tetrahydrochinolin (B. 18,
- 3388). IV, 210. 12) Nitril d. 2-Keto-6-Methyl-4-Hexyl-1, 2-Dihydropyridin-3-Carbon-
- säure. Sm. 160° (C. 1899 [1] 290). 13) Benzylamid d. Hexahydropyridin-1-Carbonsäure (s-Benzylpiperidinharnstoff). Sm. 101—102° (B. 24, 3818). — IV, 13.
- $C_{18}H_{18}ON_4$
- C 63.4 H 7.3 O 6.5 N 22.8 M. G. 246.1) 1-[3-Acetylamidophenyl]azohexahydropyridin. Sm. 100-101° (A. 235, 266). — IV, 1580.
- $C_{13}H_{18}O_{2}N_{2}$
- C 66.6 H 7.7 O 13.7 N 12.0 M. G. 234.
- 1) 3,4-Di[Propionylamido]-1-Methylbenzol. Sm. 133° (B. 23, 1878). IV, 613.
- 2) 3,5-Di[Acetylamidomethyl]-l-Methylbenzol. Sm. 165° (B. 25, 3017). **- IV**, 645.
- 3) 5-Acetylamido-4-Methylacetylamido-1,3-Dimethylbenzol. Sm. 195 bis 196° (B. 31, 2933).
- 4) 2,4-Di[Acetylamido]-1,3,5-Trimethylbenzol. Sm. oberh. 360° (A. 179, 177). — IV, 645.
- 5) s-Valeryl-2-Methylphenylharnstoff. Sm. 119—120° (Soc. 67, 1043).
- 6) α -Acetylamido- β -[4-Methylphenyl]acetylamidoäthan. Sm. 107° (B. 24, 2197). — II, 493.
- 7) ε -Oximido- α -Benzoylamidohexan. Sm. 87° (A. 289, 207).
- 8) Benzoat d. Isocapronamidoxim. Sm. 105-106 (B. 19, 1502). -II, 1210.
- 9) ε -Phenylhydrazon- β -Methylpentan- ε -Carbonsäure. Sm. 105° (A. **305**, 63).

C₁₃H₁₈O₂N₂10) Phenylhydrazonderivat d. Mesitonsäure. Sm. 121,5° (A. 247, 104).

- IV, 692.
11) Aethylester d. γ-Phenylhydrazonvaleriansäure. Sm. 110° (106—108°)

(A. 236, 148; J. pr. [2] 44, 115). — IV, 691. 12) Aethylester d. β -[4-Methylphenyl] hydrazonbuttersäure. Sm. 91—93°

(B. 17, 250). — IV, 807.

13) Aethylester d. 2,5-Dimethyl-2,3-Dihydrobenzimidazol-2-Methylcarbonsäure (Ae. d. Aethenyltoluylendiaminessigsäure). Sm. 820 (B. 12, 953). — IV, 615.

14) Verbindung (aus Benzenylamidin u. Acetaldehyd). (2HCl, PtCl₄) (B. 23, 2926). — IV, 848. C 59,5 — H 6,8 — O 12,2 — N 21,4 — M. G. 262.

C, H, O, N

1) Pentamethylen-1,2-Xylylendinitrosodiamin. Sm. 104° (B. 31, 1704). 2) 1-[?-Nitro-2,4-Dimethylphenyl]azohexahydropyridin. Sm. 51-520

 $C_{13}H_{18}O_3N_2$

1) Aethylester d. α-Benzenylamidoximbuttersäure. Sm. 57° (B. 29,

2) Aethylester d. α-Benzenylamidoximisobuttersäure. Sm. 37—38°. HCl (B. 28, 1375).

3) β -Amid d. β -Phenylamidopropan- $\alpha\beta$ -Dicarbonsäure- α -Aethylester. Sm. 125° (B. 18, 1039). — II, 439.

4) isom. Amid d. β -Phenylamidopropan- $\alpha\beta$ -Dicarbonsäuremonäthylester. Sm. 163° (B. 25, 2068). — II, 439.

5) Monamid d. α -[2-Methylphenyl]amido \ddot{a} than- $\alpha\alpha$ -Dicarbons \ddot{a} uremonäthylester (B. 19, 2966). — II, 473.

6) 6-Nitro-2-Methyl-4-Pseudobutylphenylamid d. Essigsäure. Sm.

147° (B. 30, 303). C 58,6 — H 6,8 — O 24,1 — N 10,5 — M. G. 266. $C_{13}H_{18}O_4N_2$

1) Diäthylester d. 4-Methyl-1,3-Phenylendi [amidoameisensäure]. Sm. 137° (B. 7, 1263; 23, 1817; Soc. 49, 257). — IV, 603.
2) Diäthylester d. Benzylidendi[amidoameisensäure] (Benzylidendiurc-

than). Sm. 171° (B. 7, 634-635; 27, 1250). — III, 33. 1) Aethylester d. α-[4-Methylphenylsulfon]isobuttersäure (B. 27 [2]

 $C_{13}H_{18}O_4S$ $\mathbf{C}_{13}\mathbf{H}_{18}\mathbf{O}_{5}\mathbf{N}_{2}$

C18H18O8N.

 $\mathbf{C}_{13}\mathbf{H}_{18}\mathbf{O}_{6}\mathbf{N}_{4}$

- H 6.4 - O 28.4 - N 9.9 - M. G. 282. C 55,3 -

1) Glyko-3,4-Diamido-1-Methylbenzol (B. 20, 2209). — IV, 621. 2) Diäthyläther d. β -[2-Nitrobenzoyl]amido- $\alpha \alpha$ -Dioxyäthan. Sm. 70 bis 71° (B. **27**, 3093). — II, 1231.

3) Diäthyläther d. β -[3-Nitrobenzoyl]amido- $\alpha\alpha$ -Dioxyäthan. Sm. 82°

(B. **27**, 3095). — II, 1236.

4) Methylphenylhydrazon d. Glykoson. Sm. 171° (B. 22, 90). — IV, 792. 5) 5-Aethylester d. 6-Aethylamido-2-Keto-1-Aethyl-1,2-Dihydropyridin-3,5-Dicarbonsäure. Sm. 165°. Aethylaminsalz (A. 285, 68, 75).

– IV, 836. 6) Diäthylester d. 1-Nitroso-2,6-Dimethyl-1,4-Dihydropyridin-3,5-Di-

carbonsäure + 1/2 H₂O. Sm. 52° (G. 25 [2] 82). — IV, 94.
7) Nitril d. Phenylamidogalaktosecarbonsäure. Sm. 138° (B. 27, 1288).

8) Nitril d. Phenylamidoglykosecarbonsäure. Sm. 166-168° (B. 27,

9) Nitril d. Phenylamidolävulosecarbonsäure. Sm. 131° (B. 27, 1289).

C 52,4 — H 6,0 — O 32,2 — N 9,4 — M. G. 298.
1) Dextrosehydrazid d. Benzolcarbonsäure. Sm. Sm. 171-172° u. Zers.

(195—196°) (B. **28**, 161; **29**, 2311). — **II**, 1309. C 47,8 — H 5,5 — O 29,4 — N 17,2 — M. G. 326. 1) 2,4,5-Trinitro-6-Aethylamido-3-Pseudobutyl-1-Methylbenzol.

113° (B. 30, 304).

1) Diacetylamethylcamphophenolsulfon (Bl. [3] 4, 720). — III, 499. $C_{13}H_{18}O_{7}S$ $\mathbf{C}_{13}\mathbf{H}_{18}\mathbf{NCl}$ $\mathbf{C}_{13}\mathbf{H}_{18}\mathbf{HBr}$ 1) 1,2-Xylylenpiperidoniumchlorid. 2+PtCl₄, +AuCl₈ (B. 31, 425, 592).
 1) 1,2-Xylylenpiperidoniumbromid. Sm. 234° (B. 31, 425, 592).
 1) Jodmethylat d. 3,3-Diäthylpseudoindol. Sm. 132° u. Zers. (G. 28

 $\mathbf{C}_{13}\mathbf{H}_{18}\mathbf{N}\mathbf{J}$ [2] 367).

2) Jodmethylat d. 3,4,8,9-Tetrahydrojulol. Sm. 186° (B. 25, 2803). — IV, 230.

 $\mathbf{C}_{13}\mathbf{H}_{18}\mathbf{NJ}_{6}$ $C_{12}H_{18}N_2S$

- 1) Pentajodid d. 1,2-Xylylenpiperidoniumjodid. Sm. 92° (B. 31, 425).
- 1) s-Phenylhexahydrophenylthioharnstoff. Sm. 147-1480 (A. 278, 104). 2) s-Allyl-3,5-Dimethylbenzylthioharnstoff. Sm. 91° (B. 25, 3015). II, *555*.
- 3) 2-Phenylamido-4, 4, 6-Trimethyl-4, 5-Dihydro-1, 3-Thiazin. Sm. 147 bis 148°. (2 HCl, PtCl₄) (B. 30, 1324).
- 4) 2-Methylphenylamid d. Hexahydropyridin-1-Thiocarbonsäure (s-2-Methylphenylpiperidinthioharnstoff). Sm. 98° (B. 17, 3040). — IV, 14.
- 5) 4-Methylphenylamid d. Hexahydropyridin-1-Thiocarbonsäure (s-4-Methylphenylpiperidinthioharnstoff). Sm. 132° (B. 17, 3040). — IV, 14.
- 6) Benzylamid d. Hexahydropyridin-1-Thiocarbonsäure (s-Benzylpiperidinthioharnstoff). Sm. 87-88° (Soc. 59, 568). — IV, 14. C 76,1 — H 9,3 — O 7,8 — N 6,8 — M. G. 205. 1) α-Oximido-α-Phenylheptan. Sm. 55° (Bl. 47, 50). — III, 156. 2) 4-Propyl-1-[γ-Oximidoäthyl] benzol. Sm. 56-57° (B. 22, 2271). —

 $C_{13}H_{19}ON$

- III, 156.
- 3) 2- $[\alpha$ -Oximidopropyl]-4-Isopropyl-1-Methylbenzol. Fl. (J. pr. [2] 46, 486). — III, 156.
- 4) 4-Isopropylbenzimidopropyläther. HCl (Sm. 1080 u. Zers.) (B. 30,
- 5) α -[2-Oxyphenyl]- β -[2-Hexahydropyridyl]äthan (Oxystilbazolin). Sm. $93-94^{\circ}$ (B. 23, 2699). — IV, 395.
- 6) 4-Oxy-2,2-Dimethyl-6-Phenylhexahydropyridin. Fl. HCl (B. 16, 2237). — IV, 232.
- 7) 2-Oxy-1-Methyl-3,3-Diäthyl-2,3-Dihydroindol. Sm. 55° (G. 28) [2] 368).
- 8) Aethyläther d. 8-Oxy-1-Aethyl-1,2,3,4-Tetrahydrochinolin. Sm. 33°;
- Sd. 269—271°. Pikrat (B. 17, 760; 19, 1044). IV, 200.

 9) Aethyläther d. 7-Oxy-2-Aethyl-1,2,3,4-Tetrahydroisochinolin. Sd. 197—198°₅₀. HCl, (2HCl, PtCl₄) (A. 286, 19). IV, 202.

 10) Cyanäthyleampher. Sd. 163—165°₂₁ (B. 24 [2] 733). III, 513.
- 11) Methylisoamylamid d. Benzolcarbonsäure. Sd. 296—298° (B. 29, 2120).
- 12) Phenylamid d. Oenanthsäure. Sm. 70-71° (B. 20, 1022). II, 370. 13) Phenylamid d. β -Methylpentan- δ -Carbonsäure. Sm. 110—111° (Soc.
- 67, 512).
- 14) Phenylamid d. $\beta\beta$ -Dimethylbutan- α -Carbonsäure. Sm. 105—105,5° Soc. 73, 18).
- 15) 4-Methylphenylamid d. β -Methylbutan- α -Carbonsäure. Sm. 75° Soc. 67, 268).
- 16) 4-Methylphenylamid d. β -Methylbutan- γ -Carbonsäure. Sm. 103 bis 104° (Soc. **73**, 17).
- 17) Isoamylphenylamid d. Essigsäure. Sd. 278°₇₂₀ (B. 18, 3378; 21, 1110). **- II**, 367.
- 18) 2-Methyl-6-Isobutylphenylamid d. Essigsäure. Sm. 141-142° (B. 17, 2340). **— II**, *564*.
- 19) 2-Methyl-4-Pseudobutylphenylamid d. Essigsäure. Sm. 1620 (B. 17, 2322). — II, 564.
- 20) Pentamethylphenylamid d. Essigsäure. Sm. 213° (B. 18, 1825). II, 565. C'66,9 - H 8,2 - O 6,9 - N 18,0 - M. G. 233.

 $\mathbf{C}_{13}\mathbf{H}_{19}\mathbf{ON}_{3}$

- 1) ε -Oximido- δ -Phenylhydrazon- β -Methylhexan. Sm. 127—128° (G. 27
- [1] 277). IV, 782. 2) δ -Oximido- ε -Phenylhydrazon- β -Methylhexan. Sm. 150—151° (B. 22, 2122). — IV, 782. C 70,6 — H 8,6 — O 14,5 — N 6,3 — M. G. 221.

 $\mathbf{C}_{13}\mathbf{H}_{19}\mathbf{O}_{2}\mathbf{N}$

- 1) P-Nitro-1-Heptylbenzol. Sd. 178°_{10} (Bl. 47, 50). II, 107.
- 2) Aethyläther d. 4-Acetylisopropylamido-1-Oxybenzol. Fl. (A. 305,
- 3) 6-Methyläther d. α -Oximido- α -[6-Oxy-3-tert. Butylphenyl]methan. Sm. 113—114° (Am. 17, 115). — III, 155.
- 4) Diäthyläther d. β-Benzylidenamido-αα-Dioxyäthan (Benzalamido-
- acetal). Sd. 220¹,50 (M. 14, 116; 15, 300; B. 26, 421). III, 37. 5) 3,5-Diacetyl-1,2,4,6-Tetramethyl-1,4-Dihydropyridin. Sm. 118⁰ (B. **31**, 1030).

 $C_{13}H_{19}O_{2}N_{3}$

 $C_{19}H_{19}O_{2}N$

6) Dioscorin. Sm. 43,5°. $HCl + 2H_2O$, $(2HCl, PtCl_4 + 3H_2O)$, $(HCl, PtCl_4 + 3H_2O)$, $(HCl, PtCl_4 + 3H_2O)$ $AuCl_3 + \frac{1}{4}H_2O$) (C. 1897 [2] 130).

7) β-[4-Methylphenyl]amidoisocapronsäure. Sm. 1920 (B. 25, 2050). — II, 509.

8) Aethylester d. α-Phenylamidoisovaleriansäure. Sd. 275-280°. HBr

(B. 30, 2305, 2308). 9) Aethylester d. α-Methylphenylamidobuttersäure. Fl. (B. 30, 3175).

10) Aethylester d. α-[2-Methylphenyl]amidobuttersäure. Sd. 278° (B.

25, 2317). — **II**, 472. 11) Aethylester d. α-[3-Methylphenyl]amidobuttersäure. Sd. 281 bis

285°₇₄₅ (B. 30, 2467). 12) Aethylester d. α-[4-Methylphenyl]amidobuttersäure. Sm. 30,5°; Sd.

 $278-280^{\circ}$ (B. **25**, 2319). — II, 508.

13) Aethylester d. α-Benzylamidobuttersäure. Sd. 275-285°₇₈₅ (B. 30, 14) Aethylester d. α -[2-Methylphenyl]amidoisobuttersäure. Sm. 57°;

Sd. 272,8° (B. 25, 2334; Ph. Ch. 10, 656). — II, 472. 15) Aethylester d. α-[3-Methylphenyl]amidoisobuttersäure. Sd. 270 bis

273°₇₅₃ (B. 30, 2468).

16) Aethylester d. β -[2-Methylphenyl]amidoisobuttersäure (B. 25, 2336). **– II**, 472.

17) Aethylester d. β -[4-Methylphenyl]amidoisobuttersäure. Sm. 36°; Sd. 278° (B. 25, 2338). — II, 508.

18) Aethylester d. α - oder β -Benzylamidoisobuttersäure. Sd. $270-290^{\circ}_{782}$ (B. 30, 3171).

19) Aethylester d. Aethylphenylamidopropionsäure. Sd. 268-270°,771 (B. 30, 3178).

20) Aethylester d. α-[2,4-Dimethylphenyl] amidopropionsäure. Sm. 42°; Sd. 274—275°₇₅₈ (B. 30, 2476). 21) Aethylester d. 4-Methyl-2-Isopropylphenylamidoameisensäure. Sm.

 229° (A. **221**, 173). — II, 559. 22) Aethylester d. 4-Diäthylamidobenzol-1-Carbonsäure. Sm. 43°; Sd. 312—314° (Am. 7, 197; 19, 331). — II, 1271.

HCl (B. 28, 1919). 23) Amylester d. 4-Amidophenylessigsäure. Fl.

24) Isoamylester d. α-Amido-α-Phenylessigsäure. Şm. 154°. HCl (B. 24, 4147, 4148). - II, 1323.

25) Allylimid d. Camphersäure. Sm. 48-49° (J. 1886, 559). — I, 1393. 26) Amid d. 5-Oxy-4-Isopropyl-1-Methylbenzoläthyläther-2-Carbonsäure. Sm. 127° (A. 244, 69). — II, 1589.

27) 2-Methylphenylamid d. α-Oxyisobutteräthyläthersäure. Sm. 57° (B. **25**, 2928). — **II**, 466.

28) 4-Aethoxylphenylamid d. Valeriansäure. Sm. 129° (C. 1898 [2] 373). C 62.6 - H 7.6 - O 12.9 - N 16.9 - M. G. 249.

1) 2,5-Di[Acetylamido]-4-Dimethylamido-1-Methylbenzol. Sm. 235 bis 236° (B. 31, 2516).

2) 3,5-Di[Acetylamido]-4-Dimethylamido-1-Methylbenzol. Sm. 151 bis 152° (B. 31, 2520).

3) P-Acetylamido-4-Acetylmethylamido-1-Dimethylamidobenzol? Sm.

184° (B. 12, 1813). — IV, 1125. C 56,3 — H 6,9 — O 11,5 — N 25,3 — M. G. 277. l) Piperidylkaffeïn. Sm. 142° (B. 31, 1140). $C_{13}H_{19}O_{2}N_{5}$

1) Lakton d. Methyldiäthyl-4-Methylphenylphosphoniumhydrat-α- $C_{13}H_{19}O_{2}P$ Carbonsäure (A. 293, 291). $C_{13}H_{19}O_3N$

C 65.8 - H 8.0 - O 20.2 - N 5.9 - M. G. 237.

1) Aethyläther d. ?-Nitro-4-Oxy-1-[tert.] Butylbenzol. Sd. über 300° u. Zers. (B. 15, 1991).

2) 2,4-Diäthyläther d. α -Oximido- α -[2,4-Dioxyphenyl]propan. Sm. 133°

(B. 23, 1207). — III, 143.
3) Diäthyläther d. β-[2-Oxybenzyliden]amido-αα-Dioxyäthan. Sm. 32°; Sd. 188°₁₅ (B. 27, 3101). — III, 72.
4) Diäthyläther d. β-[3-Oxybenzyliden]amido-αα-Dioxyäthan. Sm. 71°
(A. 2000). — III. 72.
(A. 2000). — III. 72.

(A. 286, 6). - III, 79.

5) Diäthyläther d. β-Benzoylamido-αα-Dioxyäthan. Sm. 38°; Sd. 228°₅₀ (B. 26, 421, 465; 27, 168). — II, 1190.

 $C_{13}H_{19}O_3N$

6) Piperidinvanillin. Sm. 70° (Soc. 73, 142). 7) Pellotin. Sm. 110°. HCl, $(2 \, \text{HCl}, \, \text{PtCl}_4)$, $(\text{HCl}, \, \text{HgCl}_2)$, HJ $(B. \, 27, \, 2977; \, 10^{-3})$ 29, 216; 31, 1193; C. 1898 [1] 741). — III, 778.

8) Aethylester d. 3-Acetyl-2,4,6-Trimethyl-1,4-Dihydropyridin-5-Carbonsäure. Sm. 120° (B. 24, 1669). — IV, 90.

C 58.9 - H 7.1 - O 18.1 - N 15.9 - M. G. 265. $C_{13}H_{19}O_3N_3$

1) $\alpha \alpha$ -Dipropyl- β -[2-Nitrophenyl]harnstoff. Fl. (Am. 19, 317). 1) Diaceton-4-Methylphenylphosphinsäure. Sm. 102-103°. Ag (B. 19, $C_{13}H_{19}O_{3}P$ 1012). — IV, 1674. C 61,7 — H 7,5 — O 25,3 — N 5,5 — M. G. 253.

 $C_{13}H_{19}O_4N$

1) $\alpha\alpha$ -Diäthyläther d. β -[2-Oxybenzoyl]amido- $\alpha\alpha$ -Dioxyäthan. Sm. 54° (B. 27, 3101). — II, 1499.

2) Diäthylester d. 1,2,5-Trimethylpyrrol-3,4-Dicarbonsäure. Sm. 720 (B. 18, 303; A. 236, 303). — IV, 92.

3) Diäthylester d. 2,5-Dimethylpyrrol-3-Carbonsäure-4-Methylcarbonsäure. Sm. 109-110° (B. 19, 48). - IV, 93.

- 4) Diäthylester d. stab. 2,6-Dimethyl-1,4-Dihydropyridin-3,5-Dicarbonsäure (D. d. Dihydrodicarbolutidinsäure). Sm. 176—1836 (170°) (B. 21, 2741; A. 281, 95; G. 25 [2] 70). — IV, 93.
 5) Diäthylester d. 2,6-Dimethyl-1,4-Dihydropyridin-3,5-Dicarbon-
- säure (D. d. Isodihydrodicarbolutidinsäure). Sm. 58-60° (G. 25 [2] 81). **IV**, 94.

6) Diäthylester einer Säure (aus d. Nitrosoisodihydrodicarbolutidinsäure) $+ \frac{1}{2} H_2 O$. Sm. 88° (G. 25 [2] 83). — IV, 94.

C 58,0 — H 7,1 — O 29,7 — N 5,2 — M. G. 269. $C_{13}H_{19}O_5N$

- 1) 2-Amido-3,4,5-Trioxybenzoltriäthyläther-1-Carbonsäure. Sm. 1110 (B. **25**, 727). — II, 1924.
- 2) Dextrose-p-Toluid + $\frac{1}{2}$ H₂O. Sm. 100° (*J. pr.* [2] 37, 307). II, 511. 3) Galaktose-p-Toluid. Sm. 139° u. Zers. (*J. pr.* [2] 37, 309). II, 511.
- C 54,7 H 6,7 O 33,7 N 4,9 M. G. 285.

 1) Triäthylester d. α-Cyanpropan-αβγ-Tricarbonsäure (Tr. d. α-Cyan- $C_{13}H_{19}O_6N$ tricarballylsäure). Sd. 196,8—198,8°20 (A. ch. [6] 27, 286; B. 25 [2] 579;

Soc. 73, 1011). — I, 1226. 2) Triäthylester d. β -Cyanpropan- $\alpha\beta\gamma$ -Tricarbonsäure. Sm. 40—41°;

- Sd. 200—215°₁₄ (A. ch. [6] 18, 285; [6] 27, 250). I, 1226. $C_{13}H_{19}N_2Cl$ 1) 1-Chloräthylat d. 2,5-Dimethyl-1-Aethylbenzimidazol. $2 + PtCl_4$
- (A. 210, 377). IV, 883. 1) 1-Jodäthylat d. 2,5-Dimethyl-1-Aethylbenzimidazol. $+ J_2$ (A. 210, $C_{13}H_{19}N_{2}J$ 377). **— IV**, *883*.
- $\mathbf{C}_{13}\mathbf{H}_{19}\mathbf{N}_4\mathbf{Cl}$ 1) Chlorbenzylat d. Hexamethylentetramin. Sm. 192°. 2 + PtCl₄ (Bl. [3] 17, 293).
- 1) Diathyl-2,4-Dimethylphenylphosphin + Schwefelkohlenstoff (B. $C_{13}H_{19}S_2P$ **15**, 2018). C 70.9 - H 9.1 - O 7.3 - N 12.7 - M. G. 220. $\mathbf{C}_{13}\mathbf{H}_{20}\mathbf{ON}_2$
 - 1) α-Dipropylamido-α-Oximidophenylmethan (Benzenyldipropylamid
 - oxim). Sm. 62-66° (B. 27, 2197). II, 1204. 2) s-Pseudohexylphenylharnstoff. Sm. 70° (B. 23, 194). II, 377. 3) α -Methyl- α -Isoamyl- β -Phenylharnstoff. Sm. 100° (B. 29, 2119).
 - 4) α -[$\beta\beta$ -Dimethylbutyl]- β -Phenylharnstoff. Sm. 103—105° (B. 26, 2493). ÎI, 377.
 - 5) 1-Aethyloxydhydratd. 2,5-Dimethyl-1-Aethylbenzimidazol. 2 Chlorid + PtCl₄, Jodid, Trijodid (A. 210, 376). - IV, 882.
 - 6) Amid d. β-[4-Methylphenyl]amidoisocapronsäure. Sm. 131° (B. 25, 2049). — II, 509.
 - 7) β -Acetyl- α -Isoamyl- α -Phenylhydrazin. Sm. 160° (A. 252, 285) IV, 665.
 - 8) Phenylhydrazid d. Oenanthsäure. Sm. 103-104° (Am. 20, 678). C 62,9 - H 8,1 - O 6,4 - N 22,6 - M. G. 248.
- $\mathbf{C}_{13}\mathbf{H}_{20}\mathbf{ON}_{4}$ 1) 5-Acetylamido-1-Diäthylamido-2-Methyl-1-Diazobenzol. Sm. 108° (A. 235, 251). - IV, 1532.
- 1) 5-Oenanthyl-2-Aethylthiophen. Sd. 329—330° (B. 19, 668). III, 766. $C_{13}H_{20}OS$ C = 66.1 - H = 8.5 - O = 13.6 - N = 11.8 - M. G. = 236. $C_{13}H_{20}O_2N_2$
 - 1) Verbindung (aus Benzalpinakolin). Sm. 145-1460 (B. 30, 2270).

C 59.1 — H 7.6 — O 12.1 — N 21.2 — M. G. 264. $C_{13}H_{20}O_{2}N_{4}$ 1) 4-Methyl-1, 3-Phenylendi [β -Aethylharnstoff]. Sm. 175° (B. 8, 292). **– IV**, 603. 2) Verbindung (aus Acetonoxim u. 4-Diazotoluolchlorid). Sm. 140-145° u. Zers. (B. 25, 1687). — IV, 810. β-Hexyl-2-Methylphenylsulfon. Fl. (J. pr. [2] 54, 526).
 C 61,9 — H 7,9 — O 19,0 — N 11,1 — M. G. 252.
 Acetallylphenylharnstoff. Sm. 55° (B. 26, 427). — II, 377. C13H20O2S $C_{13}H_{20}O_3N_2$ 2) Diäthyläther d. β-[2-Amidobenzoyl]amido-αα-Dioxyäthan. Sm. 80 bis 81° (B. 27, 3094). — II, 1247. C 55,7 — H 7,1 — O 17,1 — N 20,0 — M. G. 280. $C_{13}H_{20}O_3N_4$ 1) Isoamyläther d. Oxykaffein. Sm. 129,5°. — III, 961. 1) P-Isoamyl-P-Dimethylbenzol-P-Sulfonsäure. K, Ba (A. 141, 169-170). C18H20O3S — II, 160. C 58,2 — H 7,4 — O 23,9 — N 10,4 — M. G. 268. $C_{13}H_{20}O_4N_2$ 1) Tetanin. (2 HCl, PtCl₄) (B. 19, 3120). — III, 889. C 52,0 — H 6,7 — O 32,0 — N 9,3 — M. G. 300. $C_{13}H_{20}O_6N_2$ 1) Diäthylester d. 4-Aethoxyl-2-Aethyl-1, 2, 6-Oxdiazin-3, 5-Dicarbonsäure. Sm. 72° (B. **26**, 1005). — **IV**, 545. 2) Phenylhydrazon d. α-Galaheptose. Sm. 200° (205° cor.) u. Zers. (A. 288, 145). — IV, 793. 3) Phenylhydrazon d. α-Glykoheptose. Sm. 170° u. Zers. (A. 270, 76). - IV, 792. 4) Phenylhydrazon d. β-Glykoheptose. Sm. 192° u. Zers. (A. 270, 88). - IV, 792. 5) Phenylhydrazon d. Mannoheptose. Sm. 197-200° u. Zers. (B. 23. 2230). — IV, 793. 6) Phenylhydrazid d. α-Rhamnohexonsäure. Sm. 210° u. Zers. (B. 22, 2733; **27**, 386). — IV, 726. 7) Phenylhydrazid d. β-Rhamnohexonsäure. Sm. 170° u. Zers. (B. **27**, 389). — $\overline{1V}$, 726. 1) α -Phenylsulfon- $\beta\beta$ -Diäthylsulfonpropan. Sm. 127—128° (B. **24**, 169). C13 H20 O6 S3 - II, 792. $\mathbf{C}_{13}\mathbf{H}_{20}\mathbf{O}_7\mathbf{N}_2$ C 49.4 - H 6.3 - O 35.4 - N 8.9 - M. G. 316.1) Phenylhydrazid d. Dextrosecarbonsäure. Sm. 171-1720 (B. 22, 2732). - IV, 727. 2) Phenylhydrazid d. α-Galaheptonsäure. Sm. 220° u. Zers. (A. 288, 143). **— IV**, 727. 3) Phenylhydrazid d. β-Galaheptonsäure. Sm. 185° (A. 288, 153). — 4) Phenylhydrazid d. α-Glykoheptonsäure. Sm. 172° (A. 270, 87). — 5) Phenylhydrazid d. β -Glykoheptonsäure. Sm. 150-152° (A. 270, 86). **– IV**, 730. 6) Phenylhydrazid d. d-Mannoheptonsäure. Sm. 214-216° (B. 22, 2732). **— IV**, 727. 7) Phenylhydrazid d. 1-Mannoheptonsäure. Sm. bei 220° u. Zers. (A.

- IV, 727. C13 H20 O0 S 1) Verbindung (d. Benzol-1-Carbonsäure-3-Sulfonsäure mit Schwefelsäuredipropylester). Ba + 7 H₂O (A. 218, 266). — II, 1298.

1) Chlormethylat d. 1, 2, 3-Trimethyl-1, 2, 3, 4-Tetrahydrochinolin.

272, 185). — **IV**, 727.

 $\mathbf{C}_{13}\mathbf{H}_{20}\mathbf{NCl}$

C13 H20 NJ

 $2 + \text{PtCl}_4$ (G. 23 [2] 112). — IV, 207. 2) Chlormethylat d. 1, 4, 4-Trimethyl-1, 2, 3, 4-Tetrahydrochinolin. $2 + \text{PtCl}_{4}$ (B. **29**, 2473). — **IV**, 208. 1) Trimethyl-1,2,3,4-Tetrahydro-5-Naphtylammoniumjodid. Sm. 164,5°

8) Phenylhydrazid d. i-Mannoheptonsäure. Sm. bei 225° (A. 272, 186).

(B. 22, 1316). — II, 586. 2) Jodmethylat d. Benzylhexahydropyridin. Sm. 145° (B. 15, 423). - IV, 9.

3) Jodmethylat d. 2-Methyl-1-Aethyl-1,2,3,4-Tetrahydrochinolin. Sm. 187° (A. 242, 321). — IV, 204. 4) Jodmethylat d. 1,2,3-Trimethyl-1,2,3,4-Tetrahydrochinolin. Sm.

 $146-147^{\circ}$ (G. **23** [2] 112). — **IV**, 207.

- 5) Jodmethylat d. 1,2,4-Trimethyl-1,2,3,4-Tetrahydrochinolin. Sm. 215° u. Zers. (B. 23, 2693). IV, 207.
 6) Jodmethylat d. 1,3,4-Trimethyl-1,2,3,4-Tetrahydrochinolin. Sm. $\mathbf{C}_{13}\mathbf{H}_{20}\mathbf{NJ}$
 - 205° u. Zers. (B. 23, 2634). IV, 208
 - 7) Jodmethylat d. 1,4,4-Trimethyl-1,2,3,4-Tetrahydrochinolin. subl. bei 257° (A. 242, 357; B. 29, 2473; G. 22 [2] 420). — IV, 208.
 - 8) Jodäthylat d. 1-Aethyl-1,2,3,4-Tetrahydrochinolin (B. 13, 2400). **– IV**, 192.
- 1) s-Pseudohexylphenylthioharnstoff. Sm. 52-53° (B. 23, 195). $C_{13}H_{20}N_2S$ II, 392.
 - 2) s-[$\beta\beta$ -Dimethylbutyl]phenylthioharnstoff. Sm. 120—121° (B. 26, 2492).
 - 3) α -Methyl- α -Isoamyl- β -Phenylthioharnstoff. Sm. 43° (B. 29, 2119).
 - 4) αα-Dipropyl-β-Phenylthioharnstoff. Sm. 66° (B. 26, 1685). II, 392.
 - 5) Aethylester d. Aethylimidoäthylphenylamidothioameisensäure. Sd. 237°. (2 HCl, PtCl₄), Pikrat (B. **25**, 56). — II, 391.
- 1) 4-Methyl-1, 3-Phenylendi- $[\beta$ -Aethylthioharnstoff]. Sm. 225° (B. 8, $C_{13}H_{20}N_4S_2$
- 668). IV, 604. 2) **4-Methyl-1,2-Phenylendi-**[β -Aethylthioharnstoff]. Sm. 149°(A. 221, 23).
 - **IV**, 614.
- C 75,4 H 10,1 O 7,7 N 6,8 M. G. 207. $C_{13}H_{21}ON$
 - Aethyläther d. P-Amido-4-Oxy-1-[tert.] Butylbenzol (B. 15, 1991).
 Phenyläther d. ζ-Oxy-γ-Amidomethylhexan. Fl. Pkrat (B. 31, 2139).
 Cyanallyl-Allylalkoholat. Sd. 95-96° (Z. 1870, 401).
 Oenantholanilin. Fl. (B. 16, 287). II, 445.

 - 5) Aethyloxydhydrat d. 1-Aethyl-1,2,3,4-Tetrahydrochinolin (B. 13, 2400). — IV, 192.
 - 6) Cyanpropylcampher. Sm. 46°; Sd. 140—150°₂₀ (B. **24** [2] 733). III, 513.
 - 7) Oxim d. Iron. Sm. $121,5^{\circ}$ (B. 26, 2680). III, 117. 8) Oxim d. α -Jonon. Sm. $89-90^{\circ}$ (B. 31, 875). 9) Oxim d. β -Jonon. Fl. (B. 31, 872).

 - Oxim d. Pulegenaceton. Sm. 134-135° (Bl. [3] 21, 112).
 C 70,0 H 9,4 O 14,3 N 6,3 M. G. 223.
- $C_{13}H_{21}O_2N$ 1) Trimethyl-[3-Oxy-1,2,3,4-Tetrahydro-2-Naphtyl]ammoniumhydrat. Fl. Salze, siehe diese; Pikrat (B. 26, 1838; A. 288, 124). — II, 855.
 - 2) Diäthyläther d. β -Benzylamido- $\alpha\alpha$ -Dioxyäthan. Sd. $280-290^{\circ}$ u. Zers. (B. 26, 467). — II, 531.

 - ε-Oximido-α-Keto-αγε-Triphenylpentan. Sm. 144° (A. 302, 242).
 Aethylderivat d. Cyancampher. Sm. 57-58° (B. 22 [2] 575).
- 1) Diathyläther d. Dioxy-2,4,5-Trimethylphenylphosphin. Sd. 232 $C_{18}H_{21}O_{2}P$ bis 233°₁₀₀ (A. **294**, 35). — IV, 1678. C 65,3 — H 8,8 — O 20,1 — N 5,8 — M. G. 239.
- $C_{13}H_{21}O_3N$ 1) Aethylester d. 2-Keto-1-Isoamyl-5-Methyl-2,3-Dihydropyrrol-**4-Carbonsäure.** Sm. 51—52°; Sd. 188° (A. **260**, 150). — I, 1215.
- $C_{13}H_{21}O_3N_3$ C 58.4 - H 7.9 - O 18.0 - N 15.7 - M. G. 267.1) Diäthyläther d. α -Amido- α -[$\beta\beta$ -Dioxyäthyl]- β -Phenylharnstoff (Acet-
- allylphenylsemicarbazid). Sm. 65-66° (B. 27, 2206). $\mathbf{C}_{13}\mathbf{H}_{21}\mathbf{O}_4\mathbf{N}$ C 61,2 - H 8,2 - O 25,1 - N 5,5 - M. G. 255.
 - 1) Cineolallylaminsäure. Sm. 126° (A. 271, 22). I, 1398. 2) Diäthylester d. γ-Cyanhexan-γδ-Dicarbonsäure. Sd. 280—286° (J. r.
 - **21**, 170). I, 1226. 3) Diäthylester d. β -Cyan- $\beta\gamma$ -Dimethylbutan- $\alpha\gamma$ -Dicarbonsäure. Sd. 170 bis 180° 30 (Soc. 71, 1189).
 - 4) Diäthylester d. γ -Cyan- $\beta\beta$ -Dimethylbutan- $\alpha\gamma$ -Dicarbonsäure. Sd. 181°₂₅ (Soc. 75, 64).
 - 5) Diäthylester d. β -[1-Piperidyl]äthen- $\alpha\alpha$ -Dicarbonsäure. Sd. 223 bis 224°₁₆ (B. **30**, 2026).
- C₁₃H₂₁O₆Cl 1) Triäthylester d. P-Chlorbutan-ααβ-Tricarbonsäure. Sd. 292° (B. 23, 1936; 24, 2011). I, 810.
 - 2) Triäthylester d. δ -Chlorbutan- $\alpha\beta\gamma$ -Tricarbonsäure. Fl. (M. 13, 589). **— I,** 810.

C 70,3 - H 9,9 - O 7,2 - N 12,6 - M. G. 222.

477). - IV, 832.

143° (A. 304, 12).

IV, 57. C 57,8 -

1) α -Phenylamido- $\beta\beta$ -Dipropylthioharnstoff. Sm. 104° (B. 30, 847). —

IV, 678. 2) α -[β -Diäthylamidoäthyl]- β -Phenylthioharnstoff. Sm. 86° (B. 29, 2527). 1) ?-Brom-2-Methyl-5-Oktylthiophen. Sm. 20° (B. 19, 648). — III, 747.

1) 6-Oxy-4-Methyl-2-Aethyl-2-Hexyl-1, 3-Diazin. Sm. 89°. Ag (B. 28,

2) Allylpinennitrolamin. + C₂H₂O (Sm. 94°). HBr (A. 268, 217). -

1) Anhydrid d. $\beta\zeta$ -Di[Oxyacetylamido]- δ -Keto- $\beta\zeta$ -Dimethylheptan (A.

- H 8,1 - O 23,7 - N 10,4 - M. G. 270.

 $C_{13}H_{21}N_3S$

C18 H21 BrS

 $C_{13}H_{22}ON_2$

 $C_{13}H_{22}O_4N_2$

 d. Diacetyltriacetondihydroxylamin). Sm. 141° (B. 30, 233, 2733).
 C 49,7 — H 7,0 — O 25,5 — N 17,8 — M. G. 314. C18H22O5N4 1) Diäthyläther d. Trioxydihydroäthyltheobromin. Sm. 1520 (A. 215, 307). — III, 956. 1) Triäthylbenzylammoniumchlorid. 2 + PtCl₄ (B. 10, 563). — II, 516. $\mathbf{C}_{13}\mathbf{H}_{22}\mathbf{NC1}$ 1) Triäthylbenzylammoniumjodid (J. 1879, 435; B. 10, 46, 310, 563, 964, $\mathbf{C}_{13}\mathbf{H}_{22}\mathbf{NJ}$ 1152, 1634). — II, 515. 2) Triäthyl-4-Methylphenylammoniumjodid (A. 93, 317). — II, 485. 1) Triäthylbenzylammoniumtrijodid. Sm. 87° (B. 10, 46; J. 1879, 435). C13 H22 NJ3 - II, 516. 1) Dijodmethylat d. Methylmetanikotin. Sm. 1890 (B. 28, 464). -C13H22N2J2 IV, 860. Sm. 178°. $2 + PtCl_4$ 1) Triäthylbenzylphosphoniumchlorid + H₂O. $\mathbf{C}_{13}\mathbf{H}_{22}\mathbf{ClP}$ (A. Spl. 1, 323; Soc. 53, 723). — IV, 1662. 2) Triäthyl-4-Methylphenylphosphoniumchlorid. 2 + PtCl₄ (J. 1883, 1306). — IV, 1671. 3) Methyldiäthyl-2,4-Dimethylphenylphosphoniumchlorid. 2 + PtCl₄ (B. 15, 2016). — IV, 1676. 1) Triäthylbenzylphosphoniumbromid (Soc. 53, 723). — IV, 1662. $C_{13}H_{22}BrP$ 1) Triäthylbenzylphosphoniumjodid (A. Spl. 1, 323). $\mathbf{C}_{13}\mathbf{H}_{23}\mathbf{JP}$ 2) Triäthyl-2-Methylphenylphosphoniumjodid. Sm. 162° (A. 293, 302). · IV, 1671. 3) Methyldiäthyl-2,4-Dimethylphenylphosphoniumjodid. Sm. 90° (B. 15, 2016). — IV, 1676. 4) Methyldiäthyl-4-Aethylphenylphosphoniumjodid. Sm. 135° (A. 293, 324). — IV, 1674. C 74.6 - H 11.0 - O 7.6 - N 6.7 - M. G. 209.C, H, ON 1) 1-Oximido-3-Hexyl-5-Methyl-1, 2, 3, 4-Tetrahydrobenzol. Sm. 103 bis 105° (A. 288, 345). 2) Triäthylbenzylammoniumhydrat. Fl. Chlorid, Jodid (J. 1879, 435; B. 10, 46, 310, 563, 964, 1152, 1634). — II, 516.
 3) 1-Propionylfenchylamin. Sm. 123° (A. 276, 319). — IV, 58. 1) Triäthylbenzylphosphoniumoxydhydrat. Chlorid, 2 Chlorid + PtCl₄, C13H23OP Bromid, Jodid, Sulfat, Acetat, Carbonat, Oxalat (A. Spl. 1, 323; Soc. 53, 723). — IV, *1662*. C 69,3 - H 10,2 - O 14,2 - N 6,2 - M. G. 225 $C_{13}H_{23}O_2N$ 1) Aethylester d. N-Aethylmerochinen. HBr (B. 30, 1336). C 64.7 - H 9.5 - O 19.9 - N 5.8 - M. G. 241. $C_{13}H_{23}O_3N$ 1) Isobutylester d. d-Ecgonin. (HCl, AuCl₃) (B. 23, 985). — III, 865. 2) Verbindung (aus Allylalkohol u. Allylchlorid). Sd. 95—96° (Z. 1870, 401). — **I**, *1468*. C 60,7 - H 9,0 - O 24,9 - N 5,4 - M. G. 257. $C_{13}H_{23}O_4N$ Diäthylester d. β-Isobutylamidopropen-αγ-Dicarbonsäure. Sd. 181 bis 182°₁₇ (B. 23, 3763). — I, 1215.
 Diäthylester d. Piperidyläthan-αβ-Dicarbonsäure. Sd. 159°₁₀. HCl (Soc. 73, 724). 3) Diäthylester d. Methylcincholoiponsäure. Derivate siehe (M. 17, 389). — III, 843. C 57,1 - H 8,4 - O 29,3 - N 5,1 - M. G. 273. ${}^{4}C_{13}H_{23}O_{5}N$ 1) δ -Oximido- $\beta\beta\zeta\zeta$ -Tetramethylheptan- $\alpha\eta$ -Dicarbonsäure. Sm. 141 bis

2) Aethylester d. Piperidinoxalessigsäure. Sm. 74° (A. 295, 357).

 $\mathbf{C}_{13}\mathbf{H}_{24}\mathbf{ON}_{2}$

C 69,6 — H 10,7 — O 7,1 — N 12,5 — M. G. 224. 1) Propylpinennitrolamin. Sm. 96° (A. 268, 217). — IV, 57. 2) Cuskhygrin + $3^{1/2}$ H₂O. Sm. $40-41^{\circ}$; Sd. 185° ₈₂. 2HCl, (2HCl, PtCl₄), (2HCl, 2AuCl₃) (B. 28, 579; 29, 2050; 30, 1113). — III, 878. C 65,0 — H 10,0 — O 13,3 — N 11,7 — M. G. 240.

 $\mathbf{C}_{13}\mathbf{H}_{24}\mathbf{O}_{2}\mathbf{N}_{2}$

1) Secalintoxin (C. 1897 [1] 1060). C 57,3 — H 8,8 — O 23,5 — N 10,3 — M. G. 272.

 $C_{13}H_{24}O_4N_2$ 1) 3,5-Hexamethyldiamidobenzol-1-Carbonsäure. Salze, siehe diese

(B. 7, 40). — Π , 1276. C 48,7 — Π 7,5 — O 35,0 — N 8,7 — M. G. 320. $\mathbf{C}_{13}\mathbf{H}_{24}\mathbf{O}_{7}\mathbf{N}_{2}$

1) Verbindung (aus Harnstoff u. Natriumacetessigsäureäthylester). Na, (A. **258**, 360). — I, *1349*.

1) Chlormethylat d. Dimethylamidoterpen. 2 + PtCl₄ (G. 16, 344). -C₁₃H₉₄NCl IV, 76.

1) Jodmethylat d. 1-Methyl-?-Diäthyl-1,2,3,4-Tetrahydrochinolin. Sm. $\mathbf{C}_{13}\mathbf{H}_{24}\mathbf{N}\mathbf{J}$ 192° u. Zers. (B. 29, 2481). — IV, 210.

2) Jodmethylat d. Dimethylamidoterpen (G. 16, 344). - IV, 76.

1) s-Allylcamphelylthioharnstoff. Sm. 79—80° (G. 23 [2] 503). 1) Diisoamylester d. Dithiomelanurensäure. Sm. 82° (J. pr. [2] 33, $C_{13}H_{24}N_2S$ $\mathbf{C}_{13}^{13}\mathbf{H}_{24}^{13}\mathbf{N}_{4}\mathbf{S}_{2}$ 300). — $\bar{1}$, 1452. C 73,9 — H 11,8 — O 7,6 — N 6,6 — M. G. 211.

 $\mathbf{C}_{13}\mathbf{H}_{25}\mathbf{ON}$

1) 4-Keto-2,2-Dimethyl-6-Hexylhexahydropyridin (Oenanthdiacetonamin). Sm. 29,5°. Oxalat (A. 227, 370). - I, 983.

2) Trimethylterpenylammoniumhydrat. 2 Chlorid + PtCl₄, Jodid (G.

16, 344). — IV, 76.
3) d-Menthylamid d. Propionsäure. Sm. 151° (A. 276, 310). — IV, 43.
4) l-Menthylamid d. Propionsäure. Sm. 89° (A. 276, 304). — IV, 42.

5) 1-Aethylmenthylamid d. Ameisensäure. Sd. 293—294° (J. r. 27, 530).

– IV, 42. C₁₉H₉₅O₉Br 1) Aethylester d. ?-Bromdekan-?-Carbonsäure. Sd. 179⁹₁₅ (B. 23, 2357). — I, 488. C 49,5 — H 7,9 — O 20,3 — N 22,2 — M. G. 315.

 $\mathbf{C}_{13}\mathbf{H}_{25}\mathbf{O}_{4}\mathbf{N}_{5}$

1) Verbindung (aus d. Nitril d. Propionsäure u. Ag₂O). Fest. Sd. oberh.

 $\begin{array}{c} 200^{\circ} \ (J. \ 1868, \ 647). - \text{I}, \ 1295. \\ \textbf{C}_{13}\textbf{H}_{25}\textbf{N}_{2}\textbf{Br} \ 1) \ \textbf{Brompropylat d. 1-Propyl-2-Isobutylimidazol.} \quad \text{Sm. } 162-163^{\circ} \ (B. \ 162-163) \end{array}$ 17, 1295). — IV, 530. C 69,0 — H 11,5 — O 7,1 — N 12,4 — M. G. 226. 1) Propyl-1-Menthylnitrosamin. Sd. 159—161°₂₀ (A. 300, 280). 2) γ-Oxy-αβ-Di[1-Hexahydropyridyl]propan. Sd. 178—180°₂₈ (C. 1898)

 $\mathbf{C}_{13}\mathbf{H}_{26}\mathbf{ON}_{2}$

[2] 353; Bl. [3] 21, 311).
3) β-Oxy-αγ-Di[1-Hexahydropyridyl]propan (Dipiperallylalkin). Sd. 280 bis 290° u. ger. Zers. HCl, (2HCl, PtCl₄) (B. 14, 1879; C. 1898 [2] 353;

Bl. [3] 21, 311). — IV, 19. 4) Dipiperidinhydrin. Sm. 11—12°; Sd. 288°₅₄₆. (2 HCl, PtCl₄) (M. 15, 128). — IV, 19. C 64,5 — H 10,7 — O 13,2 — N 11,6 — M. G. 242.

 $C_{13}H_{26}O_2N_2$

1) $\beta \vartheta$ -Dioximido - $\gamma \eta$ -Diäthylnonan. Sm. 110—111° (Soc. 57, 34). — I, 1034.

2) Diisobutyläther d. αε-Diimido-αε-Dioxypentan (Glutarimidodiisobutyl-

äther). 2HCl (Pinner, Imidoäther 48). — I, 1491. 3) Amid d. Brassylsäure. Sm. 177° (J. pr. [2] 48, 333). C 54,5 — H 9,1 — O 16,8 — N 19,6 — M. G. 286.

 $C_{13}H_{26}O_3N_4$ 1) Carbonat d. ε -Amido- ε -Oximido- β -Methylpentan (C. d. Isocapramidoxim). Sm. 114° (B. 19, 1505). — I, 1485.

1) Paraffinsäure (J. 1872, 352). $C_{13}H_{26}O_5N$ $\mathbf{C}_{13}\mathbf{H}_{26}\mathbf{O}_{10}\mathbf{N}_{4}$

C 39.2 - H 6.5 - O 40.2 - N 14.1 - M. G. 398.1) Milchzuckeramidoguanidin. HNO_3 , $H_2SO_4 + 7 H_2O$ (B. 28, 2614).
1) Hexamethylentetraminmethylenjodid. Sm. 165° (B. 19, 1845). $C_{13}H_{26}N_8J_9$

I, 1168. C 73,2 — H 12,7 — O 7,5 — N 6,6 — M. G. 213. C13H27ON

1) α-Diisoamylamido-β-Ketopropan. Sd. 219—220°. HCl, HBr, HJ (B. **29**, 871).

2) η -Oximidotridekan (Dihexylketoxim). Fl. (Soc. 57, 535). — I, 1031. 3) β -Acetylamidoundekan. Sm. 58° (G. 24 [2] 279).

4) Amid d. Dodekan-P-Carbonsäure. Sm. 98,5° (B. 19, 1439). — I, 1249. C 68,1 — H 11,8 — O 14,0 — N 6,1 — M. G. 229. $\mathbf{C}_{13}\mathbf{H}_{27}\mathbf{ON}$ $\mathbf{C}_{13}\mathbf{H}_{27}\mathbf{O}_{2}\mathbf{N}$

1) μ-Amidododekan-α-Carbonsäure. Sm. 163°. HCl, (2HCl, PtCl,), Ag (B. **26**, 1870).

2) Aethylester d. Diisoamylamidoameisensäure. Sd. 246-2470 (B. 12, 1334). — I, *1255*.

C 68,4 - H 12,3 - O 7,0 - N 12,3 - M. G. 228. $C_{13}H_{28}ON_{2}$

1) Tetrapropylharnstoff. Sd. 258°_{755} (Bl. [3] 11, 935). 2) α -Diisoamylamido- β -Oximidopropan (B. 29, 872). 1) $\beta\beta$ -Di[Isoamylsulfon]propan. Sm. 72° (B. 23, 3229). — I, 994. C 46,4 — H 8,3 — O 28,6 — N 16,7 — M. G 336. $C_{13}H_{28}O_4S_2$ $C_{13}H_{28}O_6N_4$

1) Verbindung (aus Lysin) (B. 25, 2455). — III, 893.

1) Trimethyl-d-Menthylammoniumjodid. Sm. 160-1610 (A. 300, 284). $\mathbf{C}_{13}\mathbf{H}_{28}\mathbf{NJ}$ 2) Trimethyl-I-Menthylammoniumjodid. Sm. 190° (A. 300, 281).

1) Trimethyl-1-Menthylammoniumtrijodid. Sm. 117—118° (A. 300, 281). 1) s-Dihexylthioharnstoff. Sm. 40° (B. 16, 746). — I, 1321. $C_{13}H_{28}NJ_{3}$

 $\mathbf{C}_{13}\mathbf{H}_{28}\mathbf{N}_{2}\mathbf{S}$

 $\mathbf{C}_{13}\mathbf{H}_{29}\mathbf{ON}$ C 72,6 - H 13,5 - O 7,4 - N 6,5 - M. G. 215.

α-Diisoamylamido-β-Oxypropan (Oxyisopropyldiisoamylamin). Sd. 242 bis 244°. (2 HCl, PtCl₄) (A. ch. [6] 13, 435). — I, 1175.
 Trimethyl-d-Menthylammoniumhydroxyd (A. 300, 285).
 Trimethyl-1-Menthylammoniumhydroxyd. Jodid, Trijodid (A. 300, 285).

281).

1) Methyltriisobutylphosphoniumjodid (B. 6, 300). — I, 1504. $\mathbf{C}_{13}\mathbf{H}_{30}\mathbf{JP}$

 $C_{13}H_{32}Cl_2P_2$ 1) Methylenhexaäthyldiphosphoniumchlorid (J. 1860, 487). — I, 1506.

C₁₃-Gruppe mit vier Elementen.

C13H5O6N2Cl3 1) 2,4,6-Trichlor-3-Nitrophenylester d. 2-Nitrobenzol-1-Carbonsäure. Sm. 106° (B. 18, 1165). — II, 1230.

2) 2,4,6-Trichlor-3-Nitrophenylester d. 3-Nitrobenzol-1-Carbonsäure. Sm. 146,3° (B. 18, 1165). — II, 1232.

 $C_{13}H_5O_6N_2Br_3$ 1) 2,4,6-Tribrom-3-Nitrophenylester d. 2-Nitrobenzol-1-Carbonsäure. Sm. 215° (B. 18, 1168). — II, 1230.

2) 2,4,6-Tribrom-3-Nitrophenylester d. 3-Nitrobenzol-1-Carbon-

säure. Sm. 153,8° (B. 18, 1168). — II, 1232.

1) 3,6-Dichlor-2-Amidobenzaldoxim. Sm. 175—176° (B. 29, 877).

1) P-Trichlor-3-Nitrodiphenylketon. Sm. 143° (Soc. 73, 430). $\mathbf{C}_{13}\mathbf{H}_{6}\mathbf{ON}_{2}\mathbf{Cl}_{2}$ $\mathbf{C}_{13}\mathbf{H}_{6}\mathbf{O}_{3}\mathbf{NCl}_{3}$

C₁₈H₆O₄NCl₈ 1) 2,4,6-Trichlorphenylester d. 3-Nitrobenzol-1-Carbonsäure. 131—132° (B. **18**, 1165). — II, *1232*,

 $C_{13}H_6O_5N_2Br_2$ 1) 4,4'-Dibrom-3,3'-Dinitrodiphenylketon. Sm. 152-153° (B. 24, 3774). — III, 182.

1) 2,4,6-Trinitrophenylimid d. Benzol-1-Carbonsäure-2-Sulfonsäure. $C_{13}H_6O_9N_4S$ Sm. 262° (B. 30, 1269).

1) P-Dibrom-2-Phenylbenzisoxazol. Sm. 148—149° (M. 15, 651). — $\mathbf{C}_{13}\mathbf{H}_7\mathbf{ONBr}_2$ IV, 410.

 $C_{13}H_7O_2NBr_2$ 1) 1,8-Anhydrid d. ?-Dibrom-8-Acetylamidonaphtalin-1-Carbonsäure. Sm. 185° (J. pr. [2] 38, 179). — II, 1452.

C₁₃H₇O₂ClBr₂ 1) 2-Chlor-4,6-Dibromphenylester d. Benzolcarbonsäure. Sm. 65 bis 65,5° (B. **25** [2] 121). — II, 1146.

C₁₃H₇O₂Cl₂Br 1) 2,4-Dichlor-6-Bromphenylester d. Benzolcarbonsäure. Sm. 67,5° (G. 17, 500). — II, $1\overline{146}$.

C₁₈H₇O₃NBr₂ 1) 4,4'-Dibrom-3-Nitrodiphenylketon. Sm. 118° (B. 24, 3772). III, 182.

2) Benzoat d. 3,5-Dibrom-4-Oximido-1-Keto-1,4-Dihydrobenzol. Sm. 191° (A. 277, 102). — III, 336.

 $\textbf{C}_{13}\textbf{H}, \textbf{O}_{4}\textbf{NBr}_{2} \quad \textbf{1)} \quad \textbf{2}, \textbf{6-Dibrom-4-[4-Oxyphenyl]} \\ \textbf{imido-1-Keto-1, 4-Dihydrobenzol-4} \\ \textbf{-4-Dihydrobenzol-4} \\ \textbf{-4-$ Carbonsäure (2-Oxycarbonsäuredibromdiphenazon). Na₂ (A. 289, 101). - IV, 599.

2) P-Dibrom-2-Phenylpyridin-2, 3-Dicarbonsäure. Sm. 204-2050 (M. 4, 469). — IV, 384.

3) P-Dibromphenylester d. 3[P]-Nitrobenzol-1-Carbonsäure. Sm. 90 bis 100° (A. 90, 204). — II, 1146.

- 1) Methyldi [?-Trichlorphenyl] ester d. Phosphorsäure. Sm. 132 bis C₁₃H₇O₄Cl₆P 133° (C. **1896** [1] 100).
- 1) 2,4,6-Trinitrophenyläther d. ?-Dijod-2-Oxy-1-Methylbenzol. Sm. C19H7O7N9J9
- 204° (J. pr. [2] 39, 295). II, 739. 1) 2-[4-Bromphenyl]benzisoxazol. Sm. 132—133° (B. 27, 1454). IV, 410. C1. H. ONBr
 - 2) Nitril d. β -[2-Furanyl]- α -[4-Bromphenyl]akrylsäure. Sm. 65° (A. 250, 161). — III, $71\overline{3}$.
- C, H, ONBr. 1) 2,4,6-Tribromphenylamid d. Benzolcarbonsäure. Sm. 1980 (G. 17. 527). — **II**, *1163*.
 - 2) Nitril d. $\alpha\beta$ -Dibrom- β -[2-Furanyl]- α -[4-Bromphenyl] propionsäure. Sm. 212° u. Zers. (A. 250, 162). — III, 712.
- 1) ?-Dichlor-1-Phenylimido-1, 2-Dihydrobenzoxazol. Sm. 2760 (J. pr. C, H, ON, Cl, 2] **42**, 441). — II, 708.
- 1) Tetrabromdiphenylharnstoff. subl. bei 230-235° (B. 2, 410). -C13H8ON2Br4 II, 379.
- C, H, O, NBr, 1) Tribrom-o-Amidophenylbenzolcarbonsäure (B. 12, 1405). — IV, 394. C₁₃H₈O₂N₂Cl₂ 1) 1-[2,5-Dichlor-3[oder 4]-Nitrobenzyliden]amidobenzol. Sm. 113
 - bis 114,5° (B. 29, 877; A. 296, 79).
 2) 1-[3,6-Dichlor-2-Nitrobenzyliden]amidobenzol. Sm. 102—103° (B. 29, 877; A. 296, 77).
- 1) 1-[2-Nitrophenyl] benzthiazol. Sm. 188° (B. 13, 1223 Anm.; Bl. [3] $\mathbf{C}_{13}\mathbf{H}_8\mathbf{O}_2\mathbf{N}_2\mathbf{S}$ 11, 895). — II, 1177.
- C₁₉H₂O₂Cl₃Hg₂l) Benzoat d. Oxyphenylendiquecksilberdichlorid (B. 32, 763). —
- IV, 1710.
 Di [4-Bromphenylester] d. Thiokohlensäure. Sm. 177° (B. 27, 1369). $C_{13}H_8O_2Br_2S$ - II, 673.
- 1) 6-Chlor-3-Nitrodiphenylketon. Sm. 86° (B. 31, 1695). C₁₃H₈O₃NCl
 - 2) Benzoat d. 2-Chlor-4-Oximido-1-Keto-1,4-Dihydrobenzol. α-Modif. Sm. 197° (192°); β-Modif. Sm. 162° (B. 27, 218; A. 277, 98). III, 332.
- 1) Methylester d. 3,5,6-Trichlor-4-Keto-1-Phenyl-1,4-Dihydropyri-C₁₈H₈O₃NCl₈ din-2-Carbonsäure. Sm. 205° u. Zers. (A. 267, 28). — IV, 154. 1) 4-Brom-3-Nitrodiphenylketon. Sm. 112—113° (B. 24, 3771).
- C₁₈H₈O₈NBr III, 182.
- C₁₃H₈O₃N₂Br₂ 1) ?-Dibrom-2-Nitrophenylamid d. Benzolcarbonsäure. Sm. 194 bis 195° (B. **10**, 1710). — **II**, 1163.
- 1) 4-Nitro-1-[3,5-Dijod-4-Oxybenzyliden]amidobenzol. Sm. 210° u. $\mathbf{C}_{13}\mathbf{H}_{8}\mathbf{O}_{3}\mathbf{N}_{2}\mathbf{J}_{2}$ Zers. (J. pr. [2] 57, 206; [2] 58, 129). 1) α -Dibromfluorensulfonsäure. Sm. 142°. Ba + 8H₂O (B. 16, 1103).
- C18 H8 O8 Br2 S - II, 247. 1) ?-Tetrabrom- α -[2-Naphtyl]sulfon- β -Ketopropan (J. pr. [2] 55, 406).
- $C_{13}H_8O_3Br_4S$ 1) Benzoat d. 4-Chlor-3-Nitro-1-Oxybenzol. Sm. 96-970 (Soc. 69, $\mathbf{C}_{13}\mathbf{H}_8\mathbf{O}_4\mathbf{NCl}$ 1323).
 - 2) Benzoat d. 6-Chlor-3-Nitro-1-Oxybenzol. Sm. 127-1280 (Soc. 69,
 - 3) Benzoat d. 2-Chlor-4-Nitro-1-Oxybenzol. Sm. 135° (Soc. 69,
- $C_{13}H_8O_4N_3Br_3$ 1) 3,5-Dinitro-4-[2,4,6-Tribromphenyl]amido-l-Methylbenzol. Sm. 238° (Am. 19, 28, 206).
- 1) Chlorid d. aa-Dichlordiphenylmethan-?-Disulfonsäure. Sm. 128 $\mathbf{C}_{13}\mathbf{H}_{8}\mathbf{O}_{4}\mathbf{Cl}_{4}\mathbf{S}_{2}$ bis 129° (B. 8, 993). — III, 192.
- 1) 2,4-Dinitrophenylester d. Benzolthiolearbonsäure. Sm. 1130 (B. $\mathbf{C}_{13}\mathbf{H}_8\mathbf{O}_5\mathbf{N}_2\mathbf{S}$ 18, 328). — II, *1290*.
- 1) 4-Brom-2, 6-Dinitro-1-Benzoylamidobenzol. Sm. 197-1980 (Soc. $C_{13}H_8O_5N_3Br$
 - 2) ?-Dinitrophenylamid d. 4-Brombenzol-1-Carbonsäure. Sm. 214° (A. **222**, 178). — II, 1223.
 - 3) 4-Brom-2,?-Dinitrophenylamid d. Benzolcarbonsäure. Sm. 221° (B. 10, 1710). — II, 1163.
 - 4) isom. 4-Brom-2,?-Dinitrophenylamid d. Benzolcarbonsäure. Sm $195-196^{\circ}$ (B. 8, 565). — II, 1163.
- $\mathbf{C_{13}H_{8}O_{5}N_{4}Cl_{2}}$ 1) Dichlordinitrodiphenylharnstoff. Sm. 208–210° (Bl. 32, 170). II, 380.

C₁₃H₈O₅Cl₂S₂ 1) Chlorid d. Diphenylketon-3,3' oder 3,4'-Disulfonsäure. Sm. 137 bis 138° (Soc. 73, 405).

2) Chlorid d. Diphenylketon-P-Disulfonsäure. Sm. 121,5° (B. 8, 992).

— III, 192.

C₁₃H₃O₆N₂Cl₂ 1) Aethylester d. 5,8-Dichlor-?-Dinitronaphtalin-2-Carbonsäure. Sm. 128° (*J. pr.* [2] **43**, 423). — II, 1458.

 $C_{13}H_3O_6N_3Cl$ 1) 5-Chlor-2-[2,4-Dinitrophenyl]amidobenzol-1-Carbonsäure. Sm. 280—282°. Ca (B. 18, 1450). — II, 1277.

2) 2-[4-Chlor-2,6-Dinitrophenyl]amidobenzol-1-Carbonsäure. Sm. 254-256° (B. 18, 1454). — II. 1248.

C₁₈H₈O₈N₃Cl 1) Aethylester d. 5 [oder 8]-Chlor-?-Trinitronaphtalin-2-Carbonsäure. Sm. 188° (J. pr. [2] 43, 417). — II, 1458.

C₁₃H₉ONCl₂ 1) \$\alpha\$-0ximido-4,4'-Dichlordiphenylmethan. Sm. 135\(^{\alpha}\) (A. 264, 177).

— III, 189.

2) Phenylamid d. 2, 5-Dichlorbenzol-1-Carbonsäure. Sm. 240° (A. 222, 203). — II, 1219.

3) 4-Chlorphenylamid d. 4-Chlorbenzol-1-Carbonsäure. Sm. 207—208° (A. 264, 176). — II, 1219.

4) 2,4-Dichlorphenylamid d. Benzolcarbonsäure. Sm. 117º (Am. 18, 386).

 $C_{13}H_9ONBr_2$ 1) α -Oximido-2,4'-Dibromdiphenylmethan. Sm. 140—142° (B. 27, 1454). — II, 180.

 α-Oximido-3,3'-Dibromdiphenylmethan. Sm. 181—182° u. Zers. (B. 23, 3615). — III; 190.

α-Oximido - 4, 4' - Dibromdiphenylmethan. Sm. 149—150° (A. 264, 164). — III, 190.

4) 3,5-Dibrom-4-Oxy-1-Phenylimidomethylbenzol. Sm. 147° (B. 28, 3235). — III, 85.

5) 3-Bromphenylamid d. 3-Brombenzol-1-Carbonsäure. Sm. 146° (A. 264, 174). — II, 1222.

6) 2,4-Dibromphenylamid d. Benzolcarbonsäure. Sm. 134° (B. 10, 1710). — II, 1163.

 Nitril d. αβ-Dibrom-β-[2-Furanyl]-α-Phenylpropionsäure. Sm. 113-114° (B. 29, 712). — III, 712.

 $C_{13}H_9ONJ_2$ 1) 1-[3,5-Dijod-2-Oxybenzyliden]amidobenzol. Sm. 147,5° (J. pr. [2] 57,205, [2] 58, 121)

57, 205; [2] 58, 121). 2) 1-[3,5-Dijod - 4 - Oxybenzyliden] amidobenzol. Sm. 169° (166°). + C₂H₆O (B. 29, 2304; J. pr. [2] 57, 205; [2] 58, 128).

3) α-Oximido-4, 4'-Dijoddiphenylmethan. Sm. 171—173° (A. 264, 166).
 — III. 190.

4) 2,4-Dijodphenylamid d. Benzolcarbonsäure. Sm. 181° (B. 11, 81).
 — II, 1163.

 $C_{13}H_9ONS$ 1) Methylindophenin (B. 16, 2269).

 $\mathbf{C}_{13}\mathbf{H}_{9}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{C}\mathbf{I}$

2) 1-[2-Oxyphenyl] benzthiazol. Sm. 129° (B. 13, 1237). — II, 1493. 3) Rhodanmethyl-1-Naphtylketon (B. 19, 2899). — III, 174.

 $C_{13}H_9ON_2Br$ 1) 4-Brombenzolazobenzoyl. Sm. 69° . +4Br, +5Br (Am. 21, 39). $C_{13}H_9O_2NCl_2$ 1) Benzyläther d. ?-Dichlor-4-Nitroso-1-Oxybenzol. Sm. 64° (A. 277,

95). — II, 678. C₁₃H₉O₂NBr₂ 1) Benzyläther d. ?-Dibrom-4-Nitroso-1-Oxybenzol. Sm. 68° (A. 277, 95). — II, 678.

 Di[4-Bromphenylester] d. Imidokohlensäure. Sm. 129° (B. 28, 2469).

C₁₃H₉O₂NS 1) 3-Phenyl-1, 2-Benzsulfonazol (Phenylbenzalsultim). Sm. 164° (Am. 17, 359; B. 29, 2295). — III, 192.

Cyanid d. Biphenylsulfonsäure. Sm. 84° (B. 13, 389). — II, 225.
 α-Chlor-α-[2-Nitrophenyl]imido-α-Phenylmethan (Benz-2-Nitranilidimidchlorid). Sm. 67-68° (B. 31, 242).

2) α -Chlor- α -[3-Nitrophenyl] imido- α -Phenylmethan. Sm. 80° (B. 30, 1786).

3) 1 [oder 4]-Chlor-2-Oxymethylphenazon. Sm. 200—201° (A. 290, 305). — IV, 1004.

4) 4'-Chlorazobenzol-2-Carbonsäure. Sm. 166° (B. 24, 3064). — IV, 1461.

- C₁₃H₂O₂N₂Br 1) 4'-Bromazobenzol-2-Carbonsäure. Sm. 176° (B. 24, 3065). IV, 1461.
- $C_{13}H_9O_2N_3Cl_2$ 1) α -Phenyl- β -[2,5-Dichlor-3 oder 4-Nitrobenzyliden]hydrazin. Sm. 174° (B. 29, 876; A. 296, 79). IV, 752.
 - 2) α-Phenyl-β-[3,6-Dichlor-2-Nitrobenzyliden] hydrazin. Sm. 146 bis
- 147° (B. 29, 877; A. 296, 77). IV, 752. 1) 1-Phenylamido-P-Nitrobenzthiazol. Sm. 247° (B. 13, 12). II, 797. C13H9O2N3S C₁₃H₉O₂ClHg 1) Benzoat d. 2-Oxyphenylquecksilberchlorid. Sm. 204° (B. 32, 763).
- IV, 1708.
 - 2) Benzoat d. 4-0xyphenylquecksilberchlorid. Sm. 275-276° (B. 32,
- 763). IV, 1709.

 1) Acetat d. 3,5-Dichlor-2-Oxy-4-Keto-1-Phenyl-1,4-Dihydropyri-C₁,H₀O₃NCl₃ din. Sm. 143° (A. 267, 32). - IV, 120.
 - 2) Dichlorid d. 1,4-Benzochinonmonoximbenzoat. Sm. 1650 (A. 277, 98). — III, *331*.
- 1) 1, 2, 3, 4, 5, 6-Hexachlor-3'-Nitrohexahydrodiphenylketon, Sm. 1590 C19HONCL (Soc. 73, 429).
- C₁₉H₉O₂NBr₉ 1) 4,6-Dibrom-2-Nitrophenyläther d. Oxymethylbenzol. Sm. 64.59 (J. pr. [2] 32, 57). - II, 1049.
 - 2) 2, 6-Dibrom-4-Nitrophenyläther d. Oxymethylbenzol. Sm. 93,50 (J. pr. [2] 32, 58). - II, 1049.
 - 3) Dibromid d. 1,4-Benzochinonmonoximbenzoat. Sm. 145-1460 n. Zers. (A. 277, 101). — III, 331.
- 1) α -Naphtochinolin-5-Sulfonsäure. Na, K, Ba, Ag (*J. pr.* [2] 57, 79). 2) β -Naphtochinolin-2-Sulfonsäure+xH₂O. Ba+5H₂O, Ag+3\(^1/_2\H_2\O) C13HO3NS
 - B. 18, 201). IV, 409.
 - 3) Phenylimid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm. 190,50 (189—190°) (Am. 17, 320, 335; 20, 274; B. 31, 1658). 1) 2'-Chlor-4-Oxyazobenzol-3-Carbonsäure. Sm. 194°. NH₄, K, Ag
- $C_{13}H_9O_3N_2Cl$ (Soc. **69**, 1258). — **IV**, 1468. 2) 3'-Chlor-4-Oxyazobenzol-3-Carbonsäure. Sm. 220-221°. NH₄, K,
 - Ba, Ag (B. 28, 803; Soc. 69, 1262). IV, 1469.
 - 3) 4'-Chlor-4-Oxyazobenzol-3-Carbonsäure. Sm. 237°. NH4, K, Ba + 2 H₂O, Ag (Soc. 69, 1263). — IV, 1469. 4) Phenylamid d. 3-Chlor-2-Nitrobenzol-1-Carbonsäure. Sm. 186°
 - (A. **222**, 97). **II**, 1240.
 - 5) Phenylamid d. 5-Chlor-2-Nitrobenzol-I-Carbonsäure. Sm. 1640 (A. **222**, 98). — II, 1241.
 - 6) Phenylamid d. 4-Chlor-3-Nitrobenzol-1-Carbonsäure. Sm. 131% (A. 222, 183). — II, 1241.
 - 7) Phenylamid d. 2-Chlor-4-Nitrobenzol-1-Carbonsäure. Sm. 1680
 - (B. 24, 3813). II, 1239. 8) 4-Nitrophenylamid d. 2-Chlorbenzol-1-Carbonsäure. Sm. 180° (A. **222**, 194). — II, 1217.
- $C_{13}H_9O_3N_2Cl_3$ 1) 2 Dichlormethyl-7-Methylchinolin-3-Chlormethylketocarbonsäure? (B. 21, 2443). — IV, 950.
- C₁₃H₂O₃N₂Br 1) 4'-Brom-3-Nitro-4-Amidodiphenylketon. Sm. 171° (B. 24, 3773). - III, 183.
 - 2) 2-Brom-4-Nitrophenylamid d. Benzolcarbonsäure. Sm. 160° (B. 10, 1709). — II, $116\bar{3}$.
 - 3) 4-Brom-2-Nitrophenylamid d. Benzolcarbonsäure. Sm. 137—138° (B. 8, 565; 10, 1710). — II, 1163.
 - 4) Phenylamid d. 4-Brom-3-Nitrobenzol-1-Carbonsäure. Sm. 1560 (B. **23**, 3447). — **II**, 1243.
 - 5) Phenylamid d. 6-Brom-3-Nitrobenzol-1-Carbonsäure. Sm. 166° (B. **24**, 3809). — II, 1242.
- 1) 2-Nitro-4-Benzoylamido-1-Diazobenzolchlorid + 2H₂O (B. 30, 984). C₁₃H₉O₃N₄Cl - IV, 1527.
- 1) Chlorid d. Diphenylketon-2-Sulfonsäure. Sm. 96-97° (Am. 17, C₁₃H₉O₃ClS 355). — III, *192*.
 - 2) Chlorid d. Diphenylsulfon-4-Carbonsäure. Sm. 145,2—145,8° (Am. **20**, 307).
- 1) Phenylester d. Phenoxylphosphortetrachlorid-2-Carbonsäure $\mathbf{C}_{13}\mathbf{H}_{9}\mathbf{O}_{3}\mathbf{Cl}_{4}\mathbf{P}$ (Salol-O-Tetrachlorphosphin). Sm. 44° (B. 31, 2172).

1) Verbindung (aus 3,3,5,5,6-Pentachlor-4-Keto-1-Phenylhexahydropyridin). Sm. 150° (A. 267, 40). — IV, 120. C₁₃H_oO₄NCl₄

1) 3,5-Dibrom-4,4'-Dioxydiphenylamin-3'-Carbonsäure. Sm. 2090 u. C18 HOOANBr Zers. (A. 289, 103).

2) Phenylamid d. 2,6-Dibrom-3,4,5-Trioxybenzol-1-Carbonsäure

 $+3 \, \mathrm{H_2O}$. Zn (Bl. [3] 11, 323, 497). — II, 1923. C₁₃H₉O₄NS 1) Akridonsulfonsäure. Ba $+1^{1/2} \, \mathrm{H_2O}$ (B. 25, 198). — III, 192. C₁₃H₉O₄N₃Br₂ 1) Methyldibromdinitrodiphenylamin. Sm. 194° (B. 15, 1236). —

II, 342. 1) Phenylamid d. 4-Nitro-1-Cyanbenzol-2-Sulfonsäure. Sm. 207 bis $\mathbf{C}_{13}\mathbf{H}_{9}\mathbf{O}_{4}\mathbf{N}_{3}\mathbf{S}$

208° (Am. 19, 511). $C_{13}H_9O_4N_4Br_3$ 1) 3,5-Dinitro-4-[2,4,6-Tribrom-3-Amidophenyl] amido-1-Methyl-

benzol. Sm. 222° (Am. 19, 27, 206). — IV, 572.

1) Chlorid d. 4-Benzoylbenzol-1-Sulfonsäure. Sm. 115—116° (R. 16, 423). C18H9O4CIS 2) 2-Chlorid d. Benzol-1-Carbonsäure-2-Sulfonsäure-1-Phenylester.

Sm. 103—104° (B. 31, 1662).

1) Phenylester d. Phenylphosphorsäuredichlorid-2-Carbonsäure C, H, O, Cl, P (Salol-O-Oxychlorphosphin). Sm. 70—71°; Sd. 125—135°₁₃ (B. 31, 2173). 1) N-Methyl-Dinitrodiphenylaminsulfoxyd (A. 230, 128). — II, 808.

 $\mathbf{C}_{13}\mathbf{H}_{9}\mathbf{O}_{5}\mathbf{N}_{8}\mathbf{S}$ 1) 4[?]-[3-Nitrophenyl]sulfonbenzol-1-Carbonsäure. Sm. 269°. Ba C13HOONS $+2H_2O$ (A. **278**, 259). — II, 1542.

C₁₃H₉O₆N₂Cl 1) Aethylester d. 5-[oder 8-]Chlor-?-Dinitronaphtalin-2-Carbonsäure. Sm. 132^{o} (J. pr. [2] 43, 416). — II, 1458. C₁₃H₉O₆Cl₂Br 1) Dimethylester d. 2, 2-Dichlor-4-Brom-1-Oxy-3-Keto-2, 3-Dihydro-

inden-1, 6-Dicarbonsäure. Sm. 168-1690 (A. 293, 144).

1) 2-Phenylpyridin-2,32-Dicarbonsäure-36-Sulfonsäure. K₃, Ba₃, $C_{13}H_9O_7NS$ $Pb_3 + Pb(OH)_2$, Ag_3 (B. **22**, 405). — **IV**, 385.

1) 2-Phenylbenzisoxazol-?-Disulfonsäure. C13H9O7NS2 $Na_2 + 2H_2O$, $K_2 + H_2O$, Ba $+ H_2O$, Pb, Ag_2 (M. 15, 647). — IV, 411.

C13H10NCl 1) anti- α -Oximido-3-Chlordiphenylmethan. Sm. 132—133° (B. 24, 57). **— III**, 189.

2) syn- α -Oximido-3-Chlordiphenylmethan. Sm. 105—106° (B. 24, 57). - III, 189.

3) anti-α-Oximido-4-Chlordiphenylmethan. Sm. 155—156°. HCl (B. 23, 3610; A. 252, 7). — III, 189.

4) $syn - \alpha - Oximido - 4 - Chlordiphenylmethan.$ Sm. 95° (B. **23**, 3610; **24**, 56). — III, 189.

5) Phenyläther d. α -Chlor- α -Phenylimido- α -Oxymethan. Sm. 43°; Sd. 168°_{12} (Am. 16, 392; B. 28, 980).

6) Phenylamid d. 2-Chlorbenzol-1-Carbonsäure. Sm. 114º (A. 117, 155; **222**, 194). — II, 1217. 7) Phenylamid d. 4-Chlorbenzol-l-Carbonsäure. Sm. 194° (B. 8, 882;

A. **252**, 7). — **II**, *1218*.

8) Phenylchloramid d. Benzolcarbonsäure. Sm. 78-80° (B. 28, 3269). 9) 3-Chlorphenylamid d. Benzolcarbonsäure. Sm. 118° (B. 24, 58).

- II, 1162. 10) 4-Chlorphenylamid d. Benzolcarbonsäure. Sm. 183—1840 (J. 1855,

541; B. **24**, 56). — **II**, 1162. Chlorid d. Diphenylamidoameisensäure (uns - Diphenylharnstoff-chlorid).
 Sm. 85° (B. 8, 1665; 9, 397; Bl. 25, 251; J. pr. [2] 56, 6).

- II. 381. 1) 5-Brom-2-Oxy-1-Phenylimidomethylbenzol (B. 6, 339). — III, 73. 2) 3-Brom-4-Oxy-1-Phenylimidomethylbenzol (Phenyl-3-Brom-4-Oxy-

benzylidenamin). Sm. 135° (B. 28, 2410). - III, 83. 3) α -Oximido-2-Bromdiphenylmethan. Sm. $132-133^{\circ}$. $+xC_2H_6O$ (Sm. 76—132°) (B. 25, 3293). — III, 189.

4) anti-α-Oximido-3-Bromdiphenylmethan. Sm. 168° (A. 264, 171). **– III**, 190.

5) syn- α -Oximido-3-Bromdiphenylmethan. Sm. 1340 (A. 264, 172). **– III**, 190.

6) anti-α-Oximido-4-Bromdiphenylmethan. Sm. 165-166° (A. 264, 154). — III, *190*.

7) syn-α-Oximido-4-Bromdiphenylmethan. Sm. 110-111° (A. 264, 156). — III, *190*.

 $\mathbf{C}_{18}\mathbf{H}_{10}\mathbf{ONBr}$

- C. H. ONBr 8) Phenylamid d. 2-Brombenzol-1-Carbonsäure. Sm. 141-142.5° **- II**, 1221.
 - 9) Phenylamid d. 3-Brombenzol-1-Carbonsäure. Sm. 1370 (A. 264, 174). — II, *1222*.
 - 10) Phenylamid d. 4-Brombenzol-1-Carbonsäure. Sm. 197º (A. 222, 178; B. 10, 1707). — II, 1223.
 - 11) 3-Bromphenylamid d. Benzolcarbonsäure. Sm. 120° (A. 264, 174). **- II**, 1163.
 - 12) 4-Bromphenylamid d. Benzolcarbonsäure. Sm. 2020 (B. 8, 564). — II, 1163.
- 1) α-Oximido-2-Joddiphenylmethan. Sm. 152° (B. 26, 1745). C, H, ONJ
 - 2) anti-α-Oximido-4-Joddiphenylmethan. Sm. 178° (A. 264, 168). III, 190.
 - 3) syn-α-Oximido-4-Joddiphenylmethan. Sm. 132—134° (A. 264, 168). **– III**, 190.
 - 4) Phenylamid d. 2-Jodbenzol-1-Carbonsäure. Sm. 1420 (B. 26, 1745).
 - II, 1226. 5) P-Jodphenylamid d. Benzolcarbonsäure. Sm. 210° (B. 10, 1718).
 - · II, 1163. 6) ?-Jodphenylamid d. Benzolcarbonsäure. Sm. 180° (B. 10, 1717).
- **II**, 1163. $C_{13}H_{10}ON_2Cl_2$ 1) s-Di[2-Chlorphenyl]harnstoff. Sm. 235—236° (Bl. [3] 21, 303).
 - 2) s-Di[3-Chlorphenyl]harnstoff. Sm. 245° (Bl. [3] 21, 302). 3) s-Di[4-Chlorphenyl]harnstoff. Sm. 306-307° (A. 176, 51; Bl. [3] 21, 302). — II, 379.
- 4) Diehlorharmin. $\text{HCl} + 2\text{H}_2\text{O}$, HNO_3 , $+\text{J}_2$ (J. 1862, 377). III, 886. $\text{C}_{13}\text{H}_{10}\text{ON}_2\text{Br}_2$ 1) s-Di[2-Bromphenyl]harnstoff. Sm. 219—220° (Bl. [3] 21, 304). 2) s-Di[3-Bromphenyl]harnstoff. Sm. 262° (263°) (J. pr. [2] 58, 196; Bl. [3] 21, 304).
 - 3) s-Di[4-Bromphenyl]harnstoff. Sm. 274°; subl. bei 215 225° (330°) (B. 2, 409; 15, 45; J. pr. [2] 58, 202, 231; Bl. [3] 21, 303). II, 379.
 - 4) Phenyl-?-Dibrom-2-Oxybenzylidenhydrazin. Sm. 148° (B. 17, 3009). - IV, 760.
 - 5) ?-Dibrom-6-Oxy-3-Methylazobenzol. Sm. 168°. IV, 1421. 1) s-Di[4-Jodphenyl]harnstoff. subl. oberh. 3000 (Bl. [3] 21, 305).
- $C_{13}H_{10}ON_2J_2$ α-Phenyl-β-[3,5-Dijod-2-Oxybenzyliden]hydrazin. Sm. 167,5° (J. pr. [2] 57, 205; [2] 58, 118).
 α-Phenyl-β-[3,5-Dijod-4-Oxybenzyliden]hydrazin. Sm. 160° (159°) (B. 29, 2304; J. pr. [2] 57, 205; [2] 58, 128). — IV, 761.
 Thiodiphenylharnstoff. Sm. 201—202° (B. 24, 2908). — II, 806.
 Methylthionolin (B. 20, 933). — II, 811.
 Methylthionolin (B. 20, 11, 11, 11).
- C13H10ONS
- - 3) 2-Thiocarbonyl-5-Methyl-3-[1-Naphtyl]-2, 3-Dihydro-1, 3, 4-Oxdiazol. Sm. 86° (B. 24, 4184). — IV, 926.
 - 4) 2-Thiocarbonyl-5-Methyl-3-[2-Naphtyl]-2,3-Dihydro-1,3,4-Oxdiazol. Sm. 109° (B. 24, 4180). — IV, 929. 5) Acetyl-l-Naphtylthiocarbizin. Sm. 283° (B. 24, 4187). — IV, 927.
- 1) P-Chlor-P-Diamido-5-Keto-5,10-Dihydroakridin. Sm. 230° (B. 18, $C_{13}H_{10}ON_3Cl$
- 1452). IV, 404. 2) Amid d. 4-Chlorazobenzol-3-Carbonsäure. Sm. 210° (A. 263, 232). **– IV**, 1461.
- 1) Thionylpseudodiphenylthiocarbazon. Sm. 144—145° (B. 26, 2495). C13H10ON4S2 _ IV, 685.
- 1) $\beta \gamma$ -Dibrom- α -Keto- α -[2-Thiënyl]- γ -Phenylpropan (Zimmtsäure- $\mathbf{C}_{13}\mathbf{H}_{10}\mathbf{OBr}_{2}\mathbf{S}$ thiënylketondibromid). Sm. 157° (B. 19, 2895). — III, 768. 1) 4-Chlor-3-Benzoylamido-1-Oxybenzol. Sm. 191—192° (Soc. 69, 1323).
- C₁₈H₁₀O₂NCl 2) 4-Chlorphenylester d. Phenylamidoameisensäure. Sm. 138° (B. 28, 979).
- $C_{13}H_{10}O_2NBr$ 1) α -Brom- α -Nitrodiphenylmethan. Sm. 44° (J. r. 26, 83). 2) 4-Bromphenylester d. Phenylamidoameisensäure. Sm. 144° (B.
 - 3) Phenylamid d. 5-Brom-2-Oxybenzol-1-Carbonsäure. Sm. 2220 (A. 273, 122). - II, 1505.

 $C_{13}H_{10}O_{2}N_{2}Br_{2}1$) $\alpha\beta$ -Dibrom- α -[3-Nitrophenyl]- β -[2-Pyridyl]äthan. Sm. 145° (B. 23, 2717). — IV, 395.

2) Benzolazodibromorcin. Sm. 1830 (B. 10, 1580). - IV, 1447.

1) 1-Phenyläther d. 1-Thiodiazobenzol-2-Carbonsäure. Sm. 600 $C_{13}H_{10}O_{2}N_{2}S$ u. Zers. (A. 263, 3). — IV, 1553.

2) Inn. Anhydrid d. Phenylsulfon-2-Amidobenzol-1-Carbonsäureamid. Sm. 145° (J. pr. [2] 44, 421). — II, 1253.

3) Anhydro-β-Benzyliden-α-Phenylhydrazin-β²-Sulfonsäure? Sm. $174,5^{\circ}$ (A. **299**, 365). — IV, 754.

4) Amid d. α-Naphtochinolin-5-Sulfonsäure. Sm. bei 225° (J. pr. [2] **57**, 82).

5) Pseudosaccharinphenylamid (B. 26, 2296). — II, 1298.

6) Phenylamid d. 2-Cyanbenzol-1-Sulfonsäure. Sm. 150-1520 (B. 26, 2292). — II, 1297.

7) Phenylamid d. 4-Cyanbenzol-1-Sulfonsäure. Sm. 1120 (Am. 18, 161). C₁₃H₁₀O₂N₃Cl 1) 5-Chlor-2-Nitrobenzylidenphenylhydrazin. Sm. 180-181^o u. Zers.

(A. 262, 138). - IV, 752.2) 6-Chlor-3-Nitrobenzylidenphenylhydrazin. Sm. 1820 (B. 26, 1256)

Anm.). — IV, 752. C₁₈H₁₀O₂N₃Br 1) Phenyl-5-Brom-2-Nitrobenzylidenhydrazin. Sm. 180° u. Zers.

(A. 284, 145). - IV, 752.2) Benzyliden-4-Brom-2-Nitrophenylhydrazin. Sm. 2070 (B. 22, 2817). — IV, 749.

3) 4-Brom-1-Phenylamidodiazobenzol-13-Carbonsäure. (J. 1866, 453). - IV, 1578.

C₁₃H₁₀O₃NBr 1)?-Brom-?-Nitro-2-Oxydiphenylmethan. Sm. 105-110°. K (Soc. 49, 410). — II, 896.

2) 3-Brom-5-Nitro-4-Oxydiphenylmethan. Sm. 64-65°. K (Soc. 41, 223). — II, 897.

3) 4-Brom-2-Nitrophenyläther d. Oxymethylbenzol. Sm. 83,5° (J. pr. [2] **32**, 57). — II, 1049.

4) 2-Brom-4-Nitrophenyläther d. Oxymethylbenzol. Sm. 125.5° (J. pr. [2] 32, 57). - II, 1049.

5) Methylester d. ?-Brom-2-Keto-1-Phenyl-1,2-Dihydropyridin-

5-Carbonsäure. Sm. 183,3° (B. 17, 2399). — IV, 153.

1) 2-Phenylindazol-P-Sulfonsäure. 2 isom. Formen. α-Verb. Zers. bei 300°; β-Verb. Zers. bei 320°. Na, Ba, Pb (B. 27, 50). — IV, 867.

2) 2-Phenylbenzimidazol-P-Sulfonsäure. Na, Ba (B. 10, 1710). — $C_{13}H_{10}O_3N_2S$

IV, 1008. $C_{13}H_{10}O_3N_3Cl$ 1) Chlornitroharmin + 2 H₂O. HCl, (2 HCl, PtCl₄), + J₂ (A. 92, 330).

– III, 886. 2) 4-Chlorphenyl-2-Nitrobenzylnitrosamin. Sm. 100° (J. pr. [2] 52, 387).

C₁₃H₁₀O₃N₃Br 1) Bromnitroharmin (A. 92, 335). — III, 886. 2) 4-Bromphenyl-2-Nitrobenzylnitrosamin. Sm. 167° (*J. pr.* [2] **52**, 394). 3) s-3-Bromphenyl-3-Nitrophenylharnstoff. Sm. $214-215^{\circ}$. — II, 380.

4) ?-Brom-3-Nitro-?-Oxy-?-Methylazobenzol. Sm. 198-1990 (Soc. 65,

838). **— IV**, 1421. 5) 4-Brom-2-Nitrophenylhydrazid d. Benzolcarbonsäure. Sm. 1850 (B. 22, 2817). - IV, 668.

 $C_{13}H_{10}O_3Br_2S$ 1) $\gamma\gamma$ -Dibrom- α -[2-Naphtyl]sulfon- β -Ketopropan. (J. pr. [2] 55, 405). Sm. $155-157^{\circ}$

C₁₈H₁₀O₄NCl 1) Aethylester d. 5-Chlor-8-Nitronaphtalin-1-Carbonsäure. Sm. 1210 (J. pr. [2] 38, 170). — II, 1449.

2) Aethylester d. 8-Chlor-?-Nitronaphtalin-1-Carbonsäure. Sm. 84° (J. pr. [2] 38, 254). — II, 1450.

3) Aethylester d. 5-[oder 8-] Chlor-P-Nitronaphtalin-2-Carbonsäure. Sm. 118° (J. pr. [2] 43, 414). — II, 1458.
1) Benzylimid d. Bromakonitsäure (G. 24 [1] 229). — II, 531.

 $C_{13}H_{10}O_4NBr$ 2) Aethylester d. α -Cyan- β -Brom- β -[3,4-Dioxyphenyl]akryl-3,4-Methylenäthersäure. Sm. 131° (J. pr. [2] 50, 19). — II, 1777. $C_{13}H_{10}O_4N_2Br_2$ 1) Phenylhydrazid d. 2,6-Dibrom-3,4,5-Trioxybenzol-1-Carbon-

säure. Sm. 160° u. Zers. (Bl. [3] 15, 785). — IV, 716. $C_{13}H_{10}O_4N_2S$ 1) 2,4-Dinitrophenyläther d. Merkaptomethylbenzol. Sm. 128°

(B. 18, 331). — II 1052.

- C₁₈H₁₀O₄N₂S 2) 1-Phenylsulfondiazobenzol-2-Carbonsäure. Zers. bei 169-170° (B. 30, 316, 2558). — IV, 1553.
 - 3) 1-Phenylsulfondiazobenzol-4-Carbonsäure. Zers. bei 122-1230 (B. 30, 315). — IV, 1554.
- 1) s-Di[3-Nitrophenyl]thioharnstoff. Sm. 160-161° (B. 6, 1103; 15, $C_{13}H_{10}O_4N_4S$ 470; **16**, 550). — II, 396.
- C₁₃H₁₀O₄Cl₂S₂ 1) Chlorid d. Diphenylmethan -4, 4'-Disulfonsäure. Sm. 124° (Soc. 73, 409).
- $C_{13}H_{10}O_4Cl_8S$ 1) 1, 2, 3, 4, 5, 6 Hexachlorhexahydrodiphenylketon ? Sulfonsäure. Ba $+ 7^{1}/_{2}$ H₂O (Soc. 73, 431).
- 1) Azobenzol-3-Carbonsäure-3'-Sulfonsäure (B. 31, 2204). IV, 1461. $C_{13}H_{10}O_5N_2S$
 - 2) Aldehyd d. 4-Oxyazobenzol-3-Carbonsäure-3'-Sulfonsäure. oberh. 270°. Na + 2 H₂O, Ba + 5 H₂O (A. 251, 80). — IV, 1476. 3) Aldehyd d. 4-Oxyazobenzol-3-Carbonsäure-4'-Sulfonsäure.
 - $232-235^{\circ}$. + C_2H_6O , Na + $2H_2O$, Ba + $5H_2O$, BaH + $3H_2O$ (A. 251,
- 174). IV, 1476. $C_{13}H_{10}O_5ClBr$ 1) Methylester d. 2-Chlor-2-Brom-3-Acetoxyl-1-Keto-2,3-Dihydroinden-3-Carbonsäure. Sm. 136-137° (B. 21, 2386). - II, 1866.
- 1) 4-Oxyazobenzol-3-Carbonsäure-4'-Sulfonsäure. Ba (B. 11, 2196). $C_{13}H_{10}O_6N_2S$ **- IV**, 1470.
 - 2) 4 Oxyazobenzol 3 Carbonsäure 4'-Sulfonsäure (B. 15, 2190; 17, 339).
 - 3) P-Oxyazobenzol-3-Carbonsäure-P-Sulfonsäure $+ \frac{1}{2} H_2 O$. $K + H_2 O$,
- Ba (B. 14, 2034). IV, 1463. C₁₃H₁₀O₆N₃Br 1) 6-Brom-2,4-Dinitro-3-Phenylamido-1-Methylbenzol. Sm. 116° (J. pr. [2] 37, 17). - II, 477.
- $C_{13}H_{10}N_{2}Cl_{2}S$ 1) s-Di[2-Chlorphenyl]thioharnstoff. Sm. 141° (B. 13, 14; 32, 1088). **— II**, 396.
 - 2) s-Di[3-Chlorphenyl]thioharnstoff. Sm. 121—123° (B. 13, 13, 14).
 - **II**, 396. 3) s-Di[4-Chlorphenyl]thioharnstoff. Sm. 168° (A. 176, 47; B. 5, 156; 13, 13). — II, 396.
- $C_{13}H_{10}N_2Br_2S$ 1) s-Di[4-Bromphenyl]thioharnstoff. Sm. 178° (B. 2, 409; 13, 230). — II, 396.
- 1) s-Di[4-Jodphenyl]thioharnstoff. Sm. 1730 (B. 5, 158). II, 396. $\mathbf{C}_{13}\mathbf{H}_{10}\mathbf{N}_{2}\mathbf{J}_{2}\mathbf{S}$ $\mathbf{C}_{13}\mathbf{H}_{11}\mathbf{ONCl}_{2}$ 1) Phenyläther d. αα-Dichlor-α-Phenylamido-α-Oxymethan. Sm. 650
- u. Zers. (Am. 17, 106). $C_{13}H_{11}ONBr_{2}$ 1) Phenyl-3,5-Dibrom-2-Oxybenzylamin. Sm. 98—99° (A. 302, 149). 2) $\alpha\beta$ -Dibrom- α -[2-Oxyphenyl]- β -[2-Pyridyl] \ddot{a} than (Dibromoxydihydro
 - stilbazol) (B. **23**, 2699). **IV**, 395. 3) ?-Dibrom-10-Keto-8-Methyl-3,4-Dihydrojulol (?-Dibrom-α₁-Keto-4-Methyljulolin). Sm. 1530 (cor.) (B. **24**, 850). — IV, 193.
- 1) 2-Keto-3-[1-Naphtyl]tetrahydrothiazol (Aethylenester(?) d. 1-Naph-C13H11ONS tylcarbaminthionsäure). Sm. 102° (B. 21, 970). - II, 608.
 - 2) Aethyläther d. 1-Oxy-α-Naphtthiazol. Sm. 78-79° (B. 26, 2366). **— II**, 871.
 - 3) α -Thionylamidodiphenylmethan. Sd. 88°_{35} (B. 26, 2169). II, 635.
 - 4) Phenylester d. Phenylamidothioameisensäure. Sm. 149-1510 (1470) (Soc. 57, 268; 69, 98; B. 27, 1370). — II, 663.
 - 5) Phenylester d. Phenylamidothiolameisensäure. Sm. 125° (B. 18, 2432). — II, 785.
- $C_{13}H_{11}ON_{2}Cl$
 - 1) s-3-Chlordiphenylharnstoff. Sm. 184° (B. 25, 1366). II, 379. 2) s-4-Chlordiphenylharnstoff. Sm. 237—238° (B. 25, 1366). II, 379. 3) Benzenyl-4-Chlorphenylamidoxim. Sm. 183° (B. 31, 242).

 - 4) β-Chlor-γ-Phenylhydrazon-α-Furylpropen. Sm. 157° u. Zers. (B. 21,
 - 425). IV, 765. 5) 3'-Chlor-6-Oxy-3-Methylazobenzol. Sm. 103° (B. 25, 1329). IV, 1420.
 - 6) 4'-Chlor-6-Oxy-3-Methylazobenzol. Sm. 151-152° (B. 25, 1326). · IV, 1420.
 - 7) Methyläther d. 4-Chlor-4'-Oxyazobenzol. Sm. 122° (B. 30, 1630). - IV, 1409.
 - 8) 2-Chlorphenylhydrazid d. Benzolcarbonsäure. Sm. 152° (B. 30, 320). — IV, 668.

C₁₈H₁₁ON₂Br 1) 2-Brom-4-Amido-1-Benzoylamidobenzol. Sm. 205° (B. 10, 1709). - IV, 594.

2) 4-[?-Bromphenyl]nitrosamido-1-Methylbenzol. Sm. 1660 (A. 239, 56). — II, 485.

3) 4-Bromphenyläther d. α-Amido-α-Phenylimido-α-Oxymethan (4-Bromdiphenylisoharnstoff). Sm. 142° (B. 28, 983). 4) s-4-Bromdiphenylharnstoff. Sm. 245° (B. 21, 2568; 25, 1090; 30,

1405). — II, 379.

5) s-Benzoyl-4-Bromphenylhydrazin. Sm. 156° u. Zers. (Am. 21, 38).

6) 2-Brom-4'-Oxy-4-Methylazobenzol $+ \frac{1}{2}$ H₂O. Sm. 104° (B. 31, 1782). — IV, 1413.

- 1) Phenylhydrazid d. 2-Jodbenzol-1-Carbonsäure. Sm. 2030 u. Zers. $C_{13}H_{11}ON_2J$ (B. **26**, 1745). — **IV**, 668.
- C13H11OBrS 1) 3-Brom-5-Benzoyl-2-Aethylthiophen. Fl. (B. 26, 2462). — III, 767. 2) 4-Brom-3-Benzoyl-2, 5-Dimethylthiophen. Sm. 85° (B. 28, 1809). **– III**, 768. 3) isom. Brom-?-Benzoyl-?-Dimethylthiophen. Sm. 78° (B. 28, 1806).
- 1) N-Methyl-Diphenylaminsulfon. Sm. 2220 (A. 230, 92). II, 808, $\mathbf{C}_{13}\mathbf{H}_{11}\mathbf{O}_{2}\mathbf{NS}$ 2) Acetat d. 2[oder 3]-[α -Oximidobenzyl|thiophen. α -Derivat Sm.
- 80-84°; β-Derivat Sm. 88-89° (B. 24, 60). III, 767. C₁₃H₁₁O₂N₂Cl 1) 4-[?-Chlornitrophenyl]amido-1-Methylbenzol. Sm. 124° (B. 11, 1157). - II, 486.
 - 2) 2-Chlorphenyl-2-Nitrobenzylamin. Sm. 67°. HCl (J. pr. [2] 52, 374).
 - 3) 3-Chlorphenyl-2-Nitrobenzylamin. Sm. 59° (J. pr. [2] 52, 377). 4) 4-Chlorphenyl-2-Nitrobenzylamin. HCl, H₂SO₄ (J. pr. Sm. 85°. [2] **48**, 542; [2] **52**, 380). — **II**, *51*7.
- 5) Phenyl-2-Chlor-4-Nitrobenzylamin. Sm. 73° (B. 25, 87). II, 517. $C_{13}H_{11}O_2N_2Br$ 1) 4-Bromphenyl-2-Nitrobenzylamin. Sm. 82-83° (84-85°) (J. pr. [2] 47, 348; [2] 48, 549). — II, 517. 1) s-3-Nitrodiphenylthioharnstoff.
- $C_{13}H_{11}O_{2}N_{3}S$ Sm. 155° (145°) (B. 7, 1235; 14, 2365; **16**, 2331; **17**, 3045). — II, 396.
- C₁₈H₁₁O₂N₄Br 1) Methyl-4'-Brom-3-Nitrodiazoamidobenzol. Sm. 160,5—161° (Soc. 55, 425). — IV, 1565.
 - 2) Methyl-4-Brom-3'-Nitrodiazoamidobenzol. Sm. 144° (Soc. 55, 425).
 - IV, 1565.
 3) isom. Methyl-4-Brom-3'-Nitrodiazoamidobenzol. Sm. 125—127,5° (Soc. 55, 425; 57, 786). — IV, 1565.
 - 4) Methyl-4'-Brom-4-Nitrodiazoamidobenzol. Sm. 163-164° u. Zers. (Soc. 55, 419). — IV, 1566.
 - 5) Methyl-4-Brom-4'-Nitrodiazoamidobenzol. Sm. 151-151,5° (Soc. 55, 418). - IV, 1566.
 - 6) isom. Methyl-4-Brom-4'-Nitrodiazoamidobenzol. Sm. 150,5—151,5° (Soc. 55, 419). - IV, 1566.
- 1) Phenyl-α-Chlorbenzylsulfon (J. pr. [2] 40, 516). II, 1052. C13H11O2CIS
- $C_{13}H_{11}O_{3}NS$ 1) 3-Nitro-2-Benzoyl-2-Aethylthiophen. Sm. 117° (B. 26, 2464). — III, 767.
 - 2) Amid d. Diphenylsulfon-4-Carbonsäure. Sm. 242-2430 (Am. 20,
 - 3) Benzoylamid d. Benzolsulfonsäure. Sm. 147°. NH4, Na, Pb, Ag (J. 1856, 503; B. 11, 754; A. 108, 216; 214, 211; Am. 8, 238). -II, 1174.
 - 4) Phenylformylamid d. Benzolsulfonsäure. Sm. 148-149° (Am. 19,
- $C_{13}H_{11}O_{3}N_{9}P$ 1) Lakton d. s-Benzoylphenylhydrazidophosphorsäure. Sm. 161° (B. 27, 2123). — IV, 668.
- 1) s-3-Nitrophenyl-4-Oxyphenylthioharnstoff. Sm. 1520 (B. 16, 2335). $C_{13}H_{11}O_{3}N_{3}S$ **II**, 720.
- 1) Di[4-Chlorphenylester] d. Methylphosphinsäure. Sd. 245°20 (B. 31, $\mathbf{C}_{13}\mathbf{H}_{11}\mathbf{O}_{3}\mathbf{Cl}_{3}\mathbf{P}$ $\mathbf{C}_{13}\mathbf{H}_{11}\mathbf{O}_{3}\mathbf{BrS}$
- 1) γ -Brom- α -[2-Naphtyl]sulfon- β -Ketopropan. Sm. 130-132° (J. pr. 2] 55, 404). $\mathbf{C}_{13}\mathbf{H}_{11}\mathbf{O}_{4}\mathbf{NS}$
- 1) 3-Nitrophenyl-4-Methylphenylsulfon. Sm. 93° (A. 278, 259). II, 824.

- C13H11O4NS
- 2) 1-Benzoylamidobenzol-?-Sulfonsäure. $K+1^{1}/_{2}H_{2}O$, Ca, Ba+ $4H_{2}O$, Pb+ $4H_{2}O$, Cu+ $6H_{2}O$, Ag (Z. 1868, 266). II, 1193.
- 3) 2-Oxy-1-Phenylimidomethylbenzol-5-Sulfonsäure + H₂O. Ba $+ 4 H_2 O$, Ag' (M. 18, 126).
- 4) 1-Phenylester d. Benzol-1-Carbonsäure-2-Sulfonsäureamid. Sm. 131-132° (Am. 18, 799).
- 5) Amid d. 4-Benzoxylbenzol-I-Sulfonsäure. Sm. 234—236° (R. 16, 423).
- 6) 1-Phenylamid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Fl. NH. $+ H_2O$, K, Ba $+ 5 H_2O$, Cd, Anilinsalz (Am. 20, 272).
- 7) 2-Phenylamid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm. 1730 (156°). Ba (Am. 17, 321, 346).
 8) 4-Phenylamid d. Benzol-1-Carbonsäure-4-Sulfonsäure. Sm. 252
- bis 253° u. Zers. K + $2 H_2 O$, Ba + $5 H_2 O$ (Am. 18, 161)
- 1) β -[2,4-Dinitrophenyl]amido- α -Phenylthioharnstoff. Sm. 186° (G. 24 C, H, O, N, S
- [1] 562). IV, 679. 1) 1-Chlor-7-Sulfo-2-Naphtylester d. Oxydithioameisenäthyläther- $C_{13}H_{11}O_4ClS_3$
- säure. $K + H_2O$ (C. 1895 [2] 121). C18H11O4BrS 1) P-Brom-2-Oxydiphenylmethan-P-Sulfonsäure. K (Soc. 49, 409). —
 - II, 896. 2) P-Brom-4-Oxydiphenylmethansulfonsäure. K (Soc. 41, 35). —
 - II, 898.
- 1) 2-Benzoylamido-1-Oxybenzol-4-Sulfonsäure. Na $+4^{1}/_{2}$ H₂O, Ca +C13 H11 O5 NS $4^{1}/_{2}$ H₂O, Sr + $4^{1}/_{2}$ H₂O, Ba (A. **205**, 56). — II, 1193.
 - 2) 4-Benzoylamido-1-Oxybenzol-2-Sulfonsäure (A. 205, 62). II, 1193.
 - 3) **2-Phenylamidobenzol-1-Carbonsäure-5-Sulfonsäure.** Ba $+ 5 H_{2}O_{1}$ Anilinsalz (B. 24, 3805). — II, 1306.
- 1) ?-Amidoazobenzol-3'-Carbonsäure-?-Sulfonsäure (B. 31, 2205). $C_{13}H_{11}O_5N_3S$ IV, 1461.
 - 2) 4-Oxy-3-Oximidomethylazobenzol-4'-Sulfonsäure. Na (A. 251,
- 177). IV, 1476.

 3) Amid d. 4-Oxyazobenzol-3-Carbonsäure-4'-Sulfonsäure. Na + 3H₂O (A. 251, 187). IV, 1470.

 C₁₃H₁₁O₅N₃S₂ 1) Amid d. 2-Phenylbenzisoxazol-P-Disulfonsäure. Sm. 187—188°
- (M. 15, 651).
- $\mathbf{C}_{13}\mathbf{H}_{11}\mathbf{O}_{6}\mathbf{NCl}_{2}$ 1) Acetylderivat d. 1- $[\alpha\beta$ -Dichlor- β -Nitroäthyl]benzol-4-Ketocarbonsäuremethylester. Sm. 130-1310 (A. 268, 281). - II, 1660.
- 1) ?-Nitro-2-Oxydiphenylmethan-?-Sulfonsäure. K (Soc. 49, 408). $\mathbf{C}_{13}\mathbf{H}_{11}\mathbf{O}_{6}\mathbf{NS}$ II, 896. 2) P-Nitro-4-Oxydiphenylmethansulfonsäure. K (Soc. 41, 35). — II, 898.
- 1) 4,6-Dinitro-2-Methylphenylamid d. Benzolsulfonsäure. Sm. 167 $\mathbf{C}_{13}\mathbf{H}_{11}\mathbf{O}_{6}\mathbf{N}_{3}\mathbf{S}$ bis 168° (Bl. [3] 13, 634).
 - 2) 2,6-Dinitro-4-Methylphenylamid d. Benzolsulfonsäure. Sm. 178° (B. 16, 596; Bl. [3] 15, 1035). — II, 504. 1) Alloxanchinolindisulfit (A. 248, 150). — IV, 250.
- $\mathbf{C}_{13}\mathbf{H}_{11}\mathbf{O}_{7}\mathbf{N}_{3}\mathbf{S}$ $\mathbf{C}_{13}\mathbf{H}_{11}\mathbf{O}_{10}\mathbf{N}_3\mathbf{Cl}_2\mathbf{1})$ Diathylester d. α -Nitro-?-Dichlor-?-Dinitrophenylmethan- α α -Di-
- Sm. 87—89° (94—95°) (Am. 18, 677). carbonsäure. C₁₃H₁₁O₁₂N₄Br1) Diäthylester d. 3-Brom-2,4,6-Trinitrophenylnitromethandicarbonsäure (A. 14, 336). — II, 1841.
- s-4-Bromdiphenylthioharnstoff. Sm. 158° (B. 13, 231). H, 396.
 Phenyl-5-Brom-2-Oxybenzylamin. Sm. 114—115° (A. 302, 144). $\mathbf{C}_{13}\mathbf{H}_{11}\mathbf{N}_{2}\mathbf{BrS}$ $C_{13}H_{12}ONBr$
 - 2) 9-Brom-10-Keto-8-Methyl-3,4-Dihydrojulol (β₁-Brom-α₁-Keto-γ₁-Methyljulolin). Sm. 178,5° (B. 24, 850). IV, 193.
 3) Brombenzoylmethylat d. Pyridin (Pyridinphenacylbromid) (B. 20,
 - 3344). IV, 112.
 - 4) 1-Naphtylamid d. α-Brompropionsäure. Sm. 158° (B. 25, 2922). **- II**, 607.
 - 5) 2-Naphtylamid d. α-Brompropionsäure. Sm. 174° (B. 25, 2922). **– II**, 616.
- 1) Benzyläther d. Phosphazobenzol $+ 2 H_2 O$. Sm. 105° (B. 27, 496). C18H19ONP - II, 1051.
- $C_{13}H_{12}ON_2Br_4$ 1) Harmintetrabromid (B. 22, 638). III, 886.
- 1) α -Oxy- $\alpha\beta$ -Diphenylthioharnstoff. Sm. 111° (J. pr. [2] 56, 89). $\mathbf{C}_{13}\mathbf{H}_{12}\mathbf{ON}_{2}\mathbf{S}$ RICHTER, Lex. d. Kohlenstoffverb.

2) s-Phenyl-2-Oxyphenylthioharnstoff. Sm. 146° (B. 16, 1829). — C13 H12 ON2 S II, 711.

3) s-Phenyl-4-Oxyphenylthioharnstoff. Sm. 162° (B. 16, 376). -II, 720.

4) s-Acetyl-1-Naphtylthioharnstoff. Sm. 1980 (Bl. 28, 103). — II. 610.

5) Thionyl-α-Phenyl-α-Benzylhydrazin. Sm. 65° (A. 270, 122).

C₁₃H₁₂ON₄Br₂ 1) ?-Dibrom-6-Phenylureïdo-2,4-Dimethyl-1,3-Diazin. Sm. 238° (J. pr. [2] 31, 374). - IV, 1128.

1) Thionylpseudodiphenylthiocarbizin. Sm. 162° (B. 26, 2495). - $C_{13}H_{12}ON_4S_2$

IV, 685. 1) Aethylester d. 8-Chlor-2-Methylchinolin-3-Carbonsäure. Sm. 92°. $\mathbf{C}_{13}\mathbf{H}_{12}\mathbf{O}_{2}\mathbf{NCl}$ $(2 \text{HCl}, \text{PtCl}_4 + 4 \text{H}_2 \text{O}) (J. pr. [2] 56, 383).$

2) α-Chloräthylester d. 1-Naphtylamidoameisensäure. Sm. 100-101°

(J. pr. [2] 44, 18). - II, 608.3) α-Chloräthylester d. 2-Naphtylamidoameisensäure. Sm. 98° (J. pr.

[2] **44**, 18). — **II**, 617.

C₁₂H₁₂O₂NBr 1) Methyläther d. 6-Brom-l-Acetylamido-2-Oxynaphtalin. Sm. 2520 (C. 1897 [1] 239). C, H, O, N, S

1) s-Di[4-Oxyphenyl]thioharnstoff. Sm. 222° u. Zers. (219-220°) (B. **16**, 1830; Soc. **67**, 559). — II, 720. 2) Oxalyl-s-Allyl-[4-Methylphenyl]thioharnstoff. Sm. 1570 (J. 1869,

637). — II, 498. 3) Di[4-Amidophenyl]methansulfon. Sm. 217° (B. 27, 2806). — IV, 975.

4) α -Phenylsulfonimido- α -Amido- α -Phenylmethan. Sm. 139° (A. 108,

215; **184**, 348; **214**, 218; B. **11**, 755). — **IV**, 847. 5) α-Phenylhydrazon-3-Methylthiënylessigsäure. Sm. 141° (B. 20.

1749). — III, 759. 6) 4-Methyl-1-Phenylsulfondiazobenzol. Zers, bei 90° (B. 30, 313),

– IV, 1531.

7) Benzylidenhydrazid d. Benzolsulfonsäure. Sm. 110° (110-112° u. Zers.) (B. 27, 600; J. pr. [2] 58, 171). — III, 39.

8) 2-Methylphenylamidoformiat d. syn-2-Oximidomethylthiophen. Sm. 66° (\bar{B} . **25**, 2593). — III, 762.

C₁₃H₁₂O₂N₃Cl 1) 2-[4-Chlor-2, 6-Diamidophenyl]amidobenzol-1-Carbonsäure. Sm. $24\overline{5}^{\circ}$ u. Zers. (B. 18, 1455). — II, 1248.

1) β -[3-Nitrophenyl]amido- α -Phenylthioharnstoff. Sm. 146—147° (B. $C_{13}H_{12}O_{2}N_{4}S$ 22, 2815). — IV, 679. 1) Monochlorid d. 4-Methylphenylphosphinsäuremonophenylester.

 $\mathbf{C}_{13}\mathbf{H}_{12}\mathbf{O}_{2}\mathbf{ClP}$ Sm. 55°; Sd. oberh. 360° (A. 293, 262). — IV, 1668.

1) βγ-Dichlorpropyl-1-Naphtylsulfon. Fl. (J. pr. [2] 55, 205).

2) βγ-Dichlorpropyl-2-Naphtylsulfon. Sm. 104—105° (J. pr. [2] 55, 205).

C13H12O2Cl2S

 $\mathbf{C}_{13}\mathbf{H}_{12}\mathbf{O}_{2}\mathbf{Br}_{2}\mathbf{S}$

1) βγ-Dibrompropyl-1-Naphtylsulfon. Fl. (*J. pr.* [2] **55**, 207). 2) βγ-Dibrompropyl-2-Naphtylsulfon. Sm. 85° (*J. pr.* [2] **53**, 487; 2 55, 208).

1) Pyridinoacetylbrenzkatechinchlorid. Sm. 265° u. Zers. (J. r. 25, $C_{13}H_{12}O_{3}NCl$ 285). - IV, 112.

1) Aethylester d. β -Brom- α -Cyan- β -[4-Methoxylphenyl]akrylsäure. $C_{19}H_{19}O_{9}NBr$ Sm. 185° (J. pr. [2] 50, 13). — II, 1637. $C_{19}H_{19}O_{9}N_{9}S$

1) Methyläther d. 2-Oxy-1-Phenylsulfondiazobenzol. Sm. 104° (B. 30, 315). — IV, 1544. 2) Methyläther d. 4-Oxy-1-Phenylsulfondiazobenzol. Sm. 73-74°

(B. 30, 314). 3) β -Benzyliden - α -Phenylhydrazin - α ³-Sulfonsäure. Na + $2H_2O$ (B.

21, 3410). — IV, 751. 4) β -Benzyliden- α -Phenylhydrazin- α -Sulfonsäure. Ca + 4H₂O (A.

239, 218). — IV, 751.

5) β -Benzyliden- α -Phenylhydrazin- β^2 -Sulfonsäure. Na (A. 299, 365). **- IV**, 753.

6) β -Benzyliden- α -Phenylhydrazin- β 3-Sulfonsäure (B. 24, 791). —

7) 4-Methylazobenzol-4'-Sulfonsäure. Na (Soc. 67, 930). — IV, 1384. 8) Amid d. Phenylsulfon-2-Amidobenzol-1-Carbonsäure. Sm. 166 bis 167° (J. pr. [2] 44, 417). — II, 1253.

- 9) Phenylimid d. Benzol-I-Carbonsäure-2-Sulfonsäure. Sm. 1890 $C_{13}H_{12}O_{3}N_{2}S$ (Am. 11, 346). — II, 1296.
- 1) α-Phenylazo-α-Phenylhydrazonmethan-α-Sulfonsäure (Formazyl- $C_{13}H_{12}O_3N_4S$ sulfonsäure). Sm. 192°. K (B. 29, 2166). — IV, 1227.
- 1) 5-Amido-1-Methyl-1,2,3-Benztriazol-P-Diazobenzolsulfonsäure. $C_{13}H_{12}O_{3}N_{6}S$ Ca (B. 30, 2858). — IV, 1583.
- 1) Pyridinoacetylpyrogallolchlorid. Sm. 180° (J. r. 25, 285). IV, 112. $\mathbf{C}_{13}\mathbf{H}_{12}\mathbf{O}_{4}\mathbf{NCl}$
- C₁₃H₁₂O₄NBr₃ 1) Aethylester d. $\beta\gamma\delta$ -Tribrom- δ -[4-Nitrophenyl]- α -Buten- α -Carbon-säure. Sm. 124° (A. 253, 365). II, 1431.
- 1) s-Diphenylharnstoff-4-Sulfonsäure. Zers. bei 270°. Ca + 3½ H₂O, $C_{13}H_{12}O_4N_2S$ Ba, Ag (B. 28, 3233).
 - 2) 2-Oxy-1-Phenylhydrazonmethylbenzol-5-Sulfonsäure. Phenylhydrazinsalz (M. 18, 134).
 - 3) 4-Oxy-3-Methylazobenzol-4'-Sulfonsäure. Na+2H₂O, Ba+3H₂O (B. 17, 365). — IV, 1421.
 - 4) 6-Oxy-3-Methylazobenzol-4'-Sulfonsäure. Na, K+3H₂O, Mg+ 5H₂O, Ba (B. 17, 355). — IV, 1421.
 - 5) 6-Oxy-3-Methylazobenzol-5-Sulfonsäure. Na (B. 17, 357). IV, 1421.
 - 6) isom. Oxymethylazobenzolsulfonsäure (B. 13, 718). IV, 1421.
 - 7) 2-Nitro-4-Methylphenylamid d. Benzolsulfonsäure. Sm. 99° (A. **221**, 18; B. **16**, 595). — II, 504.
- 1) 4-Nitro-3-Phenylamido-1-Methylbenzol-6-Sulfonsäure. Ba+ $C_{13}H_{12}O_5N_2S$ 2H₂O (B. **26**, 580). — II, 579.
 - 2) Orcinazobenzol-4-Sulfonsäure. $K + 2 H_2 O(B.11, 2196)$. IV, 1447.
- 1) Amid d. Diphenylketon-3,3' oder 3,4'-Disulfonsäure. Sm. 157° $C_{13}H_{12}O_5N_2S_2$ (Soc. 73, 405).
- 1) 4,6-Diamidoazobenzol-2-Carbonsäure-4'-Sulfonsäure (B. 15, 2199). $\mathbf{C}_{13}\mathbf{H}_{12}\mathbf{O}_5\mathbf{N}_4\mathbf{S}$ **- IV**, 1461.
- $C_{13}H_{12}O_3N_4S_2$ 1) Diazobenzolphenylhydrazonmethandisulfonsäure. K₂ (B. 29, 2165). · IV, 1578.
- 1) 1-[β -Chlor- β -Nitro- α -Acetoxyläthyl] benzol-2-Ketocarbonsäure. $\mathbf{C}_{13}\mathbf{H}_{12}\mathbf{O}_7\mathbf{NCl}$ Sm. 179° (A. 278, 204). — II, 1782.
- C₁₃H₁₂O₈N₂Cl₂1) Diathylester d. ?-Dichlor-?-Dinitrophenylmethan-aa-Dicarbonsäure. Sm. 101° (Am. 18, 675).
- $\mathbf{C}_{13}\mathbf{H}_{12}\mathbf{O}_8\mathbf{N}_2\mathbf{B}\mathbf{r}_2\mathbf{1})$ Diäthylester d. α -Brom-3-Brom-4,6-Dinitrophenylmethan- $\alpha\alpha$ -Dicarbonsäure. Sm. 72-73° (Am. 18, 140).
 - 2) Diäthylester d. ?-Dibrom-?-Dinitrophenylmethandicarbonsäure. Sm. 89° (Am. 12, 296). — II, 1841.
- C₁₃H₁₂O₁₀N₃Brl) Diäthylester d. α -Brom-2, 4, 6-Trinitrophenylmethan- $\alpha\alpha$ -Dicarbonsäure. Sm. 85—86° (Am. 18, 138).
 - 2) Diäthylester d. 3-Brom-2,4,6-Trinitrophenylmethandicarbonsäure. Sm. 104-105°. Na (Am. 12, 9). - II, 1841.
 - 3) Diäthylester d. 3-Brom-4, 6-Dinitrophenylnitromethandicarbonsäure. Sm. 111º (Am. 14, 358). — II, 1841.
- $C_{13}H_{12}O_{11}N_3Br1$) Diäthylester d. α -Oxy- α -[3-Brom-2, 4, 6-Trinitrophenyl] methan- $\alpha \alpha$ -Dicarbonsäure. Sm, 156° (Am. 14, 345). — II, 1947.
- 1) ?-Methylphenylamidophenyldichlorphosphin. Fl. Zers. bei 300° $\mathbf{C}_{13}\mathbf{H}_{12}\mathbf{NCl}_{2}\mathbf{P}$ (A. **260**, 37). — **IV**, 1647. C13H19N3ClS
- 1) β -[2-Chlorphenyl]amido- α -Phenylthioharnstoff. Sm. 134° (Soc. 59, 210). IV, 679. 2) β -[3-Chlorphenyl]amido- α -Phenylthioharnstoff. Sm. 138—139°
 - (Soc. 63, 870). IV, 679. 3) β-[4-Chlorphenyl]amido-α-Phenylthioharnstoff. Sm. 149° (Soc. 59,
 - 210). IV, 679. 1) 3-[α-Benzoylamidoäthyl]thiophen. Sm. 95° (B. 20, 1701). —
- $C_{13}H_{13}ONS$ 2) Aethylester d. 2-Naphtylamidothioameisensäure. Sm. 96-97°.
 - Ag (B. 14, 62). II, 618. 1) 2-Allylimido-3-Acetyl-5-Phenyl-2, 3-Dihydro-1, 3, 4-Thiodiazol.
- Sm. 123—124° (B. 27, 630). IV, 1158. C₁₃H₁₃ON₄Br 1) 5-Brom-6-Phenylureïdo-2,4-Dimethyl-1,3-Diazin (Carbanilidobromkyanmethin). Sm. 1900 (J. pr. [2] 31, 375). — IV, 1128.

C13H13ON3S

 $C_{13}H_{13}O_{2}NS$

Sm. 176° (B. 29, 2022).

1) P-Phenylsulfon-4-Amido-1-Methylbenzol (Amidotolylphenylsulfon).

2) α-[2-Naphtyl]sulfon-β-Imidopropan. Sm. 124° (J. pr. [2] 55, 402). 3) Aethylester d. 4-Methyl-2-Phenylthiazol-5-Carbonsäure. Sm. 430

(A. 259, 237). - IV, 355.4) Phenylamid d. 1-Methylbenzol-2-Sulfonsäure. Sm. 136° (B. 12, 1348; J. pr. [2] 51, 437; Am. 17, 343). — II, 425. 5) Phenylamid d. 1-Methylbenzol-3-Sulfonsäure. Sm. 96° (72°) (E. 12, 1349; Am. 19, 197). — II, 425. 6) Phenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 103° (B. 12, 1348; Am. 8, 242; J. pr. [2] 47, 369; [2] 51, 437). — II, 425.
7) Methylphenylamid d. Benzolsulfonsäure. Sm. 79° (J. pr. [2] 47, 309, 370; A. 273, 23; B. 27, 372). — II, 425. 8) 2-Methylphenylamid d. Benzolsulfonsäure. Sm. 124° (125—126°); Sd. 290—295° (A. 265, 184; 273, 13; Bl. [3] 13, 633). — II, 468. 9) 4-Methylphenylamid d. Benzolsulfonsäure. Sm. 120° (122°) (B. 9, 427; Bl. [3] 15, 1034). — II, 504.

10) Benzylamid d. Benzolsulfonsäure. Sm. 88° (A. 265, 182). — II, 531. C₁₈H₁₈O₂NSe 1) Aethylester d. 4-Methyl-2-Phenylselenazol-5-Carbonsäure. Sm. 123—124° (A. **250**, 319). — IV, 366. C₁₃H₁₃O₂N₂Cl₃ 1) Anhydrochloralantipyrin. Sm. 186-187° (A. ch. [6] 27, 333). IV, 510. 1) Diacetylbenzylidenthiobiuret. Sm. 189° (M. 8, 31). — III, 34. 1) β -Brompropyl-1-Naphtylsulfon. Fl. (J. pr. [2] 55, 210). 2) β -Brompropyl-2-Naphtylsulfon. Sm. 124° (J. pr. [2] 53, 490). 1) β -Jodpropyl-2-Naphtylsulfon. Sm. 106° (J. pr. [2] 53, 491). 1) Dimethyläther d. 3, 4-Dichlor-5,5-Dioxy-2-Keto-1-[4-Methyl-2-Methyl-2-1]. $\mathbf{C}_{13}\mathbf{H}_{13}\mathbf{O}_{2}\mathbf{N}_{3}\mathbf{S}_{3}$ $\mathbf{C}_{13}\mathbf{H}_{13}\mathbf{O}_{2}\mathbf{BrS}$ $\mathbf{C}_{13}\mathbf{H}_{13}\mathbf{O}_{2}\mathbf{JS}$ $\mathbf{C}_{13}\mathbf{H}_{13}\mathbf{O}_{3}\mathbf{NCl}_{2}$ phenyl]-2,5-Dihydropyrrol (Dichlormalein p-Toluildimethyläther). Sm. 98° (A. 295, 49). α-[1-Naphtyl]sulfon-β-Oximidopropan (J. pr. [2] 55, 415).
 α-[2-Naphtyl]sulfon-β-Oximidopropan. Sm. 172° (J. pr. [2] 55, 400).
 Acetoximester d. Naphtalin-2-Sulfonsäure. Sm. 87° (B. 24, 3539). $C_{13}H_{13}O_{3}NS$ 4) Methyldiphenylamin-4-Sulfonsäure? Na (C. 1897 [1] 1165). 5) Phenylamid d. 4-Oxybenzolmethyläther-1-Sulfonsäure. Sm. 1090 (Am. 18, 864).6) Phenyloxyamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 142° (143 bis 143,5°) (J. pr. [2] **55**, 302; B. **32**, 215). 7) 2-Oxyphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 138 bis 139° (J. pr. [2] **51**, 441). 8) 3-Oxyphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 157° (J. pr. [2] 51, 442). 9) 4-Oxyphenylamid d. 1-Methylbenzol-4-Sulfonsäure. (J. pr. [2] **51**, 438). 10) Benzylhydroxylamid d. Benzolsulfonsäure (Benzsulfhydroxamsäurebenzyläther). Sm. 107° (A. 299, 81). $C_{13}H_{13}O_3N_3S$ 1) 2-[a-Sulfophenylhydrazonäthyl]pyridin. Sm. noch nicht bei 300° (B. 24, 2529). — IV, 799. 2) 4-Methyl-1-Phenylamidodiazobenzol-14-Sulfonsäure. Na, Ca (B. 29, 292). — IV, 1572. 3) Methylphenyldiazoamidobenzol-4-Sulfonsäure.

5) P-Amido-P-Methylazobenzol-4-Sulfonsäure (B.15,2189). — IV, 1384. 6) isom. P-Amido-P-Methylazobenzol-4-Sulfonsäure (B. 15, 2189). 1) α -Phenylamido- β -Phenylthioharnstoff- α 4-Sulfonsäure. Ca + $2H_2O$ $\mathbf{C}_{13}\mathbf{H}_{13}\mathbf{O}_{8}\mathbf{N}_{3}\mathbf{S}_{9}$

Na (B. 20, 927).

Na (B. 20, 925). —

(A. 239, 218). - IV, 735.1) Propylester d. 1-Bromnaphtalin-5-Sulfonsäure. Sm. 57-57,5°. C13H18O3BrS II, 210.

4) 4 - Methylamidoazobenzol - 4'- Sulfonsäure.

- IV, 1567.

2) Isopropylester d. 1-Bromnaphtalin-5-Sulfonsäure. Sm. 74°. — II, 210.

1) Propylester d. 1-Jodnaphtalin-5-Sulfonsäure. Sm. 67° (B. 22, $\mathbf{C}_{13}\mathbf{H}_{13}\mathbf{O}_{3}\mathbf{J}\mathbf{S}$ 2822). — II, 211.

- 2) Isopropylester d. 1-Jodnaphtalin-5-Sulfonsäure. Sm. 90° (B. 22, $C_{13}H_{13}O_{3}JS$ 2822). — II, 211.
- $\mathbf{C}_{13}\mathbf{H}_{13}\mathbf{O}_{4}\mathbf{NS}$ 1) Benzaldehyd-4-Oxyphenylthionaminsäure (A. 274, 244). — III, 7. C₁₃H₁₃O₈N₂Br 1) Diäthylester d. 3-Brom-4,6-Dinitrophenylmethandicarbonsäure. Sm. 76°. Na, Cu₂OH (Am. 11, 94, 543). — II, 1841. C₁₃H₁₃N₂SP 1) Phenylamid-2-Methylphenylimid d. Thiophosphorsäure (Sulfo-
- phosphazo-o-Toluolanilid). Sm. 162° (B. 28, 1244).
- 1) 1-Oximido-5-Methyl-3-[4-Chlorphenyl]-1,2,3,4-Tetrahydrobenzol. $\mathbf{C}_{13}\mathbf{H}_{14}\mathbf{ONCl}$ Sm. 154° (A. 303, 256).
- 2) Methylchinolylacetonylchlorid. $2 + \text{PtCl}_4$ (C. 1899 [1] 117). 1) 9-Brom-10-Oxy-8-Methyl-3,4-Dihydrojulol $(\alpha_1$ -Oxy- β_1 -Brom- γ_1 -Me-C₁₃H₁₄ONBr
- thyljulolin). Sm. 80,5° (B. 25, 116). IV, 194.

 1) Chinolinbetaïnäthylesterchlorid. 2 + PtCl₄ (B. 15, 2006). $\mathbf{C}_{13}\mathbf{H}_{14}\mathbf{O}_{2}\mathbf{NCl}$ IV, 253.
 - 2) Chlormethylat d. 2-Methylchinolin-3-Carbonsäuremethylester. Sm. 157° u. Zers. (A. 282, 120). — IV, 352.
- C₁₃H₁₄O₂NBr 1) Brompropylat d. Chinolin-4-Carbonsäure. Sm. 2180 u. Zers. (A.
- 270, 357). IV, 347. 1) Jodmethylat d. 2-Methylchinolin-3-Carbonsäuremethylester. Sm. $C_{13}H_{14}O_{9}NJ$ 200° u. Zers. (A. 282, 119). — IV, 352.
- 1) ? Methylphenylamidophenylphosphinsäure. Sm. 150,5%. Na + $C_{13}H_{14}O_{2}NP$ $2 H_2 O$ (A. 260, 37). — IV, 1650.
 - 2) Monamid d. 4-Methylphenylphosphinsäuremonophenylester. Sm. $115-116^{\circ}$ (A. **293**, 263). — **IV**, 1669.
 - 3) Phenylmonamid d. 4-Methylphenylphosphinsäure. Sm. 150°. Cu (A. 293, 268). — IV, 1669.
- C₁₃H₁₄O₂N₂Br₂1) Acetyldibromeytisin. Sm. 164° (B. **27** [2] 510). III, 879. 2) Piperidinbromisatin. Sm. 152° (B. **24**, 2606). IV, 16.
- 1) β-[2-Naphtylsulfon]hydrazonpropan. Sm. 156—158° u. Zers. (J. pr. $\mathbf{C}_{13}\mathbf{H}_{14}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{S}$ [2] 58, 184).
 - 2) β -[2-Allylthioharnstoffphenyl]akrylsäure. Sm. 204—208° u. Zers. (B. **23**, 3343). — II, *1418*.
 - 3) 2-Amido-4-Methylphenylamid d. Benzolsulfonsäure. Sm. 146,50
 - (A. 221, 18; B. 24, 633). IV, 617. 4) Phenylhydrazid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 150—151°
 - (155° u. Zers.) (J. pr. [2] 51, 443; [2] 56, 219). IV, 734. 5) $\beta\beta$ -Methylphenylhydrazid d. Benzolsulfonsäure. Sm. 131,5—132° (B. **27**, 372). — IV, 734.
- 1) Bromäthylat d. Chininsäure. Sm. 210° (A. 276, 276). IV, 362. $\mathbf{C}_{13}\mathbf{H}_{14}\mathbf{O}_{3}\mathbf{N}\mathbf{Br}$ 2) $\beta\delta$ -Lakton d. δ -Brom- β -Oxypentan- $\beta\delta$ -Dicarbonsäure- β -Phenylamid. Sm. 137—138° (A. 292, 232).
- 1) 4,4'-Diamido-3'-Oxy-3-Methylbiphenyl-6'-Sulfonsäure. HCl (B. $C_{13}H_{14}O_4N_2S$ 20, 3174). — II, 898.
- C₁₃H₁₅ONBr₂ 1) ?-Dibrom-2-Keto-l-Methyl-3,3-Diäthyl-2,3-Dihydroindol. Sm. 92—93° (*G.* **28** [2] 355).
- $\mathbf{C}_{13}\mathbf{H}_{15}\mathbf{ON}_{2}\mathbf{Br}$ 1) 4-Bromphenylamid d. β -Cyan- β -Methylbutan- γ -Carbonsäure. Fest. Sd. 220—225°₁₇ (B. **30**, 291).
- 1) Jodmethylat d. 4-Acetyl-5-Methyl-1-Phenylpyrazol. Sm. 166° (A. 295, 321). IV, 550. $\mathbf{C}_{13}\mathbf{H}_{15}\mathbf{ON}_{2}\mathbf{J}$
- 1) 4,6-Diamido-2-Methylphenylamid d. Benzolsulfonsäure. Sm. 217° $C_{13}H_{15}O_2N_3S$ (Bl. [3] **13**, 635). — **IV**, 1128. 2) 2,6-Diamido-4-Methylphenylamid d. Benzolsulfonsäure. Sm. 143
- bis 144° (Bl. [3] 15, 1036). $\mathbf{C}_{13}\mathbf{H}_{15}\mathbf{O_{3}NBr_{2}}$ 1) δ -[?-Dibrom-2-Acetylamidophenyl] valeriansäure. Sm. 205—206°
- (B. **20**, 383). II, 1393. 1) 3,6-Dimethyl-2-Aethylchinolin-?-Sulfonsäure. Sm. noch nicht bei $C_{13}H_{15}O_{3}NS$ 290°. Ba $+ H_2O$, Pb $+ 2C_{18}H_{15}O_8NS + 6H_2O$ (B. 18, 3389).
- IV, 340. C₁₃H₁₅O₃N₂Cl₃ 1) Chloralantipyrin (Hypnal). Sm. 67—68° (A. ch. [6] 27, 330). —
- IV, 510. $C_{13}H_{15}O_3N_2Br$ 1) 4α-Aethyläther d. 4-[β-Brom-α-Oxy-β-Phenyläthyl]-2,5-Diketotetrahydroimidazol. Sm. 175° u. Zers. (B. 22, 695). — II, 1655.
- $\mathbf{C}_{13}\mathbf{H}_{15}\mathbf{O}_{3}\mathbf{N}_{2}\mathbf{J}$ 1) Jodäthylat d. 5-Nitro-8-Oxychinolin-8-Aethyläther + 5 $\mathbf{H}_{2}\mathbf{O}$ (J. pr. [2] **45**, 536). — **IV**, 283.

C₁₈H₁₅O₅N₉Cl 1) Chlorid d. 4,6-Dinitro-5-Pseudobutyl-1,3-Dimethylbenzol-2-Carbonsäure. Sm. 99° (B. 31, 1348).

1) Chloräthylat d. 8-Oxychinolin-8-Aethyläther. Sm. 125-127°. C₁₃H₁₆ONCl 2 + PtCl₄ (J. pr. [2] 45, 533). — IV, 274. 2) Chloräthylat d. 5 [oder 8]-Oxyisochinolinäthyläther + xH₂O. Sm.

63° (J. pr. [2] **52**, 16).

1) Bromäthylat d. 6-Oxychinolin-6-Aethyläther + 2H,0. Zers. bei C13H16ONBr 210° (J. pr. [2] 56, 443).

1) 3,4,6-Tribrom-5-Oxy-2-Piperidylmethyl-1-Methylbenzol. Sm. $\mathbf{C}_{19}\mathbf{H}_{16}\mathbf{ONBr}_{9}$ 155—158° (A. 302, 103). 2) 2,4,5-Tribrom-6-Oxy-3-Piperidylmethyl-1-Methylbenzol. Sm.

 155° (B. **29**, 2354). — **IV**, 20.

1) Jodathylat d. 8-Oxychinolin-8-Aethyläther. Sm. 168-1690 (J. pr. C18H16ONJ [2] 45, 533). — IV, 274. 2) Jodäthylat d. 7-Oxyjsochinolin-7-Aethyläther. Sm. 122—123°

(A. 286, 15). — IV, 303.

3) Jodäthylat d. 8-Oxyisochinolin-8-Aethyläther. Sm. 170° (J. pr. [2] 52, 16). — IV, 303. 1) 2-Thiocarbonyl-5-Keto-4-Butyl-1-Phenyltetrahydroimidazol. Sm.

C, H, ON, S 179° (B. 17, 426; 31, 2188). — II, 405.

2) 2-Methyläther d. 2-Merkapto-5-Keto-4,4-Dimethyl-1-[2-Methylphenyl]-4,5-Dihydroimidazol. Fl. HCl, (2HCl, PtCl₄), H₂SO₄, Pikrat (B. 24, 3297). — II, 472.

3) 2-Methyläther d. 2-Merkapto-5-Keto-4, 4-Dimethyl-1-[4-Methylphenyl]-4,5-Dihydroimidazol. Fl. (2HCl, PtCl₄), Pikrat (B. 24, 3297). — II, 500.

4) 2,5-Dimethyläther d. 2-Merkapto-5-Oxy-4-Methyl-1-[2-Methylphenyl]imidazol. Sm. 118-120°. HCl, (2HCl, PtCl₄), Pikrat (B. 24, 3292). — II, 472.

5) 2,5-Dimethyläther d. 2-Merkapto-5-Oxy-4-Methyl-1-[4-Methylphenyl]imidazol. Sm. 109°. HCl, Pikrat (B. 24, 3292). — II, 500. 6) 2-[4-Isopropylbenzyl]imidotetrahydrothiazol. HCl (Sm. 225 bis

 235° u. Zers.) (B. **22**, 933). — II, 561.

7) Benzoylamid d. Hexahydropyridin-1-Thiocarbonsäure (s-Benzoyl-

piperidinthioharnstoff). Sm. 122—123° (Soc. 55, 623). — IV, 15. $C_{13}H_{16}O_2N_4S_2$ 1) 4-Methyl-1, 3-Phenylendi [β -Acetylthioharnstoff]. Sm. 232° (B. 8, 668). - IV, 604.

1) Methylester d. 2-Chloracetylamido-1-Isopropylbenzol-4-Carbon-C13H16O3NCI säure. Sm. 101—102° (J. pr. [2] 40, 440). — II, 1388.

C₁₈H₁₆O₃NBr 1) γ -[4-Bromphenyl]amid d. β -Methylbutan- $\beta\gamma$ -Dicarbonsäure. Sm. 125-126° (B. 30, 292).

 $C_{13}H_{17}ONBr_{2}$ 1) Diäthylamid d. $\alpha\beta$ -Dibrom- β -Phenylpropionsäure. Sm. 127° (C. **1899** [1] 730).

 $\mathbf{C}_{13}\mathbf{H}_{17}\mathbf{ON}_{2}\mathbf{Cl}$ 1) Chlormethylat d. 3-Keto-1,4,5-Trimethyl-2-Phenyl-2,3-Dihydropyrazol. $2 + \text{PtCl}_4$ (A. 293, 23). — IV, 521. 2) Methyläther d. 5-Oxy-3-Methyl-1-Phenylpyrazol-2-Chloräthylat.

 $2 + PtCl_4$ (A. 293, 23). — IV, 511.

3) Aethylätherd. 5-Oxy-3-Methyl-1-Phenylpyrazol-2-Chlormethylat. $2 + \text{PtCl}_4$ (A. 293, 20).

 $C_{13}H_{17}ON_{9}J$ 1) Jodmethylat d. 3-Keto-1,4,5-Trimethyl-2-Phenyl-2,3-Dihydropyrazol. Sm. 114-115° (A. 293, 23). - IV, 521.

2) Methyläther d. 5-Oxy-3-Methyl-1-Phenylpyrazol-2-Jodäthylat. Zers. bei 114—115° (A. 293, 23). — IV, 511.

3) Aethyläther d. 5-Oxy-3-Methyl-1-Phenylpyrazol-2-Jodmethylat. Sm. 113—116° u. Zers. (A. 293, 19).

C₁₃H₁₇ON₄Cl 1) Hexamethylentetraminbenzoylchlorid (J. pr. [2] 46, 1). — II, 1170. $\mathbf{C}_{13}\mathbf{H}_{17}\mathbf{O}_{2}\mathbf{NBr}_{2}$ 1) Aethylester d. δ -[?-Dibrom-2-Amidophenvl]valeriansäure. Fl. HCl (Sm. 135—136 6 u. Zers.) (B. 20, 383). — II, 1393.

 $C_{13}H_{17}O_{2}NS$ 1) Isoamylester d. Benzoylamidothionameisensäure (A. ch. [5] 11, 336). **– II**, 1181.

benzol. Sm. 197° (A. 303, 256). 2) β -Oxyäthyläther d. 5-Oxy-3-Methyl-1-Phenylpyrazol-2-Chlor-

methylat. $2 + PtCl_4$ (A. 293, 24). — IV, 514.

- - methylcarbonsäure (Ae. d. Aethenyltoluylendiaminchloressigsäure). Sm. 110° (B. **25**, 606). — IV, 615.
- 1) β-Oxyäthyläther d. 5-Oxy-3-Methyl-1-Phenylpyrazol-2-Jod-C13H17O2N2J methylat. Sm. 129-130° (A. 293, 24). - IV, 514.
- $C_{13}H_{17}O_5NS$ 1) 1,2,4-Trimethylbenzol-5-Sulfonacetylamidoessigsäure. Sm. 1580 (B. **27** |2] 888).
- 1) Methyläther d. 2-Merkapto-1-[2,4-Dimethylphenyl]imidazol-3-Jodmethylat. Sm. 169—170° (B. 25, 2368). IV, 504. 1) Aethyläther d. ?-Brom-8-Oxy-1-Aethyl-1,2,3,4-Tetrahydro- $C_{13}H_{17}N_{2}JS$
- C13H18ONBr chinolin. Sm. 35°. Pikrat (B. 17, 762). - IV. 200.
 - 2) Aethylphenylamid d. α-Bromisovaleriansäure. Sd. 148-165°. (B. 30, 3180).
 - 3) 2,4-Dimethylphenylamid d. α-Bromisovaleriansäure. Sm. 1530 (B. 31, 3237).
- 1) s-Valeryl-2-Methylphenylthioharnstoff. Sm. 142-1430 (Soc. 67, C, H, ON, S
 - 2) s-Valeryl-4-Methylphenylthioharnstoff. Sm. 116-1170 (Soc. 67.
 - 3) s-Diacetonphenylthioharnstoff. Sm. 144° (B. 27, 279). II, 446. 1) Isoamylester d. Phenyldithioallophansäure. Sm. 102° (J. pr. [2]
- C₁₈H₁₈ON₂S₂ 32, 256). — II, 398.

 1) Chlormethylat d. Methylhydrohydrastinin. Sm. 211°. 2 + PtCl₄, + AuCl₃ (B. 24, 2739). — IV, 203. C, H, O, NC1
- 1) Jodmethylat d. Methylhydrohydrastinin. Sm. 216-2170 (B. 24, $\mathbf{C}_{13}\mathbf{H}_{18}\mathbf{O}_{2}\mathbf{N}\mathbf{J}$
- 2738). IV, 203. 2) Jodäthylat-6,7-Methylenäther d. 6,7-Dioxy-2-Methyl-1,2,3,4-
- Tetrahydroisochinolin. Sm. 206-207° (B. 20, 2404). IV, 202. 1) Phenylthioharnstoff d. β -Hydroxylamido- δ -Keto- β -Methylpentan. $C_{13}H_{18}O_{2}N_{2}S$
- Sm. 110—112° (B. **31**, 1378). $C_{12}H_{18}O_2N_2S_2$ 1) Diäthylester d. 4-Methyl-I, 3-Phenylendi [amidothioameisensäure].
- Sm. 119-120° (B. 20, 230). IV, 603. 1) Chlormethylat d. Hydrastinin. 2 + PtCl₄ (B. 22, 2331). III, 105. $\mathbf{C}_{13}\mathbf{H}_{18}\mathbf{O}_{3}\mathbf{NCl}$
- 2) Hydrastininmethinmethylchlorid. $2 + \text{PtCl}_{4}$ (B. 22, 2339). -III, 106. 1) Jodnethylat d. Hydrastinin. Sm. 267° (B. 22, 2330). — III, 105. 2) Hydrastininmethinmethyljodid. Sm. 230—232° (B. 22, 2337). — $\mathbf{C}_{13}\mathbf{H}_{18}\mathbf{O}_{3}\mathbf{N}\mathbf{J}$
- III, 106. 1) Chloracetylpyrogallolpiperidin. Sm. 101° (J. r. 25, 290). — IV, 5.
- $\mathbf{C}_{13}\mathbf{H}_{18}\mathbf{O}_4\mathbf{NCl}$ 2) Chloräthylat d. Pyridin-3,4-Dicarbonsäurediäthylester. 2+PtCl₄ (M. 16, 697; 18, 238). - IV, 164.
- 1) Jodäthylat d. Pyridin-3,4-Dicarbonsäurediäthylester (M. 16, 697). $\mathbf{C}_{13}\mathbf{H}_{18}\mathbf{O}_{4}\mathbf{N}\mathbf{J}$ - IV, 164.

 1) 1,2,4-Trimethylbenzol-3-Sulfonamidoacetylamidoessigsäure (B.
- $C_{13}H_{18}O_5N_2S$
- 1) Verbindung (aus Albumin) (A. 101, 175). IV, 1584. $\mathbf{C}_{13}\mathbf{H}_{18}\mathbf{O}_{9}\mathbf{NCl}_{3}$
- 1) Diäthyl-3,6-Dibrom-4-Oxy-2,5-Dimethylbenzylamin. Sm. 87°. $\mathbf{C}_{13}\mathbf{H}_{19}\mathbf{ONBr}_{2}$ HBr (B. 29, 1114).
- 1) Jodmethylat d. Methylcytisin. III, 879. $\mathbf{C}_{13}\mathbf{H}_{19}\mathbf{ON}_{2}\mathbf{J}$ 2) Jodäthylat d. Cytisin. — III, 879.
- C₁₃H₁₉O₂N₂Cl 1) Chlormethylat d. β -Benzoximido α -Dimethylamidopropan. 2 + PtCl₄, + AuCl₃ (C. 1898 [2] 632). C₁₃H₁₉O₃N₂J 1) Oxim d. Hydrastininjodmethylat. Zers. bei 250° (B. 22, 2331). —
- III, -106.
- 1) Aethylester d. 1,2,4-Trimethylbenzol-5-Sulfonamidoessigsäure. C₁₃H₁₉O₄NS Sm. 77° (B. **27** [2] 888).
- 1) Benzoyldi [β-Methylsulfonäthyl]amin. Sm. 131° (B. 27, 3048). $C_{13}H_{19}O_5NS_2$ II, 1161.
- 1) Verbindung (aus 2-Amido-1-Methylbenzol). HCl (B. 25, 2804). -C, H, NClBr
- 1) Chlormethylat d. 3-Dimethylamido-2-Oxy-1,2,3,4-Tetrahydro- $\mathbf{C}_{13}\mathbf{H}_{20}\mathbf{ONCl}$ naphtalin. Sm. 243° u. Zers. $2 + PtCl_4$, $+ AuCl_3$ (A. 288, 125).

 Jodmethylat d. 3-Dimethylamido-2-Oxy-1,2,3,4-Tetrahydronaphtalin. Sm. 201° (A. 288, 119).
 Jodäthylat d. 8-Oxy-1-Aethyl-1,2,3,4-Tetrahydrochinolin. Sm. 160° (B. 19, 1044). — IV, 200.
 Jodmethylat - 2-Methyläther d. 2-Oxy-1,3,3-Trimethyl-2,3-Dimethylat-2-Methyläther d. 2-Oxy-1,3,3-Trimethyl-2,3-Dimethylation of the control of th C₁₃H₂₀ONJ

hydroindol. Sm. 183-184° (G. 27 [1] 480). - IV, 225. 1) α -Phenyl- β -[γ -Oxy- α α -Dimethylbutyl]thioharnstoff. Sm. 163—1640

C13H20ON2S (B. 30, 1324). 2) Aethyläther d. α -[β -Oxybutyl]- β -Phenylthioharnstoff. Sm. 94° (B.

28, 3113).

3) Aethyläther d. α -[γ -Oxybutyl]- β -Phenylthioharnstoff. Sm. 91—92° (B. 28, 3120; 29, 1427).

1) Diäthyläther d. α -[$\beta\beta$ -Dioxyäthyl]- β -Phenylthioharnstoff (s-Ace- $C_{13}H_{20}O_{2}N_{2}S$ talylphenylthioharnstoff). Sm. 96° (B. 22, 569; 27, 2203). — II, 443. 2) Verbindung (aus s-Acetalyl-1,3-Dimethyl-4-Phenylthioharnstoff). Sm. 94-95°. Pikrat (B. 25, 2370). — II, 544.

 Methyldiäthyl-4-Methylphenylphosphoniumchlorid-α-Carbonsäure. Sm. 96°. (2 + PtOl₄) (A. 293, 291). — IV, 1673.
 Aethylester d. Trimethyl-4-Methylphenylphosphoniumchlorid-C₁₃H₂₀O₂ClP

α-Carbonsäure. Sm. 153°. 2 + PtCl₄ (A. 293, 288). — IV, 1673. 1) Verbindung (aus Tyrosin). K (G. 11, 550). — II, 1569.

 $\mathbf{C}_{13}\mathbf{H}_{20}\mathbf{O}_{3}\mathbf{NJ}$ 1) Diäthyl-4-Dimethylamidophenylphosphin + Schwefelkohlenstoff. $\mathbf{C}_{13}\mathbf{H}_{20}\mathbf{NS}_{2}\mathbf{P}$ Sm. 107° (A. 260, 26). — IV, 1656.

1) 5- $[\alpha$ -Oximidoheptyl]-2-Aethylthiophen. Sm. 38—39° (B. 19, 668). $\mathbf{C}_{13}\mathbf{H}_{21}\mathbf{ONS}$ — III, 766.

 $C_{13}H_{21}O_2N_2Br$ 1) Bromäthylat d. Pilocarpin. Sm. 60° (J. 1885, 1724). — III, 925. $C_{13}H_{21}O_2N_2J$ 1) Jodmethylat d. Pilocarpin. Sm. 30° (J. 1885, 1724). — III, 925. Diäthyläther d. α-Amido-α-[ββ-Dioxyäthyl]-β-Phenylthioharnstoff (Acetalylphenylthiosemicarbazid). Sm. 97—98° (B. 27, 184, 2203). $\mathbf{C}_{13}\mathbf{H}_{21}\mathbf{O}_{2}\mathbf{N}_{3}\mathbf{S}$

1) 4-Diisopropylamido-1-Methylbenzol-3-Sulfonsäure. Sm. 222—223° C₁₃H₂₁O₃NS (J. pr. [2] 48, 66). — II, 581.

2) Oenantholanilinhydrosulfit (A. 210, 127). — II, 445.

 $C_{13}H_{22}ON_2Br_2$ 1) $\beta\gamma$ -Dibrompropylpinennitrolamin. Sm. 163—164° (A. 268, 217). —

 $\mathbf{C}_{13}\mathbf{H}_{22}\mathbf{OClP}$ 1) Methyläther d. Triäthyl-4-Oxyphenylphosphoniumchlorid. 2+ PtCl₄ (A. 293, 257). — IV, 1655. 2) Aethyläther d. Methyldiäthyl-4-Oxyphenylphosphoniumchlorid.

 $2 + \text{PtCl}_4$ (A. 293, 259). — IV, 1655.

 $C_{13}H_{22}OJP$ 1) Methyläther d. Triäthyl-4-Oxyphenylphosphoniumjodid. Sm. 65° (A. 293, 257). - IV, 1655.2) Aethyläther d. Methyldiäthyl-4-Oxyphenylphosphoniumjodid. Sm.

 60° (A. 293, 259). — IV, 1655. $\mathbf{C}_{13}\mathbf{H}_{22}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{Cl}_{2}$ 1) Chlorid d. 3,5-Hexamethyldiamidobenzol-1-Carbonsäure $+4\,\mathrm{H}_{2}\mathrm{O}_{2}$ $+ \text{ PtCl}_4 + \text{H}_2\text{O} (B. 7, 41). - \text{II}, 1276.$

 $\mathbf{C}_{13}\mathbf{H}_{22}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{J}_{2}$ 1) Jodid d. 3,5-Hexamethyldiamidobenzol-1-Carbonsäure + $\mathbf{H}_{2}\mathbf{O}$ (B. 7, 41). — II, 1276.

 $\mathbf{C}_{13}\mathbf{H}_{23}\mathbf{O}_{2}\mathbf{NBr}_{2}$ 1) Aethylester d. N-Aethyldibromdihydromerochinen. HBr (B. 30, $\mathbf{C}_{13}\mathbf{H}_{23}\mathbf{NJP}$

1) Methyldiäthyl-4-Dimethylamidophenylphosphoniumjodid. 186° (A. 260, 26). — IV, 1656. 1) Chlormethylat d. Oxywrightin. 2 + PtCl₄ (J. 1888, 2238). — $\mathbf{C}_{13}\mathbf{H}_{24}\mathbf{ONCl}$

III, 875. $\mathbf{C}_{13}\mathbf{H}_{24}\mathbf{ONJ}$

1) Jodmethylat d. Oxywrightin (J. 1888, 2238). — III, 875. $\mathbf{C}_{13}\mathbf{H}_{24}\mathbf{O}_{2}\mathbf{NCl}$

1) Chlormethylat d. Methylhydroecgonidinäthylester. + AuCl₃ + $2^{1/2}$ H₂O (B. 30, 718). C13H24O2NJ

1) Jodmethylat d. Methylhydroecgonidinäthylester. Sm. 149-150° (B. 30, 718).

C₁₃H₂₄O₃NJ

(B. 36, 176).

1) Jodmethylat d. δ -Piperidyl- γ -Keto- β -Methylbutan- β -Carbonsäuremethylester. Sm. $169-170^{\circ}$ (B. 32, 139).

1) Jodäthylat d. 1- $[\beta\beta$ -Dioxyäthyl]hexahydropyridin (J. d. Piperidoacetal). Sm. 105° (B. 27, 2017; 28, 1247). — IV, 22.

1) Tetraäthyläther d. s-Di- $[\beta\beta$ -Dioxyäthyl]thioharnstoff. Sm. 54° (B. 25, 2256). $C_{13}H_{28}O_{2}NJ$

 $C_{13}H_{28}O_4N_{.9}S$ (B. 25, 2356). - I, 1330.

- C₁₃H₃₀O₂NJ 1) Diäthyläther d. Methyl- $\beta\beta$ -Dioxyäthyldipropylammoniumjodid. Sm. 79–80° (B. 30, 1510). C₁₃H₃₀O₃N₂Cl₂ 1) Verbindung (aus α -Oxypropionsäure u. Trimethyl- β -Oxyäthylammonium-
- chlorid). $+ \text{PtCl}_4 + 2 \text{H}_2 \text{O}. \text{I}, 1171.$

C₁₃-Gruppe mit fünf Elementen.

- 1) Chlorid d. Thiodiphenylamidoameisensäure. Sm. 167,5° (171°) (B. C13H8ONCIS 18, 1846; 24, 2905). — II, 806.
- 1) Chlorid d. α-Naphtochinolin-5-Sulfonsäure. Sm. 116° (J. pr. [2] C₁₃H₈O₂NClS
- 1) Nitril d. β -Phenylsulfon- β -[2,4,6-Tribromphenyl]hydrazido- $\mathbf{C}_{13}\mathbf{H}_{8}\mathbf{O}_{2}\mathbf{N}_{3}\mathbf{Br}_{3}\mathbf{S}$
- ameisensäure. Sm. 162° (B. 30, 2556). IV, 1523.

 1) Verbindung (aus d. Benzoylamid d. Benzolsulfonsäure). Sm. 79—80° C₁₃H₁₀O₂NCIS
- C₁₃H₁₀O₂N₃ClS
- (A. 108, 214; 214, 212; B. 5, 140; 11, 754). II, 1174.
 1) Nitril d. β-Phenylsulfon-β-[4-Chlorphenyl]hydrazidoameisensäure. Zers. bei 131° (B. 30, 2555). IV, 1520.
 1) Nitril d. β-Phenylsulfon-β-[4-Bromphenyl]hydrazidoameisensäure. Zers. bei 127° (B. 30, 2556). IV, 1522.
 1) Cheird d. Methylogobargal (E. 170, 1522). $\mathbf{C}_{13}\mathbf{H}_{10}\mathbf{O}_{2}\mathbf{N}_{3}\mathbf{BrS}$
- 1) Chlorid d. 4-Methylazobenzol-4'-Sulfonsäure. Sm. 130-1320 $\mathbf{C}_{13}\mathbf{H}_{11}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{CIS}$ (Soc. 67, 930). — IV, 1384.
- 1) β -[4-Brom-2-Nitrophenyl]amido- α -Phenylthioharnstoff. Sm. $\mathbf{C}_{13}\mathbf{H}_{11}\mathbf{O}_{2}\mathbf{N}_{4}\mathbf{BrS}$ 160-164° (B. 22, 2817). — IV, 679.
- $C_{13}H_{11}O_3N_4BrS$ 1) $\alpha [4-Bromphenyl]azo-\alpha-Phenylhydrazonmethan-\alpha-Sulfonsäure$ (4-Bromformazylsulfonsäure). Sm. 196° (B. 29, 2167). — IV, 1227.
- $\mathbf{C}_{13}\mathbf{H}_{11}\mathbf{O}_{6}\mathbf{N}_{4}\mathbf{BrS}_{2}$ 1) 4-Bromdiazobenzolphenylhydrazonmethandisulfonsäure. K $_{2}$ (B. **29**, 2167). — IV, 1579.
- 1) 4-Brom-3-[α-Oximidobenzyl]-2,5-Dimethylthiophen. Sm. 176 $C_{13}H_{12}ONBrS$
 - bis 177° (B. 28, 1810). III, 768.
 2) isom. Brom-?-[a-Oximidobenzyl]-?-Dimethylthiophen (B. 28, 1807). — III, 7*6*7.
- 1) 2-Methylphenylimid d. Thiophosphorsäuremonophenylester $C_{13}H_{12}ONSP$ (Sulfophosphazo-o-Toluolphenylester). Sm. 236° (B. 28, 1243).
- C13H19O9NCIS 1) Phenylamid d. 2-Chlor-1-Methylbenzol-4-Sulfonsäure. Sm. 96° Soc. 73, 765).
 - 2) Phenylamid d. 2-Chlor-1-Methylbenzol-5-Sulfonsäure. Sm. 92° (Soc. 73, 765).
 - 3) Phenylamid d. 4-Chlor-1-Methylbenzol-2-Sulfonsäure. Sm. 144° (Soc. 73, 762).
 - 4) Phenylamid d. 4-Chlor-1-Methylbenzol-3-Sulfonsäure. Sm. 1886 (Soc. 73, 760).
- Amid d. β-Phenylsulfon-β-[4-Bromphenyl] hydrazidoameisensäure. Sm. 151° (B. 30, 2557). IV, 1622.
 Chloräthylat d. Bromtarkonin. 2 + PtCl₄ (A. 212, 174). $\mathbf{C}_{13}\mathbf{H}_{12}\mathbf{O}_{3}\mathbf{N}_{3}\mathbf{BrS}$
- C₁₃H₁₃O₃NClBr III, 919.
- 1) Jodäthylat d. Bromtarkonin. Sm. 205-206° u. Zers. (A. 212, $\mathbf{C}_{13}\mathbf{H}_{13}\mathbf{O}_{3}\mathbf{NBrJ}$ 174). — III, *919*.
- C13H16O3NBrS 1) Aethylester d. α-Acetylamido-α-Merkaptopropion-4-Bromphenyläthersäure. Sm. 91° (H. 20, 436).
- 1) Aethylester d. 4-Jodphenylmerkaptursäure. Sm. 104-105° (H. $C_{13}H_{16}O_3NJS$ 20; 589). 1) Aethylester d. α-Acetylamido-α-[4-Chlorphenylsulfon] propion-C₁₃H₁₆O₅NClS
- säure. Sm. 165° u. Zers. (H. 16, 527). II, 792. C₁₃H₁₉O₃NBrJ 1) Jodmethylat d. Brommethylhydrohydrastininhydrat. Sm. 1770 (B. 24, 2740). — IV, 203.

C₁₄-Gruppe mit einem Element.

- $\mathbf{C}_{14}\mathbf{H}_{2}$ C 98,8 — H 1,2 — M. G. 170.
 - 1) Kohlenwasserstoff (aus Petroleumcoaks) (J. 1880, 435). II, 305.
- C 94,5 H 4,5 M. G. 178. $C_{14}H_{10}$ 1) Anthracen. Sm. 213°; Sd. 351°, subl. bei 103—104°, Lit. bedeutend. **— II**, 256.

C14H12

 $C_{14}H_{10}$

2) Isoanthracen. Sm. 133,5—134,5° (B. 7, 1156). — II, 270.
 3) Phenanthren. Sm. 99°; Sd. 340° i. D.; subl. bei 95—96°. Pikrat (Sm. 145°). Lit. bedeutend. — II, 266.

4) Synanthren (Phosen). Sm. 189-195° (A. 191, 298; M. 3, 668). -II, 269.

5) Phosen. Sm. 193° (J. 1868, 404; A. ch. [5] 7, 526). — II, 270.
6) Diphenyläthin (Tolan; Diphenylacetylen). Sm. 60° (A. 145, 347; 168, 74 Anm.; 174, 198; 279, 328; B. 12, 1974; 15, 900; J. 1876, 366; Ph. Ch. 10, 412; J. pr. [2] 53, 9). — II, 270.
7) Kohlenwasserstoff (aus d. Acthyläther d. ββ-Diphenyl-α-Oxyäthen). Sm. 1570 (A. 270, 230)

157-158° (A. **279**, 329).

8) Kohlenwasserstoff. Sm. 189-190° (M. 3, 670). C 93,3 — H 6,7 — M. G. 180.

1) Dihydroanthracen. Sm. 108,5°; Sd. 313° (A. Spl. 7, 265; B. 9, 1202;

20, 708, 3076; A. 212, 5), — Π, 250. 2) αα-Diphenyläthen. Sm. 8-9°; Sd. 277° (B. 7, 1409; 12, 2245; A. 235, 159, 336; J. r. 22, 365). — Π, 249.

3) αβ-Diphenyläthen (Stilben). Sm. 124°; Sd. 306-307°. Lit. bedeutend. **– II**, 247.

4) isom. $\alpha\beta$ -Diphenyläthen. Fl. (B. 30, 1799).

5) Polydiphenyläthen = $(C_{14}H_{12})_n$. Sd. 190° (B. 7, 1412). — II, 250. 6) Phenylenbenzylidenmethan? Sm. 258—262° (M. 7, 524). — II, 250. 7) Kohlenwasserstoff (aus Benzylalkohol oder Benzyläthyläther). Sm. 27 bis 28°; Sd. 253—254° (A. 92, 114; J. pr. [2] 53, 369).

C 92,3 — H 7,7 — M. G. 182.

1) αα-Diphenylathan. Sd. 286° (268—270°) (B. 6, 1501; 7, 142, 1190; 15, 1128, 1481; J. pr. [2] 39, 301; A. 235, 165, 328; Bl. 36, 66; 41, 448). — II, 230.

Sm. 51,5—52,5°; Sd. 284°. Lit. bedeutend. — 2) $\alpha \beta$ -Diphenyläthan.

II, 232.

3) 3-Aethylbiphenyl. Sd. 283-284°₇₈₃ (Bl. 47, 689; 49, 101). — II, 235. 4) 2,2'-Dimethylbiphenyl (oo-Bitolyl). Sd. 272° (A. 139, 178; B. 28, 2555). — II, 235.

5) 2,3'-Dimethylbiphenyl. Sd. 286°₇₁₈ (B. 17, 471). — II, 236.
6) 3,3'-Dimethylbiphenyl (mm-Bitolyl). Sd. 280—281° (Bl. [3] 7, 182; B. 17, 468; 21, 1096). — II, 235.

7) 4,4'-Dimethylbiphenyl. Sm. 121° (122—123°) (B. 4, 397, 515; 16, 2877; **29**, 113; A. **223**, 262). — II, 236.

8) isom. Dimethylbiphenyl. Sm. 91° (B. 17, 472). — II, 236. 9) isom. Dimethylbiphenyl. Sd. 283—288° (B. 4, 399). — II, 235. 10) isom. Dimethylbiphenyl. Sd. 272—280° (J. 1877, 384; B. 4, 515;

Soc. 37, 707). — II, 235.

11) isom. Dimethylbiphenyl. Sd. 284—290° (A. ch. [6] 15, 247). — II, 237.

12) 2-Benzyl-1-Methylbenzol. Sd. 275—280° (A. 161, 93; B. 6, 906; 26,

2810). — II, 236.

13) 3-Benzyl-1-Methylbenzol. Sd. $268-269,5^{\circ}_{725}$ (B. 12, 2300). — II, 236. 14) 4-Benzyl-1-Methylbenzol. Sd. $279-280^{\circ}$ (A. 161, 93; B. 5, 683; 7,

19; **29**, 114; **31**, 999; Soc. **67**, 828). — II, 237.

15) isom.?-Benzyl-l-Methylbenzol. Sd. 283-286° (B. 7, 1544). — II, 236.

16) Tetrahydrophenanthren. Sd. 310° (B. 8, 1056). — II, 267.
17) Kohlenwasserstoff (aus Bixin). Sd. 270—280° (B. 11, 868). — III, 651. C 91,3 — H 8,7 — M. G. 184.

1) Hexahydroanthracen. Sm. 63°; Sd. 290° (A. Spl. 7, 272; A. 212, 25). - II, 260.

2) 2-Pseudobutylnaphtalin. Sd. 280°. Pikrat (Sm. 96°) (M. 5, 237; B. 27, 1623). **— II**, *220*.

3) 7-Aethyl-1,4-Dimethylnaphtalin. Sd. 298-302° (G. 22 [2] 43).

C'90,3 - H 9,7 - M. G. 186.

1) Oktohydrophenanthren? Sd. unter 300° (A. 147, 155). — II, 267. 2) 3[?]-Methylhexahydrofluoren. Sd. 128°₁₄ (B. 29, 2962). 3) Kohlenwasserstoff (aus Hexyl-4-Methylphenylketon). Sd. 260—262° (Soc. 67, 507).

4) Kohlenwasserstoff (aus Oenanthol) (Z. 1870, 75).

 $C_{14}H_{14}$

 $C_{14}H_{16}$

C14H18

 $C_{14}H_{22}$

C 88,5 -- H 11,5 -- M. G. 190.

- 1) Oktylbenzol. Sd. 261—263° (B. 19, 641, 2718; 31, 938). II, 38. 2) Isooktylbenzol. Sd. 245—255° (B. 23, 1502). II, 38. 3) Diisobutylbenzol (Gemisch). Sd. 230—240° (B. 15, 1067; 26 [2] 693).
- 4) 1,4-Dipseudobutylbenzol. Sm. 76° (70°); Sd. 230—235° $_{786,5}$ (B. 23, 2420; 27, 1608; Bl. [3] 19, 72). II, 38.
- 5) 1-Methyl-4-Isopropyl-2-Butylbenzol. Sd. 235° (J. pr. [2] 46, 487). —
- 6) 1-Methyl-4-Isopropyl-2-Isobutylbenzol. Sd. 230° (J. pr. [2] 46, 486). **– II**, 38.
- 7) 1,2,3,4-Tetraäthylbenzol. Sd. 254° (249°) (B. 16, 1745; 21, 2818). II, 38.

- 8) 1,2,4,5-Tetraäthylbenzol. Sd. 250° (B. 21, 2819). II, 38. 9) Kohlenwasserstoff (aus rohem Anilin). Sd. 255—259° (B. 22, 510). II, 38.

- 10) Kohlenwasserston (aus Fichtentheer). Sd. 254—257° (*Bl.* [3] 11, 1151). 11) Kohlenwasserstoff (aus Laktucerin). Sd. 247—252° (*B.* 12, 11). II, 38. 12) Kohlenwasserstoff (aus Oenanthol). Sd. 320—330° (*Z.* 1870, 75). I, 956. C 87,5 — H 12,5 — M. G. 192.

 $C_{14}H_{24}$

- 1) Anthracenperhydrür. Sm. 88°; Sd. 270° (B. 21, 2510). II, 260. 2) Phenanthrenperhydrür. Sm. -3°; Sd. 270-275° (B. 22, 779). —
- 3) 1,4-Dimethyl-?-Aethyloktohydronaphtalin. Sd. 247—248° (B. 28 [2] 622; G. **25** [1] 487).

- 4) Isobutyleamphen. Sd. $228-229^{\circ}_{750A}$ (A. 197, 135). III, 536. 5) α -Diheptin (aus Tetrahydrotoluol). Sd. $230-235^{\circ}$ (A. ch. [6] 1, 231). II, 16.
- 6) β-Diheptin (aus Tetrahydrotoluol). Sd. 230—235° (A. ch. [6] 1, 231). II, 16.

7) polym. Methylpropylallylen = $(C_7H_{12})_2$, Sd. 245—247° (Soc. 1882, 167). 8) Kohlenwasserstoff (aus Theeröl). Sd. 240° (A. 139, 245).

C 86,6 — H 13,4 — M. G. 194. $C_{14}H_{26}$

- 1) α -Tetradekin (Dodekylacetylen). Sd. 128°_{15} . Ag + AgNO₃ (B. 25, 2249).
- 2) β-Tetradekin (s-Methylundekylacetylen). Sm. 6,5°; Sd. 134°₁₅ (B. 17, 1372; **25**, 2249). — **I**, *137*.
- 3) Kohlenwasserstoff (aus d. Kohlenw. $C_{14}H_{22}$ aus Fichtentheer). Sd. 250 bis 253° (B. [3] 11, 1151).
- 4) Kohlenwasserstoff (aus Oenanthol). Sd. 245-260° (Z. 1870, 75).

C 85,7 — H 14,3 — M. G. 196. 1) Tetradekanaphten. Sd. 240—241° (J. r. 15, 339). — II, 16.

2) Tetradeken. Sm. —12°; Sd. 127°₁₅ (B. 16, 3021). — I, 124. 3) Kohlenwasserstoff (aus Petroleum). Sd. 240—250° (J. r. 1882, 36).

C 84,8 — H 15,2 — M. G. 198. 1) norm. Tetradekan. Sm. 4,5°; Sd. 252,5° (B. 15, 1700; 19, 2223; Soc. 47, 41). — I, 106.

2) Kohlenwasserstoff (aus Anthracen) oder C₁₄H₂₈. Sd. 240° (Bl. 8, 239). - I, 106.

1) Verbindung (aus Pyren). Sm. oberh. 300° (B. 16, 2880). — II, 285. $\mathbf{C}_{14}\mathbf{Cl}_{10}$

C₁₄-Gruppe mit zwei Elementen.

 $\mathbf{C}_{14}\mathbf{H}_{2}\mathbf{Cl}_{8}$

 $\mathbf{C}_{14}\mathbf{H}_4\mathbf{O}_6$

 $C_{14}H_{28}$

 $C_{14}H_{80}$

- 1) Oktochloranthracen (B. 11, 177). II, 263.
- 2) Oktochlorphenanthren. Sm. 270-280° (B. 11, 168; siehe auch B. 9, 1490; **12**, 677). — **II**, 268.

 $\mathbf{C}_{14}\mathbf{H}_{2}\mathbf{Br}_{8}$

1) Oktobromanthracen. subl. (B. 11, 179). — II, 264.
1) Heptachloranthracen. Sm. oberh. 350° (B. 11, 176). — II, 263.
1) Heptabromanthracen (B. 11, 178). — II, 264. $\mathbf{C}_{14}\mathbf{H}_{3}\mathbf{Cl}_{7}$

 $\mathbf{C}_{14}\mathbf{H}_{3}\mathbf{Br}_{7}$

- 2) Heptabromphenanthren. Sm. oberh. 270° (B. 11, 172). II, 268. C 62,7 H 1,5 O 35,8 M. G. 268.
- 1) Dianhydrid d. Naphtalin-1,4,5,8-Tetracarbonsäure. subl. oberh. 300° (A. 240, 185). — II, 2081.

1) Hexachloranthracen.

Sm. 320—330° (J. 1873, 392; B. 11, 175). —

C14H4Cl6 II, 263. 2) Hexachlorphenanthren. Sm. 249-250° (B. 11, 168). - II, 268. 1) Hexabromanthracen. Sm. 310-320° (B. 11, 178). - II, 264. C14H4Br6 2) isom. Hexabromanthracen (B. 10, 1213). — II, 264. 3) Hexabromphenanthren. Sm. 245⁶ (B. 11, 172). — II, 268. 5) Hexadromphenanthren. Sm. 243° (B. II, 172). — II, 263.
1) Pentabromanthracen. Sm. 212° (B. I0, 1213). — II, 264.
1) C 70,6 — H 2,5 — O 26,9 — M. G. 238.
1) Verbindung (aus d. Verb. C₂₈H₁₄O₈). Sm. 294—296° (B. 18, 1725; Soc. 53, 837). — III, 415.
1) C 55,6 — H 2,0 — O 42,4 — M. G. 302.
1) The state of the control of t $C_{14}H_5Br_5$ $\mathbf{C}_{14}\mathbf{H}_6\mathbf{O}_4$ $C_{14}H_6O_8$ 1) Ellagsäure $+2 H_2 O$. Na $+ H_2 O$, Na₂ $+ H_2 O$, K₂, K₃, Ba₃, Pb. Lit. bedeutend. — II, 2084. 1) 1, 2, 3, 4-Tetrachloranthracen. Sm. 148-1490 (A. 238, 346). - II. 263. $C_{14}H_6Cl_4$ 2) α-Tetrachloranthracen. Sm. 164° (220°) (A. Spl. 7, 283; B. 19, 1108). — II, 262
3) isom. Tetrachloranthracen. Sm. 152° (B. 13, 1589). — II, 263.
4) Tetrachlorphenanthren. Sm. 171--172° (B. 11, 167). — II, 267. 1) Tetrabromanthracen. Sm. 254° (A. 122, 305; A. 5pt. 7, 281). — II, 263.
2) Tetrabromphenanthren. Sm. 183—185° (B. 11, 171). — II, 268.
1) Tetrabromanthracenbromid. Sm. 212° u. Zers. (B. 10, 1213). — II, 264. $\mathbf{C}_{14}\mathbf{H}_{6}\mathbf{Br}_{4}$ $\mathbf{C}_{14}\mathbf{H}_{6}\mathbf{Br}_{8}$ 1) Tolallylsulfid. Sm. 180° (A. 167, 188). — II, 226. 1) Trichloranthracen. Sm. 162—163° (B. 10, 378). — II, 262. $\mathbf{C}_{14}\mathbf{H}_6\mathbf{S}$ $\mathbf{C}_{14}\mathbf{H}_{7}\mathbf{Cl}_{3}$ Trichloranthracen. Sm. 162—163° (B. 10, 3/8). — II, 262.
 isom. Trichloranthracen (A. 160, 126). — II, 263.
 Tribromanthracen. Sm. 169° (A. Spl. 7, 279; B. 14, 979). — II, 263.
 Tribromphenanthren. Sm. 126° (A. 167, 182; B. 11, 171). — II, 268. C 80,8 — H 3,8 — O 15,4 — M. G. 208.
 Morphenol. Sm. 145° (B. 30, 2441; 31, 55, 3202).
 1,2-Anthrachinon. Sm. 180° u. Zers. (B. 27, 1438; 28, 1423).
 1,2[P]-Anthrachinon (Isoanthrachinon). Sm. 211—212° (B. 7, 1156). — III. 420 $\mathbf{C}_{14}\mathbf{H}_{7}\mathbf{Br}_{3}$ $\mathbf{C}_{14}\mathbf{H}_8\mathbf{O}_2$ III, 439. 4) 9,10-Anthrachinon. Sm. 273; Sd. 379—381°. Lit. bedeutend. — III, 406. 5) 9,10-Phenanthrenchinon. Sm. 205° (202°); Sd. oberh. 360°. + NaHSO₃ $+2 H_2 O_1$, $+2 \pi C I_2$, $2 + H_3 C I_2$, $2 + H_3 (C N)_2$. Lit. bedeutend. — III, 440. 6) Isophenanthrenchinon. Sm. 156° (A. 167, 186). — III, 448. C 75,0 — H 3,5 — 0 21,4 — M. G. 224. $C_{14}H_8O_3$ C 75,0 — H 3,5 — O 21,4 — M. G. 224.

1) 1,3-Diketo-2-[2-Fural]-2,3-Dihydroinden. Sm. 203° (B. 30, 2142).

2) 1-Oxy-9,10-Anthrachinon (Erythrooxyanthrachinon). Sm. 190° (B. 7, 970; 10, 611; 11, 1611; 12, 2128; 15, 1793, 1804; 20, 2438; 21, 2527; A. 212, 20; 240, 264; J. pr. [2] 18, 147). — III, 418.

3) 2-Oxy-9,10-Anthrachinon. Sm. 302°. K, Ba (J. 1875, 450; A. 160, 141; 166, 151; 183, 154, 208; 212, 25, 53; 240, 263; B. 7, 670; 8, 530, 974; 12, 1569; 14, 464; 21, 2527; Soc. 63, 1177; J. pr. [2] 54, 89). — III. 4) 4-Oxy-9,10-Phenanthrenchinon (B. 18, 1943). — III, 442. 5) P-Oxy-9,10-Phenanthrenchinon (B. 13, 1180). — III, 448. 5) F-Oxy-5, 10-1 hehalutarien mileti (B. 16, 11c0).
6) 9-Ketofluoren-1-Carbonsäure (o-Diphenylenketoncarbonsäure). Sm. 191 bis 192°. Ca + 2H₂O, Ba + 4H₂O, Ag (A. 193, 149; 200, 6). — II, 1718.
7) 9-Ketofluoren-4-Carbonsäure. Sm. 227°. NH₄ + H₂O, Na + 6 H₂O, Ag (B. 13, 1303; 21, 2357; A. 247, 261, 275). — II, 1719. 8) isom. 9-Ketofluoren-?-Carbonsäure. Sm. noch nicht bei 275°; subl. Ag (A. **229**, 158). — II, 1719. 9) Anhydrid d. Biphenyl-2,2'-Dicarbonsäure. Sm. 217° (B. 10, 326, 1884; A. **243**, 251; **247**, 260). — II, 1884. Verbindung (aus o-Benzophenonoxyd). Sm. 1920 (Soc. 43, 188). — II, 1895.
 C 70,0 — H 3,3 — O 26,7 — M. G. 240. $\mathbf{C}_{14}\mathbf{H}_{8}\mathbf{O}_{4}$ 1) 1,2-Dioxy-9,10-Anthrachinon (Allizarin). Sm. 289-290°; Sd. 430° (subl. bei 153°). Hydrat (A. 66, 187); Ca + H₂O, Ba + H₂O, Al, Pb, Cr₂. Lit. bedeutend. — III, 420.

2) Isoalizarin (B. 3, 294). — III, 425.

3) 1,3-Dioxy-9,10-Anthrachinon (Purpuroxanthin; Xanthopurpurin). Sm. 262—263°; subl. Ca (Bl. 4, 12; J. 1874, 487; A. ch. [5] 18, 224; A. 183, 213; 241, 266; B. 9, 1204; 10, 172, 615; 15, 1804). — III, 425. $\mathbf{C}_{14}\mathbf{H}_8\mathbf{O}_4$

 $\mathbf{C}_{14}\mathbf{H}_8\mathbf{O}_5$

C14H8O8

- 4) 1,4-Dioxy-9,10-Anthrachinon (Chinizarin). Sm. 194-1950 (A. 212, 11; B. 6, 508; 8, 152; 10, 555; 17, 376; 19, 2330; 28, 117; J. pr. [2] 54, 90). · III, 426.
- 5) 1,5-Dioxy-9,10-Anthrachinon (Anthrarufin). Sm. 280° (B. 11, 1176, 1616; 12, 1289, 1293; 16, 371; 17, 896; A. 280, 10). III, 426.
 6) 1,6-Dioxy-9,10-Anthrachinon (Chrysazin). Sm. 191° (A. 183, 184;
- B. 12, 186, 1289). III, 427.
- 7) Isochrysazin. Sm. 175—180° (B. 17, 897). III, 431.
- 8) 1,7-Dioxy-9,10-Anthrachinon (m-Benzdioxyanthrachinon). Sm. 291 bis 293° (B. 9, 946; 10, 1225; 11, 970; 17, 897; Bl. 29, 401; A. 280, 9, 14, 31). — III, 429.
- 9) 2,3-Dioxy-9,10-Anthrachinon (Hystazarin). Sm. noch nicht bei 260°. Ca, Ba (B. 21, 2503; 28, 118, 1533; Soc. 67, 822; Ph. Ch. 18, 559). IIÍ. 429.
- 10) 2,6-Dioxy-9,10-Anthrachinon (Anthraflavinsäure). Sm. oberh. 330°, $N_{8_2} + 5H_2O$, $B_8 + 6^{1/2}H_2O$ (Z. 1871, 583; J. 1871, 490; Bl. 29, 401, 403; A. 170, 103; 280, 9, 32; B. 4, 359; 5, 868; 9, 379; 11, 969; 21, 445). — III, 430.
- 11) 2,7-Dioxy-9,10-Anthrachinon + H₂O (Isoanthraflavinsäure). Sm. oberh. 330° (wasserfrei). Ba (B. 9, 379, 679; 15, 1041; 19, 2330; A. 280, 31). - III, 431.
- 12) 2,7-Dioxy-9,10-Phenanthrenchinon (B. 18, 1944). III, 442.
- 13) Allofluoresceïn. Sm. 140° (B. 28, 109, 2360).
- 14) Säure (aus Hydrobenzursäure) (A. 134, 319). II, 1189.
- 15) Säure (aus d. Verbindung C₁₄H₈O₈). Sm. 275°. Ag (Soc. 43, 188). II, 1895.
- 16) Verbindung (aus Phtalylchlorid u. 1,4-Dioxybenzol) (B. 28, 108).
 C 65,6 H 3,1 O 31,2 M. G. 256.
- 1) 1,2,3-Trioxy-9,10-Anthrachinon (Anthragallol). subl. bei 290°; Sm. 310°. Pb, (B. 10, 39; 15, 2918; 18, 2148; 19, 2331, 2335; J. 1881, 573; M. 6, 759; Soc. 63, 1168; 67, 819). — III, 432.
- 2) 1,2,4-Trioxy-9,10-Anthrachinon + H_2O (Purpurin). subl. bei 150°;
- Sm. 256° (253°). Pb. Lit. bedeutend. III, 433.
 3) 1,2,5[?]-Trioxy-9,10-Anthrachinon (Oxyanthrarufin; Oxychrysazin)
 (A. 183, 191; 280, 16; B. 11, 1179, 1617; 12, 1289). —III, 434.
- 4) 1,2,6-Trioxy-9,10-Anthrachinon (Flavopurpurin). Sm. oberh. 330°; Sd. 459° (B. 9, 679, 682; 10, 1821; 19, 2331; 21, 441, 2524; 26, 1515; A. 280, 12; Ph. Ch. 18, 558). III, 435.

 5) 1,2,7-Trioxy-9,10-Anthrachinon (Anthrapurpurin). Subl. bei 170°;
- Sm. oberh. 300°; Sd. 462° (J. 1873, 450; 1874, 488; 1879, 550; Bl. 29, 405; A. 280, 15, 31; Soc. 37, 557; B. 9, 679; 10, 1823; 11, 972; 13, 42; 19, 2331; 21, 443; 26, 1515). III, 436.
- 6) P-Trioxy-9,10-Anthrachinon (B. 11, 186). III, 436.
- 7) Oxyfluoroncarbonsäure. Ag (B. 29, 2826).
- Nerbindung (aus Oxalsäure u. 1,3-Dioxybenzol). 2 Modifikationen oder C₂₀H₁₄O₇ (B. II, 1186; Soc. 75, 519). II, 938.
 C 61,8 H 2,9 O 35,3 M. G. 272.
 Resorcincarbonat. Sm. 190° u. Zers. (A. 300, 152).
 Hydrochinoncarbonat. Sm. noch nicht bei 280° (A. 300, 154).

- 3) 1,2,5,8-Tetraoxy-9,10-Anthrachinon (Chinalizarin). Sm. noch nicht
- bei 275° (A. 240, 301; J. pr. [2] 43, 239, 247). III, 437. 4) 1,2,7,?-Tetraoxy-9,10-Anthrachinon (Oxyanthrapurpurin) (J. pr. [2] 54, 91).
- 5) 1,3,5,7-Tetraoxy-9,10-Anthrachinon + $2 H_2 O$ (Anthrachryson). Sm. noch nicht bei 360° . Ba + $11 H_2 O$ (A. 164, 113; B. 19, 754). III, 436
- 6) P-Tetraoxy-9,10-Anthrachinon (Oxypurpurin). Sm. noch nicht bei 290° (B. 11, 185; J. pr. [2] 43, 251). - 111, 436.
- 7) P-Tetraoxy-9,10-Anthrachinon (Rufiopin). subl. Ca, Ba + H_2O (A. 162, 323). — III, 437.
- 8) ?-Tetraoxy-9,10-Anthrachinon (a-Oxyanthragallol). Sm. noch nicht
- bei 350° (B. 19, 2339; A. 240, 270). III, 437.

 9) P-Tetraoxy-9,10-Anthrachinon (β-Oxyanthragallol). Sm. noch nicht bei 380° (B. 19, 2339; A. 240, 271). III, 437.

 10) Phlorotanninroth (A. 252, 88). II, 1919.

C 58.3 - H 2.8 - O 38.9 - M. G. 288. $C_{14}H_8O_7$

1) 1, 2, 3, 5, 7-Pentaoxy-9, 10-Anthrachinon (Dioxyanthragallol). Sm. noch bei 360° (A. 240, 273). — III, 438.

2) 1,2,5,8,9-Pentaoxy-9,10-Anthrachinon (Alizarinevanin) (J. pr. [2] 43. 250). — III, 438. C 55,3 — H 2,6 — O 42,1 — M. G. 304.

C14H8O8

1) 1,2,3,5,6,7-Hexaoxy-9,10-Anthrachinon $+2H_2O$ (Rufigallussäure) (A. 19, 204; 163, 218; 241, 271; J. 1860, 288; Z. 1870, 128; Bl. 24, 359; M. 1, 431; B. 3, 694; 8, 931; 9, 1256; 10, 880; 21, 446).

2) 1,2,5,8,?,?-Hexaoxy-9,10-Anthrachinon (J. pr. [2] 43, 243, 250). — III, 438.

3) Naphtalin-1,4,5,8-Tetracarbonsäure. Ba₂, Ag₄ (A. 240, 182). II, 2081.

C'82.3 - H 3.9 - N 13.7 - M. G. 204. $\mathbf{C}_{14}\mathbf{H}_{8}\mathbf{N}_{2}$

1) Nitril d. Biphenyl-2, 4'-Dicarbonsäure. Sm. 152-153° (B. 22, 3018). **– II**, 1883.

2) Nitril d. Biphenyl-?-Dicarbonsäure. Sm. 234° (A. 172, 116). — II, 1887. C 72,4 — H 3,4 — N 24,1 — M. G. 232. 1) Chinoxalophenazin. Sm. über 370° (B. 29, 785). — IV, 1293.

 $C_{14}H_8N_4$

2) Verbindung (aus Natriumcyanamid u. Benzoylchlorid) (2 isom. Formen) (J. pr. [2] **42**, 98). — II, 1173.

1) 1,2-Dichloranthracen. Sm. 255° (A. 238, 347). — II, 262. C14H8Cl2

2) isom. Dichloranthracen. Sm. 205° (A. 34, 294; 160, 137; A. Spl. 7, 282). — II, 262.

3) Dichlorphenanthren (B. 11, 166). — II, 267.

4) α β -Di[2-Chlorphenyl] athin (2, 2'-Dichlordiphenylacetylen). Sm. 88 bis 89° (B. **26**, 652, 655). — Π , 270.

1) $\beta\beta$ -Dichlor- $\alpha\alpha$ -Di[?-Chlorphenyl]äthen. Sm. 89° (B. 7, 1181). — $\mathbf{C}_{14}\mathbf{H}_{8}\mathbf{Cl}_{4}$ II, 249.

2) $\alpha \beta$ -Dichlor- $\alpha \beta$ -Di[2-Chlorphenyl]äthen (oo-Dichlortolandichlorid). α-Modif. Sm. 172°; Sd. 354°; β-Modif. Sm. 129°; Sd. 353-356° (B. 26, 653). - II, 271.

3) Dichloranthracendichlorid. Sm. 149-150° (B. 10, 377). - II, 262.

4) Verbindung (aus Anthrachinonchlorid). Sm. 203-2040 (B. 10, 1480). - III, 408.

C14H8Cl8 1) α-Dichloranthracentetrachlorid. Sm. 187° u. Zers. (B. 11, 174; 19, 108). — II, 262.

2) β -Dichloranthracentetrachlorid. Sm. $205-207^{\circ}$ (B. 13, 1588). II, 262.

3) isom. Dichloranthracentetrachlorid. Sm. 141—145° u. Zers. (B. 11, 174).

4) Dichlorphenanthrentetrachlorid. Sm. 145° (B. 11, 165). — II, 267. 1) 9,10-Dibromanthracen. Sm. 221° (A. Spl. 7, 275; B. 14, 456; J. pr. C14H2Bro

 9,10-Dibromanthracen. Sm. 221° (A. Spl. 7, 275; B. F4, 450; J. pr. [2] 23, 145; A. 228, 255). — II, 263.
 2) isom. Dibromanthracen. Sm. 190—192° (A. 182, 366). — II, 263.
 3) α-Dibromphenanthren. Sm. 146—148° (B. 11, 170). — II, 268.
 4) β-Dibromphenanthren. Sm. 158° (B. 11, 170). — II, 268.
 5) γ-Dibromphenanthren. Sm. 202° (A. 167, 182). — II, 268.
 6) Dibromsynanthren. Sm. 175° (A. 191, 300). — II, 270.
 1) Dibromanthracentetrabromid. Sm. 170—180° u. Zers. (A. 122, 304; A. Spl. 7, 277). — II, 263. $\mathbf{C}_{14}\mathbf{H}_{8}\mathbf{Br}_{6}$ A. Spl. 7, 277). — II, 263.

2) P-Hexabrom- $\alpha\beta$ -Diphenyläthan. Sm. 267° (A. 137, 269; B. 29, 2126). - II, 234.

1) Tolallyldisulfid (oder C₂₈H₁₄S₄?). Sm. 208°. Pikrat (A. 167, 187). — $\mathbf{C}_{14}\mathbf{H}_{8}\mathbf{S}_{2}$

 $C_{14}H_9N$ C'88.0 - H 4.7 - N 7.3 - M. G. 191.

 $C_{14}H_{9}N_{3}$

1) meso-Methylcarbazoakridin. Sm. 175—178° (G. 21 [2] 159, 352). — IV, 424. C 76,7 — H 4,1 — N 19,2 — M. G. 219.

1) Isatomonohydrophenazin (Indophenazin). Sm. 285-287°. Ag (B. 28,

2529; **29**, 200). — IV, 1189. 2) Nitril d. **2-Phenylbenzimidazol-1-Carbonsäure.** Sm. 105,5° (Am. 5, 415). - IV, 1008.

- $\mathbf{C}_{14}\mathbf{H}_{9}\mathbf{N}_{5}$
- C 68,0 H 3,6 N 28,3 M. G. 247. 1) Nitril d. Diazoamidobenzol-2,2'-Dicarbonsäure. Sm. 133° u. Zers. (B. 29, 630). — IV, 1566.

 1) Chloranthracen. Sm. 103° (Bl. 27, 465). — II, 262.

 2) Chlorphenanthren (B. 11, 166). — II, 267.
- C14HOCl
- 1) α-Chlor-αβ-Di[2-Chlorphenyl]äthen (Trichlorstilben). Sm. 66° (B. 26, C14H9Cl3 652). — II, 248.
 - 2) P-Trichlor-αβ-Diphenyläthen (Chlortolandichlorid). α-Modif. Sm. 137 bis 145°; β-Modif. Sm. 150° (B. 4, 379). — II, 271.
- 1) $\alpha \alpha$ -Dichlorphenyl-4-Trichlormethylphenylmethan. $\mathbf{C}_{14}\mathbf{H}_{9}\mathbf{Cl}_{5}$ $Sm. 79 - 80^{\circ}$ (A. 189, 95). — II, 237.
 - 2) $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[?-Chlorphenyl]äthan. Sm. 105° (B. 7, 1181). —
- $C_{14}H_9Br$
 - 1) Bromanthracen. Sm. 100° (Bl. 27, 464). II, 263. 2) Bromphenanthren. Sm. 63° (B. 11, 1217; A. 167, 181). II, 268. C 86,6 - H 5,1 - O 8,2 - M. G. 194.
- $C_{14}H_{10}O$ 1) 2-Oxyanthracen (m - Anthrol). Zers. bei 200°. Hg + HgCl₂ + 4H₂O
 - (A. 212, 26, 49). II, 901. 2) 10-Oxyanthracen. Sm. 163—170° u. Zers. (B. 9, 1201; 15, 1797; 20,

 - 2) 10-Oxyanthracen. Sm. 163—170° u. Zers. (B. 9, 1201; 15, 1797; 20, 1854; 21, 2507; 27, 2789; A. 212, 6; Am. 18, 459). II, 902. 3) isom. Oxyanthracen. Zers. 250° (J. pr. [2] 11, 227). II, 901. 4) isom. Oxanthracen (J. pr. [2] 11, 227). II, 901. 5) 9-Oxyphenanthren? (Phenanthron). Sm. 148—149° (152—153°). Pikrat (J. pr. [2] 28, 172; Soc. 63, 770; 71, 1118). III, 442. 6) Oxyphenanthren. Sm. 112° (B. 10, 1252). II, 903. 7) 9-Keto-3-Methylfluoren. Sm. 66,5° (B. 31, 1694).

 - C 80,0 H 4,8 O 15,2 M. G. 210.
- C14H10O2 1) 2,3-Dioxyanthracen (B. 28, 1535).

 - 2) 2,9-Dioxyanthracen. Sm. 221° (B. 31, 2793). 3) 2,10-Dioxyanthracen. Sm. 202-206° (A. 212, 28; B. 31, 2794). II, 1112.

 - 4) 9,10-Dioxyanthracen (B. 18, 3037). II, 1000.
 5) α-Dioxyanthracen (Chrysazol) (B. 12, 185). II, 999.
 6) β-Dioxyanthracen (Rufol) (B. 11, 1615). II, 999.
 7) P-Dioxyanthracen (Flavol). Sm. 260—270° u. Zers. (B. 15, 1808). —
 - 8) 10-Oxy-9-Keto-9,10-Dihydroanthracen (Oxanthranol). Sm. 204-2060
 - u. Zers. (B. 14, 1264; A. 160, 126; 212, 28, 66). III, 242. 9) 9,10-Dioxyphenanthren (A. 167, 146; 247, 268; B. 19, 1870). II, 1000.

 - 10) ?-Dioxyphenanthren. Sm. 143° (B. 19, 792; 25, 1147). II, 1000.
 11) Methyläther d. 1-Oxy-9-Ketofluoren. Sm. 141,5—142,5° (B. 31, 3034).
 12) 1-Methylxanthon? (A. 257, 94). III, 211.
 13) 3-Methylxanthon. Sm. 176° (B. 25, 1745). III, 216.
 14) 4-Methylxanthon. Sm. 105°; Sd. 350—355° (B. 25, 3644). III, 212.

 - 15) P-Methylxanthon. Sm. 105° (B. 19, 2612). III, 216.
 - 16) $\alpha\beta$ -Diketo- $\alpha\beta$ -Diphenyläthan (Benzil). Sm. 95°; Sd. 346—348° u. ger. Zers. (104—106%). Lit. bedeutend. — III, 280.

 17) Isobenzil. Sd. 314% (A. 129, 347). — III, 297.

 18) Oxytoliden. Sm. 172% (A. 153, 122). — III, 296.

 19) Acetyldiphenylenoxyd. Sm. 80—81% (A. 264, 189). — III, 217.

 - 20) Dianhydrid d. αβ-Di[2-Oxyphenyl]-αβ-Oxyäthan. Sm. 116—117°; Sd.
 - 220°₃₀₋₄₀ (B. **24**, 3175). Π, 1117. 21) isom. Dianhydrid d. $\alpha\beta$ -Di[2-Oxyphenyl]- $\alpha\beta$ -Oxyäthan. Sm. 67-68° (B. **24**, 3176). — **II**, 1118.
 - 22) Fluoren-1-Carbonsäure. Sm. $245 - 246^{\circ}$. Ca $+ 2^{1}/_{2}$ H₂O, Ba + 3 H₂O (A. **200**, 15). — II, 1473.

 - 23) Fluoren-4-Carbonsäure. Sm. 175° (A. 247, 283). II, 1473.
 24) Fluoren-9-Carbonsäure. Sm. 220—222°. Ag (B. 10, 536). II, 1473.
 - 25) Lakton d. α-Oxydiphenylessigsäure (Diphenylglykolid). Sm. 140° (B.
 - 28 [2] 613). 26) Lakton d. 2-Oxydiphenylessigsäure. Sm. 113—114°; Sd. 337° u. ger. Zers. (B. 28, 989; 30, 124; 31, 2812). — II, 1698.

 $C_{14}H_{10}O_{4}$

27) Lakton d. β -[2-Oxynaphtyl] propen- α -Carbonsäure (L. d. β -Naphtolangelikasäure). Sm. 161—162° (B. 17, 2190). — II, 1698. $C_{14}H_{10}O_2$

28) Lakton d. α-Oxydiphenylmethan-2-Carbonsäure (Phenylphtalid). Sm. 115° (J. 1875, 596; B. 21, 2005; A. 291, 21). — II, 1697.

29) Aldehyd d. 4-Benzoylbenzol-1-Carbonsäure. Sm. 64,26 (Bl. [3] 15, 950). C 74,3 — H 4,4 — O 21,2 — M. G. 226.

1) 1,2,9-Trioxyanthracen. Sm. 208° (B. 14, 1259). — II, 1114.

2) ?-Dioxy-9-Keto-9,10-Dihydroanthracen (Desoxyisoanthraflavinsäure). $C_{14}H_{10}O_3$

Sm. oberh. 330° (B. **15**, 1040). — III, 245. 3) 3-Oxy-1-Methylxanthon. Sm. 285° (B. **24**, 1895). — III, 212.

4) 1-Oxy-3-Methylxanthon (Salicylorcinäther). Sm. 140°. Na + 1¹/₂H₂O, Na + NaOH (Am. 5, 95). - III, 212.

- Na + NaOH (Am. 5, 90). III, 212.

 5) 1-Oxy-4-Methylxanthon. Sm. 112° (B. 27, 1991). III, 213.
 6) 1-Oxy-5-Methylxanthon. Sm. 152° (B. 27, 1990). III, 213.
 7) 1-Oxy-6-Methylxanthon. Sm. 176° (B. 27, 1990). III, 216.
 8) 1-Oxy-7-Methylxanthon. Sm. 135° (B. 27, 1990). III, 216.
 9) Methyläther d. 2-Oxyxanthon. Sm. 131,5° (B. 26, 77). III, 201.
 10) Methyläther d. 3-Oxyxanthon. Sm. 128,5° (B. 26, 77). III, 201.
 11) Methyläther d. 4-Oxyxanthon. Sm. 165° (B. 26, 77). III, 201.

12) Oreoselon. Sm. 190° (A. 51, 320). — III, 620.

13) Acetaldehydoxyfluoron (B. 27, 2893).

14) 2-Benzoylbenzol-1-Carbonsäure $+ \text{ H}_2\text{O}$. Sm. 93-94° (85-87°) (127° wasserfrei). Ca, Ba, $Zn + 2H_2O$, $Cu + H_2O$, Ag (J. 1878, 739; 1879, 727; A. 206, 45; 227, 253; 291, 9, 17; B. 6, 907; 7, 17, 578, 805, 987; 9, 32; 11, 838; 13, 1612; 26, 1199; 27 [2] 664; A. ch. [6] 14, 446; Am. **20**, 111). — **11**, 1703.

15) 3-Benzoylbenzol-1-Carbonsäure. Sm. 161-162°. Ca + 2H₂O, Ba + 3(4) H₂O, Ag (J. 1875, 599; A. 210, 277; 220, 236, 250; B. 13, 320;

14, 648). — II, 1705.

- 16) 4-Benzoylbenzol-1-Carbonsäure. Sm. 194°. Ba + 2H₂O, Ag (J. 1875, 595; 1879, 726; M. 2, 438; A. 161, 98; B. 4, 510; 6, 539, 907; 7, 988; 9, 92). — II, 1705.
- 17) Biphenyl-4-Ketocarbonsäure. Sm. 170° u. Zers. (Bl. [3] 17, 810).
 18) 9-Oxyfluoren-4-Carbonsäure. Sm. 203° (A. 247, 284). II, 1706.
 19) 9-Oxyfluoren-9-Carbonsäure + ½ H₂O (Biphenylenglykolsäure). Sm. 162° (wasserfrei). Ca + 2 H₂O (B. 10, 125, 534; 16, 2872). II, 1706. 20) 2-Methyl-α-Naphtofuran-1-Carbonsäure. subl. Sm. 243—245° u. Zers.
- (B. 19, 1303). III, 734.
- 21) 1-Methyl-β-Naphtofuran-2-Carbonsäure. Sm. 253-254° (B. 19, 1304). - III, 734.
- 22) Anhydrid d. Benzolcarbonsäure. Sm. 42°; Sd. 360°. Lit. bedeutend. - II, 1157.
- 23) α, 2-Lakton d. 2, 4-Dioxydiphenylmethan-α-Carbonsäure. Sm. 183° (B. 31, 2826).
- 24) α, 2-Lakton d. 2, 5-Dioxydiphenylmethan-α-Carbonsäure. Sm. 153
- bis 154° (B. 30, 130). 25) α,2-Lakton d. 2,6-Dioxydiphenylmethan-α-Carbonsäure. (B. 31, 2826).
- 26) α , 2'-Lakton d. α -Oxy-4-Oxydiphenylmethan-2'-Carbonsäure (4-Oxyphenylphtalid). Sm. 148-151° (B. 27, 2632; 31, 2790). — II, 1881.
- 27) Aldehyd d. 2-Benzoxylbenzol-1-Carbonsäure. Sd. oberh. 360° (A. **145**, 297). — III, 68.
- 28) Aldehyd d. 4-Benzoxylbenzol-1-Carbonsäure. Sm. 72° (A. 277, 350). - III, *82*.
- Disalicylaldehyd (Parasalicyl). Sm. 130° (128°) (A. 53, 77; 78, 228; 145, 299; 244, 46; A. Spl. 8, 42; C. 1897 [1] 589). III, 78.
 Verbindung (aus Salicylaldehyd) (B. 17, 502; 30, 1772; 31, 1601; A. **163**, 223). — III, 78.
- 31) Verbindung (aus d. 4-Oxybenzol-1-Carbonsäure) (B. 17, 503). III, 88. 32) Verbindung (aus 2,6-Dioxy-9,10-Anthrachinon) (B. 21, 445). — III, 430. C 69,4 — H 4,1 — O 26,4 — M. G. 242.
- 1) Di[1,2-Phenylenäther] d. $a\alpha\beta\beta$ -Tetraoxyäthan (Dibrenzkatechinäthan). Sm. 88—89° (Bl. [3] **21**, 101, 106).

2) 1,4,9,10-Tetraoxyanthracen (A. 212, 14). — II, 1119.

- C14H10O4
- 3) 1,3-Dioxy-?-Dihydro-9,10-Anthrachinon (Hydropurpuroxanthin) (A. ch. [5] **18**, 230). — **III**, 426.
- 4) Anthragallolhydranthron (B. 21, 444). III, 433.
- 5) 7-Methyläther d. 7-Oxy-2-Furanyl-1,4-Benzpyron. Sm. 136° (B.
- 30, 302). 6) 3,3'-Dimethylbiphenyl-2,5,2',5'-Dichinon. Sm. 163° (M. 10, 181;
- B. 31, 1337). II, 956. 7) 1,7-Dioxy-3-Methylxanthon. Sm. 252° (B. 27, 1993). III, 216.
- 8) Monomethyläther d. 1,3-Dioxyxanthon. Sm. 145° (B. 26, 78). III, 204.
- 9) 6-Methyläther d. 1,6-Dioxyxanthon. Sm. 143-144° (B. 27, 1992). - III, 206.
- 10) 7-Methyläther d. 1,7-Dioxyxanthon. Sm. 129° (B. 27, 1992). III, 206.
- 11) Dimethyldicumarin (B. 20, 1329). II, 2019.
- 12) 2-Benzoxylbenzol-1-Carbonsäure? (Benzoësalicylsäure) (A, 87, 161). —
- 13) 6-Oxy-3-Benzoylbenzol-1-Carbonsäure. Sm. 207-210°. Ba (A. 290, 164).
- 14) 2-[4-Oxybenzoyl]benzol-1-Carbonsäure. Sm. 210° u. Zers. Ag (B. **26**, 176). — II, 1887.
- 15) α -[1-Oxy-?-Naphtoyl]äthen- β -Carbonsäure. Sm. 90°. Pb (B. 18, 2868). **- II**, 1887.
- 16) Biphenyl-3, 5-Dicarbonsäure (1-Phenylbenzol-3, 5-Dicarbonsäure). Sm. oberh. 310°. Ca, Ba + 4H₂O, Cu (B. 22, 2381; 24, 1750). — II, 1886.
- 17) Biphenyl-2,2'-Dicarbonsäure (Diphensäure). Sm. 228-229°. Mg + 4 \overline{H}_2 0, Ca + $2^{1/2}$ \overline{H}_2 0, Ba + $4\overline{H}_2$ 0, Ag₂ (A. 166, 367; 193, 116, 128; 196, 50; 203, 97; 247, 263; J. 1879, 727; B. 16, 2872; 21, 2356; 28, 2555; J. pr. [2] 32, 359). — II, 1883.
- 18) Biphenyl-2, 3'-Dicarbonsäure (Isodiphensäure). Sm. 216°. Ca + 2H₂O, $Ba + 6 H_2 O$, Ag_2 (A. 193, 155; 200, 9). — II, 1883.
- 19) Biphenyl-2, 4'-Dicarbonsäure. Sm. 251-252. Ag. (B. 22, 3018). II, 1883.
- 20) Biphenyl-3,3'-Dicarbonsäure. Sm. oberh. 340° (339—341°). Ba + 3¹/₂ H₂O (B. 21, 983; 31, 2576). II, 1886.
 21) Biphenyl-4,4'-Dicarbonsäure. Ca, Ba, Ag₂ (A. 172, 117; B. 9, 272).
- **II**, 1886.
- 22) Superoxyd d. Benzolearbonsäure (Benzoylsuperoxyd). Sm. 103,5° (110°) (J. 1863, 315; 1870, 686; M. 5, 562; 7, 522; B. 27, 1511, 1959;
 29, 1725 Anm.; 30, 2003; Ph. Ch. 12, 68; A. 298, 287; C. 1898 [1] 330; **1898** [2] 1094). — II, 1158.
- 23) a, 2'-Lakton d. a-Oxy-a-[2, 4(?)-Dioxydiphenyl]methan-2'-Carbon-säure + H₂O (Resorcylphtalid). Sm. 130° (B. 27, 2637). II, 1971.
 24) Diphenylester d. Oxalsäure. Sm. 130° u. Zers. (J. pr. [2] 25, 283,
- 284). II, 666.
- 25) Acetylderivat d. Naphtalin-l-Carbonsäure-8-Carbonsäurealdehyd. Sm. 140° (A. 276, 13). — II, 1694. C 65,1 — H 3,9 — O 31,0 — M. G. 258.

C14H10O5

- Machromin + 3H₂O (J. 1864, 558). III, 207.
 3-Methyläther d. 1,3,7-Trioxyxanthon (Gentianin; Gentisin). Sm. 267°; subl. bei 300-400° u. Zers. Na + 2H₂O, 3 + Na₂O, 7 + 2 Na₂O, K + H₂O, K + 2(16)H₂O, Ba + H₂O, Pb (J. 21, 134; 25, 202; 62, 106; 175, 62; 180, 343; M. 15, 7; 16, 920). III, 209.
- 3) Diphenyläther -2, 2'-Dicarbonsäure (Salicylosalicylsäure) (A. 87, 159; 124, 249; 150, 13; 163, 219; M. 4, 125). II, 1498.
 4) 2-[2,4-Dioxybenzoyl] benzol-1-Carbonsäure (Resorcinphtaleïn). Sn. 200° (A. 183, 24). II, 1972.
- 5) 4-[4-Oxybenzoxyl]benzol-1-Carbonsäure. Sm. 261°. Na, Ba, Ba+ xH_2O (J. pr. [2] **28**, 208). — II, 1528.
- 6) Säure (aus Diazoamidobenzolcarbonsäure) (A. 117, 37). II, 1972.
- 7) α, 2'-Lakton d. α-Oxy-1, 2, 3-Trioxydiphenylmethan-2'-Carbonsäure + H₂O (Pyrogallolphtalid). Sm. 175-177 $^{\circ}$ (wasserfrei) (B. 27, 2638). -II, 2021.

8) α,2-Lakton d. 2,4,2',4'-Tetraoxydiphenylessigsäure. Na₃ (Soc. 69, C14H10O5 1267; **71**, 1085). 9) Verbindung (aus 3-Oxybenzol-1-Carbonsäure), (Di 3-Oxybenzoïd). Sm. 130—135° (B. 15, 2588). — II, 1518. C 61,3 — H 3,6 — O 35,1 — M. G. 274. $C_{14}H_{10}O_6$ 1) Eichenroth + ½H₂O (oder C₃₄H₂₆O₁₅) (A. 145, 3; 202, 270; 240, 340; J. 1876, 903; M. 1, 270). — III, 587. 2) Diacetat d. 2,3-Dioxy-1,4-Naphtochinon (B. 11, 1324). — III, 386. 3) Diacetat d. 5,6-Dioxy-1,4-Naphtochinon (D. d. Naphtazarin). Sm. 189° (191°) (A. 286, 36, 1457; B. 28, 1457). — III, 386. 4) 4,4'-Dioxybiphenyl-3,3'-Dicarbonsäure. Sm. 302—305° (B. 31, 2577). 5) 4,4'-Dioxybiphenyl-?-Dicarbonsäure. Sm. 131° (B. 20, 2703). — II, 2022. 6) 2,5-Dimethyl-o-Benzdifuran-1,6-Dicarbonsäure. Ba $+ 2H_2O$ (B. 20, 1337). — III, 7*34*. 7) 2,4-Dimethyl-m-α-Benzdifuran-1,5-Dicarbonsäure. Sm. oberh. 310°

u. Zers. (B. 19, 2933). — III, 734.

8) 2,6-Dimethyl-m-β-Benzdifuran-1,5-Dicarbonsäure. Sm. oberh. 310° u. Zers. (B. 19, 2933). — III, 735. 9) 2,3-Dimethyl-p-α-Benzdifuran-1,4-Dicarbonsaure + H₂O. Sm. oberh.

360°. Ba + 2H₂O, Ag, (B. **20**, 1336). — III, 735. 10) Gardeniasäure. Sm. 223° u. Zers. (A. **200**, 316). — III, 633.

11) Rufohydroellagsäure + xH₂O. Sm. bei 300° (wasserfrei) u. Zers. (B. 8, 1497; M. 1, 672). — II, 2022.

12) Verbindung (aus 1,3-Dioxybenzol). Sm. 253—256° u. Zers. (J. pr. [2] 35, 510). — II, 915. C 57,9 — H 3,4 — O 38,6 — M. G. 290.

 $C_{14}H_{10}O_{7}$

 $C_{14}H_{10}O_8$

 $C_{14}H_{10}O_{9}$

 $\mathbf{C}_{14}\mathbf{H}_{10}\mathbf{O}_{10}$

 $C_{14}H_{10}N_2$

Calluxanthin (J. 1852, 683). — II, 2090.
 Salitannol (Verb. aus Gallussäure u. Salicylsäure). Sm. 210° u. Zers. (C. 1898 [1] 229).

3) Glaukohydroellagsäure (B. 8, 1498; M. 1, 671). — II, 2050.

4) Katellagsäure (B. 15, 2590). — II, 2050.

5) Di-3,4-Dioxybenzol-1-Carbonsäure (Diprotokatechusäure) (B. 15, 2589). - II, 1744.

Werbindung (aus Rufigallussäure) (B. 9, 1258). — III, 439.
 C 54,9 — H 3,3 — O 41,8 — M. G. 306.

1) Tetrahydroellagsäure. subl. bei 200-220°; Zers. oberh. 230° (M. 2, 50). · II, 2079.

2) Hydrorufigallussäure. Zers. oberh. 180° (B. 9, 135; J. 1879, 684). — II, 2079.

3) ?-Tetraoxybiphenyl-?-Dicarbonsäure (Dehydrodiprotokatechusäure). Sm. oberh. 300° (B. 18, 3495). — II, 2079.

4) ?-Tetraoxybiphenyl-?-Dicarbonsäure (Diresorcindicarbonsäure). Zers. oberh. 300°. K₂, Ba + 6 H₂O, Ag₂ (B. 17, 2105). — II, 2079. C 52,2 — H 3,1 — O 44,7 — M. G. 322. 1) α-Digallussäure. Erweicht bei 110—115° (A. 170, 54; B. 11, 2033; 12,

33, 1576; **13**, 454; **15**, 2591; **31**, 3168). — **II**, 1924. 2) β-Digallussäure + 2 H₂O. Sm. unter 100° (B. **17**, 1476). — **II**, 1925.

3) Galläpfelgerbsäure (Tannin). Salze meist bekannt. Lit. bedeutend. — II, 1925.

4) Dipyrogallocarbonsäure. Ba (A. 245, 37). — II, 1918.

5) Diphloroglucincarbonsäure (A. 245, 40). — II, 1918. 6) Gallaktinsäure. Fl. $Ca_2 + 3H_2O$, $Hg_2 + 3H_2O$, $Pb_2 + 6H_2O$ (A. 100, 267). — II, 2090.

7) Heptaoxyfluorenearbonsäure (M. 1, 631). — II, 2091. C 49,7 — H 2,9 — O 47,3 — M. G. 338.

1) Ellagengerbsäure. 2 + 5PbO (Fr. 14, 40, 44; Soc. 69, 1306). — II, 2085.

Verbindung (aus $\alpha\beta$ -Dibenzylidenamido- $\alpha\beta$ -Diphenylhydrazin)=($C_{14}H_{10}N)_x$. Sm. 211,5-212,5° (G. **26** [1] 452; **27** [2] 286). C 81,6 — H 4,8 — N 13,6 — M. G. 206. 1) Benzylidenbenzenylamidin. Sm. 175° (B. **22**, 1610; **23**, 2925).

IV, 849.

2) Diimidotolan. subl. bei 250°; Sm. bei 380° (J. r. 16, 577). — III, 282. 3) Phenanthrendiimid. Sm. oberh. 285° (M. 1, 146). — III, 445.

4) 7-[3-Pyridyl]chinolin. Sm. 104% (2 HCl, PtCl₄) (B. 19, 2475). — IV, 1022. $C_{14}H_{10}N_2$ 5) 2-Phenyl-1,3-Benzdiazin. Sm. 101°; Sd. oberh. 300°. HCl, Pikrat (B. 23, 2810; 28, 288). — IV, 1022.

6) 4-Phenyl-1, 3-Benzdiazin. Pikrat (B. 25, 3093). — IV, 1023.
7) 2-Phenyl-1, 4-Benzdiazin. Sm. 78° (A. 292, 246). — IV, 1023.
C 71,8 — H 4,3 — N 23,9 — M. G. 234. $C_{14}H_{10}N_4$ 1) 3-Amido-1, 5-2, 3-Diphenylen-2, 3-Dihydro-1, 2, 4-Triazol. Sm. 2210

(B. **28**, 153). — IV, 1292.

2) 3,6-Diphenyl-1,2,4,5-Tetrazin. Sm. 1920 (B. 26, 2133; 31, 312; A. 297, 264; 298, 98). — II, 1215. 3) Azimid d. 5- oder 6-Methyl-2-[2-Amidophenyl]benzimidazol.

187—188° (B. **31**, 317). — **IV**, 1293.

4) Azimid d. 2-[2-Amido-4-Methylphenyl] benzimidazol. Sm. 185°.

(2HCl, PtCl₄) (B. 31, 317). — IV, 1293. 5) Anhydrooxanilid. Sm. noch nicht bei 300°. 2HCl + 2H₂O, H₂SO₄ + 2H₂O (A. **209**, 370). — IV, 1292. 6) Fluoflavin. Sm. oberh. 360°. 2HCl (B. **29**, 784). — IV, 1292.

- Anthracenchlorid (A. 122, 306; Bl. 27, 465). II, 260.
 ββ-Dichlor-αα-Diphenyläthen. Sm. 80°; Sd. 316,5° (336° cor.) (B. 6, 223, 987; 7, 1411; 26, 1955; A. 271, 3; 296, 240; J. r. 21, 424). $C_{14}H_{10}Cl_2$ II, 249.
 - 3) $\alpha\beta$ -Dichlor- $\alpha\beta$ -Diphenyläthen (α -Tolandichlorid). Sm. 143° (140°); Sd. 183°₁₈ (B. 4, 289, 379; 12, 1973; 15, 900; 17, 835, 1165; 29, 2906; A. 248, 19; Am. 12, 237). II, 270.

4) isom. $\alpha\beta$ -Dichlor- $\alpha\beta$ -Dic (B. 4, 289, 379; 12, 1973; 15, 900; 29, 2906; A. 248, 19; Am. 12, 237). **- II**, 270.

5) Dichlorstilben. Sm. 170° (J. pr. [2] 19, 446). — II, 248.

 $C_{14}H_{10}Cl_4$

 $\mathbf{C}_{14}\mathbf{H}_{10}\mathbf{Br}_{2}$

 $C_{14}H_{10}J_{2}$ $C_{14}H_{10}S$

C14H10S2 $\mathbf{C}_{14}\mathbf{H}_{11}\mathbf{N}$

6) αα-Di[?-Chlorphenyl]äthen (Dichlordiphenyläthylen). Sd. 280—285° (B. 7, 1419). — II, *249*.

7) αβ-Di[2-Chlorphenyl]äthen (oo-Dichlorstilben). Sm. 97°; Sd. bei 220° (B. 26, 651). — II, 248.

1) $\alpha\beta\beta\beta$ -Tetrachlor- $\alpha\alpha$ -Diphenyläthan. Sm. 85° (B. 26, 1956; A. 296, 265). — II, 231.

2) $\alpha\alpha\beta\beta$ -Tetrachlor- $\alpha\beta$ -Diphenyläthan (Tolantetrachlorid). Sm. 163° (B. 12, 1971; 15, 901; 17, 833; J. r. 21, 426; Z. 1868, 718). — II, 271. 3) $\alpha\beta$ -Dichlor- $\alpha\beta$ -Di[2-Chlorphenyl]äthan. Sm. 170,5° (B. 26, 651). —

4) P-Dichlor-3, 3'-Di[Chlormethyl]biphenyl. Fl. (B. 21, 1098). — II, 236.

 Anthracendibromid (Bl. 27, 464). — II, 260.
 Phenanthrendibromid. Sm. 98° u. Zers. (A. 166, 364; 167, 180; B. 11, 1219). — II, 268.

3) $\beta\beta$ -Dibrom- $\alpha\alpha$ -Diphenyläthen. Sm. 83°; Sd. oberh. 300° u. Zers. (B.

6, 986). — II, 250. 4) $\alpha\beta$ -Dibrom- $\alpha\beta$ -Diphenyläthen (α -Tolandibromid). Sm. $200-205^{\circ}$ (205 bis 206°) (A. 145, 348; 279, 329; B. 4, 379; J. pr. [2] 53, 10).

5) isom. αβ-Dibrom-αβ-Diphenyläthen (β-Tolandibromid). Sm. 64⁰ (62°)
 (B. 4, 379; J. pr. [2] 53, 8; Soc. 71, 222). — II, 272.

(a) 4, 318; 3. pt. [2] 36, 5; 302. 11, 222. — 11, 212.

1) 2-Merkaptoanthracen. Zers. über 220°. HgCl (B. 28, 2263).

2) Tolansulfid (Dithiooxylepiden). Sm. 172—173°; Sd. 350—360° (A. 136, 94; 140, 239; 153, 352; 178, 374). — III, 226.

3) Tolallylhydrosulfid. Sm. 143—144° (A. 167, 192). — III, 226.

1) P-Phenylbithiophen (Phenylbithiënyl). Sm. 209° (Bl. [3] 5, 278). — III. 760°

 $C ext{ } 87,0 - H ext{ } 5,7 - N ext{ } 7,2 - M. G. ext{ } 193.$ 1) 9-Amidoanthracen (Mesoanthramin). Zers. bei 115°. HCl (B. 23, 2523). **– II**, 640.

2) P-Amidoanthracen. Sm. 238°. HCl, H₂SO₄ (B. 15, 223, 226, 852; A. **212**, 56). — **II**, 639.

3) 9-Amidophenanthren.
 4) α-Amidophenanthren.
 5) β-Amidophenanthren.
 640.
 640.
 640.

 $C_{14}H_{11}N$

6) γ-Amidophenanthren. HCl (B. 12, 1158). — II, 640.
7) 1-Phenylindol. Sd. 326—327°₇₅₇ (B. 17, 568; A. 239, 221). — IV, 219.
8) 2-Phenylindol. Sm. 186°; Sd. oberh. 360°. Pikrat (B. 15, 2480; 18, 165; 19, 1065; 21, 1072, 1811, 2596; 25, 2869; 26, 2452; 28, 587; A. 236, 133; Bl. 39, 531). — IV, 412.
9) 3-Phenylindol. Sm. 88—89°. Pikrat (B. 21, 1811; A. 253, 36). — IV, 414.

IV, 414.

10) 1-Methylakridin. Sm. 88°. Pikrat (A. 279, 279). — IV, 415. 11) 3-Methylakridin. Sm. 134° (131,5°). (2 HCl, PtCl₄), H₂Cr₂O₇ (A. 279, 273; J. pr. [2] 36, 265). — IV, 414.

5-Methylakridin. Sm. 92—94° (114°). HCl, (2HCl, PtCl₄) (B. 16, 74, 768; 19, 427; A. 192, 29; 224, 34). — IV, 415. 12) **5-M**ethylakridin.

13) 1-Methylphenanthridin. Sm. 70°. (2HCl, $PtCl_4 + 2H_2O$) (A. 266, 160). — IV, 416.

14) 3-Methylphenanthridin. Sm. 131°. $(2HCl, PtCl_4 + 2H_20)$ (A. 266, 157). — IV, 416.

15) 9-Methylphenanthridin. Sm. 85°; Sd. oberh. 360°. HCl, (2HCl, PtCl₄ + 2H₂O), Pikrat (B. 29, 1184). — IV, 416.
 16) 2-Methyl-α-Naphtochinolin (Naphtochinaldin). Sd. oberh. 300°. (2HCl,

PtCl₄ + 2H₂O), H₂Cr₂O₇ (B. 17, 1711). — IV, 411. 17) 1-Methyl- β -Naphtochinolin. Sm. 112°. Pikrat (J. pr. [2] 35, 316). —

IV, 412.

18) 3-Methyl-β-Naphtochinolin. Sm. 82°; Sd. über 300°. HCl + H₂O, (2HCl, PtCl₄ + 2H₂O), HNO₃, H₂SO₄ + 2H₂O, H₂Cr₂O₇, Pikrat (B. 17, 1711; 22, 255; 27, 353, 2021). — IV, 411.
19) isom. Methylnaphtochinolin. Sm. 91—92°. (2HCl, PtCl₄) (B. 17, 544).

— IV, 412. 20) Nitril d. Diphenylessigsäure. Sm. 71—72° (75—76°); Sd. 181—184°₁₂ (Bl. 33, 590; A. 233, 349; 250, 142; B. 23, 2845; 25, 1615). II, 1464.

21) Nitril d. 1-Benzylbenzol-2-Carbonsäure. Sm. 19°; Sd. 313-314° (B. 25, 3021; 27, 2789). — II, 1465. C 76,0 — H 5,0 — N 19,0 — M. G. 221. 1) P-[Naphtyl]azopyrrol. Sm. 103° (B. 19, 2255). — IV, 1483.

 $C_{14}H_{11}N_3$

2) P-[2-Naphtyl]azopyrrol. Sm. 101° (B. 19, 2255). — IV, 1483. 3) 1,5-Diphenyl-1,2,4-Triazol. Sm. 91°. HCl + 2H₂O, (2HCl, PtCl₄ + 4H₂O), Pikrat (Soc. 67, 1068; B. 29, 2673). — IV, 1156.

4) 1,2-Diphenyl-1,3,4-Triazol. Sm. 142°. (2 HCl, PtCl₄), Pikrat (B. 29,

2919). — IV, 1156.

5) 2,5-Diphenyl-1,3,4-Triazol + H₂0.' Sm. 192°; Sd. 280° u. Zers. Ag (B. 27, 997, 1003, 1006; A. 297, 255; 298, 97). — II, 1214; IV, 1187. 6) 4-Phenylamido-1,2-Benzdiazin. Sm. 232°. HCl (B. 25, 2851). -

7) 6-Methyl-3-Phenyl-1, 2, 4-Benztriazin. Sm. 95—96° (B. 27, 1692). — IV, 1186.

8) Hydrocyancarbodiphenylimid. Sm. 137° (B. 13, 2155; 28, 1008). — II, 452. 9) Nitril d. β -Benzyliden- α -Phenylhydrazin- β ³-Carbonsäure. Sm. 120°

(B. **24**, 2422). — IV, 753. C 67,5 — H 4,4 — N 28,1 — M. G. 249.

1) Nitril d. Formazylcarbonsäure (Formazylcyanid). Sm. 158-159° (B. 27, 689; 30, 2994). — IV, 1228. C 60,6 — H 4,0 — N 35,4 — M. G. 277. 1) 3,3'-Diazoamidoindazol. Zers. bei 183° (A. 305, 355).

 $C_{14}H_{11}N_7$

 $C_{14}H_{11}N_5$

1) β -Chlor- $\alpha \alpha$ -Diphenyläthen. Sm. 42°; Sd. 298° (A. 279, 325). $\mathbf{C}_{14}\mathbf{H}_{11}\mathbf{Cl}$

2) α -Chlor- $\alpha\beta$ -Diphenyläthen (Chlorstilben). Sm. 54°; Sd. 320—324°₇₈₀ (B. 25, 2237; Soc. 71, 220). — II, 248.

3) isom. α -Chlor- $\alpha\beta$ -Diphenyläthen (isom. Chlorstilben). Fl. (A. 149, 376; Berz. J. 25, 620). — II, 248.

 $\cdot C_{14}H_{11}Cl_3$

1) $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Diphenyläthan. Sm. 64° (B. 5, 1099; J. pr. [2] 47, 77). II, 231.

2) $\alpha \alpha \beta$ -Trichlor- $\alpha \beta$ -Diphenyläthan. Sm. 102—103° (Soc. 71, 221).

3) $\alpha\beta$ P-Trichlor- $\alpha\beta$ -Diphenyläthan (Chlorstilbenchlorid). Sm. 85° (Berz. J. **25**, 620). — II, 233.

 $\mathbf{C}_{14}\mathbf{H}_{11}\mathbf{Cl}_{3}$ $\mathbf{C}_{14}^{11}\mathbf{H}_{11}^{11}\mathbf{Br}$ 4) β -Chlor- $\alpha\alpha$ -Di[?-Chlorphenyl]äthan (B. 7, 1419). — II, 231.

1) β -Brom- $\alpha \alpha$ -Diphenyläthen. Sm. 50° (40°); Sd. oberh. 300° ($165-175^{\circ}_{11}$) (B. 7, 1411; A. 235, 160). — II, 249.

2) α -Brom- $\alpha\beta$ -Diphenyläthen (α -Bromstilben). Sm. 31° (A. 145, 340; 155, 72; B. 26, 664; 28, 2699). — II, 248.

3) isom. α -Brom- $\alpha\beta$ -Diphenyläthen (β -Bromstilben). Fl. (B. 28, 2699).

1) $\beta\beta\beta$ -Tribrom- $\alpha\alpha$ -Diphenyläthan. Sm. 89° (B. 6, 985). — II, 231. $\mathbf{C}_{14}\mathbf{H}_{11}\mathbf{Br}_{3}$ 2) $\alpha\beta\beta$ -Tribrom- $\alpha\beta$ -Diphenyläthan (Bromstilbenbromid). Sm. 100° (A. 145, 341). — II, 234.

3) P-Tribrom- $\alpha\beta$ -Diphenyläthan. Sm. 207—211° (A. 151, 365). — II, 234. 4) ?-Tribrom-αβ-Diphenyläthan. Zers. bei 170° (A. 137, 268). -- II, 234. C 85,7 — H 6,1 — O 8,2 — M. G. 196.

 $C_{14}H_{12}O$

 $C_{14}H_{12}O_{2}$

1) α -Phenyl- β -[2-Oxyphenyl]äthen. Sm. 135—136° (Am. 1, 315). — II, 899.

2) α -Phenyl- β -[3-Oxyphenyl]äthen. Sm. 180° (B. 28, 1999).

3) 2-Oxy-9,10-Dihydroanthracen. Sm. 129,5° (B. 26, 3069). — II, 900. 4) 10-Oxy-9,10-Dihydroanthracen. Sm. 76° (J. pr. [2] 23, 137; B. 14. 800; A. **212**, 100). — II, 900.

5) 2-Methyldiphenylketon. Sd. 315-316° (B. 6, 754; 12, 2301; 24, 2805, 4046). — III. 211.

6) **3-Methyldiphenylketon.** Sd. 314—316°₇₄₅ (B. **12**, 2300; A. **220**, 251). - III, 212.

7) **4-Methyldiphenylketon.** Sm. 59—60° (55°); Sd. 326,5° (*J.* 1876, 2; *A.* 189, 84; *B.* 6, 538, 810, 1243; 7, 19, 982; 12, 2299; 20, 2470; *J. pr.* [2] 35, 466; *Bl.* [3] 15, 945). — III, 213.

8) α-Keto-αβ-Diphenyläthan (Phenylbenzylketon; Desoxybenzoïn). Sm. 60°;

Sd. 320—322°. Na. Lit. bedeutend. — III, 217.

9) 3-Acetylbiphenyl (Methyl-3-Biphenylketon). Sm. 121°; Sd. 325-327° (A. ch. [6] 15, 255). - III, 217.

10) Aldehyd d. Diphenylessigsäure. Sd. 315° u. ger. Zers. + NaHSO₃. (A. 198, 182; 248, 38; 279, 330; B. 28, 3181; 30, 950). - III, 64.

11) Verbindung (aus d. Phenylhydrazid d. Phenylessigsäure). Sd. 340° (B. **27** [2] 592).

12) Verbindung (aus Zimmtaldehyd) (A. 34, 160). — III, 58.

C 79,3 — H 5,6 — O 15,1 — M. G. 212.

1) 1,9-Dioxy-9,10-Dihydroanthracen (o-Oxyhydroanthranol). Sm. 99°.

K, Ba, Pb (A. 212, 15; B. 10, 609; 11, 1611). — Π, 1111. 2) αα-Di[2-Oxyphenyl]äthen. Sm. 95° (B. 24, 3178; A. 277, 354). — II, 998

3) $\alpha\beta$ -Di[2-Oxyphenyl]äthen. Sm. 197° (A. 277, 352). — II, 998. 4) $\alpha\beta$ -Di[4-Oxyphenyl]äthen. Sm. 280° u. Zers. (B. 7, 1202; J. pr. [2] 39, 500; [2] 47, 66; A. 277, 359). — II, 998.

5) Diphenyläther d. α α-Dioxyäthen. Sm. 95-96° (G. 21, 261). — II, 655. 6) γ -Keto- γ -[4-Methylphenyl]- α -[2-Furanyl]propen (Furalmethyl-p-Tolyl-

keton). Sm. 67°; Sd. 330° (B. 29, 2248). — III, 728.

7) β-Oxy-α-Keto-αβ-Diphenyläthan (Benzoin). Sm. 129-130°; Sd. 343 bis 344°. Lit. bedeutend. — III, 221.

8) α-Keto-β-[4-Oxyphenyl]-α-Phenyläthan (p-Oxydesoxybenzoïn). Sm. 129°.
 Na (B. 21, 2449). — III, 226.

9) 4-Oxymethyldiphenylketon. Sm. 48,3° (Bl. [3] 15, 947).

10) 3-Oxyphenyl-4-Methylphenylketon? Sm. 120° (A. 286, 315)

11) **4-Oxyphenyl-4-Methylphenylketon.** Sm. 160° (A. **286**, 328). — III, 215.

12) Methyläther d. 2-Oxydiphenylketon. Fl. (M. 17, 107). — III, 193.
13) Methyläther d. 4-Oxydiphenylketon. Sm. 61—62° (Soc. 41, 227; B. 23, 1204). — III, 194.
14) Phenyläther d. Oxymethylphenylketon. Sm. 72° (B. 15, 2498; 28, 23)

3030). — III, *132.*

15) Diphenylessigsäure. Sm. 148° (145–146°). Ca + H_2O , $Ba + 2H_2O$, Zn, Ag (A. 155, 84; 171, 122; 275, 84; Bl. 33, 590; B. 24, 3556; Am. 19, 645). — II, 1463.

16) 1-Benzylbenzol-2-Carbonsäure. Sm. 114°. Ca + 2H₂O, Ba + 5¹/₂H₂O, Ag (J. 1875, 598; B. 9, 633; 27, 2789; A. 291, 24). — II, 1465.
17) 1-Benzylbenzol-3-Carbonsäure. Sm. 107-108°. Ca + H₂O, Ba +

 $4 H_2 O$, Ag (A. 220, 244). — II, 1466.

18) 1-Benzylbenzol-4-Carbonsäure. Sm. 154—155°. Ca, Ba + 2H₂O, Ag (A. 161, 105; B. 8, 1054; J. 1875, 599). — II, 1466.
19) 1-[3-Methylphenyl]benzol-3-Carbonsäure. Sm. 204°. Ag (Bl. [3] 7, $C_{14}H_{12}O_{2}$

183). — II, *1466*.

20) 1-[2-Methylphenyl]benzol-4-Carbonsäure. Sm. 179—1806 (1766) (J. 1877, 385; Soc. 37, 707). — II, 1466.

21) 1-[4-Methylphenyl]benzol-4-Carbonsäure. Sm. 243—244°. Ag (J. 1877, 384). — II, 1466.

22) α -[1-Naphtyl]propen- β -Carbonsäure. Sm. 151° (Bl. [3] 17, 813).

23) Aldehyd d. 2-Oxybenzolbenzyläther-1-Carbonsäure. Sm. 46°; Sd. oberh. 360° (196°_{13}) (A. 148, 24; B. 31, 3041). — III, 67.

24) Aldehyd d. 4-Oxybenzolbenzyläther-1-Carbonsäure. Sm. 72° (B. 29, 142). — III, 82. 25) Methylester d. 1-Phenylbenzol-2-Carbonsäure. Sd. 308° (A. 279,

260). — II, 1461.

26) Phenylester d. 1-Methylbenzol-4-Carbonsäure. Sm. 71-720 (J. 1858, 406). — II, 1340.

27) 2-Methylphenylester d. Benzolcarbonsäure. Sd. 307° (Z. 1869, 621; B. 7, 1007; Bl. [3] 11, 603). — II, 1147.

28) 3-Methylphenylester d. Benzolcarbonsäure. Sm. 54°; Sd. 313-314° (Bl. [3] 11, 603; Z. 1869, 622). — II, 1147.

29) 4-Methylphenylester d. Benzolcarbonsäure. Sm. 71,5°; Sd. 315,5 bis 316° (Z. 1869, 622; J. 1882, 368; A. 171, 142; Bl. [3] 11, 603; J. pr. [2] 36, 8; G. 28 [1] 217). — II, 1147.

30) Benzylester d. Benzolcarbonsäure. Sm. unter 20°; Sd. 345° (323 bis 324° i. D.) (A. 152, 131; Gm. 6, 40; B. 20, 647; 27 [2] 312; 31, 2645). **- II**, *1143*.

31) Acetat d. 4-Oxybiphenyl. Sm. 88-890 (A. 257, 102). — II, 895. C 73,7 - H 5,3 - O 21,0 - M. G. 228.

1) Di[2,5-Dioxy-1-Methyl]biphenylanhydrid. Sm. 232° (B. 11, 1281; A. **215**, 164). — II, 956.

2) 1,4,9-Trioxy-9,10-Dihydroanthracen (A. 212, 14). — II, 1114.

3) ?-Dioxy-2-Methyldiphenylketon. Sm. 200° (A. 179, 196). — III, 211. 4) ?-Dioxy-?-Methyldiphenylketon (Benzomethylresorcin). Sm. 1760 (B. 28, 2305 Anm.). — III, 216.
5) Monomethyläther d. 2,2'-Dioxydiphenylketon. Sm. 69° (J. pr. [2]

28, 287). — III, 195.

6) Monomethyläther d. 1, 2-Dioxydiphenylketon (Benzoguajakol). Sm. 131—133° (G. **26** [2] 436; **27** [1] 280).

7) Salireton. Sm. 121,5° (J. pr. [2] 21, 221). — II, 1109.

8) α-Oxydiphenylessigsäure (Diphenylglykolsäure; Benzilsäure). Sm. 150°. K, Ba + 6 H₂O, Pb, Ag (A. 25, 25; 31, 329; 155, 77; 171, 131; B. 14, 326; 19, 1863, 1868; 22, 1212; Ph. Ch. 5, 422). — II, 1696.

9) 2-Oxydiphenylessigsäure. Sm. 85-87°. Ba + 4H₂O,Ag (B. 28, 990; 30, 126). — II, 1698.

10) 4-Oxydiphenylessigsäure. Sm. 1730 (B. 30, 125; 31, 2812).

11) α-Oxydiphenylmethan-2-Carbonsäure (o-Benzhydrylbenzoësäure). K,

Ba (J. 1875, 596; B. 21, 2005; A. 291, 23). — II, 1697. 12) α -Oxydiphenylmethan-3-Carbonsäure. Sm. 121°. Na + 4H₂O, Ca + $5 H_2 O$, Ag + $H_2 O$ (A. 220, 242). — II, 1697.

13) α-Oxydiphenylmethan-4-Carbonsäure. Sm. 164-165°. NH₄, Na, K, Ca + 5H₂O, Ba, Ag (A. 161, 102; J. 1875, 598). — II, 1697.

14) 4'-Oxydiphenylmethan-2-Carbonsäure. Sm. 145-146°. Ag (B. 31,

15) 4-Oxydiphenylmethan-3-Carbonsäure (4-Oxy-1-Benzylbenzol-3-Carbonsäure). Sm. 139—140°. Ag (J. 1873, 440). — II, 1698.

16) 3-Oxy-1-Phenylbenzolmethyläther-2-Carbonsäure. Fl. Ag (B. 31,

17) α -Oxyphenylessigphenyläthersäure. Sm. 108°. Na +3 H₂O, Cu, Ag (A. 220, 51). — II, 1551.

18) 2-Oxybenzolbenzyläther-l-Carbonsäure. Sm. 75°. Ag (A. 148, 28). **- II**, 1496.

19) β-[4-Methoxyl-1-Naphtyl]akrylsäure. Sm. 214° (Bl. [3] 17, 814).

 $\mathbf{C}_{14}\overline{\mathbf{H}_{12}}\mathbf{O}_{8}$

- 20) Methylester d. 3-Oxy-1-Phenylbenzol-2-Carbonsaure. Fl. (B. 31. $C_{14}H_{12}O_{3}$ 3035).
 - 21) Methylester d. 6-Oxy-l-Phenylbenzol-2-Carbonsäure. Sm. 84-85° (A. 284, 322). — II, 1695.
 - 22) Methylester d. 2-Oxybenzolphenyläther-1-Carbonsäure. Sd. oberh. 360° (A. **257**, 79). — II, 1495.
 - 23) Aethylester d. Naphtalin-l-Ketocarbonsäure. Sd. 213-215023. Pikrat (C. 1896 [2] 382; Bl. [3] 17, 301). 24) Aethylester d. Naphtalin-2-Ketocarbonsäure. Sd. 212—215°₂₀ (C.
 - 1896 [2] 382; Bl. [3] 17, 304). 25) Phenylester d. 3-Oxy-1-Methylbenzol-4-Carbonsäure. Sm. 49° (B.
 - 25, 1743). II, 1550. 26) Phenylester d. 2-Oxybenzolmethyläther-1-Carbonsäure. Sm. 59°
 - (J. pr. [2] 31, 474). II, 1494.
 - 27) Phenylester d. Oxyessigphenyläthersäure. Fest. Sd. 320-325° (C. 1898 [1] 988).
 - 28) 2-Methylphenylester d. 2-Oxybenzol-1-Carbonsäure. Sm. 35° (B. **22** [2] 267). — II, 1493.
 - 29) 3-Methylphenylester d. 2-Oxybenzol-1-Carbonsäure. Sm. 740 (B. **22** [2] 267). — II, 1493.
 - 30) 4-Methylphenylester d. 2-Oxybenzol-1-Carbonsäure. Sm. 390 (B. **22** [2] 267). — **II**, 1493.
 - 31) Monacetat d. 7,8-Dioxyacenaphten. Sm. 122-122,5° (Soc. 55, 579). **– II**, 1100.
 - 32) Acetat d. Methyl-1-Oxy-2-Naphtylketon. Sm. 103,5° (B. 30, 1467). 33) Acetat d. Methyl-4-Oxy-2-Naphtylketon. Sm. 108—109° (A. 254,
 - 200). III, 175.
 - 34) Benzoat d. 1,2-Dioxybenzolmonomethyläther. Sm. 57° (50-52°; 58 54) Benzoat d. 1,2-Dioxybenzoimonomethylather. Sm. 57° (50—52°; 58 bis 59°) (*J. pr.* [2] **53**, 254; *C.* **1895** [1] 801; **1896** [2] 350; *A.* 301, 103). C 68,8 — H 4,9 — O 26,2 — M. G. 244.

 1) Oreoselin (Oroselon). Sm. 177° (156°) (*A.* 51, 321; 174, 70; 176, 73; *J.* 1854, 639; *M.* 19, 274; *C.* 1899 [1] 431). — III, 620.

 2) Uvinon. Sm. 247,5° (*B.* 20, 1086). — III, 709.

 3) Dimethylparacotoin. Sm. 141° (*G.* 23 [2] 203). — III, 640.

 4) Monomethyläther d. 2,3,4[oder 3,4,5]-Trioxydiphenylketon. Sm. 165° (*A.* 269° 301). — III. 202

 $\mathbf{C}_{14}\mathbf{H}_{12}\mathbf{O}_4$

- 165° (A. **269**, 301). III, 202. 5) Monomethyläther d. 2,4,6-Trioxydiphenylketon? (Cotoïn). Sm. 130
- bis 131°. Pb₂ (A. 199, 23; 282, 192; B. 26, 2794; 27, 409, 1183; 28, 1553). - III, 202
- 6) 4'-Methyläther d. 2,4,4'-Trioxydiphenylketon. Sm. 165° (B. 27,
- 7) P-Dioxy-P-Dimethylbiphenyldioxyd (M. 10, 174). II, 955.
- 8) Dioxyessigdiphenyläthersäure. Sm. 91°. Ag (B. 27, 2796). 9) 4-Oxynaphtalinäthyläther-1-Ketocarbonsäure. Sm. 160° (Bl. [3]
- **17**, 811).
- 10) Methylester d. 4-Oxynaphtalinmethyläther-1-Ketocarbonsäure. Sm. 87° (Bl. [3] 17, 306).
- Methylester d. 3-Acetoxylnaphtalin-2-Carbonsäure. Sm. 101° (B. 27, 2624). II, 1691.
- 12) Dimethylester d. Naphtalin-1,5-Dicarbonsäure. Sm. 114-115° (G. **26** [1] 96).
- 13) Dimethylester d. Naphtalin-1,8-Dicarbonsäure. Sm. 102-103° (A. 172, 273). — II, 1879.
- 14) Diacetat d. 1,2-Dioxynaphtalin. Sm. 104-106° (B. 17, 3025). -II, 981.
- 15) Diacetat d. 1,3-Dioxynaphtalin. Sm. 56° (55°) (B. 29, 1610; A. 298, 390).
- 16) Diacetat d. 1,4-Dioxynaphtalin. Sm. 128-130° (B. 17, 3025). -II. 982.
- 17) Diacetat d. 1,5-Dioxynaphtalin. Sm. 159-160° (B. 20, 938). -II, 983.
- 18) Diacetat d. 1,6-Dioxynaphtalin. Sm. 73° (J. pr. [2] 39, 317). II, 983.
- 19) Diacetat d. 1,7-Dioxynaphtalin. Sm. 108° (A. 241, 372). II, 983.

- 20) Diacetat d. 1.8-Dioxynaphtalin. Sm. 147-148° (A. 247, 359). - $C_{14}H_{12}O_4$ II, 983.
 - 21) Diacetat d. 2,6-Dioxynaphtalin. Sm. 175° (A. 241, 370). II, 984.
 - 22) Diacetat d. 2,7-Dioxynaphtalin. Sm. 136° (129°) (B. 14, 2209; 23. 520). — II, 984. 23) Diacetat d. P-Dioxynaphtalin. Sm. 173° (B. 30, 2202).

- 24) 2-Oxybenzoat d. 1,2-Dioxybenzolmonomethyläther. Sm. 65° (C. 1895 [1] 801).
- 25) Acetylderivat d. 2-Methyl-5-Phenylfuran-3-Carbonsäure. Sm. 80 bis 83° (B. 17, 2763). — III, 712.

26) Verbindung (aus Santelholz) (Z. 1870, 84). — III, 672.

 $C_{14}H_{12}O_5$

C 64,6 — H 4,6 — O 30,8 — M. G. 260.

1) Coccinin (oder $C_{16}H_{14}O_{6}$?). + NH₃ (A. 141, 341). — II, 2098.

2) Pimpinellin. Sm. 106° (C. 1898 [2] 114).

- Sm. 127° (B. 25, 1301). 3) Acetyldehydrodiacetylresacetophenon.
- 4) ε -Keto- α -[3,4-Dioxyphenyl]hexan-3,4-Methylenäther- ζ -Carbonsäure (Methylsticinsäure). Sm. 180° u. Zers. (M. 10, 786). — II, 1968.
- 5) α , 2-Lakton d. α -Oxy- γ -Keto- α -Phenyl- α -Buten- β , 2-Dicarbonsäure- β -Aethylester (Aethylester d. Phtalylacetessigsäure). Sm. 124° (B. 16, 651; A. **236**, 185). — II, 2018.

6) Verbindung (aus Maklurin) (J. 1864, 559). — III, 208. C 60,9 — H 4,3 — O 34,8 — M. G. 276. 1) Baptigenin (C. 1897 [2] 429, 709). 2) Gardenin. Sm. 163—164° (A. 98, 316; 200, 311). — III, 632. 3) Kinoïn (B. 11, 1879). — III, 687.

 $C_{14}H_{12}O_6$

- 4) Dimethyläther d. Tetraoxybiphenylchinon (A. 169, 249). II, 1042. 5) Aponsäure (oder $C_{14}H_{10}O_6$). Sm. 2520 u. Zers. Ca, Ba, Ag₂ (B. 23, 323). — II, 1036.

- 6) Dibrenzcatechinessigsäure + 3H₂O (C. 1895 [1] 530).
 7) α-Diresorcinessigsäure. Sm. oberh. 279° (C. 1895 [1] 530).
 8) β-Diresorcinessigsäure + 1½ H₂O (C. 1895 [1] 530).
 9) Di[2,4-Dioxyphenyl]essigsäure. Ba, 3PbO, Zn (Soc. 69, 1268; 71, 1089).
- 10) Dioxyessigdi[3-Oxyphenyl]äthersäure (Resorcinglyoxylsäure). Zers. bei 250° (A. ch. [7] 1, 107). — II, 918. 11) Diacetat d. 5,7-Dioxy-4-Methyl-1,2-Benzpyron (Diacetoxylmethyl-
- cumarin). Sm. 138—140° (B. 17, 2190). II, 1953.
- 12) Diacetat d. 7,8-Dioxy-4-Methyl-1,2-Benzpyron (Diacetoxyl-β-Methyl-C 57,5 — H 4,1 — O 38,4 — M. G. 292.

 1) Thujigenin (J. 1858, 515). — III, 614.

 2) Rothsäure. Ca, Pb (Z. 1869, 668). — III, 590.

 3) Säure (aus 4-Oxybenzol-1-Carbonsäure u. 3,4-Dioxybenzol-1-Carbonsäure)

C14H12O7

- +2H₂O. Pb+2H₂O (A. 134, 278). II, 1740. 4) Triäthylester d. 5-Methyl-2,3-Dihydrofuran-2,3,4-Tricarbonsäure. Sd. 188—189°₁₅ (Soc. **69**, 532). — III, 720. C 54,5 — H 3,9 — O 41,6 — M. G. 308.

 $C_{14}H_{12}O_{8}$

1) 1,2,3,4-Tetrahydronaphtalin-2,2,3,3-Tetracarbonsäure. Fl. Zers.

hei 185° (B. 17, 450, 452; Soc. 53, 12). — II, 2077. 2) Dipyrogallolessigsäure + 3 H₂O (C. 1895 [1] 530). C 49,4 — H 3,5 — O 47,0 — M. G. 340.

C14H12O10

1) Tetramethylester d. 1,4-Diketo-1,4-Dihydrobenzol-2,3,5,6-Tetracarbonsäure. Sm. 208°. +2CH₄O (A. **258**, 318). — II, 2096. C 43,3 — H 3,1 — O 53,6 — M. G. 388.

 $C_{14}H_{12}O_{13}$ $C_{14}H_{12}N_2$

- 1) Galsäure. $Ba_3 + 4H_2O$, $Pb_3 + 7H_2O$ (A. 260, 338). II, 2108. C 80.8 H 5.8 N 13.4 M. G. 208.
- 1) Phenylimido-[2-Methylphenyl]imidomethan. Sm. 71° (B. 19, 2410). - II, 474.
- 2) Phenylimido-[4-Methylphenyl]imidomethan. Fl. (B. 19, 2407). II. 512.
- 3) Dibenzylidenhydrazin (Benzalazin). Sm. 93°. HCl, 2HBr (*J. pr.* [2] 39, 44; [2] 44, 537; [2] 58, 391; *B.* 28, 2347; 30, 1878). III, 38. 4) 3-Amido-2-Phenylindol. Sm. 174° (*B.* 21, 1074). IV, 413.

- $\mathbf{C}_{11}\mathbf{H}_{12}\mathbf{N}_{2}$

- 5) 2-[2-Methylphenyl]indazol. Sm. 80—81° (*J. pr.* [2] 51, 273). IV, 867. 6) 2-[4-Methylphenyl]indazol. Sm. 105° (*B.* 25, 3169). IV, 867. 7) 1-[4-Methylphenyl]benzimidazol. (HCl, HgCl₂), Pikrat (*A.* 303, 378). 8) 2-[4-Methylphenyl]benzimidazol. Sm. 268°, HCl, (2HCl, PtCl₄), HNO₃, H₂SO₄ (A. **205**, 116; **210**, 328). — IV, 1012. 9) **6-Methyl-1-Phenylbenzimidazol**. (2+HCl,2HgCl₂), Pikrat (A. **303**, 375).
- 10) 1-Methyl-2-Phenylbenzimidazol. Sm. 170-1716 (B. 25, 2842).
- IV, 1006. 11) 5-Methyl-2-Phenylbenzimidazol. Sm. 238—240°. HCl, H₂SO₄ (A. 208,
- 316; B. 12, 952; 24, 633; 30, 3064; Am. 17, 402). IV, 1013. 12) 2-Phenyl-3,4-Dihydro-1,3-Benzdiazin. (2 HCl, PtCl₄), H₂CrO₄ (B. 25,
- 3032). IV, 1015.
- 13) 3-Phenyl-3,4-Dihydro-1,3-Benzdiazin (Orexin). Sm. 95°. HCl+ H₂O, (HCl, SnCl₂), (2HCl, PtCl₄), H₂SO₄ + 2H₂O (B. 22, 2686). IV, 872.
- 14) 4-Phenyl-3, 4-Dihydro-1, 3-Benzdiazin. Sm. 165—166°. HCl, (2HCl, PtCl₄), (HCl, AuCl₃), Pikrat (B. 29, 1311). IV, 1016.
- 15) 2,8-Dimethyl-5,10-Naphtdiazin (Ditolazin). Sm. 156° (B. 27, 2781). **- IV**, 1016.
- 16) 3,9-Dimethyl-4,10-Naphtisodiazin + 2 H₂O (Dimethylphenanthrolin). Sm. 76° (97—98° wasserfrei) (B. 24, 1740). IV, 1015.
- 17) 7,9-Dimethyl-4,10-Naphtisodiazin (Dimethylphenanthrolin). Sm. 106 bis 107°. (2HCl, PtCl₄), Pikrat (A. 274, 373). — IV, 1015.
- 18) 6,8-Dimethyl-5,9-Naphtisodiazin (Dimethylchinochinolin). Sd. oberh. 360°. HCl, (2 HCl, PtCl₄), H₂Cr₂O₇, Pikrat (A. 279, 22). IV, 1014.
- 19) Tolazon (Ditolylenazon). Sm. 187°; Sd. oberh. 360°. (2HCl, PtCl₄) (B. **26**, 2239). — IV, 1402.
- 20) Nitril d. α-Phenylamido-α-Phenylessigsäure. Sm. 85° (B. 11, 246;
- 15, 2028; G. 24 [2] 428). II, 1324. 21) Nitril d. 1-Phenylamidomethylbenzol-2-Carbonsäure (2-Cyanbenzyl-
- anilin). Sm. 124—126°. HCl, (2HCl, PtCl₄), Chlorat, Pikrat (B. 31, 2882). 22) Verbindung (Base aus Hydrobenzamid). Sm. 220° (A. 112, 171; 122, 324). — III, 21. C 71,2 — H 5,1 — N 23,7 — M. G. 236. 1) Benzidincyanid (B. 3, 723). — IV, 961. 2) 2,3-Diphenyl-2,3-Dihydro-1,2,3,4-Tetrazin (Glyoxalosotetrazon). Sm.
- $C_{14}H_{12}N_4$
 - 152° u. Zers. (B. 21, 2156; 30, 2461; A. 262, 291). IV, 1307.
 3) 3,6-Diphenyl-1,2-Dihydro-1,2,4,5-Tetrazin. Sm. 192° (B. 26, 2132;

 - 27, 1002; 31, 312; A. 297, 258. II, 1214. 4) 1,4-Diphenyl-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 179—180°. HCl + H₂O, (2HCl,PtCl₄) (B. 30, 1263; G. 26 [2] 431; Soc. 53, 850; 55, 244). - IV, 1233.
 - 5) 3,6-Diphenyl-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 258° (HCl, AuCl₃) (B. 26, 2131; 27, 1004; A. 297, 261). — II, 1214. 6) 3-[2-Methylphenyl]azoindazol. Sm. 211—211,5° (A. 305, 341).

 - 7) 4-Hydrazon-3-Phenyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 2040 (B. 22, 2629). — IV, 874.
 - 8) Verbindung (aus d. Verb. $C_{16}H_{14}O_6N_2$ aus 3-Amidobenzol-1-Carbonsäure). Sm. 116° (Soc. 69, 1516).
- 1) $\beta\beta$ -Dichlor- $\alpha\alpha$ -Diphenyläthan. Sm. 74° (80°); Sd. 295 305° u. Zers. (B. 6, 223; A. 279, 324; A. ch. [6] 12, 271). II, 231. $\mathbf{C}_{14}\mathbf{H}_{12}\mathbf{Cl}_{1}$
 - αβ-Dichlor-αβ-Diphenyläthan (α-Stilbenchlorid). Sm. 191—193° (A. 168, 74; 198, 131; Bers. J. 25, 620; B. 16, 638; 17, 835). II, 233.
 isom. αβ-Dichlor-αβ-Diphenyläthan (β-Stilbenchlorid). Sm. 93—94°
 - (A. 168, 77; 198, 134). II, 233.
 - 4) $\alpha\beta$ -Di[2-Chlorphenyl]äthan. Sm. 65° (A. 305, 100).
- 5) $\alpha\beta$ -Di[2-Chlorphenyl]äthan. Sm. 03° (A. 305, 100). 5) $\alpha\beta$ -Di[4-Chlorphenyl]äthan. Sm. 112° (J. pr. [2] 19, 462). II, 233. 6) Phenyl-4-Methylphenyldichlormethan. Fl. (B. 26, 26). II, 237. 7) ?-Dichlor-3,3'-Dimethylbiphenyl. Sm. 51° (B. 21, 1097). II, 236. 1) $\alpha\beta$ -Dibrom $-\alpha\beta$ -Diphenyläthan (α -Stilbenbromid). Sm. 237° (A. 145, 336; 151, 364; 182, 261; 198, 127; R. 12, 185; B. 24, 1779; 28, 2694). C14H12Br2 - II, 234.
 - 2) isom. αβ-Dibrom-αβ-Diphenyläthan (β-Stilbenbromid). Sm. 110—110,5° (B. 28, 2694).

C,4H,9Br,

- 3) $\alpha\beta$ -Di[4-Bromphenyl]äthan. Sm. 114—115° (B. 9, 17; A. 137, 267; G. 18, 237). — II, 234.
- 4) P-Dibrom-4-Aethylbiphenyl. Sm. 102-1030 (Bl. 47, 689; 49, 101). **- II**, 237.
- 5) ?-Dibrom-2, 4'-Dimethylbiphenyl. Sm. 1520 (Soc. 47, 591). II, 235. 6) ?-Dibrom-3, 3'-Dimethylbiphenyl. Sm. 58 - 59° (B. 21, 1099). -II, 236.

 $\mathbf{C}_{14}\mathbf{H}_{12}\mathbf{J}_{2}$ $\mathbf{C}_{14}\mathbf{H}_{12}\mathbf{S}$

1) P-Dijod-3, 3'-Dimethylbiphenyl. Sm. 99-100° (B. 21, 1099). - II. 236.

1) Stilbensulfid. Sm. 168-169° (J. 1876, 421). — II, 1102.

1) 4,4'-Dimethyldiphenylendisulfid (Thianthren). San. 1160 (117-1180) $C_{14}H_{12}S_{2}$ (B. 22, 911; 29, 438). - II, 959.

 $C_{14}H_{13}O_4$ $\mathbf{C}_{14}\mathbf{H}_{13}\mathbf{N}$

2) P-Dimethyldiphenylendisulfid. Sd. $248-250^{\circ}_{13}$ (Bl. [3] 15, 425). 1) Acetat d. Chekenin = $(C_{14}H_{13}O_4)_x$. Sm. 142° (B. 21 [2] 481). — III, 627. C 86,1 — H 6,7 — N 7,2 — M. G. 195. 1) Benzylidenamidomethylbenzol (Benzylidenbenzylamin). Sd. 200 bis

 202°_{10-20} (Soc. **65**, 191). — III, 30. 2) 2-Benzylidenamido-l-Methylbenzol. Sd. 314° (309—310°₇₄₅) (Bl. 39,

530; M. 9, 698; B. 19, 1063; C. r. 95, 730). — III, 30. 3) 4-Benzylidenamido-1-Methylbenzol. Sm. unter 100°; Sd. 326°₇₂₃ (A.

140, 96; J. 1880, 566; B. 19, 1063). — III, 30. 4) Phenyl-3-Methylbenzylidenamin (3-Phenylimidomethyl-1-Methylbenzol).

Sd. 313—314° (B. 17, 1468). — III, 53.

5) 2-Amido-9,10-Dihydroanthracen. Sm. oberhalb 100°. HCl (B. 15, 853; **26**, 3071). — **II**, *638*.

6) 9-Amido-9,10-Dihydroanthracen. Sm. 92°. HCl (B. 23, 2525). — II, 638.

7) 2,2-Bitolylimid. Sm. 183—184°; Sd. 364° (B. 29, 2594). — IV, 398. 8) o-Imidodibenzyl. Sm. 110° (A. 305, 100).

- 9) 4-Methyl-2-[β-Phenyläthenyl]pyridin (4-Methylstilbazol). Sd. 321 bis 326° u. Zers. (HCl, $HgCl_2$), (2HCl, $PtCl_4 + H_2O$), (HCl, $AuCl_3$), HJ, Pikrat (B. 21, 3072). — IV, 397.
- 10) 6-Methyl-2-[β-Phenyläthenyl]pyridin (6-Methyl-2-Stilbazol). Sm. 123°. HCl + H₂O, (HCl, HgCl₂), (2 HCl, PtCl₄), (HCl, AuCl₃), Pikrat (B. 25, 2398). **- IV**, 397

11) 2-Phenyl-P-Dihydroindol. Sm. 46° (B. 21, 1075). — IV, 398.

12) 2 - Phenyl-1,3-Dihydroisoindol. Sm. 170-1710 (B. 17, 1826; 31, 421, 628).

- 13) 1-Aethyl- β -Naphtindol. Sm. 73° (B. 27, 3256). IV, 389. 14) 2,3-Dimethyl- α -Naphtindol. Sm. 150° (B. 21, 3365). IV, 396. 15) 1,2-Dimethyl- β -Naphtindol. Sm. 132°; Sd. oberh. 360°. Pikrat (B. 21, 3363). **— IV**, *39*7.
- 16) 2,3-Dimethyl- $\beta\beta$ -Naphtindol. Sm. 126° (A. 242, 370). IV, 396.
- 17) 3-Methyl-3,4-Dihydro-\(\text{\text{P}}\)-Naphtochinolin. Sd. oberh. 300\(\text{\text{0}}\) (B. 31, 694).

 18) 9-Aethylcarbazol. Sm. 67—68\(\text{\text{0}}\) Pikrat (A. 202, 24). IV, 392.

 19) 3,6-Dimethylcarbazol. Sm. 219\(\text{\text{0}}\). Pikrat (B. 24, 2598). IV, 397.

 20) 3-Methyl-5,10-Dihydroakridin. Sm. 157\(\text{\text{0}}\) (A. 279, 274). IV, 398.

 21) Base (aus 4-Benzylidenamido-1-Methylbenzol). Sm. 120—125\(\text{\text{0}}\). (2HCl,

PtCl₄) (A. 140, 96; J. 1880, 566). — III, 30. C 75,3 — H 5,8 — N 18,8 — M. G. 223. $\mathbf{C}_{14}\mathbf{H}_{13}\mathbf{N}_3$

- 1) 1-[3-Aethenylphenyl]amidodiazobenzol. Sm. 90—91° (B. 26 [2] 677). IV, 1574.
- 2) 3,5-Diphenyl-4,5-Dihydro-1,2,4-Triazol $+2H_2O$. Sm. 137° (127°). HCl, (HCl, AuCl₃), HNO₃ + 2H₂O (B. **26**, 2134; **27**, 1008; **30**, 1876; A. **297**, 266). — II, 1215; IV, 1184.
- 3) 7-Amido-5-Methyl-2-Phenylbenzimidazol. Sm. $182-183^{\circ}$. HCl, $H_2SO_4 + H_2O$ (B. 8, 877). — IV, 1183.
- 4) 2-Methyl-1-[4-Amidophenyl] benzimidazol. (2HCl, PtCl₄) (B. 28, 2978). • IV, 1169.
- 5) 2-[2-Amido-4-Methylphenyl]benzimidazol. Sm. 203°. IICl (B. 30,
- 3068). IV, 1183. 6) 5-Methyl-2-[2-Amidophenyl]benzimidazol. Sm. 189° (B. 30, 3068). · IV, 1183.
- 7) 5-Methyl-2-[3-Amidophenyl] benzimidazol $+ H_2O$. Sm. 238°. HNO₃, $H_2SO_4 + 1^{1}/_2H_2O$ (A. **210**, 336; B. **26**, 2762). — **IV**, 1183.

 $C_{14}H_{13}N_3$

 $C_{14}H_{18}N_{5}$

 $C_{14}H_{13}J_3$

- 8) 5-Methyl-2-[4-Amidophenyl] benzimidazol. Sm. 113-114°. H₂SO₄ + H₂O (B. **26**, 2760). — IV, 1184.
- 9) 2-Phenylimido-5-Methyl-2, 3-Dihydrobenzimidazol (Phenyltoluylenguanidin). Sm. $166-167^{\circ}$. HCl, (2HCl, $PtCl_4+3H_2O)$, H_2SO_4 (B. 19, 3057; 24, 2514). — IV, 623.
- 10) 2-[4-Methylphenyl]imido-2,3-Dihydrobenzimidazol (p-Tolyl-o-Phenylenguauidin). Sm. 209°. HCl, (2HCl, PtCl₄+3H₂U), H₂SO₄ (B. 24,
- 2509). IV, 566. 11) 5-Methyl-l-Benzyl-l,2,3-Benztriazol. Sm. 102—103° (A. 240, 130). **– IV**, 1146.
- 12) 6-Methyl-1-[4-Methylphenyl]-1,2,3-Benztriazol. Sm. 93° (B. 25, 1023). — IV, 1569.
- 1023): IV, 1053.

 13) 5-Methyl-2-[4-Methylphenyl]-2,1,3-Benztriazol. Sm. 125—126° (B. 18, 3143; 19, 1456; 20, 1178; 28, 2200). IV, 1147.

 14) 3-[2-Amidophenyl]-3,4-Dihydro-1,3-Benzdiazin. Sm. 165°. HCl, Oxalat, Pikrat (J. pr. [2] 54, 269). IV, 873.

 15) 3-[3-Amidophenyl]-3,4-Dihydro-1,3-Benzdiazin, Sm. 147°. 2HCl, 2012, 2012, 2013, 20
- (2HCl, 2SnCl₂), (2HCl, PtCl₄), Oxalat, Pikrat (J. pr. [2] 48, 563).
- IV, 873. 16) 3-[4-Amidophenyl]-3,4-Dihydro-1,3-Benzdiazin. Sm. 175°. 2 HCl + 2H₂O, (2HCl, SnCl₂), (2HCl, PtCl₄), 2HBr, Oxalat, Pikrat (J. pr. [2] 54, 273). — IV, 873.

 17) 3-Benzyl-3,4-Dihydro-1,2,3-Benztriazin. Sm. 91° u. Zers. (2HCl,
- PtCl₄), Pikrat (J. pr. [2] 51, 260). IV, 627. 18) 3-[4-Methylphenyl]-3,4-Dihydro-1,2,3-Benztriazin. Sm. 151° u. Zers. (2HCl, PtCl₄), Pikrat (B. 25, 450; J. pr. [2] 51, 269). — IV, 1148. C 66,9 — H 5,2 — N 27,9 — M. G. 251.
- 1) 2,3'-Dimethyl-4'-Diazoazobenzolimid. Sm. $58-60^{\circ}$ (B. **20**, 1181). - IV, *1532*.
- 2) 3, 4'-Dimethyl-6-Diazoazobenzolimid. Sm. 85° (B. 19, 1455). IV, 1532.
- 3) ?-Amido-1,4-Diphenyl-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 188°. HCl (B. **30**, 2870). — **IV**, 1234.
- $C_{14}H_{13}Cl$ 1) β -Chlor- $\alpha \alpha$ -Diphenyläthan (B. 6, 1439). — II, 231. $\mathbf{C}_{14}\mathbf{H}_{13}\mathbf{Br}$
 - 1) α -Brom- $\alpha\beta$ -Diphenyläthan (A. 151, 363). II, 233. 2) α -Phenyl- β -[?-Bromphenyl]äthan. Sd. oberh. 320° (A. 137, 266). —
 - 3) 2-Brom-4, 2'-Dimethylbiphenyl. Sm. 93-95° (Soc. 47, 590). II, 235. 4) 4-Brom-2, 4'-Dimethylbiphenyl. Fl. (Soc. 47, 590). II, 235.

 - 1) ?-Joddi[2-Methylphenyl]jodoniumjodid (B. 28, 1814).

 - 2) \mathbf{P} -Joddi $[\mathbf{4}$ -Methylphenyl]jodoniumjodid (B. 28, 98).
- $C_{14}H_{14}O$ C 84.8 - H 7.1 - O 8.1 - M. G. 198.
 - 1) 3- $[\acute{a}$ -Oxyäthyl]-1-Phenylbenzol. Sm. 85 -86° (Bl. 49, 101). II, 1080.
 - 2) α -Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 42° (63°?) (A. 155, 62; 174, 332; β . 23 [2] 228; Soc. 67, 605). II, 1079. 3) 4-Oxy- $\alpha\alpha$ -Diphenyläthan. Sm. 57—58°. Na (B. 23, 3145; 24, 3894).
 - II, 899.
 - 4) α -Oxy-3-Methyldiphenylmethan. Sm. 52—53° (A. 194, 265). II, 1080.

 - 5) 4-Oxy-P-Methyldiphenylmethan. Sd. 240°_{40} (J. 1878, 591). II, 898. 6) P-Oxy-P-Methyldiphenylmethan. Sd. $250-255^{\circ}_{8-10}$ (J. 1879, 521). II, 899.
 - 7) Methyläther d. 4-Oxydiphenylmethan. Sd. 305° (177°₁₀) (J. 1871, 468; 1872, 405; Soc. 41, 37, 227). — II, 897.
 - 8) Methyläther d. 3-Oxymethyl-1-Phenylbenzol. Fl. (A. ch. [6] 15, 244). **- II**, 1079.
 - 9) Methyläther d. α -[4-Oxy-l-Naphtyl] propen. Sd. 170—171%. Pikrat (Bl. [3] 17, 814).
 - 10) Aethyläther d. α -Oxy- α -[1-Naphtyl] äthen. Sd. 190–195° (Bl. [3] 6, 386). — II, *1077*
 - 11) 2-Methylphenyläther (o-Kresyläther). Sd. 272—278° (Soc. 49, 27). II, 737.
 - 12) 3-Methylphenyläther (m-Kresyläther). Sd. 284—288° (Soc. 41, 11). —
 - 13) 4-Methylphenyläther. Sm. 50° (Soc. 41, 9). II, 748.

 $C_{14}H_{14}O_{2}$

- 14) isom.? 4-Methylphenyläther (p-Ditolyloxyd?). Sm. 165° (B. 17, 2638). C14H14O **– II**, 748
 - Sd. 295 298° (A. 92, 115; 139, 313; 241, 374). -15) Dibenzyläther. II, 1050.
 - 16) 2-Methylphenyläther d. Oxymethylbenzol. Sd. 285-290° (A. 217, 45; B. 14, 898). — II, 1049.
 - 17) 3-Methylphenyläther d. Oxymethylbenzol. Sm. 43°; Sd. 300-305° (A. 217, 46; B. 15, 1129). — II, 1049.
 - 18) 4-Methylphenyläther d. Oxymethylbenzol. Sm. 41° (A. 217, 44; B. 14, 898). — II, 1049.
 - 19) Propyl-1-Naphtylketon. Sd. 316-318° (Bl. [3] 15, 65). III, 176.
 - 20) Propyl-2-Naphtylketon. Sm. 50-51° (52°); Sd. 322-324°. (Bl. [3] 15, 65, 322; [3] 17, 313). — III, 176. 21) Isopropyl-1-Naphtylketon. Sd. 308—310°. Pikrat (Bl. [3] 15, 66). —
 - III, 176.
 - Isopropyl-2-Naphtylketon. Sd. 312—314° (Bl. [3] 15, 68). III, 176.
 C 78,5 H 6,5 O 15,0 M. G. 214.
 - 1) Hydrobenzoin ($\alpha\beta$ -Diphenyl- $\alpha\beta$ -Dioxyäthan). Sm. 138° (134°); Sd. oberh. 300° (A. 123, 125; 145, 345; 160, 177; 168, 71; 182, 273; 184, 254; 198, 121, 150; B. 2, 281; 16, 637; 17, 909; Z. 1866, 343; Soc. 69, 1279). **— II**, 1100.
 - Sm. 95—96° (119,5° wasserfrei) (A. 168, 75; 182, 2) Isohydrobenzoin. 279; 198, 150; B. 17, 909; 28, 1867, 3181; 30, 1531; J. pr. [2] 25, 262; Soc. 69, 1279). — II, 1101.
 - 3) isom. Isohydrobenzoin. Sm. 124—125° (A. 226, 80). II, 1102.
 - 4) αα-Di[4-Oxyphenyl]äthan. Sm. 122° (B. 11, 283; 19, 3009). II, 994.
 - 5) $\alpha\beta$ -Di [2-Oxyphenyl] äthan. Sm. 115° (A. 305, 99).
 - 6) $\alpha\beta$ -Di[?-Oxyphenyl]äthan. Sm. 185° (189°) (B. 7, 239; 20, 914). — II, 993.
 - 7) P-Oxy-2-[P-Oxybenzyl]-1-Methylbenzol. Sm. 138—139°) (B. 26, 1855). **- II**, 994.
 - 8) 4,4'-Dioxy-3,3'-Dimethylbiphenyl. Sm. 157° (160—161°) (B. 21, 749, 1067). — II, *993*.
 - 9) 6,6'-Dioxy-3,3'-Dimethylbiphenyl. Sm. 143° (A. 270, 366). II, 993.
 - 10) Monomethyläther d. 2,3 [oder 3,4]-Dioxydiphenylmethan (Benzyl-
 - guajakol). Sd. 269—270°₄₃₆ (*C.* 1898 [1] 207). 11) Dimethyläther d. **2**, **2**'-Dioxybiphenyl. Sm. 155°; Sd. 299,5—301° (B. 31, 1745).
 - 12) Dimethyläther d. 3,3'-Dioxybiphenyl. Sm. 36°; Sd. 310-320° (328°) (B. 27, 2109; A. 156, 99; J. pr. [2] 58, 226). — II, 987. [3] Dimethyläther d. isom.? 3,3'?-Dioxybiphenyl (B. 11,

 - 14) Dimethyläther d. 4,4'-Dioxybiphenyl. Sm. 172° (B. 30, 2849). 15) Dimethyläther d. ?-Dioxybiphenyl. Sm. 146° (A. 156, 99).
 - 16) Diphenyläther d. $\alpha\beta$ -Dioxyäthan. Sm. 98,5° (95°) (Z. 1869, 165, 447; C. 1895 [1] 825; 1899 [1] 25; Soc. 69, 166). — II, 655.
 17) Methylbenzyläther d. 1,2-Dioxybenzol. Sm. 62° (C. 1898 [1] 857).
 - 18) 6-Oxy-4-Keto-2- $[\beta$ -Phenyläthenyl]-1,2,3,4-Tetrahydrobenzol (Cinn-
 - amenylhydroresorcin). Sm. 1880 u. Zers. (A. 294, 312)
 - 19) Propyl-1-Oxy-2[P]-Naphtylketon. Sm. 78° (J. pr. [2] 43, 97). III, 176.
 20) Isopropyl-1-Oxy-2[P]-Naphtylketon. Sm. 79° (J. pr. [2] 43, 97). —
 - 21) Methyläther d. Aethyl-1-Oxy-2[?]-Naphtylketon. Sm. 58° (B. 23, 1209). — III, 176.
 - 22) Aethyläther d. Methyl-2 [oder 3]-Oxy-l-Naphtylketon. Sm. 62-63° (B. 23, 1210). — III, 174.
 - 23) Aethyläther d. Methyl-1-Oxy-2-Naphtylketon. Sm. 78—79°; Sd. 320° u. ger. Zers. (B. 23, 1209; 28, 1947). — III, 174.
 - 24) 1,4-Di[γ -Keto- α -Butenyl] benzol (p-Phenylendiakrylmethylketon). Sm. 156° (A. 231, 379). — III, 280.
 - 25) 2,4-Diketooktohydrophenanthren. Sm. 160° u. Zers. (B. 31, 1900). 26) 2-Naphtylester d. Isobuttersäure. Sm. 43° (A. 301, 113).
 - 27) Acetat d. 2-Oxy-1,4-Dimethylnaphtalin. Sm. 78° (B. 12, 1575). II, 894.
 - 28) Verbindung (aus Benzoylamidoessigsäure) (A. 113, 337). II, 1189.

 $C_{14}H_{14}O_{9}$

 $C_{14}H_{14}O_5$

- C 73,1 H 6,1 O 20,8 M. G. 230.
- 1) 3,4-Methylenäther d. 1-Keto-5-Methyl-3-[3,4-Dioxyphenyl]-1,2,3,4-
- Tetrahydrobenzol. Sm. 84—85°; Sd. 234°₁₄ (A. 303, 230).

 2) 2-[2-Oxybenzyl]äther d. 2-Oxy-l-Oxymethylbenzol (Saliretin) (A. 56, 46; 117, 90; 156, 123; A. ch. [3] 7, 215). II, 1109.

 3) 2-Acetyl-1,8-Dioxy-3,6-Dimethylnaphtalin. Sm. 183—184°. Ba +
- 3H,O (Soc. 63, 127, 334). III, 176.
- 4) Aethylester d. α-Oxy-α-[2-Naphtyl]essigsäure. Sm. 87° (B. 24, 548). **– II**, 1692.
- 5) Aethylester d. Oxyessig-l-Naphtyläthersäure. Sm. 173-174° (G. 16, 438). — II, 858.
- 6) Aethylester d. Oxyessig-2-Naphtyläthersäure. Sm. 48-49° (G. 16,
- 441). II, 878. 7) Aethylester d. 2-Methyl-5-Phenylfuran-3-Carbonsäure. Fl. (B. 17, 917). — III, 712.
- 8) Verbindung (aus Diacetylaceton) (B. 28, 1825).
- 9) Verbindung (aus 2,6-Dimethyl-1,4-Pyron). Sm. 183—184° (Soc. 63, 127). - I, 1025.
- $C_{14}H_{14}O_4$
- C 68,3 H 5,7 O 26,0 M. G. 246.

 1) Curcumin (oder C₂₁H₂₀O₆). Sm. 178° (183°). K, K₂, Ca, Ba, Zn, Ag (B. 3, 609, 624, 713; 5, 1103; 6, 196; 14, 485; 15, 1761; 16, 572; 30, 192; Am. 4, 77; 6, 80). III, 659.
 - 2) 1,3,1',3'-Tetraoxy-?-Aethylbiphenyl (M. 11, 418). II, 1038.
 - 3) s-Di[2,5-Dioxy-1-Methyl]-?-Biphenyl? Sm. 202° u. Zers. (M. 10, 175). - II, 955.
 - 4) $\alpha\beta$ -Di[4-Oxyphenyl]- $\alpha\beta$ -Dioxyäthan. Sm. 222° (B. 10, 1268). II, 1118.
 - 5) isom. $\alpha\beta$ -Di[4-Oxyphenyl]- $\alpha\beta$ -Dioxyäthan. Sm. 197,5° (B. 10, 1268). **- II**, *1118*
 - 6) Di[4-Oxyphenyläther] d. $\alpha\beta$ -Dioxyäthan. Sm. 219—220° u. Zers. (A. 280, 202). — II, 940.
 - 7) Diphenylformalsuperoxydhydrat. Sm. 60-62° (A. 298, 292).
 - 8) α -[3,4-Dioxyphenyl]- $\alpha \gamma$ -Hexadiën-3,4-Methylenäther- δ -Carbonsäure (α-Aethylpiperinsäure). Sm. 179° (B. 28, 1188). — II, 1871.
 - 9) Methylester d. 6-Oxy-4-Keto-2-Phenyl-1,2,3,4-Tetrahydrobenzol-3-Carbonsäure. Sm. 162° (A. 294, 275).
 - 10) Aethylester d. α -Oxy- γ -Keto- ε -Phenyl- α δ -Pentadiën- α -Carbonsäure. Sm. 84° (B. 31, 1309).
 - 11) Aethylester d. α-[3,4-Dioxyphenyl]-αγ-Butadiën-3,4-Methylenätherδ-Carbonsäure (Ae. d. Piperinsäure). Sm. 77—78° (J. 1857, 414; A. 152, 31). — II, 1869.
 - 12) Monäthylester d. Benzol-1,4-Di[Aethenyl-β-Carbonsäure]. Sm. 200°
 - (A. 231, 377). II, 1876. 13) Verbindung (aus 1,3-Dioxybenzol u. Acetaldehyd) (A. ch. [7] 1, 99). II, 918.
 - 14) Verbindung (aus Guajakharz). Sm. 200° (J. 1862, 466). III, 558. C 64,1 H 5,3 O 30,5 M. G. 262.

 1) Danain (J. 1885, 1815). III, 579.

 - 2) α-Salylsäure. Sm. 100—101°. Ag. (A. Spl. 7, 165). III, 78.
 3) Aethylbergaptensäure. Sm. 142° (M. 12, 385). II, 2014.
 4) Methylester d. Methylbergaptensäure. Sm. 52° (M. 12, 384). II, 2014.
 - 5) Aethylester d. 7-Oxy-3-Methyl-1,2-Benzpyron-4-Methylearbonsäure. Sm. 140° (B. 24, 4103). — II, 2015.
 - 6) Verbindung (Aethyläthersäure aus Diacetylaceton). Sm. 1970 (B. 28, 1827). — II, 1968. C 60,4 — H 5,0 — O 34,5 — M. G. 278.
- $C_{14}H_{14}O_{6}$
 - 1) Benzosuccinin (J. 1856, 603). II, 1142. 2) Catalpinsäure. Sm. 205—207°. Ba + H₂O, Ag₂ (G. 14, 133). II, 2019. 3) Hydrogardeniasäure. Sm. 190° (A. 200, 321). III, 633. 4) Pyrousnetinsäure. Sm. 183—186° (G. 12, 238). II, 2058.

 - 5) Dimethyldicumarinsäure (B. 20, 1329). II, 2019.
 - 6) β -Aethylester d. $\alpha \gamma$ -Diketo- α -Phenylbutan- β , 2-Dicarbonsäure. Fl. (J. pr. [2] 35, 452). - II, 2018.

7) Aethylester d. 4,5-Dioxy-1,3-Diketo-2,3-Dihydroinden-4,5-Di-C14H14O6 methyläther-2-Carbonsäure. Sm. 58° u. Zers. Na (B. 31, 2091).

8) Diphenylester d. Orthooxalsäure? Sm. 126-127° (Soc. 43, 360; B. 17, 1740). — II, 666.

9) Verbindung (aus Citronenöl). Sm. 115—116° (Soc. 57, 326). — III, 636. C 57,1 — H 4,8 — O 38,1 — M. G. 294. $C_{14}H_{14}O_{7}$

 Eichengerbsäure siehe C₁₇H₁₈O₉. — III, 586.
 Methylester d. 5,6,7-Trioxy-1,2-Benzpyron-5,6,7-Trimethyläther-4-Carbonsäure. Sm. 105—106° (G. 25 [2] 370).
3) Aethylester d. 5,6,7-Trioxy-1,2-Benzpyron-5,7-Dimethyläther-

4-Carbonsäure. Sm. 199—200° (G. 25 [2] 366).

4) Triacetat d. Methyl-?-Trioxyphenylketon (Tr. d. Gallacetophenon). Sm. 85° (83°) (Bl. [3] 6, 159; B. 30, 1465). — III, 139. 5) Farbstoff (aus Heidelbeeren) (C. 1895 [2] 1084).

C 54,2 — H 4,5 — O 41,3 — M. G. 310.

1) Rhodoxantin (J. 1852, 686).

 $C_{14}H_{14}O_{8}$

2) Thujetin (J. 1858, 514). — III, 614. 3) Rhodotannsäure (J. 1852, 686). — II, 2076.

4) Benzoldi-1,4-[Aethyl- $\beta\beta$ -Dicarbonsäure] (p-Xylylendimalonsäure). Sm. 195° u. Zers. Ag₄ (B. 21, 39). — II, 2076.

5) Tetramethylester d. Benzol-1,2,3,4-Tetracarbonsäure. Sm. 104 bis 108° (A. 166, 332). — II, 2073.

6) Tetramethylester d. Benzol-1,2,4,5-Tetracarbonsäure. Sm. 138°

(A. 166, 339). — II, 2073. 7) Tetracetat d. 1,2,4,5-Tetracybenzol. Sm. 217° (B. 21, 2378). — C'51,5 - H 4,3 - O 44,2 - M. G. 326.

C14H14O9 $C_{14}H_{14}O_{10}$

1) Hamamelitannin $+2\frac{1}{3}(5)$ H₂0. Sm. 115—117° (*C.* 1898 [2] 374). 2) Callutansäure (*J.* 1852, 682). — II, 2090.

C 49,1 - H 4,1 - O 46,8 - M. G. 342

1) Chebulinsäure (J. 1884, 1443). — II, 2109.

2) Tetramethylester d. 3,6-Dioxybenzol-1,2,4,5-Tetracarbonsäure. Sm. 207° (A. 258, 318). — II, 2095. C 80,0 — H 6,7 — N 13,3 — M. G. 210.

C14H14N2

1) cis- $\alpha\beta$ -Di[2-Amidophenyl]äthen. Sm. 123°. 2HCl (B. 28, 1413). — IV, 994.

2) trans- $\alpha\beta$ -Di[2-Amidophenyl]äthen. Sm. 176° (168°). 2HCl + 2H₂O (B. 21, 2078; 28, 1413). - IV, 994.

3) αβ-Di[4-Amidophenyl]äthen (Diamidostilben). Sm. 227—228°. (2 HCl, PtCl₄) (B. 6, 330; 16, 943; 19, 3237; J. pr. [2] 39, 502). IV, 994.

4) β-İmido-β-Phenylamido-α-Phenyläthan (Phenacetphenylamidin). Sm. 139°. HCl (A. **184**, 343; J. pr. [2] **54**, 128). — **IV**, 850.

δ) α-Imido-α-Methylphenylamido-α-Phenylmethan (Benzenylmethylphenylamidin). Sm. 85°. HJ, Pikrat (B. 30, 1782). — IV, 842.

6) α-Imido-α-Benzylamido-α-Phenylmethan (Benzylbenzenylamidin). Sm. 77—78°. HCl, $(2 \text{HCl}, \text{PtCl}_4)$ (B. 2, 648; 6, 334; 25, 1583). — IV, 843.

7) α-Methylimido-α-Phenylamido-α-Phenylmethan (Benzenylphenylamidmethylimidin). Sm. 134°. HJ, Pikrat (B. 28, 2371). - IV, 841.

S) $\alpha - [2 - Methylphenyl]imido - \alpha - Amido - \alpha - Phenylmethan (Benzenyl-$

2-Methylphenylamidin). Sm. 105—108° (J. pr. [2] 54, 124). — IV, 844. 9) α -[4-Methylphenyl]imido- α -Amido- α -Phenylmethan (Benzenyl-4-Methylphenylamidin). Sm. 99-99,5°. HCl, (2HCl, PtCl₄), Oxalat (A. 184,

355; J. pr. [2] 54, 126). — IV, 844. 10) α -Imido- α -Phenylamido- α -[2-Methylphenyl]methan (2-Methylbenzenylphenylamidin). Sm. 121—123° (J. pr. [2] 54, 128). — IV, 850.

11) α-Imido-α-Phenylamido-α-[4-Methylphenyl] methan (4-Methylbenzenylphenylamidin). Sm. 149° (J. pr. [2] 54, 129). — IV, 851.

12) α-Phenylimido-α-Phenylamidoäthan (Diphenyläthanamidiu). Sm. 131 bis 132°. Ag, HCl, (2HCl, PtCl₄), HNO₃, Pikrat (*J.* 1865, 414; *A.* 184, 362; 273, 300; *B.* 7, 539, 541; 15, 208; 19, 1071; 22, 3305; 23, 2059; 30, 2792; *G.* 24 [1] 448). — II, 346.

13) Isodiphenyläthanamidin. Sm. 62-63°. (2 HCl, PtCl₄), CHNS (A. 192 25). — II, 347.

- 14) β -Phenylimido- α -Phenylamido athan. Sm. 103—105° (M. 8, 189). $C_{14}H_{14}N_{2}$ II, 443.
 - 15) α Phenylimido α Methylphenylamidomethan (Methyldiphenylformamidin). Sd. 214°22. HCl, (HCl, AuCl₃) (Am. 13, 519; 20, 859; J. pr. [2] 57, 217). — II, 346.
 - 16) α-Phenylimido-α-Benzylamidomethan (Phenylbenzylformamidin) (Am. 13, 528). — II, *523*.
 - 17) α-Phenylimido-2-Methylphenylamidomethan. Sm. 100
 PtCl₄, Sm. 206—207°), (Pikrat, Sm. 170°) (J. pr. [2] 57, 226). Sm. 100°.
 - 18) α-Phenylimido-4-Methylphenylamidomethan (Phenyl-4-Methylphenylformamidin). Sm. 86° (B. 32, 36; Am. 20, 856).
 - 19) isom. α-Phenylimido-4-Methylphenylamidomethan? Sm. 120°. (2 HCl₄, PtCl₄, Sm. 213°), (Pikrat, Sm. 178°) (*J. pr.* [2] **55**, 41; [2] **57**, 210; *Am.* **19**, 367; *B.* **32**, 36).
 - 20) isom. a-Phenylimido-4-Methylphenylamidomethan? Sm. 98°. (2 HCl. PtCl₄, Sm. 207°), (Pikrat, Sm. 196°) (*J. pr.* [2] **55**, 43; [2] **57**, 214; *Am*. **19**, 367; *B*. **32**, 36).
 - 21) 2-Methylphenylimido-α-Phenylamidomethan. Sm. 109—110°. (2 HCl,
 - PtCl₄, Sm. 209—210°), (Pikrat, Sm. 176°) (*J. pr.* [2] **57**, 229). 22) **4-Methylphenylimido-α-Phenylamidomethan?** Sm. 132°. PtCl₄, Sm. 127°), (Pikrat, Sm. 209°) (J. pr. [2] **55**, 42; [2] **57**, 212; Am. **19**, 367; B. **32**, 36).
 - 23) isom. 4-Methylphenylimido-α-Phenylamidomethan? Sm. 102°. (2 HCl, PtCl₄, Sm. 218°), (Pikrat, Sm. 193°) (J. pr. [2] **55**, 44; [2] **57**, 214; Am. **19**, 367; B. **32**, 36).
 - 24) α-Imido-α-Diphenylmethylamidomethan (Benzhydrylformamidin). Sm. 118—120°. HCl, (2 HCl, PtCl₄) (B. **31**, 1772). — **IV**, 994.
 - 25) β -Aethyliden- $\alpha\alpha$ -Diphenylhydrazin. Sm. 60-61° (B. 25, 2063). IV, 746.
 - 26) β -Benzyliden- α -Methyl- α -Phenylhydrazin. Sm. 106° (104,5°) (A. 227, 352; B. 27, 373; 29, 814). — IV, 749.
 - 27) 3-Methylbenzylidenphenylhydrazin. Sm. 91° (87—88°) (A. **248**, 100; B. 17, 1468). — IV, 754.
 - 28) α-Hydrazon-αβ-Diphenyläthan (Benzylphenylmethylenhydrazin). Sm. 62° (J. pr. [2] 52, 136). — III, 218.
 - 29) α -Phenylhydrazon- α -Phenyläthan. Sm. 105° (99°) (B. 16, 662; 19, 1206; **32**, 434). — **IV**, 770.
 - 30) β -Phenylhydrazon- α -Phenyläthan. Sm. 58° (B. 21, 1072). IV, 754.
 - 31) 2,4-Dimethylazobenzol. Sd. $205-215_{50}$ (B. 28, 2557; 31, 993). —
 - 31) 2,4-5 interity and IV, 1387.
 32) 2,2'-Dimethylazobenzol. Sm. 55° (B. 11, 1203; 17, 467; 18, 2555; 31, 992; J. r. 12, 360; 19, 406; C. 1898 [2] 775). IV, 1376.
 33) 2,3'-Dimethylazobenzol. Fl. (B. 17, 470; 31, 993). IV, 1377.
 34) 2,4'-Dimethylazobenzol. Sm. 71° (B. 31, 989). IV, 1377.

 - 35) 3,3'-Dimethylazobenzol. Sm. 54-55° (A. 207, 114; B. 10, 2097; 11, 1625; **31**, 992; C. **1899** [1] 422). — **IV**, 1377.
 - 36) 3,4'-Dimethylazobenzol. Sm. 55° (56-58°) (B. 19, 1459; 28, 2557). —
 - IV, 1378.
 37) 4,4'-Dimethylazobenzol. Sm. 144° (J. 1864, 527; Z. 1866, 269; B. 3, 550; 6, 556; 11, 1205; 14, 1384; 16, 1048; 17, 472; 31, 991; A. 207, 103; Soc. 37, 553; J. pr. [2] 18, 198; M. 9, 829; C. 1898 [2] 775).
 - 38) Toluolazimidotoluol. Sm. 56-58° (B. 19, 1459). IV, 1260.
 - 39) 2-Phenyl-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 101-1020 (99 bis 101°) (B. **25**, 3033; J. pr. [2] **51**, 126). — IV, 637
 - 40) 3-Phenyl-1,2,3,4-Tetrahydro-1,3-Benzdiazin (Phenyltetrahydrochinazolin). Sm. 119° (117°) (J. pr. [2] 48, 554; [2] 52, 376; [2] 53, 420; B. 22, 2693; 25, 2858; 27, 2902). — IV, 636.
 41) 4-Phenyl-1, 2, 3, 4-Tetrahydro-1, 3-Benzdiazin. HCl (B. 29, 1308). —
 - - IV, 973. C 70,6 H 5,9 N 23,5 M. G. 238.

 $C_{14}H_{14}N_4$

1) Cyananilin (Diphenyldiamidodiimidoäthan). Sm. 214° (210-220°). 2 HCl, (2HCl, PtCl,), (2HCl, 2AuCl₃), 2HBr, 2HNO₃ (A. 66, 131; 73, 180; 287, 277; J. pr. [2] 35, 515). — II, 448. $C_{14}H_{14}N_4$

2) Benzylidenamidophenylguanidin. Sm. 133°. HCl, (2HCl, PtCl₄), HNO₃,

Pikrat (G. 26 [2] 181). — IV, 1223.

3) αβ-Di[Phenylhydrazon]äthan (Phenylosazon d. Glyoxal). Sm. 179°. HCl (B. 17, 575, 2001; 25, 2553; 26, 97; 27, 182; 30, 2460, 2877; J. pr. [2] 49, 404; C. 1896 [2] 891; A. 232, 231; G. 23 [1] 532). — IV, 755.

4) αα'-Diimido-αα'-Diphenylhydrazomethan (Phenylhydrazicarbimin). Sm.

250° (J. pr. [2] 50, 256). — II, 1213.

5) Diphenylbishydrazimethylen. Sm. 147° (J. pr. [2] 44, 183; [2] 52, 135). **— III**, *287*.

6) Di[2-Amidobenzyliden]hydrazin. Sm. 244—245°. HCl (B. 31, 2187). 7) Di[4-Amidobenzyliden]hydrazin. Sm. 245° (J. pr. [2] 56, 114).

8) Dibenzenylhydrazidin (s-Diphenyldiamido-s-Dimethylenhydrazin). Sm. 202° (203°). 2 HCl, 2 HNO₃, Pikrat (B. **26**, 2130; **27**, 996; A. **297**, 249). — II, 1214. 9) α -Phenylazo- α -Phenylhydrazonäthan (Methylformazyl). Sm. 120 bis

121° (B. 27, 154; 30, 2998). — IV, 1227.

10) Phenyl-α-[4-Methylphenyl] formazylwasserstoff. Sm. 116-117° (B. 27, 1699).

11) α-Phenyl-[4-Methylphenyl] formazylwasserstoff. Sm. 116-1170 (B. **27**, 1699).

12) 6-Methyl-2-[4-Methylphenyl]-2,3-Dihydro-1,2,3,4-Benztetrazin. Sm. 168⁶ (B. **19**, 1457). — **IV**, 1260. 13) **2**, 3, 7, 8-Tetramethyl-**1**, 4, 6, 9-Naphttetrazin (Tetramethyldichinoxalin).

Sm. oberh. 300° (B. 22, 444). — IV, 1244.

14) 2, 3, 8, 9 - Tetramethyl - 1, 4, 7, 10 - Naphtisotetrazin. Sm. 218° (B. 22, 1649). — IV, 1243.

15) Diamidodimethyldiphenylenazon. Sm. 276°, u. Zers. (B. 26, 2240). — IV, 1288.

 $\mathbf{C}_{14}\mathbf{H}_{14}\mathbf{N}_{6}$

 $C_{14}H_{14}J_4$

Toluylenviolet (B. 12, 938). — IV, 608.
 C 63,1 — H 5,3 — N 31,6 — M. G. 266.

1) Guanazylbenzol. Sm. 199° (B. 30, 446). — IV, 1494. 1) Verbindung (aus s-Diphenyläthan). Zers. bei 200° (A. 137, 273; A. Spl. $\mathbf{C}_{14}\mathbf{H}_{14}\mathbf{Br}_{2}$ 4, 117). — II, 233.

1) Di[2-Methylphenyl]jodoniumjodid. Sm. 152°. + J₂ (B. 28, 1815). $C_{14}H_{14}J_{2}$

2) Di[4-Methylphenyl]jodoniumjodid. Sm. 146° (B. 28, 97).

1) Di 2-Methylphenyl jodoniumtrijodid. Sm. 155° (B. 28, 1815). 2) Di [4-Methylphenyl] jodoniumtrijodid. Sm. 156° (B. 28, 97).

2) Dispersive principles of the result of the res $C_{14}H_{14}S$

1674, 2325; G. 20, 30). — II, 825.

4) **2,4**'-Dimethyldiphenylsulfid. Sd. 173°₁₁ (B. **28**, 2325). 5) **3,4**'-Dimethyldiphenylsulfid. Sm. 27,8°; Sd. 179°₁₁ (B. **28**, 2325). 6) Phenyläther d. 4-Merkapto-1,3-Dimethylbenzol. Sd. 172,5 % (B.

28, 2324). 7) Phenyläther d. 2-Merkapto-1,4-Dimethylbenzol. Sd. 171 1 (B.

8) 4,4'-Dimerkapto-3,3'-Dimethylbiphenyl. Sm. 1130 (J. pr. [2] 41, 215). - II, 994.

9) Dimethyläther d. 4,4'-Dimerkaptobiphenyl. Sm. 185—186° (B. 20, 2928). — II, 989.

10) Diphenyläther d. $\alpha\alpha$ -Dimerkaptoäthan. Fl. (B. 28, 1121). 11) Diphenyläther d. $\alpha\beta$ -Dimerkaptoäthan. Sm. 65° (B. 4, 717). — II, 783.

12) Dibenzyldisulfid. Sm. 71—72°. + AgNO₃ (A. 70, 40; 136, 86; 140, 86, 234; B. 10, 1878; 12, 1053; 15, 861; 20, 15; 29, 2150). — II, 1055.
13) Di[2-Methylphenyl]disulfid. Sm. 38° (J. pr. [2] 54, 520).
14) Di[3-Methylphenyl]disulfid. Sd. etwa 150° u. Zers. (A. 169, 51). —

II, 822.

15) Di[4-Methylphenyl]disulfid. Sm. 46° (A. 136, 88; B. 11, 2066; J. pr. [2] **41**, 190). — II, 826.

1) Hydrat d. Thiobenzaldehyd. Fl. (B. 15, 864). - III, 19. $C_{14}H_{14}S_3$ $\mathbf{C}_{14}\mathbf{H}_{14}\mathbf{S}_{4}$

1) Di[2-Methylphenyl]tetrasulfid. Fl. (J. pr. [2] 54, 522).
2) Di[4-Methylphenyl]tetrasulfid. Sm. 75° (J. pr. [2] 37, 211; B. 20, 3414). — II, 826.

 $C_{14}H_{14}S_{5}$ $C_{14}H_{14}Hg$

- 1) Di[2-Methylphenyl]pentasulfid. Fl. (J. pr. [2] 54, 522). 1) Quecksilberdi[2-Methylphenyl]. Sm. 107°; Sd. 219°₁₄ (A. 173, 165; 293, 291; B. 28, 1670; 31, 1529). — IV, 1710. 2) Quecksilberdi[3-Methylphenyl]. Sm. 102° (B. 28, 588). — IV, 1710. 3) Quecksilberdi[4-Methylphenyl]. Sm. 238° (A. 154, 171; 173, 163;
- B. 31, 1528; 32, 761). IV, 1711.

 1) Dibenzylselenid. Sm. 45,5°. HNO₃, 2 + PtCl₄ (A. 179, 8). II, 1056.

 2) Di[2-Methylphenyl]selenid. Sm. 61—62°; Sd. 186°₁₈ (B. 28, 1671).

 3) Di[4-Methylphenyl]selenid. Sm. 69—69,5°; Sd. 196—196,5°₁₆ (B.
- **28**, 1672).
- $\mathbf{C}_{14}\mathbf{H}_{14}\mathbf{Se}_{2}$

 $\mathbf{C}_{14}\mathbf{H}_{14}\mathbf{Se}$

 $\mathbf{C}_{14}\mathbf{H}_{14}\mathbf{T}\mathbf{e}$

- 1) Dibenzyldiselenid. Sm. 90° (A. 179, 11). II, 1056.
 1) Di[2-Methylphenyl]tellurid. Sm. 37—38°; Sd. 202,5°₁₈ (B. 28, 1670).
 2) Di[4-Methylphenyl]tellurid. Sm. 63—64°; Sd. 210°₁₈ (B. 28, 1670).
 C 85,3 H 7,6 N 7,1 M. G. 197.
- $\mathbf{C}_{14}\mathbf{H}_{15}\mathbf{N}$ 1) β -Amido- $\alpha \alpha$ -Diphenyläthan. Fl. HCl, (2HCl, PtCl₄) (B. 23, 2845). —
 - 2) α -Amido- $\alpha\beta$ -Diphenyläthan. Sd. 309—310° $_{797}$. HCl, (2 HCl, PtCl $_4$ + 2 H $_2$ O), Oxalat, Pikrat (B. 22, 1409; 28, 1860; G. 23 [2] 226). II, 636.
 - 3) Aethyldiphenylamin. Sd. 285—287° (295—297°) (Bl. 23, 3; M. 4, 797). **- II**, 342.
 - 4) Methylphenylbenzylamin. Sd. 305—306° (J. 1883, 702; B. 30, 1789; 32, 519). — II, 517.
 - 5) Dibenzylamin. Sd. oberh. 300°. HCl, (2HCl, PtCl₄), HBr, HJ, HNO₈, Rhodanid (A. 144, 313; 151, 133; 241, 329; 274, 39; B. 19, 1632, 2128, 3287; 24, 2727; G. 19, 428; 23 [2] 41). II, 518.
 - 6) Di[2-Methylphenyl]amin. Sd. 3120, 25, 248; B. 20, 547; A. **238**, 363). — II, 458.
 - 7) Di[3-Methylphenyl]amin. Sd. 319—320° (B. 13, 1091; 20, 549). —
 - 8) Di[4-Methylphenyl]amin. Sm. 79°; Sd. 330,5° (A. 140, 346; 238, 363;
 - B. 6, 446; 20, 546; J. pr. [2] 48, 463). II, 486. 9) Phenyl-[?-Dimethyl-?-Phenyl]amin. Sm. 52°; Sd. 278—282°₄₈₅ (Bl. 18, 69). — II, 548.
 - 10) Benzyl-[2-Methylphenyl]amin. Sm. 56-57°; Sd. 200-210°₁₅₋₂₅ (Bl. [3] **5**, 742). — **II**, 518.
 - 11) Benzyl-[4-Methylphenyl]amin. Sd. 312—313° (A. 241, 360; Bl. [3] 5, 742). — II, *518*.
 - 12) 1-Phenylmethyl-2-Amidomethylbenzol (o-Benzylbenzylamin). HCl, $(2 \text{HCl}, \text{PtCl}_4)$ (B. **25**, 3024). — **II**, 636.
 - 13) Methylphenyl 2 Methylphenylamin (o-Homobenzhydrylamin). Sd.
 - 299°_{721} . HCl (B. **24**, 2806). II, 637. 14) Methylphenyl-3-Methylphenylamin. Sd. 299°₇₂₄. HCl (B. **24**, 2807).
 - **II**, *637*. HCl, (2HCl, PtCl₄ 15) Methylphenyl-4-Methylphenylamin. Sd. 296°₇₂₃.
 - + 2H₂O), Tartrat, Bitartrat (B. 24, 2800). II, 637. 16) α -Phenyl- γ -[5-Methyl-2-Pyridyl] propan (Methyldihydrostilbazol). Sd. 290—295°. HCl, HgCl₂ + H₂O, (2HCl, PtCl₄), Pikrat (B. 21, 3076). —
 - IV, 380. 17) 5-Methyl-1-Allyl-2-Phenylpyrrol. Sm. 52°; Sd. 277—278° (B. 18, 2595). — IV, *333*.
 - 18) **2.3**-Dimethyl-**2.3**-Dihydro- $\beta\beta$ -Naphtindol? Fl. (A. **242**, 370). —
 - IV, 380. 19) 3-Methyl-1,2,3,4-Tetrahydro- β -Naphtochinolin. Sm. 51,5—52°. HCl (B. **24**, 2646). — **IV**, 379. C 74,6 — H 6,7 — N 18,7 — M. G. 225.
- $C_{14}H_{15}N_{3}$
 - 1) α -Imido - α -[3-Amido-4-Methylphenyl] amido- α -Phenylmethan. Sm. 211,5—212°. HCl, (2HCl, PtCl₄), Chromat (B. 11, 1758). — IV, 844. 2) α-Phenylhydrazon-α-[2-Amidophenyl]äthan. Sm. 108° (B. 24, 2382).
 - **IV**, 771.

 $C_{14}H_{15}N_8$

- 3) α -Phenylhydrazon- α -[4-Amidophenyl] äthan. HCl (B. 20, 512). IV, 771.
- 4) 3-Phenylhydrazonmethyl-1-Amidomethylbenzol. Sm. 2530 u. Zers. (B. 28, 603). - IV, 754.
- 5) 4-Phenylhydrazonmethyl-1-Amidomethylbenzol. Sm. 2780 (B. 28, 605). — IV, 754.
- 6) α -Methyl- α -Phenyl- β -[α -Imidobenzyl]hydrazin(Methylphenylbenzenyl-
- hydrazidin). Sm. 105° (*J. pr.* [2] **54**, 168). **IV**, 1136. 7) **2**, 2'-Dimethyldiazoamidobenzol. Sm. 51° (*B.* **20**, 1583). **IV**, 1568. 8) 4,4'-Dimethyldiazoamidobenzol. Sm. 115—116°. (2HCl, PtCl₄) (A. 121,
- 277; B. 20, 928). IV, 1568. 9) 1-[2-Methylbenzyl]amidodiazobenzol. Sm. 85° (B. 23, 1028). —
- IV, 1573. 10) 1-Benzylamido-2-Methyldiazobenzol. Fl. (B. 21, 1019). — IV, 1569.
- 11) 1-Benzylamido-4-Methyldiazobenzol. Sm. 776 (B. 21, 1018). IV, 1569.
- 12) 1-[4-Methylbenzyl]amidodiazobenzol. Sm. 60-61° (B. 23, 1032). IV, 1573
- 13) 4-Methylbenzolsyndiazo-4-Methylphenylamid? (Bis-p-Diazotoluol-p-Toluid). Zers. bei 78° (B. 27, 1862, 2599)
- 14) 4 Aethylamidoazobenzol. HJ (Z. 1866, 135; J. 1883, 786). IV, 1356.
- 15) 4-Dimethylamidoazobenzol. Sm. 117° (115°) (B. 10, 528; 17, 1402,
- 1491). IV, 1356. 16) 4-Amido-2,3-Dimethylazobenzol. Sm. 98°. HCl (A. 263, 333).
- IV, 1386. 17) 4'-Amido-2, 3'-Dimethylazobenzol. Sm. 100°. HCl, (2 HCl, PtCl₄)
- (B. 10, 663; 17, 470; 28, 2195). IV, 1377 18) 4-Amido-2, 4'-Dimethylazobenzol. Sm. 127°. HCl, (2 HCl, PtCl₄) (B. 10,
- 1156). IV, 1377. 19) 4-Amido-3, 3'-Dimethylazobenzol, Sm. 80°. HCl, (2 HCl, PtCl₄) (B. 10,
- 1155). IV, 1377.
- 20) 4-Amido-3, 4'-Dimethylazobenzol. Sm. 127—128°. HCl, (2 HCl, PtCl₄) (B. 10, 665, 832; 28, 2195). — IV, 1378.
- 21) 6-Amido-3, 4'-Dimethylazobenzol. Sm. 118,5°. HCl (B. 17, 78; 19, 1453). **— IV**, *1378*.
- 22) 2-[α-Phenylhydrazonpropyl]pyridin. Sm. 142° (B. 24, 2531). IV, 799.
- 23) 3-[α -Phenylhydrazonpropyl]pyridin. Sm. 145° (B. 24, 2540). IV, 799.
- 24) 3-[3-Amidophenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 156°. $2 \text{ HCl}, (2 \text{ HCl}, \text{ SuCl}_2), (2 \text{ HCl}, \text{ PtCl}_4) (J. pr. [2] 48, 567). - IV, 636.$
- 25) 3-[4-Amidophenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 138°
- (J. pr. [2] 54, 276). IV, 636. 26) 2,7-Diamido-3,6-Dimethylearbazol. Sm. 271° u. Zers. (B. 24, 1033). - IV, 1175. C 66,4 - H 5,9 - N 27,7 - M. G. 253.

C14H15N5

 $C_{14}H_{15}N_7$

 $C_{14}H_{15}P$

- 1) α -Diphenylguanylguanidin. HNO₃ (B. 13, 1584). II, 353.
- 2) β -Diphenylguanylguanidin. Sm. 160—162° u. Zers. HNO₃, 2+3H₂SO₄ (M. 12, 20). — II, 353.
- 3) Bis-4-Diazo-1-Methylbenzolamid. Zers. bei 82-83° (B. 27, 899; 29, 459). — IV, 1531.
- 4) Di[Phenylazo]äthylamin. Sm. 70—71° (B. 22, 939). IV, 1567. C 59,8 H 5,3 N 34,9 M. G. 281.
- 1) m²-Amidoguanazylbenzol. Sm. 193^o (B. **30**, 448). IV, 1494. 1) Aethyldiphenylphosphin. Sd. 293^o (A. **207**, 214). IV, 1658. 2) Dibenzylphosphin. Sm. 205° (B. 5, 103). — IV, 1664.
- 3) Isobenzyl-4-Methylphenylphosphin (oder C₂₇H₂₈P₂). Sm. 187^o (B. 15, 1963). — IV, 1672.
- $\mathbf{C}_{14}\mathbf{H}_{15}\mathbf{As}$ 1) Aethyldiphenylarsin. Sd. 320° (i. CO₂) (A. 201, 235; 207, 196). — IV, 1688. $C_{14}H_{16}O$ C 84.0 - H 8.0 - O 8.0 - M. G. 200.
 - 1) Aethyläther d. 2-Oxy-1,4-Dimethylnaphtalin. Fl. (B. 12, 1575; 16, 428). — II, 894.

 $\mathbf{C}_{14}\mathbf{H}_{16}\mathbf{O}$

 $C_{14}H_{16}O_{2}$

2) Isobutyläther d. 2-Oxynaphtalin. Sm. 33°. Pikrat (Bl. [3] 19, 367). 3) 3-Keto-?-Benzyliden-l-Methylhexahydrobenzol. Sm. 59°; Sd. 190 bis 200°₁₃ (B. **29**, 1596, 2960).

4) Verbindung (aus d. Benzylester d. α-Benzylisobuttersäure). Sd. 350 bis

355° (A. 201, 174). — II, 1394. 5) Verbindung (aus d. Stearopten C₂₈H₈₀O₅) (J. 1854, 590). — III, 58. C 77,8 — H 7,4 — O 14,8 — M. G. 216.

1) 6-Oxy-4-Keto-1,5-Dimethyl-2-Phenyl-1,2,3,4-Tetrahydrobenzol (Dimethylphenylhydroresorcin). Sm. 190-1920 (A. 294, 311; B. 30, 2266).

2) Methyläther d. 1-Keto-5-Methyl-3-[2-Oxyphenyl]-1,2,3,4-Tetrahydrobenzol. Sm. 51° (A. 303, 252).

3) Methyläther d. 1-Keto-5-Methyl-3-[4-Oxyphenyl]-1,2,3,4-Tetrahydrobenzol. Sm. 65° (A. 303, 249).

4) Aethyläther d. 6-Oxy-4-Keto-2-Phenyl-1, 2, 3, 4-Tetrahydrobenzol.

- Sm. 43°; Sd. 214°₁₅ (A. **294**, 304). 5) Diäthyläther d. 1,7-Dioxynaphtalin. Sm. 67° (A. **241**, 372). II, 983.
- 6) Diäthyläther d. 2,6-Dioxynaphtalin. Sm. 162° (A. 241, 370). —
- 7) Diäthyläther d. 2,7-Dioxynaphtalin. Sm. 104° (B. 15, 1428). —

8) Saure (aus Phenylessigsaure). Sd. 310-320° (A. 221, 49). — II, 1310. 9) Verbindung (aus Anethol). Sm. 65° (B. 13, 147). — II, 852. C 72,4 — H 6,8 — O 20,7 — M. G. 232.

1) Aethylester d. δ-Benzoyl-α-Buten-δ-Carbonsäure (Ae. d. Allylbenzoylessigsäure). Sd. $240-241^{\circ}_{225}$ (Soc. 47, 241). — II, 1683.

2) Aethylester d. 2-Benzoyl-1-Methyl-R-Trimethylen-2-Carbonsäure.

Sd. 223—226°₁₀₀ (Soc. 61, 83). — II, 1684.
3) Aethylester d. 6-Phenyldehydrohexon-5-Carbonsäure. Sm. 59 bis

60° (Soc. 51, 728). — II, 1683. C 67,8 — H 6,4 — O 25,8 — M. G. 248.

 $C_{14}H_{16}O_4$

 $C_{14}H_{16}O_3$

 Dihydrocurcumin. Sm. bei 100° (Am. 4, 360). — III, 660.
 Acetat d. Siaresitannol (B. 26 [2] 679). — III, 554.
 Diacetat d. 2,3-Dioxy-1,2,3,4-Tetrahydronaphtalin. Sm. 109,5 bis 110° (B. 26, 1834; A. 288, 98).

4) Aethylester d. $\alpha \delta$ -Diketo- α -Phenylpentan- γ -Carbonsäure. Fl. (B. 16, 2866). — II, 1869.

- 5) Aethylester d. α -[3,4-Dioxyphenyl]- β -Buten-3,4-Methylenäther- δ -Carbonsäure (Ae. d. \alpha-Hydropiperinsäure). Fl. (A. 124, 122). — II, 1784.
- 6) Aethylester d. 1-Keto-5-Methyl-3-[2-Furanyl]-1, 2, 3, 4-Tetrahydrobenzol-2 oder 4-Carbonsäure. Sm. 72°; Sd. 194°, (A. 303, 245).

7) Monäthylester d. 1,2,3,4-Tetrahydronaphtalin-1,8-Dicarbonsäure.

Sm. 48° (B. 27, 2695). — II, 1871.

- 8) Diäthylester d. α -Phenyläthen- $\beta\beta$ -Dicarbonsäure (Diäthylester d. Benzylidenmalonsäure). Sm. 27–29° (32°); Sd. 308–312° (190–193°,0) (B. 14, '348; 27, 289; 30, 959; 31, 2591; A. 218, 131; 279, 25; Soc. 49, 306). Π , 1863.
- 9) Verbindung (aus 2,6-Dimethyl-1,4-Pyron). Sm. 137—138° (Soc. 63, 116). — I, 1025. С 63,6 — Н 6,1 — О 30,3 — М. G. 264.

C14H16O5

1) Gentiogenin (J. 1862, 484). — III, 585.

2) Physalin. Sm. 180—190°. (Pb, 2PbO) (J. 1852, 670). — III, 641. 3) Filixsäure. Sm. 184,5° u. Zers. NH₄, Cu (A. 54, 119; 143, 279; 253, 342; B. 21, 2963, 3467; G. 24 [1] 512; 26 [2] 441). — II, 1967.

4) α -[3-Methoxyl-4-Propionoxylphenyl]propen- β -Carbonsäure (Propiohomoferulasäure). Sm. 128—129° (B. 15, 2060). — II, 1781. 5) Aethylester d. $\alpha\gamma$ -Diketo- α -[4-Methoxylphenyl]butan- β -Carbon-

säure (Ae. d. Anisoylacetessigsäure). Fl. Cu (C. 1897 [2] 616).

6) α-Aethylester d. γ-Keto-α-Phenylbutan-αβ-Dicarbonsäure (Ac. d. Phenylacetbernsteinsäure). Sm. 132,5° (B. 17, 71). — II, 1965.

7) β-Aethylester d. γ-Keto-α-Phenylbutan-αβ-Dicarbonsäure (β-Ae. d. Phenylacetbernsteinsäure). Sm. 128°. Ag (B. 18, 790). — II, 1965.
 8) β-Aethylester d. γ-Keto-α-Phenylbutan-β, 2-Dicarbonsäure (Ae. d. Benzylacetessig-o-Carbonsäure). Sm. 92° (A. 236, 191). — II, 1966.

 $\mathbf{C}_{14}\mathbf{H}_{16}\mathbf{O}_{5}$

- 9) Diäthylester d. α -Carboxy- α -Phenyläthen- β -Carbonsäure (β -Carbäth-
- oxyisozimmtsäureäthylester). Sd. 200—202°₁₅ (A. **282**, 169). **II**, 1644. 10) Diäthylester d. α-**K**eto-α-**P**henyläthan-ββ-Dicarbonsäure (D. d. Benzoylmalonsäure). Sd. 192—198°₁₃. Cu (A. **282**, 166). **II**, 1961.
- 11) Diäthylester d. β -Keto- α -Phenyläthan- $\alpha\beta$ -Dicarbonsäure (D. d. Phenyl-
- oxalessigsäure). Na, Cu (B. **27**, 1092). II, 1961. 12) Diäthylester d. δ-Furanyl-αγ-Butadiën-αα-Dicarbonsäure (D. d. Furfurakroleïnmalonsäure). Sd. 210—211°₃₃ (B. **31**, 284). C 60,0 - H 5,7 - O 34,3 - M. G. 280.

 $C_{14}H_{16}O_{6}$

δ-Phenyl-β-Methylbutan-βγγ-Tricarbonsäure. Sm. 178° u. Zers. (B. 23, 655; 24, 1063). — II, 2016.

2) Säure (aus Filixsäure). K (G. 24 [1] 516).

3) α , 2-Lakton d. α -Oxy- α -[3, 4-Dioxyphenyl] α α -Dimethylather- β , 2-Dicarbonsäure- β -Aethylester (Aethylester d. Mekoninessigsäure). Sm. $82,5^{\circ}$ (B. 19, 2291). — II, 2045.

4) α, 2 - Lakton d. α - Oxy-4, 6-Diäthoxylphenylmethan - α, 2-Dicarbonsäure-α-Methylester. Sm. 108° (A. 296, 354).

5) β_{γ} -Diacetat d. 3,4-Dioxy-1-[β_{γ} -Dioxypropyl] benzol-3,4-Methylenather. Sd. $240^{\circ}_{.16-20}$ ($262^{\circ}_{.90}$) (B. 24, 2881, 3489). — II, 1117.

6) Diacetat d. 3,6-Dioxy-5-Isopropyl-2-Methyl-1,4-Benzochinon. Sm. 81° (B. **14**, 95). — **III**, 369.

7) Triacetat d. 2,4,5-Trioxy-1,3-Dimethylbenzol. Sm. 990 (A. 180, 41). **– II**, 1023.

8) Triacetat d. 2,4,6-Trioxy-1,3-Dimethylbenzol. Sm. 123° (M. 19,

9) Triacetat d. 4-Oxy-3-Dioxymethyl-1-Methylbenzol. Sm. 97° (B. 11, 786). — III, *88*.

10) Benzoat d. Adonitdimethylenäther. Sm. 104° (B. 27, 1894; A. 289, 25). — II, *1153*.

C14H16O7

- C 56.8 H 5.4 O 37.8 M. G. 296.1) Carthamin (A. 58, 362; 136, 115). — III, 656.
- 2) Triacetat d. 5-Methoxyl-2-Oxy-1-Dioxymethylbenzol. Sm. 69-70° (B. **14**, 1995). — **III**, *99*.
- 3) Triacetat d. 2-Methoxyl-4-Oxy-1-Dioxymethylbenzol (B. 13, 2375). - III, 98.
- 4) Triacetat d. 3-Methoxyl-4-Oxy-1-Dioxymethylbenzol. Sm. 88-89° (B. 8, 1143). — III, 104.
- 5) Dimethylester d. α -Oxy- α -[3,4-Dioxyphenyl]äthan- α -Methyläther-3,4-Methylenäther- $\beta\beta$ -Dicarbonsäure (D. d. β -Methoxylpiperonylmalonsäure). Na (B. 26, 1878). — II, 2044.
- 6) Diäthylester d. 5-Oxy-1-Methylbenzol-2, 3, 4-Tricarbonsäure. Sm. 136—137° (B. **30**, 1741).

 $C_{14}H_{16}O_{8}$

- C 53.8 H 5.1 O 41.0 M. G. 312.1) Hydrogalalsäure + H_2O (C. 1895 [1] 210).
- 2) Diäthylester d. α -Oxy- α -[2,4,6-Trioxyphenyl]äthen- α 3, β -Dicarbonsäure. Sm. 90° (Soc. 71, 1111).
- 3) 1,3-Diathylester d. 4,6-Dioxybenzol-1,3-Dicarbonsäure-2-Methyl-
- carbonsäure. Sm. 183—184° (B. 31, 2016). 4) Triäthylester d. 2-Oxy-1-Keto-R-Penten-3,4,5-Tricarbonsäure.
- Sm. 200° u. Zers. (Soc. 71, 335). 5) Triäthylester d. 1,4-Pyron-2,3,6-Tricarbonsäure. Sm. 123° (Soc. **71**, 336).

 $C_{14}H_{16}O_{9}$

- C 51,2 H 4,9 O 43,9 M. G. 328.1) Resacetophenonglykuronsäure $+ H_2 0$. Zers. bei 170°. $Cu + 4H_2O$ (B. **27**, 2734). — **III**, 137.
- 2) $\alpha \gamma$ -Lakton d. $\alpha \delta$ -Dioxy- $\alpha \gamma$ -Butadiën- $\alpha \gamma \gamma \delta$ -Tetracarbonsäure- $\alpha \beta \delta$ -Triäthylester? (Dioxalbernsteinsäurelaktontriäthylester). Sm. 89—90°.

 $C_{14}H_{16}O_{10}$

NH₄, Na, Triäthylaminsalz (A. **285**, 21; **295**, 362). C 48,8 — H 4,6 — O 46,5 — M. G. 344. 1) Tetramethylester d. 1,4-Diketohexahydrobenzol-2,3,5,6-Tetracarbonsäure. Sm. 175° (A. 258, 317). — II, 2094.

C14H16O14 C 41,2 - H 3,9 - O 54,9 - M. G. 408.

1) Acetylhexaglyoxalhydrat (A. 172, 5). — I, 966.

 $C_{14}H_{16}N_2$

C 79.2 - H 7.5 - N 13.2 - M. G. 212.

1) $\alpha \beta$ -Diamido- $\alpha \beta$ -Diphenyläthan (Stilbendiamin). Sm. 90—92° (120—121°). 2HCl + 2H₂O, (2HCl, PtCl₄ + 2H₂O), Bitartrat, Diacetat, Pikrat (B. 22, 2299; 27, 214; 28, 3174; A. 111, 140; 245, 285). — IV, 978.

2) αβ-Di[2-Amidophenyl]äthan. Sm. 68°. 2HCl + 2H₂O, 2Pikrat (A.

305, 97).

- (J. 1859, 388; 1873, 698; B. 12, 1794; 22, 1783; 23, 2057; 25, 3255; G. **22**, 1783). — II, 343.
- 5) 4,4'-Diamido-3-Methyldiphenylmethan? Sm. 129° (C. 1898 [2] 158).
- 6) α -[4-Amidophenyl]- α -[4-Amido-3-Methylphenyl]methan. Sm. 1290 $(B. \ 27, \ 1812). - IV, \ 977.$
- 7) 4'-Amido-2,3'-Dimethyldiphenylamin. Sm. 63—64° (B. 31, 1518). 8) Methyl-4-Amidophenylbenzylamin. Sd. 290—295° (B. 31, 2182).
- 9) ?-Diamido-2-Benzyl-1-Methylbenzol? Sm. 59-60°. H₂SO₄ (B. 26,
- 1854). IV, 983. 10) ?-Diamido-4-Benzyl-1-Methylbenzol. 2HCl, H₂SO₄ (B. 5, 684). —
- IV, 983. 2-Amido-1-Benzylamidomethylbenzol (2-Amidodibenzylamin). Fl.
- 2 HCl (J. pr. [2] 51, 259). IV, 627.
- 12) 4-Dimethylamido-I-Phenylamidobenzol. Sm. 130°; subl. unter 100° (B. 21, 2612). — IV, 584.
- 13) 5-Amido-2-Benzylamido-1-Methylbenzol. 2HCl (A. 263, 309). IV, 609.
- 14) 2-Amido-4-[4-Methylphenyl]amido-1-Methylbenzol (m-Amido-p-Di-
- tolylamin). Sm. 71° (B. 28, 1648). IV, 601. 15) 3-Amido 4-[4-Methylphenyl]amido -1-Methylbenzol. Sm. 109°. Oxalat, Pikrat (B. 23, 3798). — IV, 612.
- 16) 4-Amido-3-[4-Methylphenyl]amido-1-Methylbenzol. Sm. 107°. H₂SO₄ (B. 3, 554; 11, 1626; 25, 1023; J. r. 10, 60). - IV, 612.
- 17) 2-Amido-1-[2-Methylphenyl]amidomethylbenzol (2-Amidobenzyl-2-
- Methylphenylamin). Sm. 94°. 2 HCl (J. pr. [2] 51, 272). IV, 627.

 18) 2-Amido-1-[4-Methylphenyl]amidobenzol (2-Amidobenzyl-4-Methylphenylamin). Sm. 84° (80,5°). 2 HCl (B. 19, 1610; 23, 2189; 25, 450; J. pr. [2] 51, 271). IV, 327.

 19) Aethylidendiphenamin. Sm. 51° (B. 30, 1445).
- 20) isom. Aethylidendiphenamin? (2HCl, PtCl₄), + HgCl₂ (A. Spl. 3, 346; B. 30, 1449).
- 21) **4,4'-Diamido-2,2'-Dimethylbiphenyl.** Sm. $108-109^{\circ}$ ($106-107^{\circ}$). 2 HCl, H₂SO₄ (B. 11, 1626; **22**, 837; **28**, 2554). IV, 980.
- 22) **4,4'-Diamido-2,3'-Dimethylbiphenyl.** 2 HCl, H_2SO_4 (B. 17, 471). —
- 1V, 982. 23) 2,4'-Diamido-3,3'-Dimethylbiphenyl. 2 HCl (B. 23, 3253). IV, 980. 24) 4,4'-Diamido-3,3'-Dimethylbiphenyl. Sm. 129° (126,5°). HCl, 2 HCl, H₂SO₄ (A. 278, 375; B. 6, 557; 17, 467; 20, 2017; 23, 3225). IV, 980.

- 25) P-Diamido-P-Dimethylbipmenyl (p. 1988).
 H₂SO₄, 2H₂SO₄ (Z. 1870, 265). IV, 983.
 26) s-Dibenzylhydrazin. Sm. 65°. HCl, Pikrat (J. pr. [2] 39, 48; [2] 58, 374; B. 28, 2345). IV, 811, 979.
 27) C-Di[2-Methylphenyl]hydrazin. Sm. 165° (161°) (B. 6, 557; J. r. 19, 27) C-Di[2-Methylphenyl]hydrazin. 409; C. 1898 [2] 775). — IV, 1502.
- 28) s-Di[3-Methylphenyl]hydrazin. Fl. (B. 11, 1626; A. 207, 116). IV, 1502.
- 29) s-Di[4-Methylphenyl]hydrazin. Sm. 126° (J. 1864, 527; B. 3, 553; A. 207, 107; M. 9, 829; C. 1898 [2] 775). IV, 1502.
 30) uns-Di[4-Methylphenyl]hydrazin. Sm. 171—172°. HCl (B. 13, 1546).
- IV, 804. 31) **2,4-Dimethyl-s-Diphenylhydrazin.** Sm. 77—79° (B. **28**, 2558). IV. 1503.
- 32) 3,4'-Dimethyl-s-Diphenylhydrazin. Sm. 74° (B. 28, 2558). IV, 1503.

C14H16N2 33) 5- $[\alpha$ -Phenylamidoäthyl]-2-Methylpyridin. Sm. 145—146°. 2HCl + H_2O , (2HCl, PtCl₄) (B. 28, 1761). — IV, 826.

34) 2,6,2,6'-Tetramethyl-4,4'-Bipyridyl. Sm. 148-149°. (2HCl, HgCl₂), (2 HCl, PtCl₄), 2(HCl, AuCl₃), Pikrat (B. **31**, 2281).

 $\mathbf{C}_{14}\mathbf{H}_{16}\mathbf{N}_{4}$

 $C_{14}H_{17}N_{8}$

 $C_{14}H_{17}P$

 $C_{14}H_{18}O$

- C 70.0 H 6.7 N 23.3 M. G. 240.1) α-Phenylhydrazon-β-Phenylhydrazidoäthan. Sm. 94-95° (Am. 21, 59).
- 2) 2-Amido-4-Aethylamidoazobenzol. (2HCl, PtCl₄) (B. 19, 547). -

- IV, 1360.
 3) 2,4-Di[Methylamido] azobenzol (B. 10, 657). IV, 1360.
 4) 3-Amido-3'-Dimethylamidoazobenzol. Sm 165-166° (A. 234, 363). **– IV**, 1361.
- 5) 4-Amido-4'-Dimethylamidoazobenzol. Sm. 186-187° (182-183°). (2 HCl, PtCl₄) (B. 17, 257; 20, 2994; Soc. 45, 107). — IV, 1361.
- 6) 3,3'-Diamido-2,2'-Dimethylazobenzol. Sm. 1750 (Soc. 59, 1016). —
- IV, 1376.
 7) 5,5'-Diamido-2,2'-Dimethylazobenzol. Sm. 159° (u. 132—133°; 157
- bis 158°) (B. 11, 1453; C. 1898 [2] 776). IV, 1376. 8) 3,3'-Diamido-4,4'Dimethylazobenzol. Sm. 203° (197°). 8) 3,3'-Diamido-4,4'Dimethylazobenzol. Sm. 203° (197°). 2HCl, (2HCl, PtCl₄), 2HBr, H₂SO₄ (A. 229, 350; Soc. 59, 1016). — IV, 1379. 9) uns-?-Diamido-4,4'-Dimethylazobenzol. Sm. 183°. HCl, (2HCl, PtCl₄)
- (B. 10, 218). IV, 1380.
- 10) 4-Amidobenzolazo-4-Amido-1, 3-Dimethylbenzol. Sm. 163°. (2 HCl, PtCl₄) (Soc. 43, 432). — IV, 1388.
- 11) Dimethyldiphenyltetrazon. Sm. 137° u. Zers. (A. 190, 172; B. 18, 1744; J. 1882, 367). IV, 1308.
- 12) Verbindung (aus Formaldehyd u. Phenylhydrazin). Sm. 210-2120 (Soc. 69, 1282). — IV, 744. C 62,7 — H 6,0 — N 31,3 — M. G. 268.

 $C_{14}H_{16}N_{6}$

1) $\alpha\beta$ -Diphenylhydrazon- $\alpha\beta$ -Diamidoäthan (Cyanphenylhydrazin). Sm. 225° u. Zers. 2 HCl (B. 22, 1934; 26, 2396, 2981; 27, 185; 30, 1193; J. pr. [2] 35, 531). — IV, 743. C 84,4 — H 8,5 — N 7,0 — M. G. 199.

 $\mathbf{C}_{14}\mathbf{H}_{17}\mathbf{N}$

- 1) 1-Diáthylamidonaphtalin. Sd. 283—285° (290°). (2HCl, PtCl₄) (Soc. 41, 180; B. **21**, 3130). — **II**, *599*.
- 2) 2-Diäthylamidonaphtalin. Sd. 316° 117. HCl, (2HCl, PtCl₄) (B. 22, 1761). — II, 602.
- 3) 3-Aethyl-2-Propylchinolin. Sd. 291_{720}^{0} . $HCl + 2H_2O$, $(2HCl, PtCl_4)$, $HNO_3 + H_2O$, H_2SO_4 , $H_2Cr_2O_7$, Pikrat (B. 17, 1718; 18, 3361; J. 1885, H_2OOO) 1009). — IV, 342.
- 4) P-Aethyl-P-Isopropylchinolin. Sm. 54°; Sd. 294°₇₁₃. (2 HCl, PtCl₄), Pikrat (B. 18, 3372; 20, 1939). IV, 342.
 5) 3,6,8-Trimethyl-2-Aethylchinolin. Sm. 62°; Sd. 291°. HCl + 3 H₂O, (2 HCl, PtCl₄), HNO₃, H₂SO₄, H₂Cr₂O₇, Pikrat (B. 23, 2270). IV, 343.
 6) 9-Methyl-1, 2, 3, 4, 9, 10-Hexahydroakridin? Sd. 160—165°₁₄. (2 HCl, PtCl₄)
- $PtCl_4$) (G. **24** [2] 113). IV, 339.

7) Isolin. Fl. (Z. 1867, 429). — IV, 343. C 74,0 — H 7,5 — N 18,5 — M. G. 227.

- 1) Di 2-Amidobenzyl]amin. Sm. 71°. 3 HCl (J. pr. [2] 55, 360). — IV, 628. 2) Di[4-Amidobenzyl]amin. Sm. 106°. 3 HCl, (3 HCl, PtCl₄) (B. 6, 1060).
- IV, 639.
- 3) 4,4',6'-Triamido-3,3'-Dimethylbiphenyl (B. 25, 1034). IV, 1169. 4) 5-Dimethylamido-2,4'-Diamidobiphenyl. Sm. 87-89. 2 Pikrat (A. **303**, 354).
- 5) uns-2-Amidobenzyl-4-Methylphenylhydrazin. Sm. 66° (J. pr. [2] 51,
- 272). IV, 1130. 1) Diáthyl-1-Naphtylphosphin. Sd. oberh 360° u. Zers. (B. 11, 1501). —
- IV, 1681. C 83.2 - H 8.9 - O 7.9 - M. G. 202.1) 2-Acetyl-1-Phenylhexahydrobenzol. Sm. 78-79°; Sd. 187-190°₄₀
 - (Soc. 57, 320). III, 167. 2) γ -Keto- β -Aethyl- α -Phenyl- α -Hexen (Benzaldipropylketon). Sd. 176 bis 178° (B. 30, 2262).
 - 3) γ -Keto- α -[2-Methyl-5-Isopropylphenyl]- α -Buten (Bl. [3] 17, 914).

 $C_{14}H_{18}O_{2}$

C 77,2 — H 8,2 — O 14,7 — M. G. 218.

1) Cyclamiretin (C. 1897 [1] 230).

- 2) 4,6-Diacetyl-1,2,3,5-Tetramethylbenzol. Sm. 121°; Sd. 312-317° (B. **28**, 3213; **29**, 848). — III, 274.
- 3) 3, 6 Diacetyl-1, 2, 4, 5 Tetramethylbenzol. Sm. 178°; Sd. 323-326° (B. 28, 3213; 29, 847). — III, 274.
- 4) Acetat d. 2-[α -Oxypropyl]-2,3-Dihydroinden. Sd. 210 $^{\circ}_{80}$ (Soc. 65, 245). — II, 1071.
- 5) α -[4-Isopropylphenyl]- α -Buten- β -Carbonsäure (Cumenylangelikasäure). Sm. 123° (J. 1877, 791). — II, 1435.

6) Rhizopogonsäure. Sm. 127°. K (R. 2, 155). — II, 2113.

7) Urushinsäure. Pb, Fe (Soc. 43, 475). — II, 1435.
S) Methylester d. 1-Phenylhexahydrobenzol-4-Carbonsäure. Sm. 28 bis 30° (A. **282**, 146). C 71,8 — H 7,7 — O 20,5 — M. G. 234.

 $C_{14}H_{18}O_3$

- 1) $\hat{\beta}$ -[4-Methoxyl-2-Methyl-5-Isopropylphenyl]akrylsäure. Sm. 141° (B. 16, 2105). II, 1669.
- 2) α-Keto-α-Phenylheptan-θ-Carbonsäure. Sm. 78° (C. 1896 [2] 1091).
- 3) β -[2-Methyl-5-Propylbenzoyl] propionsäure. Fl. Pb (B. 20, 1378).
- 4) β -[p-Methylisopropylbenzoyl]propionsäure. Sm. 70° (*B.* 28, 3217). 5) β -[2,3,5,6-Tetramethylbenzoyl]propionsäure. Sm. 117° (*B.* 28, 3217).
- 6) 5-Pseudobutyl-1, 3-Dimethylbenzol-2-Ketocarbonsäure. Sm. 90 bis
- 110° (B. **31**, 1346). 7) Oenanthbenzolcarbonsäureanhydrid. Fl. (A. 91, 102). — II, 1158.
- 8) Aethylester d. δ -Keto- β -Phenylpentan- α -Carbonsäure. Sd. 186 bis
- 189°₂₀ (A. **294**, 323). Aethylester d. β-Keto-γ-Benzylbutan-γ-Carbonsäure (Methylbenzylacetessigsäure). Sd. 287° (A. 204, 180). — II, 1668.
- 10) Aethylester d. γ-Keto-α-[3-Methylphenyl] butan-β-Carbonsäure. Sd. 195°₃₆ (B. 31, 2129).
 11) Aethylester d. α-Benzoylvaleriansäure. Sd. 238-239°₂₂₅ (Soc. 49,
- 160). II, *1667*. 12) Aethylester d. α-Benzoylisovaleriansäure. Sd. 236-237°₂₂₅ (Soc. 49,
- 164). II, 1667.
- 13) Aethylester d. β -Benzoyl- α -Aethylpropionsäure. Fl. (B. 21, 3457). **- II**, 1667.
- 14) Aethylester d. 1-Methyl-4-Isopropylbenzol-2-Ketocarbonsäure. Sd.
- 237°₇₈₀ u. Zers. (Bl. [3] 17, 911). 15) Aethylester d. 1-Methyl-4-Isopropylbenzol-2-[oder 3]-Ketocarbon**säure.** Sd. 180°₁₀ (C. **1896** [2] 92; Bl. [3] **17**, 942, 1020). C 67,2 — H 7,2 — O 25,6 — M. G. 250.

 $C_{14}H_{18}O_4$

Rhinacanthin (J. 1881, 1022). — III, 647.
 Oxallyldimesityloxyd. Sm. 149—150° (A. 291, 136).

- 3) Diacetat d. $\alpha\delta$ -Dioxy-norm. Butylbenzol (A. ch. [5] 26, 476). II, 1099.
- 4) Diacetat d. αα-Dioxy-α-|4-Isopropylphenyl|methan (Cumylendiacetat) (A. 106, 258). — III, 55.
- 5) Diacetat d. 3,6-Dioxy-1,2,4,5-Tetramethylbenzol. Sm. 202-203° (B. 29, 2175).
- 6) α -Phenylhexan- $\beta\delta$ -Dicarbonsäure (Aethylbenzylglutarsäure). Fl. (B. **23**, 3185). — **II**, 1859.
- 7) δ-Phenyl-β-Methylbutan-βγ-Dicarbonsäure (Dimethylbenzylbernsteinsäure). Sm. 140° (B. 24, 1061; Ph. Ch. 8, 476). II, 1859.
 8) I-Phenylhexahydrobenzol-2,2-Dicarbonsäure. Fl. (Soc. 57, 315). —
- II, 1859.
- 9) Dimethylester d. Benzol-1, 3-Di [Aethyl-β-Carbonsäure]. Sm. 51° (B. **21**, 38). — II, 1858.
- 10) Dimethylester d. Benzol-1,4-Di[Aethyl-β-Carbonsäure]. Sm. 115°
 (B. 21, 41). II, 1858.
- 11) 4 Aethylester d. 1 tert. Butylbenzol 3 Carbonsäurealdehyd-4-Kohlensäure. Sm. 63° (Am. 16, 642). III, 91.
 12) Diäthylester d. α-Phenyläthan-αα-Dicarbonsäure. Sd. 165—166°₁₆
- (B. 28, 815). II, 1851.

C14H18O5

 $C_{14}H_{18}O_{6}$

 $C_{14}H_{18}O_8$

C14H18O9

 $C_{14}H_{18}O_{10}$

13) Diäthylester d. α -Phenyläthan- $\beta\beta$ -Dicarbonsäure (D. d. Benzylmalonsäure). Sd. 300° (A. 204, 175; 256, 93; B. 24, 1060; 31, 555). — C14H18O4 II, 1848.

14) Diäthylester d. Benzol-1,4-Di[Methylcarbonsäure]. Sm. 57,5-58° (B. 9, 1768). — II, 1852.

15) Dipropylester d. Benzol-1, 4-Dicarbonsäure. Sm. 310 (B. 10, 1742). **- II**, 1832.

16) Diisopropylester d. Benzol-1,4-Dicarbonsäure. Sm. 55-56° (B. 10, 1742). — II, 1832.

17) Verbindung (aus Maynasharz) (A. ch. [3] 10, 374). — III, 560. C 63,1 — H 6,8 — O 30,1 — M. G. 266. 1) Olivil + H₂O. Sm. 118—120° (A. 6, 31; 54, 68; B. 11, 1251). — III, 638. 2) ζ-Oxyhexanphenyläther-γγ-Dicarbonsäure. Sm. 89—90° (B. 31, 2137).
 3) Hydroxydibenzoësäure (A. 134, 331). — II, 1959.
 4) Acetylcampheroxalsäure. Sm. 133,5—134,5° (Am. 20, 324).
 5) Säure (aus Hydrobenzylursäure) (A. 134, 318). — II, 1189.

5) Statis (late hydrocal) in the control of the contr

8) Isoamylester d. Hämatommsäure. Sin. 54° (J. pr. [2] 57, 292).

9) Diacetat d. 3,4,5-Trioxy-1-Propylbenzolmonomethyläther. Sm. 82,5 bis 83° (M. 4, 185). — II, 1024. C 59,6 — H 6,4 — O 34,0 — M. G. 282.

1) Diacetat d. 1,2,3,5-Tetraoxybenzol-?-Diäthyläther. Sm. 148° (B. 23, 1214). — II, 1031.
2) β-[?-Tetraoxyphenyl] propentetramethyläther-α-Carbonsäure.

- Säure Sm. 148—149°; β -Säure Sm. 132—133° (G. 23 [2] 616). II, 2007. 3) Diäthylester d. 3,4-Dioxybenzoldimethyläther-1,2-Dicarbonsäure (D. d. Hemipinsäure). Sm. 72°; Sd. oberh. 300° (M. 11, 539; B. 31, 2090). - II, 1996.
- 4) Diäthylester d. 4,5-Dioxybenzoldimethyläther-1,2-Dicarbonsäure.

Fl. (M. 12, 489). — II, 1999.
Diäthylester d. 2,5-Dioxybenzoldimethyläther-1,4-Dicarbonsäure. Sm. 101,5° (A. 258, 297). — II, 2002.
Diäthylester d. 2-Methylfuran-3-Carbonsäure-5-[β-Ketopropyl-1000 AM 115 (B-1000 AM 115 α-Carbonsäure] (Sylvancarbonacetessigsäure). α-Modif. Sm. 139°; β-Modif. fl. (A. **246**, 18). — III, 720. C 56,4 — H 6,0 — O 37,6 — M. G. 298.

 $C_{14}H_{18}O_7$ 1) Picein + H_2O . Sm. 194^6 (wasserfrei). Pb₂ (Bl. [3] 11, 944). — III, 601. 2) Ipecacuanhasäure. Pb + $3H_2O$ (J. 1850, 390). — II, 2046.

3) Dikohlensäureäthylester d. 2,4,6-Trioxy-1,3-Dimethylbenzol. Sm. 35) Dikomensaureatnylester d. 2,4,0-1710xy-1,0-Dimensylbenzon Sa. 35-40°; Sd. 242-243°₁₈ (M. 19, 243). C 53,5 - H 5,7 - O 40,8 - M. G. 314. 1) Gaultherin + H₂O. Zers. bei 120° (B. 27 [2] 883). - III, 585. 2) Glykovanillin + 2 H₂O. Sm. 192° (B. 18, 1596). - III, 577. 3) Chinäthonsäure. Sm. 146°. K + H₂O, Ba, Ag + H₂O (H. 4, 296; 7, 202) 494, 12 181)

292, 424; **13**, 181). — **II**, 2069.

4) Chinovagerbsäure (A. 79, 130; 143, 273). — III, 586. 5) Helianthsäure (J. 1859, 590). — II, 2069.

6) Tetramethylester d. Hydropyromellithsäure. Sm. 156° (A. 166, 339). - II, 2069.

7) Triäthylester d. 1,2-Diketo-R-Pentamethylen-3,4,5-Tricarbonsäure. Sm. $122-123^{\circ}$. Na₂ + $3\frac{1}{2}$ H₂O, Ba (A. **297**, 105, 108). C 50,9 - H 5,4 - O 43,6 - M. G. 330.

Glykovanillinsäure + H₂O. Sm. 210—212^o (wasserfrei) (B. 8, 515).

2) $\beta\delta$ -Lakton d. β -Oxy- δ -Ketobutan- $\alpha\beta\gamma\delta$ -Tetracarbonsäure- $\alpha\beta\gamma$ -Triathylester (Triathylester d. Oxalcitronensäurelakton). Sd. 210°₃₀. NH₄, Na, Ca + 2 H₂O, Ba + 2 H₂O, Pb, Aethylaminsalz, Diäthylaminsalz, Triathylaminsalz, Piperidinsalz, + FeCl₃ (B. **24**, 124; **28**, 790; A. **295**, 347, 351; Soc. 73, 348). — I, 869. C 48,6 — H 5,2 — N 46,2 — M. G. 346.

1) Monäthylester d. Triacetylschleimsäurelakton. Sm. 122° (M. 14,

 $C_{14}H_{18}O_{11}$

C 46,4 - H 5,0 - O 48,6 - M. G. 362.

1) Saccharumsäure. Ba $+ 2H_2O$, Pb₂ $+ H_2O$, Pb₈, Cu $+ 2H_2O$ (J. 1870, 843). **— I**, 871.

 $C_{14}H_{18}O_{12}$

C 44,5 — H 4,7 — O 50,8 — M. G. 378. 1) Cyclopiofluorescin (J. 1881, 1019). — III, 629.

2) Tetracetylnorisozuckersäure + H₂O. Sm. 101° (B. 19, 1270; 27, 125,

3) Tetracetylschleimsäure + 2H₂O. Sm. 242-243° (266°) (Bl. 48, 720; M. 14, 488). — I, 856.

 $C_{14}H_{18}O_{15}$

C 39.4 - H 4.2 - O 56.3 - M. G. 426.

1) Glykosediweinsäure. Ca + H₂O (Berthelot, Chim. org. 2, 295). -I, 1049.

 $\mathbf{C}_{14}\mathbf{H}_{18}\mathbf{N}_{2}$

C 78,5 — H 8,4 — O 13,1 — M. G. 214.

1) 1-Phenylhydrazon-3,5-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 76

bis 78°; Sd. 210—215°₂₀ (A. **281**, 116).

2) Bilutidin (Bi-3-Aethylpyridin). (HCl, PtCl₄) (J. **1881**, 430). — IV, 132.

3) isom. Bilutidin. Sd. oberh. 360°. (3 HCl, PtCl₄) (J. **1881**, 430). — — IV, 132. 4) Aethylparanilin (J. 1862, 344). — IV, 943.

5) Nitril d. γ -[2-Methylphenyl]imido- β -Methylpentan- β -Carbonsäure.

Sd. 266° (Bl. [3] 4, 646). — II, 473.
Verbindung (aus Aceton, Pyrrol u. HCl). Sm. 291°. 2 + AgNO₃ (B. 19, 2184; 20, 2450). — IV, 943. C 69,4 - H 7,4 - N 23,1 - M. G. 242.

C14H18N4

1) $\alpha\beta$ -Di[3-Amidophenylamido] äthan + H₂O. Sm. 107° u. Zers. 4HCl

(B. 17, 779). — TV, 574.
2) αβ-Di[4-Amidophenylamido]äthan. Sm. 150°. 4HCl (Soc. 71, 423).

- IV, 587.
3) 4,6,4',6'-Diamido-3,3'-Dimethylbiphenyl. Sm. 176° (C. 1898 [2] 777). - IV, 1277.

4) $\alpha\beta$ -Di[α -Phenylhydrazido]äthan (uns-Aethylenphenylhydrazin). Sm. 90,5°. 2HCl, 2HNO₃, H₂SO₄, Oxalat (A. **254**, 116). — IV, 659. 5) $\alpha\beta$ -Di[β -Phenylhydrazido]äthan. Sm. 100° (Am. **21**, 60).

6) s-Di[5-Amido-2-Methylphenyl]hydrazin. Sm. 180° (178°) (B. 11, 1453;
C. 1898 [2] 776). — IV, 1502.
7) s-Di[3-Amido-4-Methylphenyl]hydrazin. 2HCl, (2HCl, PtCl₄), 2HBr,

 H_2SO_4 (A. **229**, 351). — IV, 1503.

 $C_{14}H_{18}Br_4$ $C_{14}H_{19}N$

1) Tetrabromderivat d. Kohlenw. C₁₄H₂₂ (aus Fichtentheer). Sd. 254 bis 257° (Bl. [3] 11, 1151). C 83.6 - H 9.4 - N 7.0 - M. G. 201.

1) 3,5-Diisopropylindol. Sm. 65°; Sd. 295-300° u. ger. Zers. Pikrat (B. 21, 3430). - IV, 233.

2) 1-Methyl-2-Methylen-3, 3-Diathyl-2, 3-Dihydroindol. Sd. 257-260°₇₅₈ (G. **28** [2] 350).

3) 1,3,3-Trimethyl-2-Isopropyliden-2,3-Dihydroindol (1,2,2,3,4-Pentamethyl-1, 2-Dihydrochinolin). Sd. 270° (268—269°₇₅₀). (HCl, AuCl₃), HJ, Pikrat (B. 23, 2305; G. 21 [2] 325; 28 [2] 45, 65, 88, 432). — IV, 230. 41 1-Methyl-1,2,3,4,7,8,9,10-Oktohydro-α-Naphtochinolin. Sm. 37—38°.

HJ (B. **24**, 2489). — IV, 231.

5) 3-Methyl-1,2,3,4,7,8,9,10-Oktohydro-β-Naphtochinolin. Sm. 75°. HNO₃ (B. 24, 2662). — IV, 234.
 6) isom. 3-Methyloktohydro-β-Naphtochinolin (B. 24, 2662). — IV, 234.
 7) Aethylcarbazolin. HJ (A. 202, 25). — IV, 229.

8) Nitril d. β -Methyl- α -Phenylhexan- α -Carbonsäure. Sd. 287° (B. 22, 1237). — II, 1400.

 $C_{14}H_{20}O$

C 82.4 - H 9.8 - O 7.8 - M. G. 204.1) 3-Oxy-?-Benzyl-1-Methylhexahydrobenzol. Sm. 97° (B. 29, 2961).

2) Phenyläther d. θ-Oxy-β-Okten. Sd. 282—286° (C. 1899 [1] 26).
3) Heptylphenylketon. Sm. 22°; Sd. 164°₁₅ (B. 30, 1943).
4) Hexyl-4-Metylphenylketon. Sm. 42—43° (Soc. 67, 504; B. 29 [2] 659). — III, *156*.

5) Propyl-5-Isopropyl-2-Methylphenylketon. Sd. 265-266° (J. pr. [2] **43**, 536). — III, 157.

 $C_{14}H_{20}O_{3}$

C14H20O4

 $C_{14}H_{20}O_5$

 $\mathbf{C}_{14}\mathbf{H}_{20}\mathbf{O}_{6}$

 $C_{14}H_{20}O_7$

 $C_{14}H_{20}O_{8}$

6) Isopropyl-5-Isopropyl-2-Methylphenylketon. Sd. 259° (J. pr. [2] 46, $C_{14}H_{20}O$ 485). — III, 157.

7) Isopropyl-3-Propyl-4-Methylphenylketon. Sd. 285—287° (J. pr. [2]) 47, 425). — III, 157.

8) 2-Acetyl-5-Pseudobutyl-1, 3-Dimethylbenzol. Sm. 48°; Sd. 265° (B. 31, 1346).

9) 2 oder 3-Isobutyryl-4-Isopropyl-1-Methylbenzol. Sd. 260-262° (Bl. [3] **19**, 138). C 76,4 — H 9,1 — O 14,5 — M. G. 220.

 $C_{14}H_{20}O_{2}$

1) Methylisobutyläther d. 3,4-Dioxy-l-Allylbenzol. Sd. 272-274° (J. 1877, 581). — II, 974.

2) Isansäure. Sm. 41° (C. 1896 [2] 470; Bl. [3] 15, 938, 941).

3) Pyrophotosantonsäure. Sm. 94,5°. Ba (G. 12, 83). — II, 1933.

4) Isoamylester d. β-Phenylpropionsäure. Sd. 291—293°_{758,7} (A. 137,

335). — II, *1357*.

5) β -Methylbutylester d. β -Phenylpropionsäure. Sd. 279 – 281 $^{\circ}_{788.5}$ (Bl. [3] 15, 293).

6) Phenylester d. Caprylsäure. Sd. 300° (C. r. 39, 257). -- II, 662. 7) Acetat d. 2,3,4,5,6-Pentamethyl-1-Oxymethylbenzol (B. 22, 1217).

— II, 1067. C 71,2 — H 8,5 — O 20,3 — M. G. 236.

1) 3-Methyl-4, β -Diäthyläther d. β -Oxy- α -[3,4-Dioxyphenyl] propen.

Sd. 177,5°₁₆ (B. 28, 2091). — III, 143.

2) Helleboretin (oder C₁₉H₃₀O₅). Sm. oberh. 200° (A. 135, 60; B. 15, 544; C. 1897 [2] 764). — III, 593.

3) α-Oxyheptanphenyläther-δ-Carbonsäure. Sm. 53-54° (B. 28, 1202). 4) α-Oxy-4-Pseudobutyl-2,6-Dimethylphenylessigsäure? Sm. 120° (B. 31, 1347).

5) Aethylester d. δ -Oxy- δ -Phenyl- β -Methylbutan- γ -Carbonsäure. Fl. (C. 1897 [2] 349; 1898 [1] 884).

6) Aethylester d. Oxyessig-[2-Methyl-5-Isopropylphenyl]äthersäure. Sm. 100°; Sd. 289° (G. 10, 345). — II, 767.
7) Aethylester d. Oxyessig-[3-Methyl-6-Isopropylphenyl]äthersäure.

Sd. 290° (G. 10, 342). — II, 771.

8) Isoamylester d. α-[4-Oxyphenyl]propionsäure (I. d. Phloretinsäure). Sd. oberh. 290° (A. 102, 154). — II, 1570.

Sd. oberh. 290° (A. 102, 194). — 11, 1370.

9) Acetat d. Triäthylresorcin. Sm. 63—65° (M. 11, 309). — II, 916. C 66,7 — H 7,9 — 0 25,4 — M. G. 252.

1) Triäthyläther d. Oxymethyl-3,4-Dioxyphenylketon. Sm. 66—68° (M. 14, 41). — III, 140.

2) Oleocutinsäure. Fl. (J. 1885, 1802). — I, 1079.

3) Oxydigitogensäure + ½ H,0. Mg (B. 24, 344). — III, 581.

4) Aethylester d. Campheroxalsäure. Sm. 40,5° (Soc. 57, 653; Am. 19, 207, 20, 231). — I, 734

397; **20**, 331). — **I**, 734. C 62,7 — H 7,4 — O 29,8 — M. G. 268.

1) Dimethylester d. Ketonsäure $C_{12}H_{16}O_5$. Sm. 92—93° (C. 1896 [2] 1115). 2) Diäthylester d. 1-Keto-3, 5-Dimethyl-1, 2, 3, 4-Tetrahydrobenzol-2, 4-

Dicarbonsäure. Sd. 225—230° u. Zers. (A. **281**, 106). — II, 1930. C 59,1 — H 7,0 — O 33,8 — M. G. 284.

1) Diäthylester d. 2,5-Diketo-1,4-Dimethylhexahydrobenzol-1,4-Dicarbonsäure (D. d. Dimethylsuccinylbernsteinsäure). Sm. 72,5°; Sd. 192°14 (B. **25**, 2122). — **I**, 825.

2) Diäthylester d. α -Oxy- α -[2-Furanyl]äthanäthyläther- $\beta\beta$ -Dicarbonsäure. Fl. Na (B. 26, 1878). — III, 720. C 56,0 — H 6,7 — O 37,3 — M. G. 300.

1) Glyko-o-Cumaralkohol + H₂O. Sm. 119° (wasserfrei) (B. 18, 1962). -II, 1099.

2) Benzyliden-α-Glykoheptit. Sm. 214° u. Zers. (A. 270, 82; B. 27, 1533). — III, 9.

3) isom. Benzyliden-α-Glykoheptit. Sm. 155—156° (B. 27, 1533). — III, 9. 4) Triäthylester d. δ-Keto-α-Penten-αβγ-Tricarbonsäure. Sd. 188 bis 189% (Soc. 69, 532; 71, 324). C 53,2 — H 6,3 — O 40,5 — M. G. 316.

1) Glykovanillylalkohol + H₂O. Sm. 120° (B. 18, 1597). — III, 577.

- 2) Tetraäthylester d. Aethentetracarbonsäure. Sm. 56—58°; Sd. 325 bis 328° u. Zers. (B. 13, 2161; 14, 619; 15, 1109; 16, 2631; 26, 2357; 28, 2833; 29, 1511; 30, 488; A. 214, 76; Ph. Ch. 10, 421; Am. 19, 700). $\mathbf{C}_{14}\mathbf{H}_{20}\mathbf{O}_{8}$ · I, 863.
 - 3) Verbindung (aus Aethan-\alpha \alpha \beta-Tricarbons\alpha uretri\alpha thylester u. Dichlormalonsäurediäthylester). Sd. $160-180^{\circ}_{30}$ (*B.* **29**, 1744). C 50,6 — H 6,0 — O 43,4 — M. G. 332.
- C14H20O9 1) Dulcitantetracetat (A. ch. [4] 27, 160; B. 25, 2564). — I, 418.
 2) Isodulcidtetracetat (Bl. 47, 673). — I, 418.
 3) Mannitantetracetat (A. ch. [5] 6, 110). — I, 417.
 4) Quercittetracetat (A. 190, 287). — I, 416.
- $\mathbf{C}_{14}\mathbf{H}_{20}\mathbf{O}_{13}$
- 5) Diäthylester d. Diacetylisozuckersäure. Sm. 49° (B. 27, 128). C 42,4 H 5,0 O 52,5 M. G. 396.
 1) Pektinsäure (siehe auch C₁₆H₂₂O₁₆). Na, K₂, Ca, Ba, Ag₂ (A. 51, 360).
- C 39.2 H 4.7 O 56.1 M. G. 428. $\mathbf{C}_{14}\mathbf{H}_{20}\mathbf{O}_{15}$
- 1) Dulcitweinsäure. Ca + 4H₂O (J. 1857, 506). I, 796. C 77,8 H 9,2 N 13,0 M. G. 216.
- $\mathbf{C}_{14}\mathbf{H}_{20}\mathbf{N}_{2}$ 1) 6-Methyl-3-Isopropyl-2-Phenyl-2,3,4,5-Tetrahydro-1,2-Diazin.
 - Sd. 192—193°₂₃ (Bl. [3] 17, 178, 191). IV, 769. 2) αβ-Di[2,5-Dimethyl-1-Pyrryl]äthan. Sm. 125—126° (B. 19, 3157). —
 - 3) Oktohydrodimethylphenanthrolin (B. 24, 1742). IV, 889.
 - 4) Dimethyloktohydro-β-Naphtochinolinimidazol. 2HCl (B. 24, 2668).
 - IV, 889.
 Nitril d. α-Phenylamidoönanthsäure. Sm. 39,8° (B. 25, 2051).
- 1) 3,6-Dichlor-1,2,4,5-Tetraäthylbenzol. Sd. 296° (A. ch. [6] 6, 485). $\mathbf{C}_{14}\mathbf{H}_{20}\mathbf{Cl}_{2}$ - II, 56.
- $\mathbf{C}_{14}\mathbf{H}_{20}\mathbf{Br}_{2}$ 1) **5,6-Dibrom-1,2,3,4-Tetraäthylbenzol.** Sm. 74,5° (77°); Sd. über 330°
 - u. Zers. (B. 16, 1745; 21, 2818). II, 72. 2) 3,6-Dibrom-1,2,4,5-Tetraäthylbenzol. Sm. 112,5°; Sd. 325—330° (B. **21**, 2821; **31**, 1716). — II, 72. C 82,8 — H 10,3 — N 6,9 — M. G. 203.
- $C_{14}H_{21}N$
 - 1) 3-Amido-?-Benzyliden-1-Methylhexahydrobenzol. Sd. 235-245°. HCl (B. 29, 2961).
 - 2) 6-Diathylamido-1,2,3,4-Tetrahydronaphtalin. Sd. 2980,000 (B. 22, 1762). — II, 589.
 - 3) **2-Methyl-6-**[β -Phenylathyl]hexahydropyridin. Sm. 80—81°. HCl, (HCl, HgCl₂), (HCl, AuCl₃) (B. **25**, 2402). — IV, 211.
 - isom. [?]-2-Methyl-6-[β-Phenyläthyl] hexahydropyridin (Methylstilbazolin).
 Sd. 286-291° (Β. 21, 3078). IV, 211.
 - 5) 1,2-Dimethyl-3,3-Diäthyl-2,3-Dihydroindol. Sd. 154—1580₂₅. (2 HCl,
 - PtCl₄), HJ (B. 29, 2481; G. 28 [2] 351). IV, 210. 6) 1,3,6-Trimethyl-2-Aethyl-1,2,3,4-Tetrahydrochinolin. Sd. 275 bis 280°. $(2 \text{ HCl}, \text{PtCl}_4 + 2 \text{ H}_2 \text{O}) (B. 18, 3388)$. — IV, 210.
 - 7) 3, 6, 8-Trimethyl-2-Aethyl-1, 2, 3, 4-Tetrahydrochinolin. Sd. 287 bis
 - 2896. Pikrat (B. 23, 2272). IV, 211. 8) 1, 2, 2, 3, 4 Pentamethyl-1, 2, 3, 4 Tetrahydrochinolin. Fl. Pikrat (G. 19, 326). — IV, 210. C 72,7 — H 9,1 — N 18,2 — M. G. 231.
- $\mathbf{C}_{14}\mathbf{H}_{21}\mathbf{N}_{3}$ 1) 1-[2,4,5-Trimethylphenyl]azohexahydropyridin. Sm. 50° (A. 243, 231). **— IV**, 1580.
 - 2) 1-[β-Phenylhydrazonpropyl]hexahydropyridin (Piperidoacetonphenylhydrazon). Sm. 59-62° (B. 28, 1251). IV, 767.
 - 3) Nitril d. α -[β -Phenylhydrazido]capronsäure. Sm. 50,8° (B. 25, 2052). - IV, 740.
- 1) ?-Chlor-1-[norm.] Oktylbenzol. Sd. 270—275° (B. 19, 2719). II, 56. $C_{14}H_{21}Cl$ 2) P-Chlor-P-Tetraäthylbenzol (Gemisch). Sd. 269° (A. ch. [6] 6, 427). — II, 56.
- 1) P-Brom-1-[norm.]Oktylbenzol. Sd. 285—290° (B.19, 642, 2719). II, 72. 2) 5-Brom-1, 2, 3, 4-Tetraäthylbenzol. Sd. 284° (B. 16, 1745). II, 72. 1) P-Jod-1-[norm.]Oktylbenzol (B. 18, 136; 19, 2720). II, 77. $\mathbf{C}_{14}\mathbf{H}_{21}\mathbf{Br}$
- C14 H21 J 2) 4-Jod-1-[sec.] Oktylbenzol. Sd. 304-3050 (B. 18, 142). — II, 77.

C14H22O

C 81,6 — H 10,7 — O 7,7 — M. G. 206. 1) β -[4-Oxyphenyl]oktan. Fl. (J. r. 23, 543). — II, 776. 2) Methyläther d. δ -[4-Oxyphenyl]heptan. Sd. 267—268° (J. r. 23, 540).

— II, 776.

3) α -Oxy- α -[2-Methyl-5-Propylphenyl] butan. Sd. oberh. 300° (J. pr. [2] **43**, 536). — **II**, 1067.

4) Methyläther d. 3-Oxy-P-Diisopropyl-1-Methylbenzol. Sd. 242—245° (G. 12, 508). — II, 776.

5) norm. Butyläther d. 3-Oxy-4-Isopropyl-1-Methylbenzol. Sd. 258,30 (A. 243, 48). - II, 770.6) Isobutyläther d. 4-Oxy-1-tert. Butylbenzol. Sd. 263-1680, (Am.

16, 635). 7) Isoamyläther d. 5-Oxy-1,2,4-Trimethylbenzol. Sd. 265-266° (B. 17,

1919). — II, 763. 8) norm. Heptyläther d. 2-Oxy-1-Methylbenzol. Sd. 277,5° (A. 243, 39).

9) norm. Heptyläther d. 3-Oxy-1-Methylbenzol. Sd. 238,20 (A. 243, 42). - II, 744.

10) norm. Heptyläther d. 4-Oxy-l-Methylbenzol. Sd. 283,3° (A. 243, 46). - II, 748.

11) norm. Oktyläther d. Oxybenzol. Sd. 282,8° (A. 243, 36). — II, 654. 12) Bicyklo-Methylhexen-Methylhexanon. Sd. 143-1440 (B. 29, 1595,

13) Morrenol (oder $C_{15}H_{24}O$). Sm. 168° (B. 24, 1852). — III, 638. 14) Olibanoresen = $(C_{14}H_{22}O)_x$. Sm. 62° (C. 1898 [2] 985). 15) Verbindung (aus Aceton). Sd. $183-185^{\circ}$ (Am. 15, 264). C 75,6 — H 10,0 — O 14,4 — M. G. 222.

C14H22O2

C14H22O3

 $C_{14}H_{22}O_4$

1) Aethyläther d. ?-Triäthyl-1,3-Dioxybenzol. Sd. 160—169014—20 (M. 11, 298). — II, 916.

2) Diathyläther d. 4-Isopropyl-1-Dioxymethylbenzol. Sd. 257—259° (B. 31, 1015).

3) Diisobutyläther d. 1,4-Dioxybenzol. Fest. Sd. 262° (M. 3, 681). — II, 940.

4) 3,3'-Diketo-1,1'-Dimethyldodekahydrobiphenyl. Sm. 160-161° (B. 31, 1806).

5) Sapogenin. Sm. 257—260° C. 1897 [1] 302). — III, 610. Sm. 257—260° (248—250°) (Z. 1867, 632; M. 10, 170;

6) Crotonat d. d-Citronellol. Sd. 138-140° (Bl. [3] 19, 638).
7) Verbindung (aus Sapogenin). Sm. 128° (Z. 1867, 632). — III, 610.
C 70,6 — H 9,2 — O 20,2 — M. G. 238.

1) $\alpha\alpha$ -Diäthyläther- β -[2,4-Dimethylphenyl] äther d. $\alpha\alpha\beta$ -Trioxyäthan. Sd. 273° (B. 30, 1708).

2) $\alpha\alpha$ -Diäthyläther- β -[2,5-Dimethylphenyl]äther d. $\alpha\alpha\beta$ -Trioxyäthan. Sd. 278—279° (B. 30, 1708).

3) $\alpha\alpha$ -Diäthyläther- β -[3,4-Dimethylphenyl]äther d. $\alpha\alpha\beta$ -Trioxyäthan. Sd. 168°_{20} (B. 30, 1707).

4) $\alpha\alpha$ -Diäthyläther- β -[4-Aethylphenyl]äther d. $\alpha\alpha\beta$ -Trioxyäthan. Sd. 288–289° (B. 30, 1708).

5) 2,4,6-Triketo-1,1,3,3-Tetraäthylhexahydrobenzol. Sm. 209—212°. Na (M. 9, 884). — II, 1025.

6) Oxysapogenin. Sm. noch nicht bei 290° (M. 10, 172). - III, 610.

7) Desoxydigitogensäure $+ \frac{1}{2} H_2 O$. Sm. 240° (B. 26 [2] 686). 8) Aethylester d. Methylcamphocarbonsäure. Sm. 60-610 (Bl. [3] 7,

75). **— I**, *629*.

9) Aethylester d. 1-Keto-3-Isobutyl-5-Methyl-1,2,3,4-Tetrahydrobenzol-2-Carbonsäure. Sd. 167—169°₂₀ (A. **288**, 334). 10) Aethylester d. 1-Keto-3-Isobutyl-5-Methyl-1,2,3,4-Tetrahydro-

benzol-4-Carbonsäure. Sd. $167-169^{\circ}_{20}$ (A. 288, 334). C 66.1 — H 8.6 — O 25.2 — M. G. 254.

1) Tetraäthyläther d. 1,2,3,5-Tetraoxybenzol. Sm. 143° (B. 23, 1214). - II, 1031.

2) Laserol (A. 135, 245). — III, 635.

3) Digitogensäure. Sm. 150° (B. 24, 342; 26 [2] 686; 27 [2] 881; 32, 341). — III, 581.

- 4) Diäthylester d. Säure C₁₀H₁₄O₄. Sd. 247—250° (B. 14, 336, 337). C14H22O4

 - 5) Diacetat d. Pinolhydrat (D. d. Sobrerol) (B. 29, 1197). III, 508.
 6) Diacetat d. Glykol C₁₀H₁₈O₂ (aus Menthan-1,2,8-triol). Sm. 154—155° (i. V.) (B. **29**, 1199).
 - 7) d-Monoborneolester d. Bernsteinsäure. Sm. 58° (B. 22 [2] 255). III, 471.
 - 8) 1-Monoborneolester d. Bernsteinsäure. Sm. 50° (B. 22 [2] 255). III, 472.
 - 9) Monoisoborneolester d. Bernsteinsäure. Sm. 56,5° (B. 22 [2] 255).
 - C14H22O5 C 62.2 - H 8.1 - O 29.6 - M. G. 270.
 - 1) Diacetat d. cis-Pinolglykol. Sm. 97—98°; Sd. 127°, (151—152°, s) (A. 259, 311; C. 1898 [2] 543). — III, 509.
 - 2) Diacetat d. trans-Pinolglykol. Sm. 37-38°; Sd. 166-167°, (J. r. 26,
 - 2) Diacteat d. trans-rinoigtykoi. Sm. 37-38°; Sd. 166-167°₁₇ (J. r. 26, 329; C. 1898 [2] 543; B. 32, 2067). III, 509.
 3) Diäthylester d. δ-Aethanoyl-α-Hexen-δε-Dicarbonsäure. Sd. 250 bis 255° (B. 29, 981).
 C 58,7 H 7,7 O 33,6 M. G. 286.
 1) Diäthylester d. βζ-Dioxy-δ-Methyl-βε-Heptadiën-γε-Dicarbonsäure. Sm. 60—61° (B. 32, 89).
 2) Diöthylester d. β. Diktyteskten at Dicarbonsäure. Sm. 60—61° (B. 32, 89).
 - $\mathbf{C}_{14}\mathbf{H}_{22}\mathbf{O}_{6}$

 - 2) Diäthylester d. βη-Diketooktan-γζ-Dicarbonsäure. Fl. Na. (Soc. 57, 215). — I, 821.
 - 3) Diäthylester d. γζ-Diketooktan-αθ-Dicarbonsäure. Sm. 46° (B. 28, 920; A. **294**, 167).
 - 4) Diäthylester d. δζ-Diketo-δ-Methylheptan-γε-Dicarbonsäure. Sm. 79—80° (A. 281, 104; B. 31, 1388; 32, 88).
 5) Triäthylester d. α-Penten-αγγ-Tricarbonsäure. Sd. 176—177° 18
 - (J. pr. [2] 58, 406).
 - 6) Triäthylester d. Allyläthenyltricarbonsäure. Sd. 282-2830 (B. 16,
 - C14H22O7
- C 55,6 H 7,3 O 37,1 M. G. 302. 1) Oxypeucedanin. Sm. 140° (J. 1849, 476; A. 176, 78).
 - 2) Glykosedibutyrat (A. ch. [5] 60, 96). I, 1049.
 - Triäthylester d. β-Ketopentan-γδε-Tricarbonsäure (Tr. d. α-Acettricarballylsäure).
 Sd. 175° (B. 23, 3757; Soc. 73, 727). I, 845.

 - 4) Triäthylester d. β-Ketopentan-δεε-Tricarbonsäure. Sd. 280–285° (188°₁₁) (B. 17, 2286; 19, 43; J. pr. [2] 53, 310). I, 845.
 5) Triäthylester d. β-Ketobutan-γδ-Dicarbonsäure-γ-Methylcarbonsäure (Tr. d. β-Acettricarballylsäure). Sd. 280–300° u. Zers. (A. 190, 323; B. 23, 3755; 29, 969). — I, 845.
 - C 52,8 H 6,9 O 40,2 M. G. 318. C14H22O8
 - 1) Dimethylester d. Dibutyrylweinsäure. Sd. 300-302°₇₈₁ (B. 25 [2] 859; Bl. [3] 11, 311). 2) Dimethylester d. Diisobutyrylweinsäure. Sm. 45° (B. [3] 11, 368).

 - 3) Diäthylester d. Dipropionylweinsäure. Sd. 2020 (B. 25 [2] 859; Bl. [3] 11, 310).
 - 4) Diäthylester d. Bernsteinsäuremilchsäure. Sd. 300-304°₇₂₉ (A. 133, 262; A. ch. [3] 63, 101). I, 657.
 5) Triäthylester d. β-Acetoxylpropan-αβγ-Tricarbonsäure (Tr. d. Acetylpropan-αβγ-Tricarbonsäure)
 - citronensäure). Sd. 288° (A. 129, 193; B. 18, 1954; 20, 802). I, 840.
 - 6) Tetraäthylester d. Aethan-ααββ-Tetracarbonsäure. Sm. 76°; Sd. 305° u. Zers. Na₂ (B. 13, 600; 14, 618; 16, 1046, 2632; 17, 449, 2781; 21, 2076; 28, 2831; 29, 1277, 1511; A. 214, 68; 276, 244; 285, 21; 294, 115; Ph. Ch. 10, 421; Am. 15, 526). I, 858.
 - 7) Dipropylester d. Butan- $\alpha\beta\gamma\delta$ -Tetracarbonsäure. Sm. 129° (B. 27,
 - (B. 14, 2790; 25 [2] 859; 26 [2] 923; J. 1882, 857; Bl. [3] 11, 309). I, 796. 8) Dipropylester d. Diacetyl-d-Weinsäure. Sm. 31°; Sd. 313° u. Zers.
 - 9) Diisopropylester d. Diacetylweinsäure. Sm. 33°; Sd. 171-172°₃₀₋₄₀ (Bl. [3] 11, 367).
 - 10) Triacetat d. Aethylchinovosid (B. 26, 2417).

 $C_{14}H_{22}N_2$

 $C_{14}H_{24}O_{6}$

C 77,1 — H 10,1 — N 12,8 — M. G. 218.

1) polym. 3[P]-Isopropylpyrrol. Sd. 285—290° u. ger. Zers. HCl, Pikrat (B. 20, 856; 21, 1480). — IV, 74. 1) Melanthigenin = $(C_{14}H_{23}O_2)_x$ (J. 1880, 1077). — III, 597. $C_{14}H_{23}O_{2}$ C 82,0 — H 11,2 — N 6,8 — M. G. 205. C14 H23 N 1) 2-Amido-1-[norm.] Oktylbenzol. (2HCl, SnCl₄) (B. 19, 2725). — II, 565. 2) 4-Amido-1-[norm.] Oktylbenzol. Sm. 19,5°; Sd. 310—311°. HCl, H₂SO₄, Oxalat (B. 18, 132). — II, 565. 3) 4-Amido-1-[sec.] Oktylbenzol. Sd. 290—292°. Oxalat (B. 18, 139). — II, 566. 4) ?-Dimethylamido-1-Hexylbenzol. Sd. unterh. 360° (A. 242, 344). — II, 565. 5) 4-Isobutylamido-1-Isobutylbenzol. Sd. 260-270° (A. 211, 240). -II, 557. 6) Diisobutylamidobenzol. Sd. 245—250° (A. 211, 235). — II, 336. 7) Amin (aus d. Kohlenwasserstoff $C_{14}H_{22}$). (2 HCl, PtCl₄) (B. 22, 510). — II, 566. 1) Diäthyl-4-Isopropyl-1-Methylphenylphosphin. Sd. 260-270° (A. $C_{14}H_{23}P$ 294, 55). — IV, 1680. C 80,7 - H 11,5 - O 7,7 - M. G. 208. $C_{14}H_{24}O$ 1) Gallactucon. Sm. 296° (B. 12, 10). — III, 635. C 75,0 — H 10,7 — O 14,3 — M. G. 224. $C_{14}H_{24}O_{2}$ 1) Caïncigenin (Z. 1867, 538). - III, 573. 2) Myristolsäure. Sm. 12º (A. 202, 175) — I, 534. 3) Säure (aus Myristinsäure). Sm. 36°; Sd. 200—205°₁₃ (B. **25**, 486). 4) Butyrat d. 1-Borneol. Sd. 128°₁₃ (B. 31, 1775).
5) Butyrat d. Geraniol (B. d. Rhodinol). Sd. 142—143°₁₃ (B. 31, 356).
6) Isobutyrat d. Geraniol (I. d. Rhodinol). Sd. 135—137°₁₃ (B. 31, 356). C 70,3 — H 10,0 — O 20,0 — M. G. 240. 1) Lichenstearinsäure (oder $C_{43}H_{76}O_{13}$; oder $C_{17}H_{28}O_4$). Sm. 120°. Ba, Pb, Ag (A. 55, 150; 86, 50; B. 23, 461). — I, 624. C14H24O3 C14H24O4 $C_{65,6} - H_{9,4} - O_{25,0} - M.G._{256}$ 1) Diacetat d. 3,4-Dioxy-1-Methyl-4-Isopropylhexahydrobenzol. Sd. 165-172° (B. 27, 1641). 2) Aethylester d. ζ -Acetoxyl- $\beta\zeta$ -Dimethyl- β -Hepten- η -Carbonsäure. Sd. 250° (C. 1896 [1] 707). 3) Diäthylester d. d-Camphersäure. Sd. 285-287° (A. ch. [2] 64, 152; B. 3, 118; 24, 3408, 3728; 25 [2] 107), — 1, 725. 4) Diäthylester d. 1-Isocamphersäure. Sd. 165° 25-28 (B. 25 [2] 107). — 5) Diäthylester d. i-Camphersäure. Sd. 270—275° (A. 127, 124). — I, 726. 6) Monomenthylester d. Bernsteinsäure. Sm. 620 (A. ch. [6] 7, 483). — III, 467. $C_{14}H_{24}O_5$ $C \cdot 61,7 - H \cdot 8,8 - O \cdot 29,4 - M. G. \cdot 272.$ Diäthylester d. Cineolsäure. Sd. 155°_{11—12} (A. 246, 273). — I, 772.
 Diäthylester d. ζ-Keto-β-Methylheptan-δε-Dicarbonsäure. Sd. 161 bis 163°₂₀ (A. 292, 239; C. 1898 [1] 107; Soc. 73, 49). 3) Diäthylester d. β -Keto- γ -Aethylhexan- γ δ -Dicarbonsäure. bis 285° (B. 29, 979). Sd. 280 4) Diäthylester d. β -Keto- γ -Propylpentan- γ δ -Dicarbonsäure. Sd. 285 bis 290° (B. **29**, 979). 5) Diäthylester d. β -Keto- γ -Isopropylpentan- γ δ -Dicarbonsäure. Sd. 270—275° (B. 29, 981). 6) Diisoamylester d. α -Ketoäthan- $\alpha\beta$ -Dicarbonsäure (D. d. Oxalessigsäure). Šd. 167°₂₃. Na, Cu (A. **277**, 379). C 58,3 — H 8,3 — O 33,4 — M. G. 288.

1) Triäthylester d. Pentan- $\alpha\beta\beta$ -Tricarbonsäure. Sd. 280° u. Zers. (A.

2) Triäthylester d. Pentan-αγγ-Tricarbonsäure. Sd. 192°₃₅ (A. 292, 213).
 3) Triäthylester d. Pentan-αδδ-Tricarbonsäure. Sd. 181—183°₁₂ (G. 26

4) Triäthylester d. Pentan- $\beta\beta\gamma$ -Tricarbonsäure. Sd. 281,6° (B. 22,

214, 58; A. ch. [6] **27**, 259). — I, 812.

[2] 265, 278).

1817; **23**, 647). — **1**, 812.

C14H24O6

C14H04O7

 $C_{14}H_{25}N$

C14H26O

- 5) Triäthylester d. Pentan-βγγ-Tricarbonsäure. Sd. 282,8° (B. 23, 648). **- I.** 812.
- Triäthylester d. β-Methylbutan-βγγ-Tricarbonsäure. Sd. 284° (B. 23). 649). — I, 812.
- Triäthylester d. β-Methylbutan-βγδ-Tricarbonsäure. Sd. 172—174% Soc. 73, 710).
- 8) Triäthylester d. β-Methylbutan-γγδ-Tricarbonsäure (A. 214, 58). I, 812.
- 9) Triäthylester d. β-Methylbutan-γδδ-Tricarbonsäure (Tr. d. α-Carbonpimelinsäure). Sd. 276—278° (A. 220, 274; Soc. 69, 273). — I, 812.
- 10) Triäthylester d. ββ-Dimethylpropan-ααγ-Tricarbonsäure. Sd. 194° (203° (60)) (B. 28, 1131; 29 [2] 660; Soc. 69, 1472).
 11) Heptylester d. αβ-Di[Acetoxyl]propionsäure. Fl. (Soc. 65, 751).
 12) Triacetat d. δζη-Trioxy-β-Methylheptan. Sd. 288—290° (Bl. [3] **13**, 124).
- 13) Triacetat d. $\alpha\beta\gamma$ -Trioxy- δ -Methylheptan. Fl. (J. pr. [2] 40, 413). I, 416.
- 14) Triacetat d. $\beta \delta \varepsilon$ -Trioxy- β -Aethylhexan. Fl. (J. pr. [2] 40, 410). I, 416.
- C 55,2 H 7,9 O 36,8 M. G. 304.

 1) Duleitandibutyrat (Bernfflor, Chim. org. synth. 2, 210). I, 424.

 2) Mannitandibutyrat (A. ch. [3] 47, 319). I, 424.

 3) Diäthylester d. β-Oxy-β-Methylbutan-δ-Carbonsäure-γγ-Dimethylcarbonsäure (D. d. Oxyisobutyryltriacetsäure). Sm. 620 (J. pr. [2] 41, 521). — I, 844.
- 4) Triäthylester d. β -Oxypropanäthyläther- $\alpha\beta\gamma$ -Tricarbonsäure (Tr. d. 4) Triathylester d. β-Oxypropanathylather-αβγ-Tricarbonsaure (11 Citronenäthyläthersäure). Sd. 290° u. Zers. (B. 12, 1654). — I, 839. C 43,8 — H 6,2 — O 50,0 — M. G. 384.
 1) Monacetat d. Maltose (J. 1881, 984). — I, 1061.
 2) Monacetat d. Rohrzucker (Bl. 12, 206). — I, 1069. C 76,4 — H 10,9 — N 12,7 — M. G. 220.
 1) 1,4-Di[Diäthylamido]benzol. Sm. 52°; Sd. 280°. (2 HCl., 2 HgCl., - C14H24O12
- $C_{14}H_{24}N_{2}$
 - (2HCl, 2HgCl₂),

 - 3) 2,5-Dimethyl-3,6-Diisobutyl-1,4-Diazin. Sd. 242—244°. (2 HCl, PtCl₄)
 - (B. 18, 1365). IV, 832. 4) Base (aus Spartein). Sd. 276° (B. 21, 826; M. 16, 605). III, 934. C 81,2 H 12,1 N 6,7 M. G. 207. 1) Base (aus d. Ketonoxim C₁₄H₂₈ON). Sm. 50°; Sd. 165—166°₂₀. HCl (B.
- 29, 1596). IV, 79. C 80,0 H 12,4 O 7,6 M. G. 210. 1) Amylenvaleron. Sd. 279—285° (A. 202, 302). I, 1011. 2) Diönanthylenaldehyd. Sd. 279°. + NaHSO₃ (B. 6, 982; 15, 2803; 16, 210, 1034; Soc. 43, 81; Z. 1870, 76). I, 962. C 74,3 H 11,5 O 14,2 M. G. 226.
- $C_{14}H_{26}O_{2}$ 1) $\gamma \delta$ -Dioxy- $\gamma \delta$ -Di[R-Tetramethenyl]hexan. Sm. 95°; Sd. 220—223°₁₀₀ (Soc. 61, 58). — I, 271.
 - 2) 1,1'-Bi[1-Oxy-R-Heptamethylenyl] (Suberonpinakon). Sm. 74-76° (J. r. 27, 287).
 - 3) ζ-Trideken-ζ-Carbonsäure (Amylhexylakrylsäure). Sd. 270—290°₂₀₀ (B. 15, 2803; 16, 211). I, 524.
 4) Säure (aus Cochenillefett). Ba, Pb (M. 6, 895). I, 524.
 5) Isobutylester d. Campholsäure. Sd. 250° (Bl. [3] 11, 495).
 6) Isobutylester d. Isocampholsäure. Sd. 150—151°₄₀ (Bl. [3] 13, 774).

 - 7) Butyrat d. Menthol. Sd. 230—240° (A. 120, 351). III, 467.
- C 69,4 H 10,7 O 18,8 M. G. 242.

 1) Diäthyläther d. Pinolglykol. Sm. 52—53°; Sd. 210° (A. 253, 260). C14H26O3
 - III, 509. 2) Anhydrid der norm. Oenanthsäure. Sd. 268—271° (255—258°) (A. 90,
 - 102; **185**, 371; B. **25** [2] 637). I, 464.
 - 3) Aethylester d. β-Ketoundekan-γ-Carbonsäure (Aethylester d. Oktylacetessigsäure). Sd. 280–282° (A. 204, 2). I, 612.
 4) Aethylester d. ε-Keto-β-Methyl-δ-Isobutylhexan-δ-Carbonsäure (Aethylester d. Diisobutylacetessigsäure). Sd. 250-253° (B. 7, 501). I, 612.

 $C_{14}H_{26}O_4$

C 65,1 - H 10,1 - O 24,8 - M. G. 258.1) Dodekan-au-Dicarbonsäure. Sm. 123°. K2, Mg, Cu, Ag2 (A. 261, 123; B. **27**, 177). — **I**, 689.

2) isom. Dodekandicarbonsäure (B. 26 [2] 95).

Monomethylester d. Undekan-αλ-Dicarbonsäure (Methylester d. Brassylsäure). Sm. 36°; Sd. 326—328° (J. pr. [2] 48, 73).
 Diäthylester d. Oktan-αβ-Dicarbonsäure (D. d. Sebacinsäure). Sd.

 $307-308^{\circ}$ (J. 1876, 576; Soc. 45, 518). — I, $\hat{6}86$.

5) Diäthylester d. β -Methylheptan- $\alpha \alpha$ -Dicarbonsäure (D. d. sec. Heptylmalonsäure). Sd. 263-265° (B. 13, 1651). - I, 687.

6) Diäthylester d. β-Methylheptan-αη-Dicarbonsäure (D. d. Methylazelaïnsäure). Sd. 212-215°₁₀₀ (Soc. 53, 218). — I, 687.
7) Isobutylester d. d-α-Caproxylbuttersäure. Sd. 270° (Bl. [3] 15, 491).

8) i- β -Methylbutylester d. i- α -[d-Valeroxyl]buttersäure. Sd. 2540 (Bl.

[3] **15**, 494). 9) 1-β-Methylbutylester d. i-α-Valeroxylbuttersäure. Sd. 258° (Bl. [3]

15, 493). 10) 1-β-Methylbutylester d. 1-α-[d-Valeroxyl]buttersäure. Sd. 250° (Bl.

3 15, 494). 11) Diisoamylester d. Bernsteinsäure. Sd. 298—299 785.4 (B. 12, 1699;

Ph. Ch. 1, 382). — I, 656. 12) Oktylester d. 1-α-Acetoxylbuttersäure. Sd. 265—270° (Bl. [3] 15, 489).

13) Diacetat d. Dekylenglykol. Sd. 264-272° u. Zers. (B. 25, 479).

14) Diacetat d. Diamylenglykol (J. 1862, 450). — I, 414.

15) γ -Acetat- α -Isobutyrat d. $\alpha\gamma$ -Dioxy- $\beta\beta\delta$ -Trimethylpentan. Sd. 136 $^{\circ}_{17}$ M. 19, 39).

16) Verbindung (aus Diäthylmalonsäurediäthylester). Sd. 170₁₂ (A. 274, 52). C 61,3 - H 9,5 - O 29,2 - M. G. 274.

1) Diäthylester d. ζ -Oxy- β -Methylheptan- $\delta\zeta$ -Dicarbonsäure. Fl. (Soc. **73**, 56).

2) Dibutylester d. l-α-Oxyäthanäthyläther-αβ-Dicarbonsäure. Sd. 161° 15 (Soc. 67, 973).

C 57,9 — H 8,9 — O 33,1 — M. G. 290. 1) Diäthylester d. $\delta\delta$ -Dioxybutandiäthyläther- $\beta\beta$ -Dicarbonsäure. Sd. 165°₂₆ (Soc. **75**, 19).

C 45,4 - H 7,0 - O 47,6 - M. G. 370. $C_{14}H_{26}O_{11}$

Mannitanhemiacetat (A. 160, 93; A. ch. [5] 6, 113). — I, 417.
 C 43,5 — H 6,7 — O 49,7 — M. G. 386.

 $\mathbf{C}_{14}\mathbf{H}_{26}\mathbf{O}_{12}$ Mannitantetracetat (A. ch. [5] 6, 102).
 C 67,2 — H 10,4 — N 22,4 — M. G. 250.

1) Triisobutylidendiamindihydrocyanid. 2HCl (A. 211, 348; B. 14, 1747).

 $\mathbf{C}_{14}\mathbf{H}_{27}\mathbf{N}$ C 80,4 - H 12,9 - N 6,7 - M. G. 209.

1) Di[3-Methylhexahydrophenyl]amin. Sd. 273°. HNO₃ (A. 289, 342). - IV, 31.

2) Base (aus Poleiöl) oder $C_{15}H_{29}N$. Sd. bei 250°. HCl (A. 272, 123). — IV, 60.

3) Nitril d. Myristinsäure. Sm. 19°; Sd. 226,5°₁₀₀ (86°₀). 2 + HBr (B. 15, 1730; **26**, 2847; **29**, 1318, 1324). — I, 1467. C 79,2 — H 13,2 — O 7,5 — M. G. 212.

1) ζ-Oxymethyl-ζ-Trideken (Tetradekenylalkohol). Sd. 280—283° (B. 15, 2810; 16, 211, 1029; Soc. 43, 68). -1, 255.

2) Methyläther d. 5-Oxy-3-Hexyl-1-Methylhexahydrobenzol. Sd. 135 bis 136°₁₀ (A. 289, 152).

3) Isopropyläther d. 5-Oxy-3-Isobutyl-1-Methylhexahydrobenzol. Sd. 116°₁₀ (A. 289, 151).

4) β -Ketotetradekan (Methyldodekylketon). Sm. 33—34°; Sd. 205—206° $_{100}$ (B. 15, 1708). — I, 1005.

5) Amylvaleron (Keton). Sd. 208—209° (A. **202**, 301). — **I**, 1005. 6) Aldehyd d. Myristinsäure. Sm. 52,5°; Sd. 168—169°₂₂. + NaHSO₃, + HKSO₃ (B. **13**, 1415; **23**, 2361). — **I**, 956.

7) Diönanthaldehyd (A. d. Amylheptylessigsäure). Sm. 29,5°; Sd. 266 bis 268° (Soc. 43, 71). — I, 956.

C14H26O6

 $C_{14}H_{26}O_{5}$

 $\mathbf{C}_{14}\mathbf{H}_{26}\mathbf{N}_{4}$

 $C_{14}H_{28}O$

C14H98O $C_{14}H_{28}O_{2}$

 $C_{14}H_{28}O_3$

 $C_{14}H_{28}O_4$

C14H28O5

 $\mathbf{C}_{14}\mathbf{H}_{28}\mathbf{N}_{2}$

 $\mathbf{C}_{14}\mathbf{H}_{28}\mathbf{Br}_{2}$ $\mathbf{C}_{14}\mathbf{H}_{29}\mathbf{N}$

 $\mathbf{C}_{14}\mathbf{H}_{29}\mathbf{C}1$

 $C_{14}H_{30}O$

 $C_{14}H_{30}O_{2}$

 $C_{14}H_{30}O_{3}$

 $C_{14}H_{30}O_{5}$

8) Verbindung (aus Oenanthol). Sd. 260° u. Zers. (A, 67, 111; Soc. 43, 67). - I, 954. C 73,7 - H 12,3 - O 14,0 - M. G. 228.

1) Myristinsäure. Sm. 53,8°; Sd. 248° (121–122°). K, Mg + 3 H₀O, Ba. Cu, Ag. Lit. bedeutend. - I, 441. 2) Tridekan-ζ-Carbonsäure (Amylheptylessigsäure; Diönanthsäure). Sd.

 $300-310^{\circ}$ (Soc. 43, 74). — I, 441. 3) Säure (aus indischem Geraniumöl).

Sm. 28,2°. Ca, $Cu + H_2O$, Ag(C. 1898 [2] 360).

4) Aethylester d. Laurinsäure. Sd. 269° (A. 66, 306; 92, 278). — I. 441.

5) β-Methylbutylester d. Oktan-α-Carbonsäure. Sd. 262—265°₂₉₇ (Bl. [3] 15, 283).

6) norm. Heptylester d. norm. Heptylsäure. Sd. 270—272° (274,6°) (B. 10, 1602; A. 233, 284). — I, 435.

7) norm. Oktylester d. norm. Capronsäure. Sd. 275,2° (A. 152, 18—19; **233**, 281). — **I**, *433*.

8) norm. Dodekylester d. Essigsäure. Sd. 150,5-151,5° (B. 16, 1719). **I**, 411.

9) Verbindung (aus Terpendihydrochlorid) (J. 1878, 639).

C 68,8 — H 11,5 — O 19,7 — M. G. 244. 1) Oxymyristinsäure. Sm. 51°. K + H₂O, Ca, Ba, Pb, Cu, Ag (B. 14,

2480; 22, 1746). — I, 578. 2) Aethylester d. ε-Oxy-βθ-Dimethylnonan-ε-Carbonsäure. Sd. 262° (A. 142, 9; Z. 1866, 492). — I, 578.

3) Aethylester d. δ -Oxy- $\beta\zeta$ -Dimethylheptanäthyläther- γ -Carbonsäure. Sd. 216—216,5°₇₂₀ (B. **20**, 2336; A. **249**, 64). — I, 578. C 64,6 — H 10,8 — O 24,6 — M. G. 260.

1) Isobutylester d. Dioxyessigdiisobutyläthersäure. Sd. 250-252° (B.

11, 1478). — I, 631. C 60,9 — H 10,1 — O 29,0 — M. G. 276.

Propylester d. Trioxyessigtripropyläthersäure. Sd. 256-257° (A. 254, 33). — I, 735.
 C 75,0 — H 12,5 — N 12,5 — M. G. 224.

1) $\alpha \delta$ -Di[1-Piperidyl] butan. Sd. 290—300°. (2 HCl, PtCl₄) (B. 28, 2218). **IV**, 10.

Dibromtetradekan. Sd. 203-204°₁₅ (B. 17, 1372; 25, 2249). — I, 180.
 C 79,6 — H 13,7 — N 6,6 — M. G. 211.

1) 1-Diäthylmenthylamin. Sd. 240,5—241°. (2HCl, PtCl₄) (J. r. 27, 528). • IV, 42.

1) Chlortetradekan (Tetradekylchlorid). Sd. 280° (J. 1863, 530). — I, 157. C 78,5 — H 14,0 — O 7,5 — M. G. 214.

1) α-Oxytetradekan (norm. Tetradekylalkohol). Sm. 38°; Sd. 167°₁₅ (B. 16,

1720; **23**, 2360). — **I**, 240.

2) isom. Oxytetradekan (Amylheptyläthylalkohol). Sd. 270-275° (B. 15, 2811; Soc. 43, 76). — I, 240.

3) norm. Heptyläther d. α-Oxyheptan (norm. Heptyläther). Sd. 261,90 (A. **243**, 9). — **I**, 300. C 73,0 — H 13,0 — O 13,9 — M. G. 230.

1) εζ-Dioxy-βεζι-Tetramethyldekan (Diisobutylpinakon). Sm. 30°; Sd. 240 bis 260° (268°) (A. 190, 311; Soc. 39, 468). — I, 267.

2) δε-Dioxy-δε-Dipropyloktan (Butyronpinakon). Sm. 68°; Sd. 260° (A. **161**, 215). — **I**, 267.

C 68,3 — H 12,2 — O 19,5 — M. G. 246. 1) Propyldiisoamyläther d. Trioxymethan (Orthoameisensäurepropyldisoamyläther). Sd. 254—255 (B. 16, 1647). — I, 312.

2) Diisobutylisoamyläther d. Trioxymethan (Orthoameisensäurediiso-

butylisoamyläther). Sd. 230—235° (B. 16, 1647). — I, 312.

3) Diisoamyläther d. $\alpha'\alpha^2$ -Dioxydiäthyläther. Sd. $226-227^{\circ}$ (A. 218, 30). — I, *924*.

C 60.4 - H 10.8 - O 28.8 - M. G. 278.

 Verbindung (aus Majoranol) (A. 31, 69). — III, 543.
 C 74,3 — H 13,3 — N 12,4 — M. G. 226.
 Myristinamidin. HCl, (2 HCl, PtCl₄) (B. 26, 2842). $\mathbf{C}_{14}\mathbf{H}_{30}\mathbf{N}_{2}$

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RICHTER, Lex. d. Kohlenstoffverb.

1) Diheptylsulfid. Sd. 298° (J. 1887, 1280). — I, 363. $C_{14}H_{30}S$

1) Verbindung (aus Amylenchlorosulfid). Sd. 240-250° (A. 121, 121). $C_{14}H_{30}S_{2}$ **– I**, 118.

1) Dikohlenhexamerkaptid (J. pr. [2] 15, 213). — I, 888. C14 H30 S6

C 78,9 — H 14,4 — N 6,6 — M. G. 213. $\mathbf{C}_{14}\mathbf{H}_{31}\mathbf{N}$ 1) α-Amidotetradekan. Sm. 37°; Sd. 162°₁₅. HCl, (2HCl, PtCl₄) (B. 23, 2361). — I, 1138.

1) Oktochlor-9,10-Anthrachinon. Sm. 210-235° (B. 17, 1170). - III, 408. C14O2Cl8

C₁₄-Gruppe mit drei Elementen.

 $C_{14}H_3O_2Cl_5$ 1) ?-Pentachlor-9,10-Anthrachinon. subl. (B. 11, 181). — III, 408. $C_{14}H_3O_2Br_5$ 1) ?-Pentabrom-9,10-Anthrachinon. subl. (B. 11, 183). — III, 409. $C_{14}H_4O_2Cl_4$ 1) 1,2,3,4-Tetrachlor-9,10-Anthrachinon. Sm. 1910 (A. 238, 344).

III, 408. 2) isom. ?-Tetrachlor-9,10-Anthrachinon. Sm. 320-330° (B. 11, 180).

- III, 408. C₁₄H₄O₂Br₄ 1) ?-Tetrabrom-9,10-Anthrachinon. Sm. noch nicht bei 370° (B. 10,

1213; **19**, 1107). — **III**, 409. 2) P-Tetrabrom-9,10-Anthrachinon. Sm. 295-300° (B. 11, 182). III, 409.

C₁₄H₄O₄Cl₄ 1) ?-Tetrachlor-1, 2-Dioxy-9, 10-Anthrachinon. Sm. bei 260° (B. 11, 189). - III, 422.

1) P-Tetrabrom-1, 2-Dioxy-9, 10-Anthrachinon (B. 11, 191). — III, 423. 2) P-Tetrabrom-2, 6-Dioxy-9, 10-Anthrachinon (B. 9, 382). — III, 430. $C_{14}H_4O_4Br_4$ 3) ?-Tetrabrom-2, 7-Dioxy-9, 10-Anthrachinon (B. 9, 382). — III, 431.

1) Oktobromuvinon (B. **20**, 1087). — **III**, 709. C 43,3 — H 1,0 — O 41,2 — N 14,4 — M. G. **3**88. $C_{14}H_4O_4Br_8$ $C_{14}H_4O_{10}N_4$

Aloëtinsäure + H₂O (Tetranitroanthrachinon). K, Ba, Ag (A. 39, 1;
 286; 134, 236; J. 1849, 330). — III, 617.
 40,0 — H 1,0 — O 45,7 — N 13,3 — M. G. 420.

 $\mathbf{C}_{14}\mathbf{H}_4\mathbf{O}_{12}\mathbf{N}_4$

1) ?-Tetranitro-1,5-Dioxy-9,10-Anthrachinon. Na_2+4H_2O , $K+H_2O$, $Mg + 6H_{2}O$ (B. 12, 188). — III, 427.

2) ?-Tetranitro-1, 6-Dioxy-9, 10-Anthrachinon (Chrysaminsäure). Salze meist bekannt. $+2\,\mathrm{C}_{10}\mathrm{H}_8$ (J. 1847/48, 541; 1850, 164; 1872, 4 A. 39, 5, 21; 142, 86; 183, 193; B. 12, 187; 15, 1863). — III, 427.

3) P-Tetranitro-2, 6-Dioxy-9, 10-Anthrachinon. Explod. bei 307,60

+ 2(3 u. 4) NH₃, Ag₂ (B. 8, 1487). — III, 430. 4) P-Tetranitro-2,7-Dioxy-9,10-Anthrachinon. Sm. noch nicht bei 300°. Na_2 , $K_2 + 2H_2O$, Ag_2 (B. 15, 1045). — III, 431.

Na₂, $K_2 + 2H_2O$, Ag₂ (B. 15, 1045). — III, 43I. $C_{14}H_4Cl_2Br_4$ 1) Diehlortetrabromanthracen (B. 19, 1107). — II, 264. $C_{14}H_5O_2Cl_3$ 1) ?-Trichlor-9,10-Anthrachinon. Sm. 284—290° (B. 11, 180). — III, 408. $C_{14}H_5O_2Br_3$ 1) ?-Tribrom-9,10-Anthrachinon. Sm. 186° (B. 11, 181). — III, 409. 2) ?-Tribrom-9,10-Anthrachinon. Sm. 365° (B. 10, 1213). — III, 409. 2) ?-Tribrom-9,10-Anthrachinon. Sm. 365° (B. 10, 1213). — III, 409. C₁₄H₅O₂Br₅ 1) Pentabromoxytoliden. Sm. 206° (A. 153, 127). — III, 297. C₁₄H₅O₅Br₅ 1) ?-Tribrom-1,2,6-Trioxy-9,10-Anthrachinon. Sm. 284° u. Zers. (B. 10, 123).

10, 1823). — III, 435.

C'40,1 - H'1,2 - O'42,0 - N'16,7 - M.G. 419. $C_{14}H_5O_{11}N_5$

1) ?-Tetranitro-6[oder 1]-Amido-1[oder 6]-Oxy-9,10-Anthrachinon (Chrysammidsäure). K, Ba, Pb (A. 65, 236; A. Spl. 7, 311; J. 1847/48, 541). — III, 428.

C14H5Cl3So 1) Trichlortolallyldisulfid (A. 167, 193). — III, 226.

 $\mathbf{C}_{14}\mathbf{H}_{6}\mathbf{O}_{2}\mathbf{Cl}_{2}$ 1) 1,2-Dichlor-9,10-Anthrachinon. Sm. 161° (A. 238, 348). — III, 408. 2) isom. P-Dichlor-9,10-Anthrachinon. Sm. 205° (A. Spl. 7, 290; B. 11, 179; **19**, 1109). — **III**, 408.

3) P-Dichlor-9,10-Phenanthrenchinon. Sm. 2090 (Soc. 65, 327). C₁₄H₆O₂Cl₈ 1) Dimethyläther d. Oktochlor-?-Dioxybiphenyl. Sm. 226° (B. 16, 884).

– II, 990.

 $C_{14}H_6O_2Br_2$ 1) 1,2[?]-Dibrom-9,10-Anthrachinon. Sm. 265° (B. 19, 1107). — III, 409. 2) isom. ?-Dibrom-9,10-Anthrachinon. Sm. 236,50 (1450) (A. Spl. 7, 288; B. 11, 181; Soc. 37, 555). — III, 409.

- C₁₄H₂O₂Br₂ 3) isom. ?-Dibrom-9,10-Anthrachinon. Sin. 174-175° (A. Spl. 7, 288; Soc. 37, 555). — III, 409.
 - 4) P-Dibrom-9,10-Phenanthrenchinon. Sm. 230° (A. 167, 185). III, 441. 5) Verbindung (aus 2,4'-Dimethylbiphenyl). Sm. 166° (Soc. 47, 591). —
- $C_{14}H_6O_2Br_4$ 1) Tetrabromoxytoliden. Sm. 150° (A. 153, 127). III, 297.
- 1) 3,4,5,6-Tetrachlor-2-Benzoylbenzol-1-Carbonsäure. Sm. C14H6O8Cl4 $Na + 4H_2O$, $K + 1^{1/2}H_2O$, $Cu + 2H_2O$ (A. 238, 338). — II, 1704.
 - 2) Anhydrid d. 3,5-Dichlor-2-Oxybenzol-1-Carbonsäure. Sm. 186 bis 187º (B. 30, 223).
- $C_{14}H_6O_3Br_2$ 1) 1,3-Dibrom-2-Oxy-9,10-Anthrachinon. Sm. 207—208° (A. 202, 136). - III, 419.
- C 63.2 H 2.2 O 24.0 N 10.6 M. G. 266. $\mathbf{C}_{14}\mathbf{H}_{6}\mathbf{O}_{4}\mathbf{N}_{2}$ 1) Diimid d. Naphtalin-1, 4, 5, 8-Tetracarbonsäure (A. 240, 188). —
- II, 2082. 1) P-Dichlor-1, 2-Dioxy-9, 10-Anthrachinon. Sm. 208-210° (B. 11, 188). C₁₄H₆O₄Cl₉
- III, 422. C₁₄H₆O₄Br₂ 1) ?-Dibrom-1, 2-Dioxy-9, 10-Anthrachinon. Sm. 168—170° (B. 11, 190).
- · III, 423.
 - 2) 2,4-Dibrom-1,3-Dioxy-9,10-Anthrachinon. Sm. 227—230°. (NH₄)₂ (B. 9, 1205; 28, 315). — III, 425.
 - 3) Verbindung (aus 2,4'-Dimethylbiphenyl). Sm. 197-198° (Soc. 47, 591). **— II**, 235.
- 1) Anhydro-1-Oxy-9,10-Anthrachinon-2-Sulfonsäure. Zers. unter 100° C14H6O5S (B. 17, 900). — III, 420. C 56,4 — H 2,0 — O 32,2 — N 9,4 — M. G. 298. C14H6O6N2
 - 1) 1,5-Dinitro-9,10-Anthrachinon. Sm. oberh. 300° (B. 16, 364; 29, 2935). - III. 411.
 - 2) P-Dinitro-9,10-Anthrachinon. Sm. 256-260° (A. 160, 145; 166, 154;
 - B. 3, 905; 15, 1801; 16, 54; J. pr. [2] 9, 261; [2] 19, 211). III, 410.
 3) isom. ?-Dinitro-9,10-Anthrachinon. Sm. 280° (Z. 1869, 114; J. pr. [2] 9, 261; A. 122, 302). — III, 410.
 - 4) 2,7-Dinitro-9,10-Phenanthrenchinon. Sm. 290° (A. 167, 144; 203, 108; B. 9, 548; 10, 324; 16, 2346). — III, 441. 5) isom. ?-Dinitro-9,10-Phenanthrenchinon (A. 203, 107). — III, 441.
- C 47.5 H 1.7 O 27.1 N 23.7 M. G. 354. $\mathbf{C}_{14}\mathbf{H}_{6}\mathbf{O}_{6}\mathbf{N}_{6}$
- 1) Verbindung (aus ?-Diamido-9, 10-Anthrachinon) (A. 160, 153). III, 414. $\mathbf{C}_{14}\mathbf{H}_{6}\mathbf{O}_{6}\mathbf{Cl}_{4}$ 1) Diacetat d. 2,3,7,8-Tetrachlor-5,6-Dioxy-1,4-Diketo-1,4-Dihydronaphtalin. Sm. 244° (A. 286, 48). — III, 387. C 53,5 — H 1,9 — O 35,7 — N 8,9 — M. G. 314.
- $\mathbf{C}_{14}\mathbf{H}_{6}\mathbf{O}_{7}\mathbf{N}_{2}$
- 1) 1,3-Dinitro-2-Oxy-9,10-Anthrachinon. Sm. 268-270°. K, Mg + 5H₂O, Cu + 2H₂O, Ag (B. 14, 464; 15, 692). III, 419.
 1) Sulfonsäure d. Verb. C₁₄H₆O₄. Na (Soc. 53, 841). III, 415. C 50,9 H 1,8 O 38,8 N 8,5 M. G. 330. C14H6O7S
- $\mathbf{C}_{14}\mathbf{H}_6\mathbf{O}_8\mathbf{N}_2$ 1) ?-Dinitro-1,3-Dioxy-9,10-Anthrachinon. Sm. 249-250°. NH₄, Ba (B. 9, 1205). — III, 425.
 - 2) isom. P-Dinitro-1, 3-Dioxy-9, 10-Anthrachinon. Sm. 249° (B. 9, 1206). - III, 426.
- 3) **4,5-Dinitro-1,8-Dioxy-9,10-Anthrachinon** (C. **1898** [2] 949). C 46,9 H 1,7 O 35,7 N 15,6 M. G. 358. C14HONN
- 1) ?-Trinitroakridin-5-Carbonsäure (A. 224, 40). IV, 422.
 - 2) 2,4,6-Trinitrophenylimid d. Benzol-1,2-Dicarbonsäure. Sm. 2590 (R. 11, 275). — II, 1804.
- $\dot{\mathbf{C}}$ 44,9 $\dot{\mathbf{H}}$ 1,6 $\dot{\mathbf{-}}$ O 38,5 N 15,0 M. G. 374. $\mathbf{C}_{14}\mathbf{H}_{6}\mathbf{O}_{9}\mathbf{N}_{4}$ 1) ?-Trinitro-4-Oxyphenylimid d. Benzol-1, 2-Dicarbonsäure. Sm. 210°
- (G. 16, 253). II, 1809. C 32.9 H 1.2 O 43.9 N 22.0 M. G. 510. $\mathbf{C}_{14}\mathbf{H}_{6}\mathbf{O}_{14}\mathbf{N}_{8}$ 1) s-Di[2,4,6-Trinitrophenylamid] d. Oxalsäure. Sm. 256—260° u. Zers. (300°) (Am. 9, 356; Soc. 61, 462; 63, 1067). — II, 410.
- $\mathbf{C_{14}H_6Cl_2Br_2}$ 1) Dichlordibromanthracen. Sm. $251-252^{\circ}$ (B. 10, 377). II, 264. $\mathbf{C_{14}H_6Cl_2Br_6}$ 1) Dichlordibromanthracentetrabromid. Sm. 212° (B. 19, 1107). II, 264.
- C₁₄H₆Br₂S₂ 1) Dibromtolallyldisulfid. Sm. noch nicht bei 250° (A. 167, 190). III, 226.

C 82.0 - H 3.4 - O 7.8 - N 6.8 - M. G. 205.C, H,ON 1) Nitril d. 9-Ketofluoren-1-Carbonsäure. Sm. 244° (A. 284, 314). -II, 1718.

1) Chlorid d. 9,9-Dichlorfluoren-4-Carbonsäure. Sm. 95º (A. 247, 279). C14H7OCl3 **II**, 1719.

C 76,0 — H 3,2 — O 14,5 — N 6,3 — M. G. 221. 1) Alizarinimid. + NH₃ (A. 183, 209). — III, 424. - N 6,3 - M. G. 221. $\mathbf{C}_{14}\mathbf{H}_7\mathbf{O}_2\mathbf{N}$

1) 3-Chlor-9,10-Anthrachinon. Sm. 204° (A. 233, 240). — III, 408. $\mathbf{C}_{14}\mathbf{H}_7\mathbf{O}_2\mathbf{C}$ 2) Chlorid d. 9-Ketofluoren-4-Carbonsäure. Sm. 128° (B. 13, 1304; A. 247, 279). — II, 1719.

1) Trichloroxytoliden. Sm. 87° (A. 153, 128). — III, 296. C14H7O2Cl3

1) 1-Brom-9,10-Anthrachinon. Sm. 188° (B. 12, 2127). — III, 409. 2) 2-Brom-9,10-Anthrachinon. Sm. 187° (A. Spl. 7, 290). — III, 4 $C_{14}H_7O_9Br$

1) Acetat d. Methyl-?-Pentabrom-4-Oxy-2-Naphtylketon. Sm. 110 bis $\mathbf{C}_{14}\mathbf{H}_7\mathbf{O}_8\mathbf{Br}_5$ $111,5^{\circ}$ (A. **275**, 295). — III, 175.

C 66,4 - H 2,8 - O 25,3 - N 5,5 - M. G. 253. $\mathbf{C}_{14}\mathbf{H}_7\mathbf{O}_4\mathbf{N}$

1) 1-Nitro-9,10-Anthrachinon. Sm. 220 (228°; 230°) (B. 12, 1570; 14, 978; 15, 1786; 16, 54; 30, 1117; A. 166, 147). — III, 410.

2) 4 - Nitro - 9, 10 - Phenanthrenchinon. Sm. 257° (B. 9, 1404). — III, 441.

3) isom. ?-Nitro-9,10-Phenanthrenchinon. Sm. 215—220° (B. 12, 1156). - III. 441.

4) isom. ?-Nitro-9,10-Phenanthrenchinon. Sm. 260-266° (B. 12, 1157). **– III**, 441.

5) isom. P-Nitro-9,10-Phenanthrenchinon. Sm. 263° u. Zers. (B. 12, 1158). — III, 441.

6) isom. ?-Nitro-9,10-Phenanthrenchinon. Sm. 281—282° (J. pr. [2] 28, 172). — III, 441.

 $C_{14}H_7O_4C1$ 1) ?-Chlor-1,2-Dioxy-9,10-Anthrachinon (Chloralizarin). Sm. 244—2480 (B. 11, 187). — III, 422.

1) ?-Brom-1,2-Dioxy-9,10-Anthrachinon (J. 1874, 485; A. 130, 343). — C14H7O4Br III, 422.

2) isom. P-Brom-1, 2-Dioxy-9, 10-Anthrachinon. Sm. oberh. 280° (B. 11,

190). — III, 422. C 62,4 — H 2,6 — O 29,7 — N 5,2 — M. G. 269. $\mathbf{C}_{14}\mathbf{H}_7\mathbf{O}_5\mathbf{N}$

1) P-Nitro-9-Ketofluoren-1-Carbonsäure. Sm. 245-246°. Ba + 4H₂O (A. 200, 8). — II, 1719.

2) a-Phenylenpyridinketondicarbonsäure. Sm. 264°. Ag₂ (B. 23, 1236). - IV, 385.

3) β -Phenylenpyridinketondicarbonsäure. Sm. 284°. Ag₂ (B. 23, 1241).

 $\mathbf{C}_{14}\mathbf{H}_7\mathbf{O}_5\mathbf{N}_3$

- IV, 385. C 56,6 - H 2,4 - O 26,9 - N 14,1 - M. G. 297. 1) α-Diazoanthrachinonnitrat (A. 166, 150). - III, 413. 1) ?-Brom-1,2,4-Trioxy-9,10-Anthrachinon. Sm. 276° (B. 10, 554, 615, $C_{14}H_7O_5Br$ 1619). — III, 434.

C 58,9 — H 2,4 — O 33,7 — N 4,9 — M G 285. $\mathbf{C}_{14}\mathbf{H}_7\mathbf{O}_6\mathbf{N}$

1) 3-Nitro-1,2-Dioxy-9,10-Anthrachinon. Sm. 2440 u. Zers. (J. 1878,

1190; Bl. 26, 63; B. 10, 1760; 12, 585; 15, 692). — III, 423. 2) 4-Nitro-1,2-Dioxy-9,10-Anthrachinon. Sm. 289° u. Zers. (J. 1877, 586; A. 201, 353; B. 12, 587; 24, 1612). — III, 423.

C 53,7 — H 2,2 — O 30,7 — N 13,4 — M. G. 313. C14H7O6N3

1) 1,5-Dinitro-9-Oximido-10-Keto-9,10-Dihydroanthracen. Sm. 2530 u. Zers. (B. 26, 2457). — III, 411.

C 55.8 - H 2.3 - O 37.2 - N 4.6 - M. G. 301. $\mathbf{C}_{14}\mathbf{H}_7\mathbf{O}_7\mathbf{N}$

1) α-4-Nitro-1,2,3-Trioxy-9,10-Anthrachinon. Sm. 224° u. Zers. (M. 18, 290).

2) β -4-Nitro-1, 2, 3-Trioxy-9, 10-Anthrachinon (M. 18, 291). 3) Pseudonitro-1, 2, 3-Trioxy-9, 10-Anthrachinon (M. 18, 285).

4) ?-Nitro-1,2,4-Trioxy-9,10-Anthrachinon (Nitropurpurin) (B. 24, 1617). - III, 434.

5) Pseudonitropurpurin (B. 24, 1615). — III, 434.

6) ?-Nitro-1, 2, ?-Trioxy-9, 10-Anthrachinon. K₂ (Z. 1868, 264). — III, 423.

- C 53.0 H 2.2 O 40.4 N 4.4 M. G. 317. $C_{14}H_7O_8N$
 - 1) 3-Nitro-1, 2, 5, 8-Tetraoxy-9, 10-Anthrachinon (J. pr. [2] 43, 249). III, 438.
- C 45,0 H 1,9 O 34,3 N 18,8 M. G. 373. $C_{14}H_7O_8N_5$
 - 1) 2,4-Diketo-1-[2,4,6-Trinitrophenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin (J. pr. [2] 49, 319).
 - 2) Tetranitro-3-Methyl- β -Naphtochinolin. Sm. 277° (B. 22, 256). —
- $\mathbf{C}_{14}\mathbf{H}_{7}\mathbf{O}_{10}\mathbf{N}_{5}$
- IV, 412. C 41,5 H 1,7 O 39,5 N 17,3 M. G. 405. 1) Verbindung (aus Azoorcin). Zers. bei 160° (B. 7, 441). II, 965. C 42,7 H 1,8 O 44,8 N 10,7 M. G. 393.
- $C_{14}H_7O_{11}N_3$
 - 1) Monomethyläther d. ?-Trinitro-1, 3, 7-Trioxyxanthon (Trinitrogentisin) (A. **62**, 126). — III, 210.
- 1) ?-Tetrabrom-2-Phenylindoldibromid. Sm. 259-260° (A. 272, 206). C14H7NBr6 IV, 413.
- $C_{14}H_7N_3Br_2$ 1) Dibromindophenazin. Sm. 275° (B. 29, 202). IV, 1189.
- C₁₄H₇N₄Br₅ 1) Azimid d. ?-Tribrom-2-[2-Amido-4-Methylphenyl] benzimidazoldi-
- C₁₄H₇Cl₂Br
- bromid. Sm. 120—130° u. Zers. (B. 31, 321). IV, 1293.

 1) Dichlorbromanthracen. Sm. 168° (B. 10, 376—377). II, 264.

 1) P-Tribromphenylbithiënyl. Sm. 320° (Bl. [3] 5, 278). III, 769.

 C 76,4 H 3,6 O 7,3 N 12,7 M. G. 220. $\mathbf{C}_{14}\mathbf{H}_{7}\mathbf{Br}_{3}^{*}\mathbf{S}_{2}$ $C_{14}H_8ON_2$
- 1) Anhydro-9,10-Dioximido-9,10-Dihydrophenanthren. Sm. 181° (B. **22**, 1993). — III, 446.
- C 67.7 H 3.2 O 6.4 N 22.6 M. G. 248. $\mathbf{C}_{14}\mathbf{H}_8\mathbf{ON}_4$
 - 1) Nitril d. Azoxybenzol-2,2'-Dicarbonsäure. Sm. 194-195° (B. 28, 157). — IV, 1343.
- C14H8OCl2 1) 9,9-Dichlor-10-Keto-9,10-Dihydroanthracen. Sm. 132-133° (B. 10, 1479; **21**, 1176). — III, 408.
 - 2) 9,9-Dichlor-10-Keto-9,10-Dihydrophenanthren (Dichlorphenanthron). Sm. 165° (J. pr. [2] 28, 169; B. 16, 331). — III, 442.
- C14H8OBr. 1) 9,9-Dibrom-10-Keto-9,10-Dihydroanthracen. Sm. 157° (B. 20, 2436; 21, 1177). — III, 408. C 71,2 — H 3,4 — O 13,6 — N 11,8 — M. G. 236. l) 4,4'-Biphenylendiisocyanat. Sm. 122° (Soc. 49, 255). — IV, 964. $C_{14}H_8O_9N_9$
- - 2) Verbindung (aus d. 4,4'-Diamidobiphenyl-?-Tetracarbonsäurebianhydrid). Sm. 283° (B. 16, 1762). II, 2085. C 63,6 H 3,0 O 12,1 N 21,2 M. G. 264.
- $\mathbf{C}_{14}\mathbf{H}_{8}\mathbf{O}_{2}\mathbf{N}_{4}$ 1) Nitroindophenazin. Sm. noch nicht bei 305° (B. 29, 202). — IV, 1189.
- 2) Naphtalloxazin. Zers. oberh. 300° (B. 24, 2366). IV, 1020. 1) $\alpha\beta$ -Diketo- $\alpha\beta$ -Di[3-Chlorphenyl]äthan (m-Dichlorbenzil). Sm. 121 bis $\mathbf{C}_{14}\mathbf{H}_8\mathbf{O}_2\mathbf{Cl}_2$
 - 122°. III, 281. 2) Dichlorid d. Biphenyl-2, 2'-Dicarbonsäure. Sm. 93-94° (A. 247, 268). — II, 1884.
- C₁₄H₈O₂Cl₄ 1) 3,4,5,6-Tetrachlor-1-Benzylbenzol-2-Carbonsäure. Sm. 156—157°. $\begin{array}{c} {\rm Na+4H_2O,\ Ag\ (\emph{A}.\ 238,\ 343).-II,\ 1466.} \\ {\rm C_{14}H_8O_2Br_2\ \ 1)\ Dibromoxytoliden.\ \ Sm.\ 121^{\circ}\ (\emph{A}.\ 153,\ 125).-III,\ 296.} \end{array}$
- - 2) Anhydrid d. ?-Dibrom $\alpha\beta$ -Di[2-Oxyphenyl] $\alpha\beta$ -Dioxyäthan. bei 235° (B. 24, 3177). — II, 1118.
 - 3) Anhydrid d. isom. ?-Dibrom- $\alpha\beta$ -Di[2-Oxyphenyl]- $\alpha\beta$ -Dioxyäthan. subl. bei 245° (B. **24**, 3177). — II, 1118. C 60,0 — H 2,9 — O 17,1 — N 20,0 — M. G. 280.
- $\mathbf{C}_{14}\mathbf{H}_8\mathbf{O}_8\mathbf{N}_4$
 - 1) ?-Nitro-3-Oxy-1, 5-2, 3-Diphenylen-2, 3-Dihydro-1, 2, 4-Triazol. Sm. noch nicht bei 320° (B. 28, 155). — IV, 1292.
- $\mathbf{C}_{14}\mathbf{H}_8\mathbf{O}_3\mathbf{Cl}_2$ 1) ?-Dichlor-2-Benzoylbenzol-1-Carbonsäure. Sm. 150° (A. 238, 356). II. 1704.
- C₁₄H₈O₃Br₂ 1) ?-Dibrom-9-Oxyfluoren-9-Carbonsäure. Sm. 225° (B. 10, 537). II, 1706.
 - 2) Anhydrid d. 4-Brombenzol-I-Carbonsäure. Sm. 212—2130 (218—2200)
 - (Am. 9, 85; A. 291, 89 Anm.). II, 1223. 3) α,2-Lakton d. ?-Dibrom-2,4-Dioxydiphenylmethan-α-Carbonsäure (B. 31, 2828).
 - 4) α,2'-Lakton d. ?-Dibrom-4-Oxydiphenylmethan-2'-Carbonsäure. Sm. 223—224° (B. 27, 2636). — II, 1881.
 - 5) Dibromdisalicylaldehyd. Sm. 165-166° (B. 22, 1153). III, 78.

 $\mathbf{C}_{14}\mathbf{H}_8\mathbf{O}_4\mathbf{N}_2$

 $\mathbf{C}_{14}\mathbf{H}_{8}\mathbf{O}_{4}\mathbf{N}_{4}$

 $\mathbf{C}_{14}\mathbf{H}_8\mathbf{O}_4\mathbf{N}_6$

- II, 272.

III, 411.

28, 1120). — II, 1804.

27, 3430; **28**, 1119). — **II**, 1804.

1) Dinitrophenanthren. Sm. 150-160° (A. 167, 156). - II, 269. 2) 10-Nitroso-10-Nitro-9-Keto-9, 10-Dihydroanthracen (Nitrosonitroanthron). Sm. 263° (288—290°) (B. 14, 470; Soc. 59, 637). — II, 261. 3) Diimidodioxy-9,10-Anthrachinon (A. 160, 157; B. 4, 231). — III, 410. 4) $\alpha\beta$ -Di[4-Nitrophenyl]äthin (Dinitrotolan). Sm. 288° (J. pr. [2] 34, 346).

5) 1,4- $[\beta\beta]$ Naphtodiazin-2,3-Dicarbonsäure. Sm. 192° (B. 27, 765). — IV, 1021. 6) 2-Nitrophenylimid d. Benzol-1, 2-Dicarbonsäure. Sm. 200-203° (B.

7) 3-Nitrophenylimid d. Benzol-1,2-Dicarbonsäure. Sm. 242—243° (236—236,5°) (B. 11, 2261; 27, 3430; 28, 941, 1119). — II, 1804. 8) 4-Nitrophenylimid d. Benzol-1,2-Dicarbonsäure. Sm. 262—264° (B.

9) 4-Nitrophenylisoimid d. Benzol-1, 2-Dicarbonsäure? Sm. 190-190,50 (B. 28, 940). — II, 1804. 10) Verbindung (aus ?-Dinitro-9, 10-Anthrachinon) (J. pr. [2] 9, 265). —

1) Verbindung (aus ?-Diamido-9, 10-Anthrachinon) (A. 160, 152). — III, 414. C 51,8 — H 2,5 — O 19,7 — N 25,9 — M. G. 324.

C 62,7 - H 3,0 - O 23,9 - N 10,4 - M. G. 268.

 $C_{56,7} - H_{2,7} - O_{21,6} - N_{18,9} - M.G. 296.$

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1) 3,6-Di[4-Nitrophenyl]-1,2,4,5-Tetrazin. Sm. 218° (A. 298, 53).
                2) 4,4'-Bidiazoimidobiphenyl-3,3'-Dicarbonsäure. Zers. bei 165' (B.
                   31, 2578). — IV, 1557.
                1) 4,4'-Dichlorbiphenyl-3,3'-Dicarbonsäure. Sm. 267-268° (B. 21, 1098).
 \mathbf{C}_{14}\mathbf{H}_{8}\mathbf{O}_{4}\mathbf{Cl}_{2}
                    — II, 1887.
                1) Diacetat d. 1,3,6,8-Tetrachlor-2,7-Dioxynaphtalin. Sm. 196° (B.
 \mathbf{C}_{14}\mathbf{H}_{8}\mathbf{O}_{4}\mathbf{Cl}_{4}
                   23, 526). — II, 985.
C<sub>14</sub>H<sub>8</sub>O<sub>4</sub>Br<sub>2</sub> 1) 7-Methyläther d.?-Dibrom-1, 7-Dioxyxanthon. Sm. 196° (B. 27, 1995).
                2) ?-Dibrombiphenyl-2,2'-Dicarbonsäure. Sm. 245°. Ca + 3H<sub>2</sub>O, Pb,
                   Ag_2 (B. 19, 3153; M. 16, 819). — II, 1885.
                3) isom. P-Dibrombiphenyl-2,2'-Dicarbonsäure. Sm. 295—296°. Ca, Ba (B. 7, 1091). — II, 1885.
                4) 2-[P-Dibrom-4-Oxybenzoyl]benzol-1-Carbonsäure. Sm. 246-2480 u.
                   Zers. (B. 26, 2261). — II, 1887.
                5) \alpha, 2'-Lakton d. \alpha-Oxy-\alpha-Phenyl-\alpha-[?-Dibrom-2,4(?)-Dioxyphenyl]-
                   methan-2'-Dicarbonsäure. Sm. 197,5-199,5° u. Zers. (B. 27, 2638).
                   II, 1971.
\mathbf{C}_{14}\mathbf{H}_8\mathbf{O}_4\mathbf{J}_2
                1) ?-Dijodbiphenyl-2,2'-Dicarbonsäure. Sm. 262°. Ag<sub>2</sub> (A. 196, 21). —
                   II, 1885.
C 59,2 — H 2,8 — O 28,2 — N 9,8 — M. G. 284.
\mathbf{C}_{14}\mathbf{H}_8\mathbf{O}_5\mathbf{N}_2
                1) 10,10-Dinitro-9-Keto-9,10-Dihydroanthracen (Dinitroanthron).
                   116° u. Zers. (B. 14, 472). — II, 262.
               2) 5-Nitro-1-Hydroxylamido-9,10-Anthrachinon (B. 29, 2941).
               3) 8-Nitro-1-Hydroxylamido-9,10-Anthrachinon (B. 29, 2942).
                   C 53,8 — H 2,6 — O 25,6 — N 17,9 — M. G. 312.
\mathbf{C}_{14}\mathbf{H}_{8}\mathbf{O}_{5}\mathbf{N}_{4}
               1) 3,5-Di[3-Nitrophenyl]-1,2,4-Oxdiazol. Sm. 168° (138°) (B. 22, 3158;
                   28, 2231). — II, 1208.
               2) 3,4-Di[?-Nitrophenyl]-1,2,5-Oxdiazol (Dinitrodiphenylfurazan).
                  218—220° (A. 264, 182). — III, 292.
                                                                                                    Sm.
C14H8O5Bro
               1) 2-[3,5-Dibrom-2,4-Dioxybenzoyl]benzol-1-Carbonsäure.
                  (A. 183, 56; B. 28, 315; 29, 2624). — II, 1972.
               1) Anhydrid d. 2-Jodosobenzol-1-Carbonsäure.
\mathbf{C}_{14}\mathbf{H}_{8}\mathbf{O}_{5}\mathbf{J}_{2}
                                                                              Sm. 219—220° (B. 26,
                   1730). — II, 1228.
               1) 9,10-Anthrachinon-2-Sulfonsäure. Na+H_2O, Ca+2H_2O, Ba+H_2O,
\mathbf{C}_{14}\mathbf{H}_{8}\mathbf{O}_{5}\mathbf{S}
                  Pb (A. 160, 130; 212, 44; B. 7, 805; 12, 1293, 1597; 16, 907; 18, 1723; 
J. pr. [2] 19, 218). — III, 414.
C 56,0 — H 2,7 — O 32,0 — N 9,3 — M. G. 300.
\mathbf{C}_{14}\mathbf{H}_8\mathbf{O}_6\mathbf{N}_2
               1) ?-Dinitro-\alpha\beta-Diketo-\alpha\beta-Diphenyläthan (Dinitrobenzil). Sm. 147° (J. r.
                  4, 278; B. 29, 2124). — III, 282.
               2) ?-Dinitro-\alpha\beta-Diketo-\alpha\beta-Diphenyläthan (Dinitrobenzil). Sm. 131° (J. r.
               4, 278; B. 29, 2124). — III, 282.
3) Isodinitrobenzil. Sm. 205° u. ger. Zers. (J. r. 13, 29). — III, 282.
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C 51,2 - H 2,4 - O 29,3 - N 17,1 - M. G. 328. $\mathbf{C}_{14}\mathbf{H}_8\mathbf{O}_6\mathbf{N}_4$ Hyperoxyd d. αβ-Dioximido-αβ-Di[3-Nitrophenyl]äthan (m-Dinitrobenzildioximhyperoxyd). Sm. 183—185° (B. 27, 2848). — III, 295.
 Hyperoxyd d. αβ-Dioximido-αβ-Di[4-Nitrophenyl]äthan. Sm. 197 bis 198° (B. 27, 2848). — IV, 295.
3) Dinitrophenylamidoimid d. Benzol-1,2-Dicarbonsäure. Sm. 182° u. Zers. (J. pr. [2] 35, 279). — IV, 710.
 1) 3,6-Dichlor-1,4-Dimethyl-p-β-Benzdifuran-2,5-Dicarbonsäure (J. pr. C14H8O6Cl [2] **45**, 72). — **III**, 735. 1) 1-0xy-9,10-Anthrachinon-2-Sulfonsäure. Ag (B. 17, 900). — III, 420. C14H8O6S 2) 2-Oxy-9,10-Anthrachinon-?-Sulfonsäure. Na, Ba (J. pr. [2] 18, 178; [2] 43, 237). — III, 420. 3) isom. ?-Oxy-9,10-Anthrachinon-?-Sulfonsäure. Ba (A. 160, 139). — III, 420. C 53.2 - H 2.5 - O 35.4 - N 8.9 - M. G. 316. $C_{14}H_8O_7N_2$ 1) ?-Dinitro-4-Benzoylbenzol-1-Carbonsäure. Sm. 240°. Ca + 2H₂O₂ $Ba + 4H_2O$ (B. 7, 988). — II, 1706. 2) isom. ?-Dinitro-4-Benzoylbenzol-1-Carbonsäure. Sm. 211—212° (B. 7, 984). — II, 1706. 3) Anhydrid d. 2-Nitrobenzol-l-Carbonsäure. Sm. 135° (B. 17, 2789). **— II**, *1231*. 4) Anhydrid d. 3-Nitrobenzol-1-Carbonsäure (A. 87, 158). — II, 1233. 5) α, 2'-Lakton d. ?-Dinitro-α, 4-Dioxydiphenylmethan-2'-Carbonsäure. Sm. 187° (B. 31, 2801). 6) 4,4'-Dinitrodisalicylaldehyd. Sm. 221° (Am. 14, 297). — III, 78. Verbindung (aus Aloëtinsäure) (A. 134, 240). — III, 617. 1) 1,2-Dioxy-9,10-Anthrachinon-P-Sulfonsaure. 144; B. 12, 571; J. pr. [2] 18, 173). — III, 424. C, H, O, S $Na + H_2O$ (A. 160, 2) isom. 1, 2-Dioxy-9, 10-Anthrachinon-?-Sulfonsäure (J. pr. [2] 18, 174). - III, 424. 3) 1,4-Dioxy-9,10-Anthrachinon-?-Sulfonsäure. Na (A. 212, 12). — II, 426. 4) 2, 6-Dioxy-9, 10-Anthrachinon-1-Sulfonsäure. Na (A. 280, 12). C 50,6 — H 2,4 — O 38,6 — N 8,4 — M. G. 332. 1) 3-Nitrobenzoylsuperoxyd. Sm. 140—141° (139°) (J. 1863, 317; B. 30, $\mathbf{C}_{14}\mathbf{H}_8\mathbf{O}_8\mathbf{N}_2$ 2004; A. 298, 287). — II, 1233. 2) 4,4'-Dinitrobiphenyl-2,2'-Dicarbonsäure + H₂O. Sd. 253° (248—249°) wasserfrei. Ba + 6H₂O (B. 10, 75; A. 193, 131; 196, 26). — II, 1885. 3) isom. P-Dinitrobiphenyl-2,2'-Dicarbonsäure. Sm. 297° Ba + 4H₂O (A. 193, 131; 203, 105; J. 1881, 842). — II, 1885. 4) 4,4'-Bipyridyl-2,6,2',6'-Tetracarbonsäure (B. 31, 2282). C 46,7 H 2,2 O 35,5 N 15,5 M G 360.

1) $\alpha\beta$ -Di[2,4-Dinitrophenyl]äthen. Sm. 264—266° u. Zers. (J. r. 27, $\mathbf{C}_{14}\mathbf{H}_8\mathbf{O}_8\mathbf{N}_4$ 339, 341). 2) ?-Dinitroazobenzol-3,3'-Dicarbonsäure. Na₂, K₂+3H₂O, Ba (J. r. 6, 197). — IV, 1459. 3) ?-Dinitroazobenzol-4,4'-Dicarbonsäure. Zers. bei 257° . Na₂ + $4 \, \mathrm{H}_{2} \, \mathrm{O}$, $K_2 + 4H_2O$, $Ca + 5H_2O$, $Ba + 5H_2O$, Ag_2 (J. r. 20, 25). — IV, 1460. 1) 9,10-Anthrachinon-1,5-Disulfonsäure. Na₂ + 5H₂O (B. 12, 1289). — $C_{14}H_8O_8S_2$ III, 416. 2) 9,10-Anthrachinon-1, 6-Disulfonsäure (A. 280, 35). — III, 416. 3) 9,10-Anthrachinon-2,6-Disulfonsäure. Ba, Pb (B. 9, 682; A. 280, 17). **— III**, *416*. 4) 9,10-Anthrachinon-2,7-Disulfonsäure (Bl. 33, 264; B. 9, 682; A. 280, 24). — III, 416. 5) isom. 9,10-Anthrachinon-?-Disulfonsäure. Na₂ $+ 4H_2O$ (B. 12, 1288). - III, 416. 6) isom. 9,10-Anthrachinon-?-Disulfonsäure (B. 12, 1419). — III, 416. 7) isom. 9,10-Anthrachinon-?-Disulfonsäure (A. 158, 323; 160, 134; J. 1878, 1189; B. 3, 63; 7, 1106). — III, 416. 8) 9,10-Phenanthrenchinon-?-Disulfonsäure (A. 167, 143). — III, 442.

C 48.3 - H 2.3 - O 41.4 - N 8.0 - M. G. 348.

gentisin) (A. 62, 123). — III, 210.

1) Monomethyläther d. ?-Dinitro-1, 3,7-Trioxyxanthon + H₂O (Dinitro-

 $C_{14}H_8O_9N_2$

C 44.7 - H 2.1 - O 38.3 - N 14.9 - M. G. 376. $\mathbf{C}_{14}\mathbf{H}_8\mathbf{O}_9\mathbf{N}_4$

1) 5,5'-Dinitroazoxybenzol-3,3'-Dicarbonsäure. Sm. über 200° u. Zers. (B. 28, 1801). — IV, 1344. C 40.0 — H 1.9 — O 38.1 — N 20.0 — M. G. 420.

 $\mathbf{C}_{14}\mathbf{H}_8\mathbf{O}_{10}\mathbf{N}_6$

1) s-Di[2,4-Dinitrophenylamid] d. Oxalsäure. Sm. 182° (oberhalb 270°) (Am. 9, 356; Soc. 61, 460). — II, 410.

1) 2,6-Dioxy-9,10-Anthrachinon-?-Disulfonsäure. K₂ (C. 1899 [1] 464). $\mathbf{C}_{14}\mathbf{H}_{8}\mathbf{O}_{10}\mathbf{S}_{2}$

· II, 2108.

Sm. 175° (G. 24

[1] 573). — IV, 701. 1) Dibenzthiazol. Sm. 304° (B. 13, 1227; 20, 2256; 25, 1902; Bl. [3] 15, $\mathbf{C}_{14}\mathbf{H}_{8}\mathbf{N}_{2}\mathbf{S}_{2}$ 82). — II, 798.

2) Biphenyl-4,4'-Disenföl. Sm. 203° (B. 27, 1557). — IV, 965. 1) Dibenzthiazoldisulfid. Sm. 186° (180°) (B. 24, 1404). — II, 798. $\mathbf{C}_{14}\mathbf{H}_{8}\mathbf{N}_{2}\mathbf{S}_{4}$

1) m-Chlorisatohydrophenazin. Sm. noch nicht bei 300° (B. 28, 2530). $C_{14}H_8N_3Cl$ **– IV**, 1189.

 $C_{14}H_8N_4Br_2$ 1) Azimid d. ?-Dibrom-2-[2-Amido-4-Methylphenyl] benzimidazol. Sm. 257° (B. 31, 321). — IV, 1293.

 $C_{14}H_8Cl_2Br_2$ 1) $\beta\beta$ -Dichlor- $\alpha\alpha$ -Di[?-Bromphenyl]äthen. Sm. 119—120° (B. 7, 1180). C₁₄H₈Cl₂Br₄ 1) Dichloranthracentetrabromid. Sm. 178° (166°) (B. 10, 376; 19, 1106). · II, 264.

C14H9ON C 81,2 - H 4,3 - O 7,7 - N 6,8 - M. G. 207.

1) Phenanthrenchinonimid. Sm. 158-159° (A. 196, 51; B. 12, 1642). -III, 444.

Aldehyd d. Akridin-5-Carbonsäure. Sm. 139—140°. HCl (B. 20, 1547). — IV, 422.

3) 4-Benzoylphenylisonitril. Sm. 118-1190 (A. 210, 271; B. 14, 1838). **– III**, 184.

4) Nitril d. 4-Benzoylbenzol-1-Carbonsäure. Sm. 107-108° (B. 20, 2957). — II, *1705*. C 71,5 — H 3,8 — O 6,8 — N 17,9 — M. G. 235.

 $\mathbf{C}_{14}\mathbf{H}_{9}\mathbf{ON}_{3}$

3-Oxy-1,5-2,3-Diphenylen-2,3-Dihydro-1,2,4-Triazol. Sm. noch nicht bei 320°. Ag (B. 28, 154). — IV, 1292.
 3-Benzoyl-1,2,4-Benztriazin. Sm. 114° (B. 26, 2788). — IV, 1165.

3) Verbindung (aus 1,2-Diamidobenzol u. Pyrroylbrenztraubensäureanhydrid). Zers. bei 250° (B. 23, 2155). — IV, 1189.

4) 9-Chlor-10-Keto-9,10-Dihydrophenanthren (Chlorphenanthron). Sm.

122—123° (J. pr. [2] 28, 171). — III, 442.

1) 4-Trichlormethyldiphenylketon. Sm. 111-111,5° (A. 189, 92). III, 213.

 $C_{14}H_9OBr$ $\mathbf{C}_{14}\mathbf{H}_{9}\mathbf{O}_{8}\mathbf{N}$

C14HOCl3

1) 9-Brom-10-Oxyanthracen. Sm. 148—149° (B. 20, 2437). — II, 902. C 75,3 — H 4,0 — O 14,3 — N 6,3 — M. G. 223.

1) α -Nitrophenanthren. Sm. 73—75° (A. 167, 155; B. 12, 1155). — II, 269. 2) β -Nitrophenanthren. Sm. 126—127° (B. 12, 1156). — II, 269. 3) γ -Nitrophenanthren. Sm. 170—171° (B. 12, 1157). — II, 269. 4) 10-Nitroso-9-Oxyanthracen (Pseudonitrosoanthron). Sm. 224° u. Zers.

(Soc. 59, 644). — II, 261.

5) 10-Nitro-9-Keto-9,10-Dihydroanthracen (Nitrosoanthron). Sm. 146° (B 13, 1586; 20, 974; Soc. 59, 639). — II, 261. 6) 9-Oximido-10-Keto-9,10-Dihydroanthracen (Anthrachinonoxim). Sm.

224°; subl. bei 200° (B. 16, 2179; 27, 2125). — III, 409.
7) 9-Oximido-10-Keto-9,10-Dihydrophenanthren. Sm. 158° (B. 16, 2178;

22, 1989). — III, 445.

8) 1-Amido-9,10-Anthrachinon. Sm. 241° (242-243°). HCl (A. 166, 149; B. 14, 979; 15, 1518, 1790; 30, 1116). — III, 413.
9) 2-Amido-9,10-Anthrachinon. Sm. 302°. HCl (Bl. 33, 264; A. 212, 61; B. 12, 1418, 1566; 15, 229, 1792). — III, 413.
10) 4-Amido-9,10-Phenanthrenchinon. Sm. bei 200° u. Zers. (B. 18, 1943).

- III, 442.

11) 2-Benzoylanthranil. Sm. 122-123° (B. 16, 2229; J. pr. [2] 30, 486; [2] **33**, 19). — **II**, 1254.

12) Pyrophtalon. Sm. oberh. 260° (B. 16, 2604). — IV, 126.

- 13) 2,3-Diketo-2,3-Dihydro-1-Phenylindol (Phenylpseudoisatin). Sm. 134° $\mathbf{C}_{14}\mathbf{H}_{9}\mathbf{O}_{9}\mathbf{N}$ (A. **239**, 222). — **IV**, 236.
 - 14) Akridin-5-Carbonsäure. Zers. oberh. 300° (B. 20, 1549). IV, 421.
 - 15) β -Naphtochinolin-3-Carbonsäure. Sm. 187 $^{\circ}$ u. Zers. Na $+ 2^{1}/_{2}$ H₂O, $Ba + 4H_2O$, $Cu + 1\frac{1}{2}H_2O$, HCl, $(2HCl, PtCl_4 + 2H_2O)$ (B. 22, 261). -
 - 16) Oximanhydrid d. α-Oximido-αα-Diphenylmethan-2-Carbonsäure (Oximanhydrid d. 2-Benzoylbenzol-1-Carbonsäure). Sm. 162°. K₂ + 3 H₂O, Ba, (Ag, NH₄) (B. **26**, 1262, 1795). — II, 1704.
 - 17) Imid d. Biphenyl-2,2'-Dicarbonsäure. Sm. 219-220°. Na (A. 247,
 - 270; **252**, 16). II, 1884. 18) Phenylimid d. Benzol-1,2-Dicarbonsäure. Sm. 205° (203°; 207°) (J. 1847/48, 605; A. 210, 267; B. 16, 1323; 31, 1333; Am. 9, 202; 18, 338; R. 15, 287). — II, 1804.

 19) Phenylisoimid d. Benzol-1, 2-Dicarbonsäure. Sm. 115—117° (R. 15,

 - 20) Amid d. 9-Ketofluoren-l-Carbonsäure. Sm. 230° (225°) (A. 252, 26; **284**, 311). — II, 1718.
 - 21) Amid d. 9-Ketofluoren-4-Carbonsäure. $(+ \frac{1}{2}C_2H_6O \text{ Sm. } 225^{\circ})$ (B. 21, 2357). — II, *1719*.
 - 22) Nitril d. 2-Benzoxylbenzol-1-Carbonsäure. Sm. 148-1490 (1050)
- (A. 99, 250; B. 2, 491; 26, 2623; 31, 3041). II, 1501. 1) Chloroxytoliden. Sm. 57—58° (A. 153, 127). III, 296. C₁₄H₉O₂Cl
- 2) Chlorid d. 2-Benzoylbenzol-1-Carbonsäure (A. 290, 10). 1) Bromoxytoliden. Fl. (A. 153, 125). — III, 296. $\mathbf{C}_{14}\mathbf{H}_9\mathbf{O}_2\mathbf{Br}$
- 2) Lakton d. α-Brom-2-Oxydiphenylessigsäure. Sm. 70° (B. 30, 127). C 71,4 - H 3,7 - O 20,1 - N 5,8 - M. G. 239. $\mathbf{C}_{14}\mathbf{H}_{9}\mathbf{O}_{3}\mathbf{N}$
 - 1) 10-Nitro-9-Oxyanthracen. Sm. 148° u. Zers. (Soc. 61, 869). II, 261. 2) 10-Nitro-9-Keto-9,10-Dihydroanthracen (Nitroanthron). Sm. 140° u. Zers. (Soc. 61, 868). — II, 261.
 - 3) 10-Nitroso-10-Oxy-9-Keto-9,10-Dihydroanthracen (Nitrosooxanthranol) (B. 14, 471). — II, 262.
 - 4) 1-Hydroxylamido-9,10-Anthrachinon (B. 29, 2943).
 - 5) 2-Amido-1-Oxy-9,10-Anthrachinon (β Alizarinamid). subl. bei 150° (J. pr. [2] 18, 139; B. 15, 1805). — III, 419.
 - 6) 3 [oder 1]-Amido-1 [oder 3]-Oxy-9,10-Anthrachinon (Purpuroxanthinamid) (A. 183, 217). — III, 426.
 - 7) 4-Amido-1-Oxy-9,10-Anthrachinon (B. 29, 2943; C. 1898 [1] 543).
 - 8) 1-Amido-2-Oxy-9,10-Anthrachinon (α -Alizarinamid). Sm. 251° . Ba (A. 183, 205; B. 15, 1799; 28, 1423). — III, 419.
 9) 1-Keto-2-Benzoyl-1,2-Dihydrobenzoxazol. Sm.173—174°(B. 31, 1065).

 - 10) 9-Oximidofluoren-4-Carbonsäure. Sm. 263°. Ag (A. 247, 280). II, 1719.
 - 11) 2-[2-Furanyl]chinolin-4-Carbonsäure. Sm. 210-215° u. Zers. (2HCl, $PtCl_4$), 2 + $AuCl_3$ (A. 242, 285). - IV, 422.
 - 12) 2-Oxyphenylimid d. Benzol-1, 2-Dicarbonsäure (o-Oxyphtalamid). Sm. 220° (B. **9**, 1528). — **II**, 1809.
 - 13) 4-Oxyphenylimid d. Benzol-1, 2-Dicarbonsäure. Sm. 287—288° (G. **16**, 252; *C*. **1897** [1] 48). — II, 1809. C 62,9 — H 3,4 — O 18,0 — N 15,7 — M. G. 267.
- C14H9O3N3
 - 1) 5-Phenyl-3-[3-Nitrophenyl]-1,2,4-Oxdiazol. Sm. 160° (B. 18, 1067). II, 1235.
 - 2) 5-Phenyl-3-[4-Nitrophenyl]-1,2,4-Oxdiazol. Sm. 198° (B. 22, 2421). - II, *1238.*
 - 3) 8-Nitro-4-Keto-2-Phenyl-3,4-Dihydro-1,3-Benzdiazin (J. pr. [2] 43, 444). **— II**, *1282*
 - 4) 2-[3-Nitrophenyl]-4-Keto-1,4-Dihydro-1,3-Benzdiazin. Sm. 206-2070 A. **251**, 168). — II, 1267.
 - 5) Imid d. Azoxybenzol-2,2'-Dicarbonsäure. Sm. noch nicht bei 320° (B. 28, 157). — IV, 1343.
 - 6) Phenylnitrosamidoimid d. Benzol-1, 2-Dicarbonsäure. Sm. 153 bis 154° u. Zers. (J. pr. [2] 35, 274). — IV, 710.
- 1) 4-[oder 5]-Chlor-2-Benzoylbenzol-1-Carbonsäure. Sm. 170° (A. 233, $\mathbf{C}_{14}\mathbf{H}_9\mathbf{O}_3\mathbf{C}\mathbf{I}$ 239). — II, 1704.

1) Benzoat d. 3,4,5-Trichlor-1,2-Dioxybenzolmonomethyläther. Sm. $\mathbf{C}_{14}\mathbf{H}_{9}\mathbf{O}_{3}\mathbf{Cl}_{3}$ 128—129° (G. **28** [1] 231).

1) ?-Brom-2-Benzoylbenzol-1-Carbonsäure. Sm. 219—221° (B. 12, 2126). C, H, O, Br **- II**, 1704.

2) α, 2-Lakton d. ?-Brom-2, 4-Dioxydiphenylessigsäure. Sm. 145° (B. 31, 2828).

3) α, 2-Lakton d. ?-Brom-2, 6-Dioxydiphenylessigsäure. Sm. 142° (B. 31, 2828). C 65.9 - H 3.5 - O 25.1 - N 5.5 - M. G. 255.

 $\mathbf{C}_{14}\mathbf{H}_{9}\mathbf{O}_{4}\mathbf{N}$

1) $\alpha\beta$ -Diketo- β -[2-Nitrophenyl]- α -Phenyläthan (o-Nitrobenzil). Sm. 98° (B. 26, 2453). — III, 281.

αβ-Diketo-β-[4-Nitrophenyl]-α-Phenyläthan (p-Nitrobenzi). Sm. 141 bis 142° (130°) (A. Spl. 3, 153; B. 23, 532; 31, 2426). — III, 282.
 3-Amido-1,2-Dioxy-9,10-Anthrachinon. Sm. oberh. 300° (B. 12, 588;

18, 445). — III, *423*.

4) 4-Amido-1, 2-Dioxy-9, 10-Anthrachinon (J. 1877, 586; B. 24, 1613). - III. 423.

5) 4-Amido-1, 3-Dioxy-9, 10-Anthrachinon (Purpurinamid) (A. 130, 337; 183, 211). — III, *434*.

6) 1[?]-Amido-2, 3-Dioxy-9, 10-Anthrachinon (M. 6, 755). — III, 433. 7) 1[?]-Amido-2,7-Dioxy-9,10-Anthrachinon (Anthrapurpurinamid) (J.

1878, 669). — III, 436. 8) Acetat d. Resorufin. Sm. 223° (M. 5, 611; B. 22, 3029). — II, 933.

9) α,2'-Lakton d. α-Oxy-?-Nitroso-4-Oxydiphenylmethan-2'-Carbonsäure. Sm. 153°. Ba (A. 300, 236). C 59,4 — H 3,2 — O 22,6 — N 14,8 — M. G. 283.

 $C_{14}H_9O_4N_8$

1) α -Dinitro-3-Methyl- β -Naphtochinolin. Sm. 226—227° (B. 22, 256). **— IV**, 412.

2) β -Dinitro-3-Methyl- β -Naphtochinolin. Sm. 230° (B. 22, 257). — IV, 412.

3) γ -Dinitro-3-Methyl- β -Naphtochinolin. Sm. 205—212° (B. 22, 257). **- IV**, 412.

4) 6-Nitro-1-Phenylisoindazol-3-Carbonsäure. Sm. 272° (B. 22, 320; A. 264, 149). — IV, 1465.

5) Phenylnitramidoimid d. Benzol-1, 2-Dicarbonsäure. Sm. 147—148° u. Zers. (J. pr. [2] 35, 277). — IV, 710. C 54,0 — H 2,9 — O 20,6 — N 22,5 — M. G. 311. l) 2,5-Di[4-Nitrophenyl]-1,3,4-Triazol. Sm. 257° (A. 298, 52). — IV, 1187. l) ?-Brombiphenyl-2,2'-Dicarbonsäure. Sm. 235—236°. Na₂, Ba +

C14HOAN5

 $C_{14}H_9O_4Br$ 3 H₂O, Cu, Ag₂ (B. 19, 3149; M. 16, 818). — II, 1884. 2) 4-Brombiphenyl-2,4'-Dicarbonsäure. Sm. 208° (B. 22, 3018). —

II, 1883. $\mathbf{C}_{14}\mathbf{H}_{9}\mathbf{O}_{4}\mathbf{Br}_{8}$

1) Bromverbindung d. ?-Brombiphenyl-2, 2'-Dicarbonsäure. Sm. 256° u. Zers. Na₂ (B. 19, 3152). — II, 1885. 1) Pentabromeurcumindibromid. Sm. bei 120° (Am. 4, 364). — III, 660. C 62,0 — H 3,3 — O 29,5 — N 5,2 — M. G. 271.

 $\mathbf{C}_{14}\mathbf{H}_{9}\mathbf{O}_{4}\mathbf{Br}_{7}$ $\mathbf{C}_{14}\mathbf{H}_9\mathbf{O}_5\mathbf{N}$

C14H9O5N3

C, H,O,N

1) 4-Amido-1, 2, 3-Trioxy-9, 10-Anthrachinon (M. 18, 291).

2) 2-[?-Nitroso-4-Oxybenzoyl]benzol-1-Carbonsäure. Sm. 178° (A. 300,

3) 4-[3-Nitrobenzoyl]benzol-1-Carbonsäure. Sm. 242°. K, Ba + H₂O (A. 286, 316). - II, 1705.

4) 4-[4-Nitrobenzoyl]benzol-1-Carbonsäure. Sm. 255°. Na (A. 286, 330). · II, 1706.

5) Gem. Anhydrid d. Benzolcarbonsäure u. 3-Nitrobenzol-1-Carbonsäure (A. 87, 158). — II, 1233.

6) α,2'-Lakton d. P-Nitro-4-Oxydiphenylmethan-2'-Carbonsäure. Sm. 152-153° (B. 27, 2636). — II, 1881.

7) Monacetat d. Resazurin. Sm. 222° (B. 22, 3024). — II, 932. C 56,2 — H 3,0 — O 26,7 — N 14,0 — M. G. 299.

1) ?-Dinitro-2-[4-Methylphenyl]benzisoxazol. Sm. 187—188° (B. 27, 1453). — IV, $\frac{417}{100}$. C 58,5 — H 3,1 — O 33,4 — N 4,9 — M. G. 287.

1) 6-Oxy-3-[3-Nitrobenzoyl] benzol-1-Carbonsäure. Sm. 244° (A. 290, 170).

 $\mathbf{C}_{1,1}\mathbf{H}_{0}\mathbf{O}_{6}\mathbf{N}$ 2) 4-Nitrobiphenyl-2,2'-Dicarbonsäure. Sm. 217° (B. 16, 2347). II, 1885.

C 53,3 - H 2,9 - O 30,5 - N 13,3 - M. G. 315. $\mathbf{C}_{14}\mathbf{H}_{9}\mathbf{O}_{6}\mathbf{N}_{3}$

1) 4,6-Dinitro-5-Oxy-3-Methyl-1-Phenylbenzoxazol. Zers. bei 188 bis 189° (M. 19, 499).

2) ?-Nitroazobenzol-4,4'-Dicarbonsäure. Zers. bei 270°. Na + 4 H₂O, $K + 3H_2O$, $K_2 + 3H_2O$, $Ca + 5H_2O$, $Ba + 4H_2O$, Ag_2 (J. r. 20, 20). **– IV**, *1459*.

3) Imid d. 3-Nitrobenzol-1-Carbonsäure. Sm. 1990 (1950) (J. pr. [2] 51, 402; A. **251**, 172, 173). — II, 1234.

4) ?-Dinitro-1-Naphtylimid d. Bernsteinsäure. Zers. bei 250° (B. 10,

1713; A. 209, 382). — II, 611.

 Diacetat d. 2-Chlor-5,6-Dioxy-1,4-Diketo-1,4-Dihydronaphtalin. Sm. 192° (A. 286, 43). — III, 386. C 50,8 — H 2,7 — O 33,8 — N 12,7 — M. G. 331. C_{1.4}H₉O₆Cl $\mathbf{C}_{14}\mathbf{H}_{9}\mathbf{O}_{7}\mathbf{N}_{3}$

1) ?-Dinitro-3-Nitrophenyl-4-Methylphenylketon. Sm. 165° (A. 286, 311). — III, 214.

2) ?-Dinitro-4-Nitrophenyl-4-Methylphenylketon. Sm. 1590 (1650) (A. 286, 323; B. 7, 983). — III, 214.
3) N-4-Nitrobenzoat d. 4-Nitrobenzhydroxamsäure. Zers. bei 174°

(R. 16, 186).

 $\mathbf{C}_{14}\mathbf{H}_{9}\mathbf{O}_{9}\mathbf{N}_{3}$

 $\overset{\bullet}{\text{C}}$ 46,3 $\overset{\bullet}{\text{--}}$ $\overset{\bullet}{\text{H}}$ 2,5 $\overset{\bullet}{\text{--}}$ 0 39,6 $\overset{\bullet}{\text{--}}$ N 11,6 $\overset{\bullet}{\text{--}}$ M. G. 363. 1) Aldehyd d. 3,4-Dioxybenzol-3-Methyläther-4-[2,4,6-Trinitrophenyläther]-1-Carbonsäure (Pikrylvanillin). Sm. 114-1160 (B. 27, 2459). — III, 102.

2) Methylester d. 2-Oxybenzol-2, 4, 6-Trinitrophenyläther-l-Carbonsäure. Sm. 139° (G. **26** [2] 556). C 44,3 — H 2,4 — O 42,2 — N 11,1 — M. G. 379.

 $C_{14}H_9O_{10}N_3$ 1) 3,4-Dioxybenzol-3-Methyläther-4-[2,4,6-Trinitrophenyläther-1-Carbonsäure (Pikrylvanillinsäure). Sm. 184-186° (B. 27, 2460). -II, 1742. C 36,0 — H 1,9 — O 41,1 — N 21,0 — M. G. 467.

 $C_{14}H_9O_{12}N_7$

1) Di[?-Trinitro-4-Methylphenyl]amin. Sm. 258° (B. 13, 1545). — II, 486. 1) 2-Chlor-4-Phenyl-1, 3-Benzdiazin. Sm. 1130 (B. 29, 1310). — IV, 1023. C₁₄H₉N₂Cl $\mathbf{C}_{14}\mathbf{H}_{9}\mathbf{N}_{2}\mathbf{Cl}_{7}$ 1) $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[2,4-Dichlorphenylamido]äthan. Sm. 144° (A.

302, 369). $C_{14}H_9N_3Br_6$ 1) 2,4,6,2,4,6-Hexabrom-3,3'-Dimethyldiazoamidobenzol (B. 30, 2355). — IV, 1568.

 $\begin{matrix}\mathbf{C}_{14}\mathbf{H}_{9}\mathbf{N}_{3}\mathbf{S}_{2}\\\mathbf{C}_{14}\mathbf{H}_{9}\mathbf{N}_{4}\mathbf{C}\mathbf{1}\end{matrix}$ Diphenylamin-4,4'-Dithiocarbonimid. Sm. 170° (A. 303, 366).
 Chlorfluoflavin. Sm. oberh. 360° (B. 29, 786). — IV, 1293.

 $C_{14}H_9N_4Br_3$ 1) ?-Tribrom-1,4-Diphenyl-1,4-Dihydro-1,2,4,5-Tetrazin. Zers. bei 224° (Soc. 55, 246). — IV, 1233.

 $\mathbf{C}_{14}\mathbf{H}_{9}\mathbf{Cl}_{3}\mathbf{Br}_{2}$ 1) $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[P-Bromphenyl]äthan. Sm. 139–141° (B. 7, 1180). · II, 231.

C 75,7 — H 4,5 — O 7,2 — N 12,6 — M. G. 222. $\mathbf{C}_{14}\mathbf{H}_{10}\mathbf{ON}_{2}$

1) Benzoylphenylazomethylen (Ketazodiphenylketon). Sm. 63° u. Zers.

(B. 22, 2162; J. pr. [2] 44, 182). — III, 287.

2) Phenylimesatin (J. 1855, 541; A. 144, 51). — II, 1608.

3) 3,5-Diphenyl-1,2,4-Oxdiazol. Sm. 108° (110°); Sd. 290° (B. 17, 1694; 18, 1081; 31, 2111; A. 252, 48). — II, 1207.

4) 3,4-Diphenyl-1,2,5-Oxdiazol (Diphenylfurazan). Sm. 94° (B. 21, 810; 22, 215, 27, 214, 4, 252, 252, 244, 100).

22, 715; 27, 214; A. 252, 52; 264, 180). — III, 292.

5) **2,5-Diphenyl-1,3,4-Oxdiazol** + $\rm H_2O$. Sm. 80° u. Zers. (140° wasserfrei); Sd. oberh. 360° . + $\rm AgNO_3$ (B. **27**, 1006; A. **297**, 263). — II, 1215; 1023.

6) 3-Nitroso-2-Phenylindol. Sm. 258° u. Zers. HCl, HNO₃, Na (B. 15, 2487; 18, 167; 21, 1073). — IV, 413.

7) 1-Nitroso-3-Phenylindol. Sm. 60-61° u. Zers. (A. 253, 37). IV, 414.

8) 1-Benzoylbenzimidazol. Sm. 91-92° (A. 273, 360). - IV, 869.

9) 4-Oxy-2-Phenyl-1,3-Benzdiazin. Sm. 235-236° (B. 28, 289). -IV, 1023.

10) 2-Keto-4-Phenyl-1, 2-Dihydro-1, 3-Benzdiazin. Sm. 250-251° (B. 29, 1310). — IV, 1023.

 $C_{14}H_{10}ON_2$ 11) 4-Keto-2-Phenyl-1,4-Dihydro-1,3-Benzdiazin. Sm. 233--234°. (2HCl. $PtCl_4$) (J. pr. [2] **36**, 157). — II, 1254.

12) 4-Keto-3-Phenyl-3, 4-Dihydro-1, 3-Benzdiazin. Sm. 139°. HCl, (2 HCl, PtCl₄) (B. **22**, 2690; **24**, 3055). — IV, 874.

- 13) 1-Keto-4-Phenyl-1, 2-Dihydro-2, 3-Benzdiazin. Sm. 236° (J. pr. [2] **51**, 151). — **IV**, 1023.
- 14) Amid d. 9-Imidofluoren-4-Carbonsäure. Sm. 220-221° (A. 252, 30). **— II**, 1719.
- 15) Nitril d. Phenylbenzoylamidoameisensäure. Sm. 118° (124°) (B. 28, 1306; G. 28 [2] 69).
- 16) Nitril d. 2-Benzoylamidobenzol-1-Carbonsäure. Sm. 216º (B. 29, 631). 17) Nitril d. α-Oximido-αα-Diphenylmethan-4-Carbonsäure. Sm. 176°

(B. 20, 2957). — II, 1705.

18) Verbindung (aus Phenylhydrazin u. Phtalaldehydsäure). Sm. 106-1070 (B. 21, 1611; A. 239, 86). — IV, 696.

19) Verbindung (aus d. Verb. C₁₄H₁₀N₂Cl₂ aus Benzildioxim). Sm. 135 bis

 $\begin{array}{c} 136^{\circ}. \ + \text{AgNO}_{3} \ (A. \ \textbf{252}, \ 61). \ - \ \textbf{III}, \ 292. \\ \textbf{C}_{14}\textbf{H}_{10}\textbf{OCl}_{2} \ \ 1) \ \textbf{4} - \textbf{Dichlormethyldiphenylketon}. \quad \textbf{Sm.} \ 94-95^{\circ} \ \ (\textbf{\textit{A}}. \ \textbf{189}, \ 91). \ - \end{array}$ III, 213.

2) $\beta\beta$ -Dichlor- α -Keto- $\alpha\beta$ -Diphenyläthan. Sm. 61°; Sd. 229—232° (A. 119, 117; 149, 374; J. 1880, 614; B. 17, 1162; J. r. 21, 428).

3) α -Keto- $\alpha\beta$ -Di[3-Chlorphenyl]äthan. Sm. 134°. **- III**, 218.

4) Chlorid d. Diphenylchloressigsäure. Sm. 50° (B. 22, 1539). -II, 1464.

 $C_{14}H_{10}OBr_2$ 1) 4-Dibrommethyldiphenylketon. Sm. 86,8° (Bl. [3] 15, 949).

2) $\beta\beta$ -Dibrom- α -Keto- $\alpha\beta$ -Diphenyläthan. Sm. 112^{6} (A. 126, 221; 155, 70; J. pr. [2] 44, 547). — III, 218. C 70,6 — H 4,2 — O 13,4 — N 11,8 — M. G. 238.

 $\mathbf{C}_{14}\mathbf{H}_{10}\mathbf{O}_{2}\mathbf{N}_{2}$

- 1) $\alpha\beta$ -Di[4-Nitrosophenyl]äthen (p-Dinitrosostilben). Sm. 263° (B. 26, 2232). **- II**, 248.
- 2) 1,2-Diamido-9,10-Anthrachinon. Zers. bei 130° (J. pr. [2] 18, 133). **— III**, 414.
- 3) 1,5-Diamido-9,10-Anthrachinon. Sm. oberh. 300°; subl. (B. 16, 366). - III, 414.
- 4) P-Diamido-9,10-Anthrachinon. Sm. 236° (A. 160, 148; B. 4, 231, 779; 14, 981; J. pr. [2] 19, 209). III, 413. 5) isom. P-Diamido-9,10-Anthrachinon. Sm. noch nicht bei 300° (J. pr.
- [2] 9, 266). III, 414.
- 6) 2,7-Diamido-9,10-Phenanthrenchinon. Sm. noch nicht bei 310° (B. 18, 1944). — III, 442.
- 7) 9,10-Dioximido-9,10-Dihydrophenanthren. Sm. 2020 u. Zers. (B. 22, 1991). — III, 445.

8) Oxalyl-4, 4'-Diamidobiphenyl (J. 1860, 356). — IV, 965.

- 9) 1,3-Phtalyldiamidobenzol. Sm. 178° (B. 10, 1165). IV, 578. 10) 1,4-Phtalyldiamidobenzol. Sm. 182° (B. 10, 1164). IV, 595. 11) Diphenyldiisocyanat. Sm. 175° (A. Spl. 1, 57; B. 24, 246; Soc. 49, 254). — II, 375.

12) 3-Amidobenzoïd. Sm. bei 225° (B. 16, 1321). — II, 1257.

- 13) polym. 3-Amidobenzoïd = $(C_{14}H_{10}O_2N_2)_x$ (B. 16, 1321, 1322). II, 1257. 14) 5-Phenyl-3-[2-Oxyphenyl]-1,2,4-Oxdiazol. Sm. 128° (B. 22, 2780, 3147). — II, 1503.
- 15) 5-Phenyl-3-[3-Oxyphenyl]-1,2,4-Oxdiazol. Sm. 163° (B. 18, 2475; **24**, 830). — II, 1519.
- 16) 5-Phenyl-3-[4-Oxyphenyl]-1,2,4-Oxdiazol. Sm. 183° (B. 24, 836). **- II**, 1531.
- 17) 5-Keto-3,4-Diphenyl-4,5-Dihydro-1,2,4-Oxdiazol. Sm. 166—1670 (B. 19, 1670; 22, 2402). — II, 1204.
- 18) 5-Keto-2,4-Diphenyl-4,5-Dihydro-1,3,4-Oxdiazol (Benzoylphenylcarbizin). Sm. 113—114°; Sd. oberh. 300° (B. **21**, 2461). — IV, 672. 19) 6-Oxy-2-Furanyl-4-Phenyl-1, 3-Diazin. Sm. 256° (B. **25**, 1419).

IV, 1023.

20) 4,5-Diphenyl-1,2,3,6-Dioxdiazin (Benzildioximsuperoxyd). Sm. 114 bis 115° (B. 19, 184, 1146; 21, 804; 22, 1593; 27, 2195). — III, 294.

- C₁₄H₁₀O₂N₂21) 2,4-Diketo-1-Phenyl-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Zers. oberh.
 - 360° (J. pr. [2] **49**, 319). 22) **2,4-**Diketo-3-Phenyl-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 272° (B. 27, 44, 977, 1868; 30, 1687; J. pr. [2] 51, 266; Am. 21, 145). -IV, 874, 897.
 - 23) 1,4-Diketo-2-Phenyl-1,2,3,4-Tetrahydro-2,3-Benzdiazin. Sm. 2100 Ag (J. pr. [2] 35, 281; G. 16, 204; 17, 284). — IV, 710.
 - 24) 2-Phenylindazol-2³-Carbonsäure. Sm. 211^o. Na (B. 25, 3595). IV, 867.
 - 25) 2-Phenylbenzimidazol-22-Carbonsäure. Zers. bei 2660 (B. 23, 1044). **– IV**, 562.
 - 26) 2-Phenylbenzimidazól-24-Carbonsäure + 11/2 H2O. Sm. oberh. 300°. $K + 7H_2O$, $Ca + 5H_2O$, $Ba + 6H_2O$, Ag (B. 11, 293; A. 205, 118;210, 337). — IV, 1020.
 - 27) Anhydro-3-[α-Oximido-4-Methylbenzyl] pyridin-2-Carbonsäure. Sm. 217° (M. 18, 456).
 - 28) Methylphenazoncarbonsäure. Sm. noch nicht bei 290° (B. 26, 2242).
 - IV, 1466. 29) Inn. Anhydrid d. α -Phenylimido- β -[2-Pyrroyl] propionsäure. Sm. 218° (B. 23, 2157). — IV, 89.
 - 30) Amid d. 9-Oximidofluoren-1-Carbonsäure. Sm. 2720 (A. 252, 29). - II, 1719.
 - 31) Phenylamidoimid d. Benzol 1, 2 Dicarbonsäure. Sm. 181-1820 $(178-179^{\circ})$ (G. 16, 203; B. 19, 1204; 21, 1617; A. 232, 233; J. pr. [2] 35, 268). — IV, 710.
 - 32) Nitril d. ?-Nitro-1-Benzylbenzol-2-Carbonsäure. Sm. 110° (B. 25, 3022). — II, 1466.
- C 63,2 H 3,8 O 12,0 N 21,0 M. G. 266. $\mathbf{C}_{14}\mathbf{H}_{10}\mathbf{O}_{2}\mathbf{N}_{4}$
 - 1) 2-Phenylhydrazon-5-Keto-4-Phenyl-4,5-Dihydro-1,3,4-Oxdiazol. Sm. 198—200° (B. 23, 2832). — IV, 676.
 - 2) 3-[4-Nitrobenzyliden]amidoindazol. Sm. 232-2340 (A. 305, 350).
 - 3) 2,3-Di[Formylamido]-5,10-Naphtdiazin (B. 23, 842). IV, 1281. 4) 2,4-Lakton d. 2-Oxy-1,2-Diphenyl-2,2-Dihydro-1,2,3,5-Tetrazol-
 - **4-Carbonsäure.** Sm. 161° (B. **27**, 2926). **IV**, 1240. 5) **Verbindung** (aus d. Nitril d. 4-Nitrophenylessigsäure). Sm. 201—202° (B. 16, 341). — II, 1319.
- $C_{14}H_{10}O_{2}Cl_{2}$ 1) β -Oxy- α -Keto- $\alpha\beta$ -Di[3-Chlorphenyl]äthan (m-Dichlorbenzoïn). Sm. 65 bis 67°. — III, 223.
- $\mathbf{C}_{14}\mathbf{H}_{10}\mathbf{O}_{2}\mathbf{Cl}_{4}$ 1) Dimethyläther d. $\alpha\alpha\beta\beta$ -Tetrachlor- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 169° (A. **279**, 339). — II, *993*.
- $\mathbf{C}_{14}\mathbf{H}_{10}\mathbf{O}_{2}\mathbf{Br}_{2}$ 1) ?-Dibrom-4-Methylphenylester d. Benzolcarbonsäure. Sm. $91-91.5^{\circ}$ (B. 17, 2532). — II, 1147.
- $C_{14}H_{10}O_{2}Br_{4}$ 1) Di[P-Dibromphenyläther] d. $\alpha\beta$ -Dioxyäthan. Sm. unter 100° (Z. 1869, 447). — II, 655.
- $\mathbf{C}_{14}\mathbf{H}_{10}\mathbf{O}_{2}\mathbf{J}_{2}$ 1) ?-Dijod-4-Methylphenylester d. Benzolcarbonsäure. Sm. 129,5 bis 130° (B. 17, 2534). — II, 1147.
- $C_{14}H_{10}O_2S$
- Anthracen-2-Sulfinsäure. Na, Ag (B. 28, 2262).
 Benzoylsulfid (Anhydrid d. Benzolthiolcarbonsäure). Sm. 48° (Z. 1868, 357). — II, *1291*.
 - 3) Benzoat d. polym. Thio-2-Oxybenzaldehyd = $(C_{14}H_{10}O_2S)_x$. Sm. 95
 - bis 98° (A. 277, 346). III, 71. 4) Benzoat d. polym. Thio-4-Oxybenzaldehyd = $(C_{14}H_{10}O_2S)_x$. Sm. 96bis 98° (A. 277, 351). — III, 84.
- Dibenzoyldisulfid. Sm. 128° (Z. 1868, 358; A. 115, 27; 118, 305;
 J. pr. [2] 4, 59; B. 29, 2150). II, 1291. $C_{14}H_{10}O_2S_2$
- C 66.1 H 3.9 O 18.9 N 11.0 M. G. 254. $\mathbf{C}_{14}\mathbf{H}_{10}\mathbf{O}_3\mathbf{N}_2$ 1) 4,5,7-Trioxy-2-Phenyl-1,3-Benzdiazin (Pinner, Imidoather 297). —
 - IV, 1024.
 - 2) 3-Nitro-9-Acetylcarbazol. Sm. 237—238° (G. 22 [2] 443). IV, 392. 3) 4-Acetylamido-3-Keto-1,6-Phenoxazin? Sm. 287° (285°) (B. 28, 297).
 - 4) Acetylamidobenzolazoxindon. Sm. 287° (A. 226, 64). IV, 1005. 5) Säure (aus s-Diphenylhydrazin-3, 3'-Dicarbonsäure). Ba + 7 H₂O, HCl
 - (B. 23, 917). IV, 1508.

- C₁₄H₁₀O₃N₂ 6) Aldehyd d. Azoxybenzol-4, 4'-Dicarbonsäure. Sm. 194° (B. 30, 1598). IV, 1345.
 - 7) Aldehyd d. 4-Oxyazobenzol-3, 4'-Dicarbonsäure. Sm. 180° (J. pr. [2] 56, 123). — IV, 1476.
 - 8) Methylester d. 5-Keto-5,10-Dihydro-a-Chinochinolin-3-Carbonsäure. Sm. 176° (B. 28, 123). — IV, 1020.
 - 9) Verbindung (aus d. Acthylester d. α-Nitro-β-[4-Nitrophenyl]akrylsäure).
 Sm. 188° (B. 16, 850). II, 1415.
 C 59,6 H 3,5 O 17,0 N 19,9 M. G. 282.
- $C_{14}H_{10}O_3N_4$
 - 1) 3-Oxy-5-Phenyl-1-[3-Nitrophenyl]-1,2,4-Triazol. Sm. 235°. Ag +

 - Zers. $Ag + \frac{1}{2}H_2O$ (Soc. 71, 205). IV, 1158.
 - 4) ?-Nitro-3-Phenylhydrazon-2-Oxypseudoindol (Phenylhydrazon d.
- Nitroisatin). Sm. 284° (B. **28**, 546). **IV**, 695. 1) α-Οχy-αα-Di[3-Chlorphenyl]essigsäure. Sm. 114—115°. **II**, 1696. $\mathbf{C}_{14}\mathbf{H}_{10}\mathbf{O}_{3}\mathbf{Cl}_{2}$ 2) Benzoat d. 4,5-Dichlor-1,2-Dioxybenzolmonomethyläther. Sm. 72 bis 74° (G. 28 [1] 230).
- C₁₄H₁₀O₃Br₂ 1) Acetat d. Brommethyl-?-Brom-1-Oxy-2-Naphtylketon. Sm. 124° (B. **30**, 1468).
- 1) Anthracen-2-Sulfonsäure. Na $+4H_2O$, Ba, Pb $+2H_2O$ (B. 12, 589, 1288; 13, 47; 15, 852; 28, 2262; A. 212, 48). II, 264.
 2) isom. Anthracensulfonsäure. Pb (B. 1, 187). II, 265.
 3) isom. Anthracensulfonsäure. Na, Ba $+6H_2O$, Pb $+4H_2O$ (J. pr. [2] $C_{14}H_{10}O_3S$

 - 11, 222). II, 265.
 - 4) isom. Anthracensulfonsäure. Na, Ba + 7H₂O, Pb + 7H₂O (J. pr. [2] 11, 223; B. 12, 592). — II, 265.
 - 5) α -Phenanthrensulfonsäure. Ca + 4 H₂O, Ba, Pb + 2 H₂O (A. 167, 152; B. 11, 213; Soc. 37, 83). — II, 269.

 - 6) β -Phenanthrensulfonsäure (Soc. 37, 83). II, 269. 7) isom. Phenanthrensulfonsäure. K, Ba + 3H₂O, Pb + 3H₂O (Am. 2, 203). — II, 269.
 - 8) αβ-Diphenyläthin-?-Sulfonsäure (Tolansulfonsäure). Ca, Ba (B. 4, 380). — II, 272.
- C 62,2 H 3,7 O 23,7 N 10,4 M. G. 270. $C_{14}H_{10}O_4N_2$
 - 1) $\alpha\beta$ -Dinitro- $\alpha\beta$ -Diphenyläthen? Sm. 104—105° (Soc. 71, 223).
 - 2) cis- $\alpha \beta$ -Di[2-Nitrophenyl]äthen. Sm. 126° (B. 21, 2072; 28, 1412). II, 248.
 - 3) trans- $\alpha\beta$ -Di[2-Nitrophenyl]äthen (Dinitrostilben). Sm. 196° (191—192°) (B. 21, 2072; 28, 1412). II, 248. 4) $\alpha\beta$ -Di[4-Nitrophenyl]äthen. Sm. 280—285° (B. 6, 328; 23, 1959; 26,
 - 2232; J. pr. [2] 34, 344). II, 248.
 - 5) isom. $\alpha \hat{\beta}$ -Di[4-Nitrophenyl] äthen. Sm. 210—216° (B. 6, 328; 23, 1959; **26**, 2232; *J. pr.* [2] **34**, 344). — **II**, 248. 6) αα-Diphenylvinyldinitrit. Sm. 148—149° (A. **233**, 340). — **II**, 232.

 - 7) β -Oximido α Keto β [2-Nitrophenyl] α Phenyläthan. Sm. 185° u.
 - Zers. (B. 26, 2454). III, 281. 8) α-Oximido-β-Keto-β-[2-Nitrophenyl]-α-Phenyläthan. Sm. 265° u. Zers. (B. 26, 2456). III, 281.
 - 9) 4,8-Diamido-1,5-Dioxy-9,10-Anthrachinon (B. 29, 2937, 2941).
 - 10) isom. Diamidodioxy-9, 10-Anthrachinon (B. 29, 2937). 11) 1,5-Dihydroxylamido-9,10-Anthrachinon (B. 29, 2935).
 - 12) 1,8-Dihydroxylamido-9,10-Anthrachinon (B. 29, 2942).
 - 13) Diacetylpyrokoll. Sm. 225° (G. 19, 354). IV, 88.
 - 14) N-3-Formylphenyläther d. 3-Nitrobenzaldoxim. Sm. 1910 (B. 29,
 - 15) N-4-Formylphenyläther d. 4-Nitrobenzaldoxim. Sm. 224° (B. 29,
 - 16) Benzoat d. anti-3-Nitrobenzaldoxim. Sm. 161° (G. 22 [2] 171; 26 1] 458). — III, 48.
 - 17) Untersalpetersäureanthracen. Sm. 1940 (B. 13, 1585; 14, 484). II, 261.

 $C_{14}H_{10}O_4N_2$ 18) Azobenzol-2,2'-Dicarbonsäure. Sm. 237° u. Zers. Ba + 7 (9) H_2O_7 , Ag₂ (B. 10, 1868; 11, 760; 15, 55). — IV, 1458.

19) Azobenzol-2, 3'-Dicarbonsäure. Sm. 237° u. Zers. (B. 25, 3597). — IV, 1458.

- 20) Azobenzol-3,3'-Dicarbonsäure. Ca, Ba + 5H₂O, Ag₂ (A. 129, 133;
 B. 8, 41; J. r. 6, 196; 16, 414; 21, 485). IV, 1458.
- 21) Azobenzol-4,4'-Dicarbonsäure. (NH₄)₂ + H₂O, Na, Ca + 3H₂O, Ba, Ag₂ (A. 132, 144; 135, 154; 139, 13; 303, 385; A. Spl. 3, 160; Z. 1868, 563; B. 15, 2331; J. r. 20, 28; 21, 484). IV, 1459.

22) Säure (aus 3-Amidobenzol-1-Carbonsäure). Ba, Ag (A. 123, 291).

IV, 1459. 23) Amid d. 4-[3-Nitrobenzoyl]benzol-1-Carbonsäure. Sm. 2040 (A. 286, 318). — II, 1705.

C 56,4 — H 3,3 — O 21,5 — N 18,8 — M. G. 298. $C_{14}H_{10}O_4N_4$

- 1) 5-Keto-3-Methyl-1-Phenyl-4, 5-Dihydropyrazol-4-Malonylharn-
- stoff. Zers. bei 250° (A. 255, 236). IV, 548.

 2) 2,2'-Dinitrobenzalazin. Sm. 181° (J. pr. [2] 39, 49). III, 38.

 3) ?-Nitro-1-[4-Methylphenyl]-1,2,3-Benztriazol-5-Carbonsäure.
- 253° (B. 23, 3455). IV, 1154. 4) 2,4-Lakton d. 2-Oxy-1,2-Di[4-Oxyphenyl]-2,2-Dihydro-1,2,3,5-Tetrazol-4-Carbonsäure + 31/2 H2O (Di-p-Oxyphenyltetrazoliumbetain).
- Sm. 178—179° u. Zers. (B. 28, 1692). IV, 1241. C 51,5 H 3,1 O 19,6 N 25,8 M. G. 326. $\mathbf{C}_{14}\mathbf{H}_{10}\mathbf{O}_{4}\mathbf{N}_{6}$ 1) 3,6-Di[4-Nitrophenyl]-1,2-Dihydro-1,2,4,5-Tetrazin. Sm. 215° (A. **298**, 53). — IV, *1289*. C 47,5 — H 2,8 — O 18,1 — N 31,6 — M. G. 354.
- $C_{14}H_{10}O_4N_8$ 1) Verbindung (aus 4-Nitro-anti-Diazobenzolcyanid u. 2-Oxynaphtalin). Sm.
- 210° u. Zers. (B. 28, 2079). IV, 1453. C₁₄ \mathbf{H}_{10} O₄Cl₂ 1) Diacetat d. 2,4-Dichlor-1,3-Dioxynaphtalin. Sm. 136° (A. 300, 193). 2) Diacetat d. ?-Dichlor-1,4-Dioxynaphtalin. Sm. 236° (A. 149, 7). II, 983.
 - 3) Diacetat d. 1, 8-Dichlor-2, 7-Dioxynaphtalin. Sm. 195° (B. 23, 525). - II, 985.
- C₁₄H₁₀O₄Br₂ 1) Dibromcotoïn (Monomethyläther d. ?-Dibrom-2, 4, 6-Trioxydiphenylketon). Sm. 116° (114°) (A. 199, 26; B. 27, 415). — III, 203.
- 2) Diacetat d. 2, 3-Dibrom-I, 4-Dioxynaphtalin. Sm. 238° (Soc. 67, 909). 3) Dioxyessigdi [?-Bromphenyläther] säure. Sm. 151°. Ag (B. 27, 2797). $\mathbf{C}_{14}\mathbf{H}_{10}\mathbf{O}_{4}\mathbf{Br}_{4}$ 1) Tetrabromeureumin (Am. 4, 364). III, 660.
- $C_{14}H_{10}O_4S$ 1) 2-Oxyanthracen-?-Sulfonsäure. Na, Ba (B. 12, 185; 15, 1808). — II, 901.
 - 2) Dialdehyd d. Diphenylsulfon-4,4'[?]-Dicarbonsäure $+ 1\frac{1}{2}H_2O$ (Dibenzolsulfon). Sm. 179°. $+2 \text{ NaHSO}_3 + 1^{1/2} \text{H}_2\text{O}$ (Bl. [3] 11, 505). -III. 19.
- 1) Diphenyldisulfid-2,2'-Dicarbonsäure. $(NH_4)_2 + 2H_2O$ (B. 31, 1669; $C_{14}H_{10}O_4S_2$ *Am.* **21**, 209).
 - 2) Diphenyldisulfid-3,3'-Dicarbonsäure. Sm. 242—244°. (NH₄)₂+2H₂O, Ca+3H₂O, Ba+3H₂O, Pb+H₂O, (CuOH)₂+5H₂O, Ag₂+1¹/₂H₂O (Z. 1870, 294; J. pr. [2] 1, 103; B. 4, 622; 6, 1150; 7, 794). II, 1522. C 58,7 H 3,5 O 28,0 N 9,8 M. G. 286.
- $\mathbf{C}_{14}\mathbf{H}_{10}\mathbf{O}_{5}\mathbf{N}_{2}$ 1) P-Dinitro - α - Keto - $\alpha\beta$ -Diphenyläthan. 3 Modifikationen.
 - Sm. 112—114°; β -Modif. Sm. 124—125°; γ -Modif. Sm. 154—155° (*J. r.* 13, 23; *B.* 13, 2403). III, 219.
 - 2) ?-Dinitro-3-Methyldiphenylketon. Sm. 145° (A. 220, 236). III, 212.
 - 3) ?-Nitro-3-Nitrophenyl-4-Methylphenylketon. Sm. 125° (A. 286, 311). **– III**, 214.
 - 4) ?-Nitro-4-Nitrophenyl-4-Methylphenylketon. Sm. 127° (A. 286, 322; B. 7, 983). — III, 214.
 - 5) N-Benzoat d. 4-Nitrobenzhydroxamsäure. Sm. 1870 u. Zers. (1850) (R. 15, 363; 16, 187).
 - 6) N-4-Nitrobenzoat d. Benzhydroxamsäure. Sm. 168° u. Zers. (R. 15, 361; **16**, 185).
 - 7) 3-[3-Nitrobenzoyl]amidobenzol-1-Carbonsäure (A. 251, 169). II, 1267.

- C₁₄H₁₀O₅N₂ 8) 5-[2-Nitrobenzyliden]amido-2-Oxybenzol-1-Carbonsäure. Sm. 221° u. Zers. (B. 31, 2260).
 - 9) 5-[3-Nitrobenzyliden]amido-2-Oxybenzol-1-Carbonsäure. Sm. 252° u. Zers. (B. 31, 2260).
 - 10) 5-[4-Nitrobenzyliden]amido-2-Oxybenzol-1-Carbonsäure. Sm. 217 bis 218° u. Zers. (B. 31, 2260).
 - 11) Azoxybenzol-2, 2'-Dicarbonsäure. Sm. 237—240° u. Zers. Ba+4 H $_2$ O
 - (B. 7, 1611; 17, 1903; 29, 656; H. 2, 57; J. r. 23, 89). IV, 1343.

 12) Azoxybenzol-3, 3'-Dicarbonsäure. Sm. noch nicht bei 300°. K₂, Ba, Ag₂ (J. 1864, 352; J. pr. [2] 50, 565, 566; Soc. 73, 146; A. 196, 18; J. r. 23, 91). IV, 1343.
 - 13) Azoxybenzol-4,4'-Dicarbonsäure. Zers. bei 240°. (NH₄)₂, Ba, Ag₂ (B. 30, 1599; J. pr. [2] 50, 565; Soc. 73, 147). IV, 1344.

 14) ?-Oxyazobenzol-3,3'-Dicarbonsäure? Ag₂ (J. pr. [2] 1, 106; B. 9, 630).
 - IV, 1470.
- 15) Säure (aus 1-Naphtylaminalloxan) + H₂O (G. 17, 411). II, 612. C 55,6 H 3,3 O 31,8 N 9,3 M. G. 302. $C_{14}H_{10}O_6N_2$
 - 1) 1,5-Naphtylendioxaminsäure. Sm. 235°. Na₂ (B. 30, 774). IV, 923. 2) Methylester d. 3-Nitro-1-[4-Nitrophenyl]benzol-4-Carbonsäure. Sm. 156° (A. 210, 192). — II, 1463.
- C 50.9 H 3.0 O 29.1 N 17.0 M. G. 330. $C_{14}H_{10}O_6N_4$ 1) s-2-Nitrophenyl-2-Nitrobenzoylharnstoff. Sm. 220° (Am. 19, 303, 327). 2) s-3-Nitrophenyl-3-Nitrobenzoylharnstoff. Sm. 230° (Am. 19, 24, 339). 3) s-4-Nitrophenyl-4-Nitrobenzoylharnstoff. Sm. 256° (Am. 19, 301).

 - 3) s-4-Nitrophenyi-4-Nitrobenzoyinarnston. Sm. 250° (Am. 19, 301).
 4) s-Di[2-Nitrobenzoyl]hydrazin. Sm. über 250° (J. pr. [2] 51, 177).
 5) s-Di[3-Nitrobenzoyl]hydrazin. Sm. 242° (J. pr. [2] 51, 177).
 6) s-Di[4-Nitrobenzoyl]hydrazin. Sm. 245° (J. pr. [2] 51, 178).
 7) 1,3,5-Trinitrobenzol + Indol. Sm. 187° (R. 14, 66). IV, 217.
 8) 4,4'-Bidiazobiphenyl-3,3'-Dicarbonsäure + 2H₂O (B. 31, 2576). —

 - 9) s-Di[2-Nitrophenylamid] d. Oxalsäure. Sm. oberh. 300° (A. 209, 369). - II, 410.
 - 10) s-Di[3-Nitrophenylamid] d. Oxalsäure. Sm. noch nicht bei 270°. II, 410.
 - 11) s-Di[4-Nitrophenylamid] d. Oxalsäure. Sm. 260° (A. 209, 366; B. 8, 473). — II, 410.
- 12) Verbindung (aus 1,3,5-Trinitrobenzol u. Indol). Sm. 187° (R. 14, 66). C₁₄H₁₀O₆Cl₂ 1) Dimethyläther d. 3,6-Dichlor-2,5-Dioxy-1,4-Benzochinonhemi
 - acetal. Na₂ (Am. 17, 600). III, 350.

 2) 1,4-Diacetat d. 2,5-Diathyläther d. 3,6-Dichlor-1,2,4,5-Tetraoxy-
- benzol. Sm. 172° (*J. pr.* [2] **42**, 169). **II**, 1032. 1) Diphenylsulfon-4,4'-Dicarbonsäure. Sm. über 300°. Ba, Ag₂ (*B.* **11**, C14H10O6S 121). — **II**, *1308*.
 - 2) Diphenylsulfon-?-Dicarbonsäure. Ag₂ (Bl. [3] 9, 709). II, 1291.
 - 3) Gemischtes Anhydrid d. Benzolcarbonsäure u. d. Benzol-1-Carbon-
- 3) Gemischtes Annydrid d. Benzolearbonsaure u. d. Benzol-1-Carbon-säure-3-Sulfonsäure (A. 131, 162). II, 1299.

 1) α-Anthracendisulfonsäure. Na₂ + 4H₂O, K₂ + H₂O, Ca + 5H₂O, Ba + 4H₂O, Pb (B. 11, 1613; 12, 183). II, 265.

 2) β-Anthracendisulfonsäure. Na₂ + 3H₂O, Ca + 3H₂O, Ba + 4H₂O, Pb (B. 11, 1613; 12, 183). II, 265.

 3) Flavanthracendisulfonsäure. Na₂, Ba (B. 15, 1807). II, 265.

 4) Phenanthrendisulfonsäure. K₂ + 3H₂O, Ba (B. 13, 314). II, 269.

 1) γ-Phenylbithiënyl-γ-Sulfonsäure. Ba (BL [3] 5, 279). III, 769. $\mathbf{C}_{14}\mathbf{H}_{10}\mathbf{O}_{6}\mathbf{S}_{2}$
- P-Phenylbithiënyl-P-Sulfonsäure. Ba (Bl. [3] 5, 279). III, 769.
 52,8 H 3,1 O 35,2 N 8,8 M. G. 318.
 Monomethyläther d. P-Dinitro-1,2-Dioxydiphenylketon. Sm. 188 C14H10O6S4 $C_{14}H_{10}O_7N_2$
 - bis 189° (G. 27 [1] 285). 2) Aldehyd d. 3,4-Dioxybenzol-3-Methyläther-4-[2,4-Dinitrophenyl-
 - äther]-1-Carbonsäure. Sm. 131° (B. 27, 2457). III, 101.
 - 3) Methylester d. ?-Dinitro-2-Oxybenzolphenyläther-1-Carbonsäure.
- Sm. 126° (A. 257, 83). II, 1495. 4) Verbindung (aus Tetraphenylthiophen) (A. 144, 199). III, 750. C 50,3 H 3,0 O 38,3 N 8,4 M. G. 334. $\mathbf{C}_{14}\mathbf{H}_{10}\mathbf{O}_{8}\overline{\mathbf{N}}_{2}$ 1) polym. Pyridindicarbonsäure. Sm. 96°. Pb₂, Ag₄ (B. 14, 1942). —

IV, 166.

C₁₄H₁₀O₂N₂ 2) Dimethylester d. ?-Dinitronaphtalin-1,5-Dicarbonsäure. Sm. 210 bis 215° (*G.* **26** [1] 108). C 46,2 — H 2,8 — O 35,4 — N 15,5 — M. G. 362.

 $C_{14}H_{10}O_8N_4$

- 1) ?-Tetranitro-4-Benzyl-1-Methylbenzol. Sm. 160-161° (B. 5, 685). **- II**, 237.
- 2) Acetat d. 2-[2,4,6-Trinitrophenyl]amido-1-Oxybenzol. Sm. 1610 (Soc. 59, 720). — II, 704.

3) Acetat d. 4-[2,4,6-Trinitrophenyl] amido-1-Oxybenzol. Sm. 165° (Soc. 59, 718). — II, 718.

C 43,1 - H 2,6 - O 32,8 - N 21,5 - M. G. 390. $C_{14}H_{10}O_8N_6$

1) P-Tetranitro-4,4'-Dimethylazobenzol. Sm. 198-200° (M. 9, 839). -

IV, 1379. C₁₄H₁₀O₈Cl₂ 1) 3,6-Dichlor-1,4-Benzochinondi[Methylfurancarbonsäure]. Zers. bei 220° (J. pr. [2] 45, 76). — II, 2078.

1) Säure (aus 1-Diazobenzol-3-Carbonsäure) (J. 1864, 351). — II, 1523. $C_{14}H_{10}O_8S$ $C_{14}H_{10}O_8S_2$ 1) $\alpha\beta$ -Diketo- $\alpha\beta$ -Diphenyläthan-3,3'-Disulfonsäure (m-Benzildisulfonsäure). Ba (B. 24, 794). — III, 295.

 $C_{14}H_{10}O_9N_6$

C 41,4 — H 2,4 — O 35,5 — N 20,7 — M. G. 406.

1) Säure (aus 6-Nitro-2-Amido-1-Diazobenzol-4-Carbonsäure-1,4-Anhydrid) (A. 128, 177; 163, 61). — IV, 1555.

C 37,3 — H 2,2 — O 35,5 — N 24,9 — M. G. 450. $\mathbf{C}_{14}\mathbf{H}_{10}\mathbf{O}_{10}\mathbf{N}_{8}$

1) Di[2,4-Dinitrophenylhydrazid] d. Oxalsäure. Sm. 2920 (G. 24 [1] 562). — IV, 701. C 44,0 — H 2,6 — O 46,1 — N 7,3 — M. G. 382.

 $C_{14}H_{10}O_{11}N_2$ C 44,0 - H 2,6 - U 46,1 - N 1,5 - M. G. C21. (Azoxygallussäure?). Sm. 1) ?-Hexaoxyazoxybenzol-3,3'-Dicarbonsäure (Azoxygallussäure?). Sm. unter 200°. Ag₂ (B. **28**, 1802). — IV, 1344. C 34,9 — H 2,1 — O 39,8 — N 23,2 — M. G. 482.

 $\mathbf{C}_{14}\mathbf{H}_{10}\mathbf{O}_{12}\mathbf{N}_{8}$

1) $\alpha\beta$ -Di[2, 4, 6-Trinitrophenylamido] äthan. Sm. 230° (J. pr. [2] 48, 204). - II. 343.

2) ?-Hexanitro-4,4'-Di[Methylamido] biphenyl. Zers. oberh. 220° (B. 19, 2126). — IV, 962.

1) 4[oder 6]-Chlor-2-Phenylindol. Sm. 181—182°. Pikrat (B. 25, 2876). C, H, NCl • IV, 413. 2) 2-[4-Chlorphenyl]indol. Sm. 201-202° (Bl. [3] 21, 66).

3) Nitril d. α-Chlordiphenylmethan-2-Carbonsäure. Fl. (B. 29, 1315).

 $C_{14}H_{10}NBr$ 1) 2-[4-Bromphenyl] indol. Sm. 208—209° (Bl. [3] 21, 67).

 $C_{14}H_{10}N_2Cl_2$ 1) Verbindung (aus α -Benzildioxim). Sm. 122° (A. 252, 60). — III, 292.

 $\mathbf{C}_{14}\mathbf{H}_{10}\mathbf{N}_{2}\mathbf{Br}_{2}\mathbf{1}$ Nitril d. α -[2,4-Dibromphenyl]amido- α -Phenylessigsäure. Sm. 92° (B. 15, 2032). — II, 1324. 2) Verbindung (aus Benzonitril) (A. 133, 145). — II, 1212.

1) 3,5-Diphenyl-1,2,4-Thiodiazol. Sm. 90° (B. 2, 646; 25, 1589). — $C_{14}H_{10}N_2S$ IV, 1023.

2) Anhydro - 2 - Oxyphenylthiotetrahydrochinazolin. Sm. 160 — 161° $(2 \text{ HCl}, \text{PtCl}_4)$ (J. pr. [2] 55, 372). — IV, 634.

1) 2-Thiocarbonyl-4,5-Diphenyl-2,4-Dihydro-1,3,4-Thiodiazol. Sm. 223-224° (B. 28, 2645). — IV, 750.

2) Thiocarbonyl-s-Diphenylthioharnstoff. Sm. 78-79° (B. 25, 1459).

 $C_{14}H_{10}N_2S_3$ 1) 5-Phenylimido-3-Thiocarbonyl-4-Phenyl-3,5-Dihydro-1,2,4-Dithiazol (Phenylsenfölsulfid). Sm. 154—156° (B. 9, 1265; 22, 2200; 25, 1463, 3526; A. 285, 199). — II, 389.

2) Phenyläther d. 5-Merkapto-2-Thiocarbonyl-3-Phenyl-2, 3-Dihydro-1,3,4-Thiodiazol (B. 29, 2141). — IV, 683.

C₁₄H₁₀N₂Se 1) Verbindung (aus dem Amid d. Benzolselencarbonsäure) (B. 7, 1274). —

II, 1308. $\mathbf{C}_{14}\mathbf{H}_{10}\mathbf{N}_{3}\mathbf{Cl}$ 1) 3-Chlor-1,5-Diphenyl-1,2,4-Triazol. Sm. 96°. HCl, (2HCl, PtCl₄)

 $+2H_2O)$ (B. **29**, 2672). — **IV**, 1156. $C_{14}H_{10}N_4Br_2$ 1) ?-Dibrom-1, 4-Diphenyl-1, 4-Dihydro-1, 2, 4, 5-Tetrazin (Soc. 55, 246).

- IV, 1233.
2) isom.-?-Dibrom-1,4-Diphenyl-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 131° (Soc. 55, 246). — IV, 1233.

1) 5-Phenylazo-2-Thiocarbonyl-3-Phenyl-2,3-Dihydro-1,3,4-Thiodi- $C_{14}H_{10}N_4S_2$ azol. Sm. 160—165° u. Zers. (B. 23, 2829). — IV, 687.

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C₁₄H₁₀N₅Cl 1) 2-Chlorphenylat d. 4-Cyan-1-Phenyl-1, 2, 3, 5-Tetrazol. Sm. 265 bis 267° (B. 30, 2995). — IV, 1240. 1) Disulfid d. 5-Merkapto-1-Phenyl-1,2,3,4-Tetrazol. Sm. 145—148°

 $C_{14}H_{10}N_8S_2$ (B. 28, 81). — IV, 1233. $\mathbf{C}_{14}\mathbf{H}_{10}\mathbf{ClBr}$ 1) α-Chlor-β-Brom-αβ-Diphenyläthen. Sm. 173—174° (Soc. 71, 222).

 $C_{14}H_{10}Cl_2Br_21$) $\beta\beta$ -Dichlor- $\alpha\beta$ -Dibrom- $\alpha\alpha$ -Diphenyläthan. Sm. 120—120,5° (B. 26, 1956; A. **296**, 265). — II, 231.

 $C_{14}H_{11}ON$

C 80,4 — H 5,2 — O 7,6 — N 6,7 — M. G. 209. 1) 1-Amido-2-Oxyanthracen. Zers. bei 140—150° (B. 28, 1422).

- 2) 3 [oder 1]-Oxy-2-Phenylindol. Sm. 175° (B. 28, 587; 29, 2062). IV, 414.

1V, 414.

3 3-Oxy-2-Phenylindol? Sm. 160—165° (A. 243, 246). — IV, 772.

4) 2-Keto-3-Phenyl-2, 3-Dihydroindol. Sm. 183° (M. 18, 546).

5) 1-Keto-2-Phenyl-1, 3-Dihydroisoindol (Phenylphtalimidin). Sm. 160° (B. 10, 1450; 11, 239; A. 239, 87; 247, 306). — II, 1558.

6) 4-Methyl-1-Phenylbenzoxazol. Sm. 104° (B. 31, 2695).

7) 2-[4-Methylphenyl]benzisoxazol. Sm. 81-82°; Sd. 344-346° u. ger. Zers. (B. 27, 1453). — IV, 417.

8) 3-Phenyl-1,4-Benzoxazin. Sm. 102—103°. (2HCl, PtCl₄) (B. 23, 172). **- IV**, 417.

9) 9-Acetylcarbazol. Sm. 69°; Sd. oberh. 360° (A. 163, 350). — IV, 392. 10) 4-Oxy-2-Methyl-α-Naphtochinolin. Sm. 292°. (2HCl, PtCl₄) (B. 17,

545; **21**, 531). — **IV**, 411.

11) 1-Oxy-3-Methyl-β-Naphtochinolin. Sm. 286°. (2 HCl, PtCl₄) (B. 17, 543; **21**, 532). — **IV**, 412.

12) Anhydro-Methyloxydhydrat d. a-Naphtochinolin. Sm. 1750. (2 HCl, $PtCl_4$) (J. pr. [2] 57, 77).

13) Anhydro-Methyloxydhydrat d. β-Naphtochinolin. Sm. 1830 u. Zers. (J. pr. [2] 57, 57).

14) 2-Oxy-5-Methylakridin. Sm. oberh. 250°. $HCl + H_2O$ (B. 24, 2045). · IV, 416.

15) 5-Keto-1-Methyl-5,10-Dihydroakridin. Sm. 345-3460 (A. 279, 278; B. 29, 1191). — IV, 415.

16) 5-Keto-3-Methyl-5,10-Dihydroakridin. Sm. 338° (A. 279, 272; B.

29, 1191). - IV, 415. 17) 5-Keto-10-Methyl-5,10-Dihydroakridin (N-Methylakridon). Sm. 203,50

(J. pr. [2] 45, 193; A. 276, 47). - IV, 406.18) 9-Keto-10-Methyl-9,10-Dihydrophenanthridin. Sm. $108,5^{\circ}$ (B. **26**,

1966; A. 276, 252; C. 1897 [1] 414). — IV, 408. 19) Nitril d. α-Oxydiphenylmethan-2-Carbonsäure. Fl. (B. 29, 1316).

20) Nitril d. 2-Oxybenzolbenzyläther-1-Carbonsäure. Sm. 71—72° (B. **31**, 3040).

21) Nitril d. 4-Oxybenzolbenzyläther-l-Carbonsäure. Sm. 94—94,5° (B. **31**, 3041).

22) Nitril d. 1-Oxymethylbenzolphenyläther-2-Carbonsäure. Sm. 63 bis 65° (B. 25, 3019). — II, 1559. C 70,9 - H 4,6 - O 6,8 - N 17,7 - M. G. 237.

 $\mathbf{C}_{14}\mathbf{H}_{11}\mathbf{ON}_{3}$

1) α -Phenyl- β -[2-Cyanphenyl]harnstoff. Sm. 1940 (B. 29, 632).

2) 5-Phenyl-3-[3-Amidophenyl]-1,2,4-Oxdiazol. Sm. 143. HCl, (2HCl, PtCl₄) (B. 18, 2473). — II, 1257.

3) 2-Phenylimido-3-Phenyl-2, 3-Dihydro-1, 3, 4-Oxdiazol. Sm. 99°. HCl (B. 26, 2870). — IV, 674.

4) 3-Oxy-1,5-Diphenyl-1,2,4-Triazol. Sm. 288° (290°). $HCl + 2H_2O$, $Ag + H_2O$ (Soc. 67, 1064; B. 29, 1951, 2311). — IV, 1157.

5) 2-Keto-1, 3-Diphenyl-2, 3-Dihydro-1, 3, 4-Triazol. Sm. 249° (B. 25, 3112). — IV, 676.

6) 1-Phenylazo-3-Oxyindol? Sm. 236° (229°) (B. 16, 2190; 26, 226). — IV, 1484.

7) 3-Phenylhydrazon-2-Oxypseudoindol. Sm. 210—211° (B. 17, 577; 23, 3619; 28, 543). — IV, 695.

8) 2-Oxy-3-[2-Amidophenyl]imidopseudoindol (o-Amidophenimesatin). Sm. 260—261° (B. **29**, 198). — IV, 1187. 9) 1-Benzoyl-6-Methylbenzisotriazol. Sm. 125° (Am. 17, 452). — IV, 1147.

- C, H, ON, 10) 3-Nitroso-4-Phenyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 131° u. Zers.
 - (B. **29**, 1312). **IV**, 1016. 11) **3-Benzoyl-3,4-Dihydro-1,2,3-Benztriazin.** Sm. 114—115° u. Zers. $(2 \text{ HCl}, \text{PtCl}_4)$ (J. pr. [2] 51, 280). — IV, 631.
 - 12) 5-Keto-6-Phenyl-8-Methyl-5, 6-Dihydro-1, 6,7-Benztriazin. Sm. 1210 (B. 26, 1512). — IV, 156.
 - 13) Nitril d. α-Phenylnitrosamido-α-Phenylessigsäure. Sm. 143° (B. 31, 2717).
- 1) 4-Chlormethyldiphenylketon. Sm. 97-98° (A. 189, 89). III, 213. $C_{14}H_{11}OC1$
 - 2) β -Chlor- α -Keto- $\alpha\beta$ -Diphenyläthan. Sm. 65° (B. 17, 1163; J. pr. [2] **44**, 548). — III, 218.
 - 3) α -Keto- β -[4-Chlorphenyl]- α -Phenyläthan. Sm. 133° (B. 25, 2240). III. 218.
 - 4) 4-Chloracetylbiphenyl. Sm. 122—123° (Bl. [3] 17, 510).
- 1) β -Brom- α -Keto- $\alpha\beta$ -Diphenyläthan. Sm. $54-55^{\circ}$ (50°) (A. 155, 68; B. $C_{14}H_{11}OBr$ **21**, 1355). — III, 218.

 - 2) 4-Brommethyldiphenylketon. Sm. 96,6° (Bl. [3] 15, 946).
 3) 2-Bromphenyl-4-Methylphenylketon. Sm. 92-93° (B. 27, 1452). III, 214.
- 4) 4-Bromphenyl-4-Methylphenylketon. Sm. 139° (A. 286, 328).
 C 74,7 H 4,9 O 14,2 N 6,2 M. G. 225.
 1) α-Phenyl-α-[P-Nitrophenyl]äthen. Sm. 86° (B. 18, 664). II, 250. $C_{14}H_{11}O_{2}N$
 - 2) 3, 4 Methylenäther d. 3, 4 Dioxy 1 Phenylimidomethylbenzol (Piperonanilid). Sm. 65° (B. 14, 793). III, 103.
 - 3) β-Oximido-α-Keto-αβ-Diphenyläthan (α-Benziloxim). Sm. 137—138° (B. 22, 540, 557; 29, 2906; A. 274, 6). III, 288.
 - 4) isom. β -Oximido- α -Keto- $\alpha\beta$ -Diphenyläthan (γ -Benziloxim). Sm. 113 bis 114°. $+ \frac{1}{2}C_6H_6$ (Sm. 70°) (B. 22, 543; 29, 2906; A. 296, 284). -III, 289.
 - 5) Oxim d. Acetyldiphenylenoxyd. Sm. 145-146° (A. 264, 189). -
 - 6) Hydrat d. Benzamid + 2H₂O? Sm. 99° (A. 169, 111). II, 1171.
 - 7) Nitrit d. β -Oxy- $\alpha\alpha$ -Diphenyläthen. Sm. 87—88° (A, 233, 336). —
 - 8) Benzoat d. anti-Benzaldoxim. Sm., 101-1020 (G. 22 [2] 167). III, 43.
 - 9) 10-Nitroso-9-Oxy-9,10-Dihydroanthracen. Na (B. 13, 1587). II, 261.
 - 10) 4-Amido-9,10-Dioxyphenanthren (B. 18, 1943). II, 1001.
 - 11) Methylenäther d. α -[3,4-Dioxyphenyl]- β -[2-Pyridyl]äthen (Piperonylα-Pikolin). Sm. 109°. HCl, (2HCl, HgCl₂), (2HCl, PtCl₄), Pikrat (B. 30, 1579). — IV, 395.
 - 12) 5-Oxy-3-Methyl-1-Phenylbenzoxazol. Sm. 239—239,50 (241—2420) (B. 30, 1105; M. 19, 496).
 - 13) Methyläther d. 2-[4-Oxyphenyl] benzisoxazol. Sm. 100-1010 (B. 27, 1455). — IV, 410.
 - 14) 2-Oxy-2-Phenyl-1, 3-Benzoxazin (B. 31, 1603).
 - 15) α-Phenylimidophenylessigsäure (Anilphenylglyoxylsäure). Ag (C. 1895 [2] 90).
 - 16) 1 Phenylimidomethylbenzol 2 Carbonsäure (Phtalaldehydsäure-
 - Anilid). Sm. 174° (A. 239, 89; C. 1898 [2] 524). II, 1626. 17) 3-Benzylidenamidobenzol-1-Carbonsäure. Sm. 119° (B. 24, 3522). - III, 32.
 - 18) Aldehyd d. 2-Benzoylamidobenzol-1-Carbonsäure. Sm. 73-740 (B.
 - 28, 287). III, 17.

 19) Imid d. Benzolcarbonsäure (Benzamid). Sm. 148°. Na, Ag, + J₂ (A. 111, 6; 252, 65; 297, 252; B. 9, 975; 11, 764; 13, 708; 22, 1606; 23, 2389, 3039; 25, 3120; 27, 999; 28, 435, 2355; J. pr. [2] 30, 87). II, 1170.
 - 20) Aethylimid d. Naphtalin-1,8-Dicarbonsäure. Sm. 148° (G. 25 [1] 250; B. **28**, 362). — II, 1880.
 - 21) 1-Naphtylimid d. Bernsteinsäure. Sm. 152° u. 151,5-153° (B. 10,
 - 1713; A. 209, 382; 248, 158; Chemiker-Ztg. 1895, 2081). II, 611. 22) 2-Naphtylimid d. Bernsteinsäure. Sm. 180° (183°) (A. 248, 159; 292, 190; C. **1896** [1] 996). — II, 620.

- C₁₄H₁₁O₂N 23) Amid d. 9-Oxyfluoren-4-Carbonsäure. Sm. 206—210° (A. 252, 29). **— II**, 1706.
 - 24) Amid d. 2-Benzoylbenzol-1-Carbonsäure. Sm. 165° (A. 291, 11). 25) Phenylamid d. Benzolketocarbonsäure. Sm. 63° (A. 274, 9). -II, 1598.
 - 26) Phenylformylamid d. Benzolcarbonsäure. Sm. 112º (Am. 18, 385, 543; 19, 135).

 $C_{14}H_{11}O_{2}N_{3}$ C 66.4 - H 4.3 - O 12.6 - N 16.6 - M. G. 253.

- 1) 4-[1-Naphtyl]hydrazon-5-Keto-3-Methyl-4,5-Dihydroisoxazol. Sm. 168—170° (B. **30**, 1165). — **IV**, 928.
- 2) 4-[2-Naphtyl]hydrazon-5-Keto-3-Methyl-4,5-Dihydroisoxazol. Sm. 200° (B. **30**, 1166). — **IV**, 930.
- 3) 2-Phenylamido-5-Keto-4-Phenyl-4,5-Dihydro-1,3,4-Oxdiazol (Diphenyldehydrobiuret; Phenylcarbizincarbonanilid). Sm. 173° (B. 21, 2465). · IV, 676.
- 4) 6-Phenylazo-5-Oxy-3-Methylbenzoxazol. Sm. 1860 (M. 19, 517). IV, 1448.
- 5) 5-Nitro-l-Methyl-2-Phenylbenzimidazol. Sm. 140° u. Zers. (Bl. [3] 17, 869). — IV, 562.
- 6) ?-Nitro-5-Methyl-2-Phenylbenzimidazol $+ \frac{1}{2}$ H₂O. Sm. 222–223° (B. 25, 1995). — IV, 1013.
- 7) 9-Nitroso-3-Acetylamidocarbazol. Sm. 162—164° u. Zers. (G. 21 [2]
- 386). IV, 992. 8) 1-Phenyl-5-Pyrrylpyrazol-3-Carbonsäure. Sm. 215° (B. 23, 2159). **IV**, 798.
- 9) 1-[4-Methylphenyl]-1,2,3-Benztriazol-5-Carbonsäure. Sm. 271° (B.
- 23, 3454). IV, 1154. 10) Aldehyd d. Diazoamidobenzol-4,4'-Dicarbonsäure. Sm. 135° (J. pr. [2] **56**, 118). — **IV**, 1579.
- 11) Nitril d. α-[4-Nitrophenyl]amido-α-Phenylessigsäure. Sm. 129° (B. 25, 2054). — II, 1324.
- 12) Verbindung (aus d. α-Phenylhydrazid d. 2-Amidobenzol-1-Carbonsäure). Sm. 218-219° (A. 301, 94).
- 13) Verbindung (aus Stilben). Sm. 220° u. Zers. (B. 7, 1097; 8, 1050). -II, 249.
- C 59.8 H 3.9 O 11.4 N 24.9 M. G. 281. $C_{14}H_{11}O_{2}N_{5}$
 - 1) ?-Nitro-1, 4-Diphenyl-1, 4-Dihydro-1, 2, 4, 5-Tetrazin. Sm. oberh. 300° (Soc. 53, 852; 57, 51). - IV, 1234.
 - 2) isom.-P-Nitro-1, 4-Diphenyl-1, 4-Dihydro-1, 2, 4, 5-Tetrazin. bis 146° (Soc. 53, 852; 57, 51). — IV, 1234.
- C₁₄H₁₁O₂Cl 1) Benzylidenäther d. Chlordioxymethylbenzol? (A. 154, 347; J. 1850,
 - 489). III, 13. 2) Benzoat d. 5-Chlor-2-Oxy-1-Methylbenzol. Sm. 71—72° (G. 28 1] 211).
 - 3) 2-Naphtylester d. β -Chlorpropen- α -Carbonsäure (2-N. d. β -Chlorcrotonsäure). Sm. 99—100° (B. 29, 1669).
 - 4) 2-Naphtylester d. isom. β -Chlorpropen- α -Carbonsäure (2-N. d. β -Chlorisocrotonsäure). Sm. 67° (B. 29, 1669).
- $C_{14}H_{11}O_{2}Cl_{3}$ 1) $\beta\beta$ -[4,4'-Dioxydiphenyl]- $\alpha\alpha\alpha$ -Trichloräthan. Sm. 202° u. Zers. (B. 7, 1201; J. pr. [2] 47, 59). — II, 995.
- C₁₄H₁₁O₂Br 1) Methyläther d. 2-Brom-4'-Oxydiphenylketon. Sm. 95—95,5° (B. 27, 1455). — III, *195*.
 - 2) Benzylidenäther d. Bromdioxymethylbenzol. Sm. 69-70° (A. 3, 266; B. 14, 2475). — III, 13.
 - 3) Diphenylbromessigsäure (A. 171, 131). II, 1464.
 - 4) Methylester d. ?-Brom-l-Phenylbenzol-3-Carbonsäure. Sm. 670 (B. **27**, 3389). — II, 1462.
 - 5) ?-Brom-2-Methylphenylester d. Benzolcarbonsäure. Sm. 59° (J. pr. [2] **51**, 213)
 - 6) P-Brom-3-Methylphenylester d. Benzolcarbonsäure. Sm. 82° (J. pr. [2] **51**, 213).
 - 7) P-Brom-4-Methylphenylester d. Benzolcarbonsäure. Fl. (J. pr. [2] **51**, 213).

- $C_{14}H_{11}O_{3}N$
- C 69.7 H 4.6 O 19.9 N 5.8 M. G. 241.
- 1) 3,4-Methylenäther d. 4-[3,4-Dioxybenzyliden amido-1-Oxybenzol. Sm. 208—209° (B. 31, 175).
- 2) Oreirufin (α-Oreindichroïn). Na (B. 7, 1100; 17, 1879; 21, 251; 23, 718). - II, 965.
- 3) Aethyläther d. Resorufin. Sm. 228° (M. 1, 894; B. 22, 3028; 23,
- 719). II, 933. 4) 2-Nitro-4[?]-Methyldiphenylketon. Sm. 126—127° (B. 5, 685; 7, 983). - III, 214.
- 5) 3-Nitrophenyl-4-Methylphenylketon. Sm. 1110 (A. 286, 307; B. 29, 3036). — III, 214.
- 6) 4-Nitrophenyl-4-Methylphenylketon. Sm. 122-1240 (A. 286, 321). **— III**, 214.
- 7) α -Keto- β -[2-Nitrophenyl]- α -Phenyläthan. Sm. 73—74° (B. 21, 2448; **26**, 2452). — III, 219.
- 8) α -Keto- β -[4-Nitrophenyl]- α -Phenyläthan. Sm. 145° (140—142°) (*J. r.* 11, 99; *B.* 25, 2242). III, 219.
- 9) 4-Nitro-4'-Acetylbiphenyl. Sm. 90-94° (B. 28, 525). III, 217.
- 10) 1-Benzoat d. 2-Oxybenzaldoxim. Sm. 1170 (114,5—1150) (B. 26, 2624; G. 26 [1] 463). — III, 77.
- 11) 2-Benzoat d. 2-Oxybenzaldoxim. Sm. 130° (B. 26, 2625). III, 77.
- 12) N-[3-Carboxylphenyl]äther d. Benzaldoxim. Sm. 2006 u. Zers. (B. **29**, 3042).
- 13) Salpetersäureanthracen. Sm. 125° u. Zers. (B. 13, 1585). II, 260.
 14) Azoorcin (B. 7, 440; 17, 1882). II, 965.
- 15) 6-Aethylphenoxazin-3,4-Chinon. Sm. 226° (B. 31, 496).
- 16) Diphenyloxaminsäure + H₂O. Sm. 141,5° (wasserfrei) u. Zers. -
- II, 408.
 17) 3-[2-Oxybenzyliden] amidobenzol-1-Carbonsäure. Sm. 190° (A. 210, 116). — III, 74.
- 18) 4-[3-Amidobenzoyl]benzol-l-Carbonsäure + H₂O. Sm. 145°. Ba, HCl, $H_2SO_4 + 2H_2O$ (A. 286, 318). — II, 1706.
- 19) 4-[4-Amidobenzoyl] benzol-1-Carbonsäure. Sm. 211°. H₂SO₄ (A. 286, 331). — **II**, *1706*.
- 20) 2-Benzoylamidobenzol-1-Carbonsäure. Sm. 177°. Na + 4H₂O, Mg $+4H_2O$, Ca $+3H_2O$, Ba $+3H_2O$, Ag (A. 205, 130; B. 16, 2229; 19, 1196; 25, 1263; 26, 1304; 27, 1480; 29, 2063). $-H_2$, 1254.
- 21) 3-Benzoylamidobenzol-1-Carbonsäure (A. 103, 90; 117, 172). II, 1267.
- 22) 4-Benzoylamidobenzol-1-Carbonsäure. Sm. 278°. Ca, Ba, Ag (A. **205**, 127). — II, 1273.
- 23) N-Phenylbenzaldoxim-N 3-Carbonsäure. Sm. 198° u. Zers. (C. 1898)
- 24) 3-[4-Methylbenzoyl]pyridin-2-Carbonsäure. Sm. 166°. Ag, AgH, HČI (M. 18, 453).
- 25) α, 2'-Lakton d. ?-Amido-α, 4-Dioxydiphenylmethan-2'-Carbonsäure. Sm. 229—230° (B. 31, 2801).
- 26) Benzoylbenzhydroxamsäure. Sm. 95° (B. 19, 1670; 27, 2198). II, 1208.
- 27) N-Benzoat d. Benzhydroxamsäure. Sm. 161°. Na, K, Pb, Ag (A. 161, 357; 175, 257, 305; 178, 226; 252, 228; 281, 221; B. 16, 874; 25, 43; 27, 2198; J. r. 14, 41; G. 23 [2] 242; R. 15, 359; Am. 20, 7). II, 1206.
- 28) Benzoat d. 4-Oximido-1-Keto-2-Methyl-1,4-Dihydrobenzol. Sm. 193° (u. 129°) (Am. 20, 770).
- 29) Benzoat d. 4-Oximido-l-Keto-3-Methyl-1,4-Dihydrobenzol. Sm. 1770 u. Zers. (Am. 20, 775).
- 30) Amid d. 2-Benzoxylbenzol-1-Carbonsäure. Sm. 200° (J. 1856, 502; A. 99, 249). — II, 1500.
- 31) Monamid d. Biphenyl-2,2'-Dicarbonsäure. Sm. 1930 (190-1910) (A. **247**, 269; **252**, 24). — II, 1884.
- 32) Phenylmonamid d. Benzol-1, 2-Dicarbonsäure (Phenylphtalamidsäure). Sm. 158° u. Zers. (169—169,5°) (J. 1847/48, 605; A. 255, 375; Am. 18, 337). — **II**, *1797*.

 $C_{14}H_{11}O_4N_3$

- $C_{14}H_{11}O_8N$ 33) Phenylmonamid d. α -[2-Furanyl]äthan- $\alpha\beta$ -Dicarbonsäure. Sm. 152,50 (B. **31**, 1121).
 - 34) 2-Naphtylmonamid d. Maleinsäure. Sm. 2000 u. Zers. (Am. 19, 495).
 - 35) Aethoxylimid d. Naphtalin-1,8-Dicarbonsäure. Sm. 160° (G. 25 [1] 253; B. 28, 363). II, 1880.
 - 36) 2-Naphtylimid d. Aepfelsäure. Sm. 193° (B. 23, C 62,4 H 4,1 O 17,8 N 15,6 M. G. 269. Sm. 193° (B. 23, 2046). — II, 620.

 $C_{14}H_{11}O_3N_3$

- 1) β -[2-Nitrophenyl]azo- α -Keto- α -Phenyläthan. Sm. 140–141° (B. 18, 2565). **— IV**, *1478*. 2) 5-Nitro-1-Nitroso-2-Phenyl-2, 3-Dihydroindol. Sm. 160° (B. 31, 2541).
- 3) Benzylidenhydrazid d. 2-Nitrobenzol-1-Carbonsäure.
- (J. pr. [2] 51, 172). III, 39. 4) Benzylidenhydrazid d. 3-Nitrobenzol-1-Carbonsäure. (J. pr. [2] 51, 172). III, 39. Sm. 203°
- 5) Benzylidenhydrazid d. 4-Nitrobenzol-1-Carbonsäure. Sm. 2470 (J. pr. [2] 51, 173). — III, 39.
- 6) 3-Nitrobenzylidenhydrazid d. Benzolcarbonsäure. Sm. 1920 (J. pr. [2] **50**, 303). — **III**, 39.
- 7) s-Diphenylnitrosamid d. Oxalsäure. Sm. 86° (B. 10, 960). II, 410.
- 1) Benzoat d. 4-Chlor-1, 2-Dioxybenzolmonomethyläther. Sm. 76-770 $\mathbf{C}_{14}\mathbf{H}_{11}\mathbf{O}_{3}\mathbf{C}\mathbf{l}$ (G. **28** [1] 229).
- C₁₄H₁₁O₃Br 1) Phenylester d. Oxyessig-4-Bromphenyläthersäure. Sm. 73° (C. 1898) [1] 988).
 - 2) 4-Bromphenylester d. Oxyessigphenyläthersäure. Sm. 98° (C. 1898) [1] 988).
- C = 65.4 H = 4.3 O = 24.9 N = 5.4 M. G. = 257. $C_{14}H_{11}O_4N$
 - 1) Monomethyläther d. 3-Nitrophenyl-[1,3-Dioxyphenylen]methan.
 - Zers. bei 150° (G. **22** [2] 302). **II**, 997. 2) Aethyläther d. Resazurin. Sm. 212° (M. 1, 889; B. **22**, 3023). **II**, 931.
 - 3) 2-Nitrophenyläther d. Oxymethylphenylketon. Sm. 118° (B. 23, 172). **— III**, *132*
 - 4) 4-Nitrophenyläther d. Oxymethylphenylketon. Sm. 144° (B. 15, 2498). — III, *133*.
 - 5) 5-[2-Oxybenzyliden]amido-2-Oxybenzol-1-Carbonsäure. Sm. 245° u.
 - Zers. (A. 210, 117). III, 75. 6) 3-Benzoylamido-2-Oxybenzol-1-Carbonsäure. Sm. 1890 (A. 195, 37).
 - II, *1512*. 7) 5-Benzoylamido-2-Oxybenzol-1-Carbonsäure. Sm. 252°. Ca, Ba+
 - 6 H₂O (Am. 5, 23). II, 1513. 8) 4-Amidobiphenyl-2,2'-Dicarbonsäure. HCl (B. 16, 2347). II, 1886.
 - 9) 2-Methyl-5-Phenylpyridin-6,52-Dicarbonsäure $+ H_2O$. Sm. 2010. $Na_2 + 2H_2O$, $Zn + 1\frac{1}{2}H_2O$, $Cu + 1\frac{1}{2}H_2O$ (B. 22, 259). — IV, 386.
 - 10) Benzylester d. 4-Nitrobenzol-1-Carbonsäure. Sm. 83,5-84° (B. 30,
 - 11) 2-Nitrobenzylester d. Benzolcarbonsäure. Sm. 94° (B. 25, 2962). · II, 1144.
 - 12) 4-Nitro-2-Methylphenylester d. Benzolcarbonsäure. Sm. 126° (B. 26, 2352). — II, *114*7.
 - 13) 2-Oxyphenylmonamid d. Benzol-1,2-Dicarbonsäure (Oxyphtalanilsäure). Sm. 223°. Na (B. 9, 1528). — II, 1809.
 - 14) 4-Oxyphenylmonamid d. Benzol-1,2-Dicarbonsäure. Sm. 289° (G.
 - 16, 252). II, 1809. 15) Imid d. 2-Oxybenzol-1-Carbonsäure. Sm. 197—199° u. Zers. Ag,
 - HCI (*J. pr.* [2] **22**, 289). II, 1499. 16) **2-Naphtylimid d. Weinsäure?** (Soc. **71**, 1062). C 59,0 H 3,9 O 22,4 N 14,7 M. G. 285.
 - 1) 1-Naphtylaminalloxan (G. 17, 410). II, 612.
 - 2) 4-Nitrophenylnitrosamidobenzoylmethan. Sm. 135-145° (B. 15, 2474). — III, 126.
 - 3) $\alpha \beta$ -Dioximido β -[2-Nitrophenyl] α -Phenyläthan. Sm. 244° u. Zers. (B. 26, 2455). — III, 281.
 - αβ Dioximido α [ρ Nitrophenyl] β Phenyläthan (2 isom. Form.).
 α-Modif. Sm. 225° u. Zers.; β-Modif. Sm. 185° (B. 23, 533, 534). III, 294.

- C14H1O4N3 5) Methylenäther d. Phenyl-6-Nitro-3,4-Dioxybenzylidenhydrazin. Sm. 212° (B. 24, 625). — IV, 764.
 - 6) α-Phenylhydrazon-2-Nitrophenylessigsäure. Sm. 165—166° u. Zers. (B. **23**, 1579, 3618). — **IV**, 695.
 - 7) α-Phenylhydrazon-3-Nitrophenylessigsäure. Sm. 174—175° u. Zers.
 - (B. 23, 1576). IV, 695. 8) Diazoamidobenzol-3,3'-Dicarbonsäure. Zers. bei 180°. (NH₄)₂, K₂,

 - Ba, Ag₂ (A. 117, 2; 135, 107; J. 1864, 353). IV, 1577.

 9) Diazoamidobenzol-3, 4'-Dicarbonsäure (J. 1864, 353). IV, 1577.

 10) Diazoamidobenzol-3', 4-Dicarbonsäure (J. 1864, 353). IV, 1577.

 11) Diazoamidobenzol-4, 4'-Dicarbonsäure (A. 128, 269). IV, 1577.

 12) Säure (aus d. Nitril d. 2-Amidophenylessigsäure). Sm. 254° u. Zers. Ag₃ (B. 17, 509). — II, 1320.
 - 13) Acetat d. 2'-Nitro-4-Oxyazobenzol. Sm. 109° (B. 24, 2314). IV, 1410.
 - 14) Amid d. 3-[3-Nitrobenzoyl]amidobenzol-l-Carbonsäure. Sm. 223 bis 224° (A. 251, 167). II, 1267.
 - 15) Verbindung (aus Phenylcarbonimid u. anti-2-Nitrobenzaldoxim). Sm. 880 (B. **26**, 2100). — III, 46.
 - 16) Verbindung (aus Phenylcarbonimid u. syn-2-Nitrobenzaldoxim). Sm. 91° u. Zers. (B. 26, 2101). — III, 47.
 - 17) Verbindung (aus Phenylcarbonimid u. anti-3-Nitrobenzaldoxim). 2 isom. Formen. Sm. 105° u. Sm. 139° (B. 23, 2171; 26, 2097). — III, 47.
 - 18) Verbindung (aus Phenylcarbonimid u. syn-3-Nitrobenzaldoxim). Sm. 75° (B. **23**, 2171). — **III**, 48.
 - 19) Verbindung (aus Phenylcarbonimid u. anti-4-Nitrobenzaldoxim). Sm. 157° (B. **24**, 2548). — III, 49.
 - 20) Verbindung (aus Phenylcarbonimid u. syn-4-Nitrobenzaldoxim). Sm. 94° u. Zers. (B. 24, 2551). — III, 50.
 - 21) Verbindung (aus α-Phenylhydrazon-2-Nitrophenylessigsäure). Sm. 189 bis 190° u. Zers. (B. 23, 1575). — IV. 695.
 - 22) Verbindung (aus 6-Nitro-1-Phenylisoindazol-3-Carbonsäure). Sm. 2350 (A. 264, 151). — IV, 1465. 1) Diacetat d. ?-Chlor-1,2-Dioxynaphtalin. Sm. 149° (B. 27, 2760).
- - 1) 2-Methyl-6-[2-Nitro-5-Oxy-3-Methylphenyl]-1,4-Benzochinon (B. **31**, 1336).
 - 2) 2-Benzoat-1-Methyläther d. 3-Nitro-1, 2-Dioxybenzol? Sm. 88-89° (C. 1896 [2] 350).
 - 3) 1-Benzoat-2-Methyläther d. 4-Nitro-1, 2-Dioxybenzol. Sm. 102 bis
 - 103° (C. **1896** [2] 350). 4) Methylester d. 4-Oxybenzol-4-Nitrophenyläther-1-Carbonsäure. Sm. 108—109°. Ba (B. 29, 2084). C 55,8 — H 3,6 — O 26,6 — N 14,0 — M. G. 301.
- $C_{14}H_{11}O_5N_3$
 - 1) ?-Dinitrophenylamidobenzoylmethan. Sm. 171—172° (B. 15, 2479). - III, 126.
 - 2) N-2-Nitrobenzyläther d. 2-Nitrobenzaldoxim. Sm. 150° (B. 30, 60).
 - 3) N-3-Nitrobenzyläther d. 3-Nitrobenzaldoxim. Sm. 185° (A. 298, 190).
 - 4) N-4-Nitrobenzyläther d. syn-4-Nitrobenzaldoxim. Sm. 227-228°
 - (A. 263, 191, 354). III, 50. 5) Methylester d. 3'-Nitro-4-Oxyazobenzol-3-Carbonsäure. Sm. 1670 (A. 251, 189). - IV, 1469.
 - 6) 3-Nitrophenyl-2-Nitrobenzylamid d. Ameisensäure. Sm. 140° (J. pr. [2] **48**, 562). — **II**, *523.*
 - 7) 4-Nitrophenyl-2-Nitrobenzylamid d. Ameisensäure. Sm. 155-156° (J. pr. [2] 54, 273).
 - 8) Methyl-P-Dinitrophenylamid d. Benzolcarbonsäure. Sm. 136° (B.
 - 9) 3,5-Dinitro-1-Methyl-4-Phenylamid d. Benzolcarbonsäure. Sm. 186° (A. 208, 312; 222, 73; B. 8, 877). — II, 1165.
 - 10) 2,?-Dinitro-1-Methyl-4-Phenylamid d. Benzolearbonsäure. Sm. 2030 (A. 172, 229). — II, 1165.

 $C_{14}H_{11}O_5N_3$ 11) 2[oder 3]-Nitro-1-Methyl-4-Phenylamid d. 3-Nitrobenzol-1-Carbonsäure. Sm. 188,5° (A. 210, 336; B. 10, 1712). — II, 1234. 12) 3-Nitro-1-Methyl-4-Phenylamid d. 4-Nitrobenzol-1-Carbonsäure.

Sm. 171—172° (B. **26**, 2760). — II, 1236. C 51,1 — H 3,3 — O 24,3 — N 21,3 — M. G. 329.

 $C_{14}H_{11}O_5N_5$ 5-Amido-3,5-Di[3-Nitrophenyl]-4,5-Dihydro-1,2,4-Oxdiazol. Sm. 150—151°. HBr, (HBr, Br₂) (B. 22, 3157; 28, 2230). — II, 1206.
 2-Nitrat d. 1,2-Diphenyl-2,2-Dihydro-1,2,3,5-Tetrazol-4-Carbon-

säure. Sm. 207º (B. 27, 2926).

1) Oxyphenanthrenchinonphosphinsäure. Sm. 125-128°. Ca (M. 7, $C_{14}H_{11}O_5P$ 36). — IV, 1681.

C₁₄H₁₁O₅As 1) Diphenyloxyarsin-4,4'-Dicarbonsäure (Dibenzarsenigesäure). Ca + 1) Diplicity 10.3, 11. 12. 14. 20. 15. 17. 1693. C 58,1 — H 3,8 — O 33,2 — N 4,8 — M. G. 289. 1) Nitrooreoselon. Sm. 171° (C. 1899 [1] 432).

 $C_{14}H_{11}O_6N$

2) Diacetat d. 3-Nitro-1,2-Dioxynaphtalin. Sm. 196-197° (A. 295, 13 Anm.).

C 53.0 - H 3.5 - O 30.3 - N 13.2 - M. G. 317. $C_{14}H_{11}O_6N_3$

1) 2,4-Dinitrophenyläther d. anti-Methylbenzhydroxamsäure. Sm. 1210 (B. 29, 1156).

2) 2,4-Dinitrophenyläther d. syn-Methylbenzhydroxamsäure. Sm. 152°

(B. 29, 1159).
3) Acetat d. 2-[2,4-Dinitrophenyl]amido-1-Oxybenzol. Sm. 150° (B. 22, 902). — II, 704.

4) Monacetat d. 4-[2,4-Dinitrophenyl]amido-l-Oxybenzol. Sm. 129° (B. 28, 2974).

 $C_{14}H_{11}O_6N_5$ C 48.7 - H 3.2 - O 27.8 - N 20.3 - M. G. 345.1) ?-Trinitro-2,2'-Dimethylazobenzol. — IV, 1376.

2) P-Trinitro-4, 4'-Dimethylazobenzol. Sm. 189° (M. 9, 836). — IV, 1379.

3) isom. ?-Trinitro-4,4'-Dimethylazobenzol. Sm. 1380 (M. 9, 836). -

IV, 1379. $\mathbf{C}_{14}\mathbf{H}_{11}\mathbf{O}_{6}\mathbf{As}\ 1)\ \mathbf{Diphenylarsins\"{a}ure-4,4'-Dicarbons\"{a}ure}.\ \mathbf{Ca},\ \mathbf{Ba},\ \mathbf{Ag}\ (\emph{A.}\ \mathbf{208},\ 21).$ — IV, 1693. C 50,4 — H 3,3 — O 33,6 — N 12,6 — M. G. 333.

 $\mathbf{C}_{14}\mathbf{H}_{11}\mathbf{O}_{7}\mathbf{N}_{3}$

1) 4-Nitrobenzyläther d. 3,5-Dinitro-2-Oxy-1-Methylbenzol. Sm. 1450 (B. 14, 899; A. 217, 178, 181, 183). — II, 1060.

2) 4-Nitrobenzyläther d. 3,5-Dinitro-4-Oxy-l-Methylbenzol. Sm. 186,5° (A. 224, 145). - II, 1060.

 $C_{14}H_{11}O_7N_5$ C 46.5 - H 3.0 - O 31.0 - N 19.4 - M. G. 361.

1) α -Phenyl- β -Acetyl- β -[2,4,6-Trinitrophenyl]hydrazin. Sm. 236° (B.

27, 2460). — IV, 665. 2) P-Trinitro-4,4'-Dimethylazoxybenzol. Sm. 201° (Z. 1869, 264; B. 6, 557). — IV, 1340.

1) Bordi [2-Oxybenzol-1-Carbonsäure]. NH₄, Na, K, Mg + 10H₂O, Ca $C_{14}H_{11}O_7B$ $+10 \, \mathrm{H_2\,O}, \; \mathrm{Ba} \; (J. \; 1878, \; 761). \; -\Pi, \; 1496. \; C \; 42,7 \; -H \; 2,8 \; -O \; 36,6 \; -N \; 17,8 \; -M. \; G. \; 393. \; C \; 42,7 \; -M. \; G. \; 42,7 \; -M.

 $\mathbf{C}_{14}\mathbf{H}_{11}\mathbf{O}_{9}\mathbf{N}_{5}$

1) ?-Tetranitro-2-Oxy-1-[4-Methylphenyl]amidomethylbenzol. Sm. 1680 (A. 241, 348). — II, 742. C 38,4 — H 2,5 — O 36,6 — N 22,4 — M. G. 437.

 $\mathbf{C}_{14}\overline{\mathbf{H}}_{11}\mathbf{O}_{10}\mathbf{N}_{7}$

1) Diazoamidoderivat (aus ?-Dinitro-?-Amido-3-Oxy-1-Methylbenzol). Zers.

bei 160° (B. 9, 1095). — IV, 1576. $\mathbf{C_{14}H_{11}NBr_{2}} \ \ 1) \ \text{?-Dibrom-4-Benzylidenamido-l-Methylbenzol.} \ \ \mathbf{Sm.} \ 160-165° \ \mathbf{u.} \ \mathbf{Zers.}$ (J. 1880, 566). — III, 30.

C₁₄H₁₁NBr₄ 1) Tetrabromdi[4-Methylphenyl]amin. Sm. 162° (B. 13, 1545). II, 486.

1) 1-Benzylbenzthiazol. Fl. HCl, $(2 \text{HCl}, \text{PtCl}_4 + 5 \text{H}_2 \text{O})$ (B. 13, 1234). $C_{14}H_{11}NS$ II, 1310.

2) 5-Methyl-1-Phenylbenzthiazol. Sm. 122 -123° (125°). (2 HCl, PtCl $_4$ + H₂O) (B. 14, 493; 22, 424, 1065). — II, 1179. 3) 3-Phenyl-1,4-Benzthiazin. Sm. 233° (B. 30, 609, 2396).

4) 3-Phenyl-2,4-Benzthiazin (Phenylphenpenthiazol). Sm. 55-58°. Pikrat (B. 27, 3524).

C₁₄H₁₁N₂Cl 1) 6-Chlor-2-Methyl-1-Phenylbenzimidazol. Sm. 96°. (2HCl, PtCl₄), Pikrat (B. 23, 3425). — IV, 877.

- $C_{14}H_{11}N_{2}Cl$ 2) 5-Methyl-2-[2-Chlorphenyl] benzimidazol. HCl (B. 13, 468).
 - IV, 1013.
 3) 3-[4-Chlorphenyl]-3,4-Dihydro-1,3-Benzdiazin. Sm. 143°. HCl, (HČl, ZnCl₂), (HCl, ŠnCl₂), (2HCl, PtCl₄), HNO₃, H₂SO₄, Bioxalat, Pikrat (J. pr. [2] 48, 544). — IV, 872.
- $\mathbf{C}_{14}\mathbf{H}_{11}\mathbf{N}_{2}\mathbf{Cl}_{5}$ 1) $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[3-Chlorphenylamido]äthan. Sm. 89° (A. 302, 367). 2) $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[4-Chlorphenylamido]äthan. Sm. 143° (A. 302, 368).
- ${f C_{14} H_{11} N_2 Br}$ 1) **5-Brom-2-Amidodiphenylamin.** Sm. 106° (A. **303**, 322), 2) ${eta}$ -[**4-Bromphenyl**]azo- ${\alpha}$ -Phenyläthen. Sm. 48° (Am. **21**, 37).

 - 3) 2-Brom-4-Phenyl-3, 4-Dihydro-1, 3-Benzdiazin. Sm. 165°. HBr (B. **29**, 1306). — **IV**, 1016.
 - 4) 3-[4-Bromphenyl]-3,4-Dihydro-1,3-Benzdiazin. Sm. 142°. HCl, (2HCl, PtCl₄), (HCl, AuCl₈), Bioxalat, Pikrat (J. pr. [2] 48, 551). — IV, 872.
- 1) 5-Merkapto-1, 2-Diphenyl-1, 3, 4-Triazol. Sm. 1870 (2810) (B. 27, 622; $\mathbf{C}_{14}\mathbf{H}_{11}\mathbf{N}_{3}\mathbf{S}$ 29, 2917). — IV, 1159. 2) 5-Phenylamido-2-Phenyl-1, 2, 4-Thiodiazol. Sm. 174° (B. 24, 394).
 - **IV**, 847.
 - 3) 2-Phenylimido-5-Phenyl-2, 3-Dihydro-1, 3, 4-Thiodiazol. Sm. 200°.
 - (2 HCl, PtCl₄) (B. **27**, 622; **29**, 2916). IV, 1159. 4) **1-Phenylamidoimidomethylbenzthiazol.** Sm. 118°. (2 HCl, PtCl₄), (HCl, AuCl₃) (B. 20, 2254). — II, 799.
 - 5) α-Phenyl-β-[2-Cyanphenyl]thioharnstoff. Sm. noch nicht bei 300° (B. **29**, 632).
- 1) Verbindung (aus Benzidinsenföl). Sm. noch nicht bei 300° (B. 27, 1558). $C_{14}H_{11}N_3S_2$ - IV, 965.
- 1) 4-Amidophenyläther d. 5-Merkapto-2-Thiocarbonyl-3-Phenyl-2, 3- $C_{14}H_{11}N_3S_3$ Dihydro-1,3,4-Thiodiazol. Sm. 163—164°. HCl (B. 29,2140). — IV, 683.
- $C_{14}H_{11}N_4Br$ 1) ?-Brom-1, 4-Diphenyl-1, 4-Dihydro-1, 2, 4, 5-Tetraziń. Sm. 219 $\stackrel{\sim}{-}$ 220° (Soc. 55, 246). — IV, 1233.
- $\mathbf{C}_{14}\mathbf{H}_{11}\mathbf{ClBr}_{2}$ 1) α -Chlor- $\alpha\beta$ -Dibrom- $\alpha\beta$ -Diphenyläthan. Sm. 127° u. Zers. (Soc. 71, 222). C 75,0 — H 5,4 — O 7,1 — N 12,5 — M. G. 224. $\mathbf{C}_{14}\mathbf{H}_{12}\mathbf{ON}_{2}$
 - 1) α-Imido-α-Benzoylamidophenylmethan (Benzoylbenzamidin). Sm. 98° (105-106°). HCl, (2 HCl, PtCl₄) (A. 296, 285; B. 11, 765; 22, 1606; 25, 464; J. pr. [2] 30, 89; Am. 20, 571). — IV, 848.
 2) Benzoylphenylhydrazimethylen. Sm. 151° u. Zers. (J. pr. [2] 44, 176).
 - III, 287.
 - 3) s-Benzoylbenzylidenhydrazin. Sm. 202° (J. pr. [2] 50, 301; [2] 53, 520). — III, 39.
 - 4) s-Phenyloxymethylen-Benzylidenhydrazin. Sm. 206° (B. 27, 1008; A. 297, 265). — II, 1215.

 - 5) 9-Fluorenylharnstoff. Sm. 255° (B. 29, 231).
 6) o-Nitrosimidodibenzyl. Sm. 120° (A. 305, 102).
 7) 4-Oxyhydrazobenzol? (A. 154, 212). IV, 1407.
 - 8) β -Phenylazo- α -Keto- α -Phenyläthan (Benzolazoacetophenon). Sm. 128,5°
 - (B. **18**, 2563; **21**, 2123). IV, 1472, 1478. 9) 3-Keto-2-Methyl-1-Phenyl-2, 3-Dihydroindazol $+ H_2O$. Sm. $54-55^{\circ}$
 - (B. 32, 789). 10) 1-Methylphenylamidobenzoxazol. Sd. über 360°. (2HCl, PtCl₄) (B. 16, 1827). — II, 709.
 - 11) 1-Phenylamido-4-Methylbenzoxazol. Sm. 205-206°. Pikrat (B. 22, 3237). — II, 753.
 - 12) 1-[3-Amidophenyl]-4-Methylbenzoxazol. Sm. 160,5-161,5° (B. 28,
 - 13) 1-[4-Amidophenyl]-4-Methylbenzoxazol. Sm. 188° (B. 28, 1128).
 - 14) 1-Methyl-2-[2-Oxyphenyl] benzimidazol. Sm. 164—165° (B. 25, 2843). **- IV**, 564.
 - 15) 5- oder 6-Methyl-2-[2-Oxyphenyl] benzimidazol. Sm. 241° (B. 31, 317). **— IV**, 1014.
 - 16) Methyläther d. 6-Oxy-l-Phenylbenzimidazol. Sm. 77° (B. 29, 2683).
 - 17) 3-Phenylamido-1,4-Benzoxazin. Sm. 126°. HJ (Am. 20, 566). 18) 3-Phenylimido-3,4-Dihydro-2,4-Benzoxazin (Phenylimidocumazon; Benzophenyldihydroacimiazin). Sm. 145-146° (143°). HČl, (2HCl, PtCl₄), (HCl, AuCl₃) (B. 22, 1670, 2938; 27, 44, 2421). — IV, 874.

- $C_{14}H_{12}ON_2$ 19) 3-[4-Oxyphenyl]-3,4-Dihydro-1,3-Benzdiazin. Sm. 235° (J. pr. [2])
 - 54, 287). IV, 873. 20) 2-Keto-3-Phenyl-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 186 bis 188° (B. 25, 2856; 27, 43, 2425; J. pr. [2] 55, 243). — IV, 632. 21) 2-Keto-4-Phenyl-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 187° (u.
 - 193°). Acetat (B. 29, 1307, 1309). 22) 3-Keto-2-Phenyl-1,2,3,4-Tetrahydro-1,4-Benzdiazin. Sm. 201 bis
 - 202° (B. 25, 952). IV, 1016.
 - 23) 9-Nitroso-3, 6-Dimethylearbazol. Sm. 106° (B. 24, 2598). IV, 398. 24) 3-Acetylamidocarbazol. Sm. 213—214° (G. 21 [2] 385). IV, 992. 25) 1-Naphtooxymethylchinizin. Sm. bei 190° (B. 17, 551). IV, 927. 26) 2-Naphtooxymethylchinizin. Sm. 190° (B. 17, 550). IV, 929.

 - 27) Inn. Anhydrid d. α-Oxyphenylessigsäurephenylhydrazid. Sm. 165 bis 166° (B. 23, 3703). — IV, 694.
 - 28) Aldehyd d. Phenylhydrazonphenylessigsäure. Sm. 142—143° (B. 22, 2557). — IV, 761.
 - 29) Verbindung (aus 2-Amidobenzol-1-Carbonsäurealdehyd). Sm. 188—189°. HCl, (2 HCl, PtCl₄) (B. 17, 457). III, 17.
 - 30) Verbindung (aus Blausäure u. Salhydranilid) (B. 6, 339). III, 73. C 66,7 H 4,8 O 6,3 N 22,2 M. G. 252.
- $C_{14}H_{12}ON_4$ 1) 3-Oxy-5-[3-Amidophenyl]-l-Phenyl-1,2,4-Triazol. Sm. 278°. HCl $+3 H_2 O$, Ag $+ H_2 O$ (Soc. 71, 211). - IV, 1271.
 - 2) 3-Oxy-5-[4-Amidophenyl]-1-Phenyl-1,2,4-Triazol. Sm. noch nicht bei 290°. $HCl + 3H_2O$, $Ag + H_2O$ (Soc. 71, 207). — IV, 1271.
 - 3) 1 oder 3-Nitroso-2-Phenylimido-5-Methyl-2,3-Dihydrobenzimidazol (Phenyltoluylennitrosoguanidin). Sm. 125° u. Zers. (B. 24, 2516). IV, 623.
 - 4) 1-Nitroso-2-[4-Methylphenyl]imido-2, 3-Dihydrobenzimidazol. Sm. 150-160° u. Zers. (B. 24, 2512). IV, 566.
 - 5) 1-[4-Acetylamidophenyl]-1,2,3-Benztriazol. Sm. 200° (B. 28, 2978). · IV, 1259.
 - 6) 5-Acetylamido-1-Phenyl-1, 2, 3-Benztriazol. Sm. 266° (B. 28, 2972).
 - IV, 1259. 7) 6-Benzoylamido-1-Methyl-1,2,3-Benztriazol. Sm. 228,5° (B. 30, 2853).
 - IV, 1259. 8) 2-[4-Amidophenyl]amido - 4 - Keto - 1, 4 - Dihydro - 1, 3 - Benzdiazin
 - (4-Amidophenylbenzylglykocyamidin) (B. 18, 2421). IV, 595.
 9) Imidophenylbenzglykocyamidin. Ba (B. 18, 2414). IV, 562.
 - 10) Phenylamid d. 5-Methyl-1, 2, 3-Benztriazol-1-Carbonsäure (Phenyl-
 - azimidotolylharnstoff). Sm. 159—160° (J. pr. [2] 41, 325). IV, 614. 1) Di[4-Chlorbenzyl]äther. Sm. 54—55° (G. 18, 243). II, 1056.
- $\mathbf{C}_{14}\mathbf{H}_{12}\mathbf{OCl}_{2}$ 2) Methyläther d. 4-Oxydiphenyldichlormethan. Sm. 54° (B. 24, 3518; **26**, 21). — **II**, 897.
- $\mathbf{C}_{14}\mathbf{H}_{12}\mathbf{OBr}_{2}$ 1) Di[4-Brombenzyl]äther. Sm. 85—86° (G. 18, 240). — II, 1058.
- $\mathbf{C}_{14}\mathbf{H}_{12}\mathbf{OS}$ 1) Phenyläther d. Merkaptomethylphenylketon. Sm. 52-53° (B. 22, 309). **— III**, *128*.
 - 2) Benzylester d. Benzolthiolcarbonsäure. Sm. 39,5° (B. 13, 1285). II, 1291.
 - 3) 4-Methylphenylester d. Benzolthiolcarbonsäure. Sm. 75° (B. 9, 1636). — II, 1291. C 70,0 — H 5,0 — O 13,3 — N 11,7 — M. G. 240. 1) Phenylnitrosamidobenzoylmethan. Sm. 73° (B. 15, 2472). — III, 125. 2) 2-Nitro-2'-Amido-s-Diphenyläthen (Nitroamidostilben) (B. 21, 2077). —
- $\mathbf{C}_{14}\mathbf{H}_{12}\mathbf{O}_{2}\mathbf{N}_{2}$

 - II, 638. 3) 4-Nitro-4'-Amido-s-Diphenyläthen (Nitroamidostilben). Sm. 229-230°.
 - HCl (B. 6, 329). II, 638.
 - 4) α-Phenyl-β-Benzoylharnstoff. Sm. 204° (B. 17, 2881; 28, 435; A. 274, 28). — II, 1172.
 - 5) ?-Diamido-9,10-Dioxyphenanthren. $2HCl + 3H_2O$ (B. 18, 2168). II, 1001.
 - 6) 2-Oxyphenyl-4-Methylphenylketon. Sm. 61,5° (B. 31, 1694).
 - 7) Glyoxim-N-Phenyläther. Sm. 182—183° u. Zers. (B. 30, 2463, 2875).
 - 8) $\alpha\beta$ -Dioximido- $\alpha\beta$ -Diphenyläthan (α -Diphenylglyoxim; α -Benzildioxim). Sm. 237° u. Zers. (B. 16, 1616; 21, 793, 3525). III, 291.

- C₁₄H₁₂O₂N₂ 9) αβ-Dioximido-αβ-Diphenyläthan (β-Benzildioxim). Sm. 206—207° u. Zers. + C₂H₆O (β. 16, 2176; 21, 517; 22, 710; 28, 3167). III, 292. 10) isom, αβ-Dioximido-αβ-Diphenyläthan (γ-Benzildioxim). Sm. 164—166°. + C₂H₆O (Sm. 100°) (β. 22, 710; 25, 1960; A. 274, 19). III, 293. 11) Benzenylbenzoylamidoxim. Sm. 140° (β. 17, 1694). II, 1207. 12) 4,4'-Di[Formylamido]biphenyl. Sm. noch nicht bei 240°. Na₂ (β. 17, 1694). II, 1207.
 - 379; Soc. 67, 831). IV, 964.
 - 13) 1,2-Phtalyldiamidobenzol. Sm. 278° u. Zers. (G. 24 [1] 145). IV, 563.
 - 14) Anhydro-o-Phenylendiimidoglykobrenzkatechin. Zers. bei 245° (B. 27, 1984). — IV, 565.
 - Sm. 105° (B. 22, 1589). III, 45. 15) Azobenzenylsuperoxyd.
 - 16) α-Carbanilido-syn-Benzaldoxim. Sm. 74-75° u. Zers. (B. 23, 3321). **- III**, 44.
 - 17) β -Carbanilido-syn-Benzaldoxim. Sm. 94° u. Zers. (B. 23, 3323). III, 44.
 - 18) Carbanilido-anti-Benzaldoxim. Sm. 135—136° (B. 22, 3101). III, 42.
 - 19) Benzoat d. Methenylphenylamidoxim. Sm. 144-145° (É. 22, 2411). **- II**, 1209.
 - 20) Di [2-0xybenzyliden] hydrazin (2-0xybenzalazin). Sm. 205° (208-210°; 213°) (J. pr. [2] 39, 48; A. 302, 303; B. 31, 2807 Anm.). III, 75.
 21) s-Dibenzoylhydrazin. Sm. 233° (237°) (B. 23, 3029; 27, 993; J. pr. [2]
 - 50, 299; [2] 52, 219; H. 19, 505; A. 297, 245). II, 1308. 22) Isobenzoylhydrazin. Sm. 70° (B. 26, 2130). II, 1214. 23) s-Benzoyl-2-Oxybenzylidenhydrazin. Sm. 182° (J. pr. [2] 50, 302).

 - III, 76.
 - 24) s-Benzoyl-4-Oxybenzylidenhydrazin. Sm. 2330 (J. pr. [2] 50, 303). - III, 86.
 - 25) Methylenäther d. Phenyl-3,4-Dioxybenzylidenhydrazin (Piperonalphenylhydrazon). Sm. 102—103° (100°) (A. 248, 104; B. 24, 3656). IV, 764.
 - 26) Acetat d. 4-Oxyazobenzol. Sm. 84-85°; Sd. oberb. 360° u. Zers. (B. 14, 2617). — IV, *1408*.
 - 27) Cyanmethylbenzylglutakonimid. Cu $+ 4 \text{NH}_3 + 2 \text{H}_2 \text{O}$. IV, 383. 28) 3-Phenyl-5-[2-Oxyphenyl]-4,5-Dihydro-1,2,4-Oxdiazol (Benzenyl-
 - hydrazoximsaliciden). Sm. 155° (B. 22, 3146). III, 77. 29) 2-[3-Nitrophenyl]-1,3-Dihydroisoindol. Sm. 177° (B. 31, 630).

 - 30) 2-[4-Nitrophenyl]-1,3-Dihydroisoindol (B. 31, 630).
 - 31) 4-Oxy-6-Keto-2-Phenyl-5,6,7,8-Tetrahydro-1,3-Benzdiazin. Sm. 2720 (B. 22, 2623). — IV, 1015.

 32) N-Aethylsafranol. Na (B. 31, 1183). — IV, 1002.

 33) 2-Oxyäthylphenazon. Sm. 230—240° (A. 290, 302). — IV, 1002.

 34) Dimethylamidochinoxazon. subl. oberh. 250° (B. 25, 1065). — IV, 1005.

 - 35) Tolazondioxyd. Sm. 128° u. Zers. (B. 26, 2240). IV, 1402. 36) Diphenylenazondioxyd. Sm. 240° u. Zers. (B. 24, 3083). IV, 1403.
 - 37) Monoäthyläther d. Dioxy-1,8-Naphtochinoxalin? (B. 7, 314; 30, 776). **- IV**, 924.
 - 38) 1-Phenylhydrazonmethylbenzol-3-Carbonsäure. Sm. 112-115° (B. **24**, 2424). — **II**, 1627.
 - 39) 1-Phenylhydrazonmethylbenzol-4-Carbonsäure. Sm. 212—214° (B. **24**, 2424). — **II**, 1627.
 - 40) α-Phenyl-α-Phenylhydrazonessigsäure. Sm. 1630 (1530; 1600) (A. 227, 341; **280**, 295; J. pr. [2] **52**, 36; B. **29**, 210; G. **22** [2] 524). IV, 694.
 - 41) Benzylidenphenylhydrazin-3-Carbonsäure. Sm. 171-1726 (A. 236, 171). — II, *1289*.
 - Sm. 115° (B. 25, 3170). 42) 4-Methylazobenzol-2'-Carbonsäure.
 - IV, 1462. 43) 4-Methylazobenzol 3'-Carbonsäure. Sm. 192° (B. 31, 2204). IV, 1462.
 - 44) ?-Methylazobenzol-?-Carbonsäure (Tolylazophenylcarbonsäure). Sm.
 - 237°. Ag (B. 16, 945). II, 92. 45) Methylester d. Azobenzol-4-Carbonsäure. Sm. 123—124° (A. 303, 387). — IV, 1460.

- $C_{14}H_{12}O_2N_2$ 46) Nitril d. 6-Oxy-2-Keto-4-Methyl-5-Benzyl-2,5-Dihydropyridin-3-Carbonsäure (Benzylcyanmethylglutakouimid). (Cu + 4 NH₃ + 2 H₂O) (C. 1897 [1] 369).
 - 47) Amid d. Biphenyl-2, 2'-Dicarbonsäure. Sm. 212° (A. 247, 272; 252, 19, 23). — II, 1884.
 - 48) Amid d. Biphenyl-?-Dicarbonsäure (A. 172, 117). II, 1887.
 - 49) Amid d. 3-[2-Oxybenzyliden]amidobenzol-1-Carbonsäure. Sm. 1860 (A. 218, 188). — III, 74.
 - 50) Amid d. 2-Benzoylamidobenzol-1-Carbonsäure. Sm. 218—219° (J. pr. 2] **36**, 155). — **II**, 1254.
 - 51) Phenylamid d. α-Oximido-α-Phenylessigsäure. Sm. 205-206° (A. 274, 10). — II, *1599*.
 - 52) 4-Nitrosodiphenylamid d. Essigsäure. Sm. 96-970 (A. 243, 276). - II, 368.
 - 53) s-Di[Phenylamid] d. Oxalsäure (Oxanilid). Sm. 245°; Sd. 320° (über 360°?) (A. 60, 308; 73, 184; 252, 57; 279, 59; B. 12, 1065; 13, 527; 14, 740; 22, 3350; 29, 2640; Soc. 61, 459). II, 409.
 54) uns-Di[Phenylamid] d. Oxalsäure. Sm. 169—170°. II, 409.
 55) Benzylnitrosamid d. Benzolcarbonsäure. Sm. 46—47° (B. 31, 2644).

 - 56) 4-Methylphenylnitrosamid d. Benzolcarbonsäure. Zers. bei 74-75°
 - (B. 27, 652; 30, 215). II, 1165. 57) Benzylidenhydrazid d. 2-Oxybenzol-1-Carbonsäure. Sm. 230° (J. pr.
 - [2] **52**, 239). **III**, 41. 58) Benzylidenhydrazid d. 3-Oxybenzol-1-Carbonsäure. Sm. 205° (J. pr.
 - [2] **52**, 235). III, 41. 59) Benzylidenhydrazid d. 4-Oxybenzol-1-Carbonsäure. Sm. 218° (J. pr.
 - [2] **52**, 237). III, *41*. 60) Verbindung (aus d. Carbanilidoisatinsäureamid) (J. pr. [2] 32, 288). —
 - II, 1604.
 - 61) Verbindung (aus Dehydracetsäurechlorid). Sm. 2030 u. Zers. (A. 257, 285). — II, 1756.
 - 62) Verbindung (aus 3-Methyl-1-Phenylpyrazolon u. Acetessigsäureäthylester). Sm. 145° (A. 238, 182). — IV, 513.
 - 63) Verbindung (aus d. Natriumamid d. Benzolcarbonsäure). Sm. 180-185° (B. 28, 436).
- $C_{14}H_{12}O_{2}N_{4}$
- C 62,7 H 4,5 O 11,9 N 20,9 M. G. 268. 1) Carbonylphenylhydrazin. Sm. 148—150° (G. 22 [2] 101). IV, G71. 2) 2-Phenylhydrazido-5-Keto-4-Phenyl-4, 5-Dihydro-1, 3, 4-Oxdiazol.
- Sm. 180-181° (B. 23, 2831). IV, 676. 3) 3,6-Diketo-1,4-Diphenylhexahydro-1,2,4,5-Tetrazin (Diphenylurazin).
- Sm. 264° (B. 21, 1225; 32, 16; A. 263, 282). IV, 676.
- 4) Hexahydrobenzo-4-Benzyliden-3,4-Bipyrazolon. Sm. noch nicht bei 280° (J. pr. [2] 51, 65).
- 5) α-Phenylazo-α-Phenylhydrazonessigsäure (Formazylcarbonsäure). Sm. 162—163°. Na, K, Ag (B. 25, 3185, 3202). — IV, 1227.
 6) Nitril d. 2-Nitro-1-Phenylhydrazidomethylbenzol-4-Carbonsäure.
- Sm. 207° (B. 27, 2165). IV, 741.
- 7) Phenylamid d. Azodicarbonsäure. Sm. 182—183° (J. pr. [2] 58, 226).
- 8) Verbindung (aus Dibenzenylhydrazidin). HCl + H₂O (B. 27, 1000). -II, 1214.
- $\mathbf{C}_{14}\mathbf{H}_{12}\mathbf{O}_{2}\mathbf{Cl}_{2}$ 1) $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[3-Chlorphenyl]äthan. Sm. 154—155°. **- II**, 1101.
- 2) Aethyläther d. ?-Dichloracetyl-1-Oxynaphtalin. Sm. 110° (B. 31, 172). C₁₄H₁₂O₂Cl₄ 1) Verbindung (aus 1,2,2,6-Tetrachlor-3,4-Diketo-1,5-Dimethyl-1,2,3,4-Tetra-hydrobenzol). Sm. 173° (A. **296**, 213).
- $\mathbf{C}_{14}\mathbf{H}_{12}\mathbf{O}_{2}\mathbf{Br}_{2}$ 1) Diphenyläther d. $\alpha\beta$ -Dibrom- $\alpha\alpha$ -Dioxyäthan. Sm. 125° (G. 21, 262). **– II**, 655.
- C₁₄H₁₂O₂Br₆ 1) Hexabromurushinsäure (Soc. 43, 478). II, 1435.
- $C_{14}H_{12}O_{2}S$ 1) Biphenylmerkaptoessigsäure. Śm. 169—170° (B. 13, 389). — II, 895. $C_{14}H_{12}O_2S_2$ 1) Dimerkaptoessigdiphenyläthersäure. Sm. 104-106° (B. 25, 3427). - II, 786.
 - 2) Diacetat d. 2,7-Dimerkaptonaphtalin. Sm. 110° (B. 23, 2371). II, 985.
- $\mathbf{C}_{11}\mathbf{H}_{12}\mathbf{O}_{3}\mathbf{N}_{2}$ C 65,6 - H 4,7 - O 18,7 - N 10,9 - M. G. 256.
 - 1) 6,4'-Di[Formylamido]-3-Oxybiphenyl. Sm. 243° u. Zers. (A. 303, 346).

- $\mathbf{C}_{14}\mathbf{H}_{12}\mathbf{O}_{3}\mathbf{N}_{2}$ 2) 4-Nitrophenylamidobenzoylmethan. Sm. 167° (B. 15, 2475). III, 126. 3) 2-[3-Nitrobenzyliden]amido-1-Oxymethylbenzol. Sm. 93° (B. 25,
 - 2971). III, 32. 4) α -Oximido- β -[2-Nitrophenyl]- α -Phenyläthan. Sm. 118° (B. 26, 2453). **– III**, 219.
 - 5) α -Oximido- β -[4-Nitrophenyl]- α -Phenyläthan. Sm. 107° (105°) (B. 21, 2449; **26**, 2453). — III, 219.
 - 6) α -Oximido- α -[4-Nitrophenyl]- α -[4-Methylphenyl]methan. Sm. 1450 (A. **286**, 329). — III, 215.
 - 7) 5-Acetylamido-2-Phenylamido-1,4-Benzochinon. Sm. 278-280° u. Zers. (B. 31, 2400).
 - 8) N-Benzyl-2-Nitrobenzaldoxim. Sm. 125—126° (A. 298, 193).
 - 9) N-Benzyl-syn-3-Nitrobenzaldoxim. Sm. 148° (B. 23, 2174; A. 298, 188). **— III**, 48.
 - 10) N-Benzyl-syn-4-Nitrobenzaldoxim. Sm. 118° (B. 23, 2750; A. 263. 197; **265**, 239). — III, 50.
 - 11) N-[2-Nitrobenzyl]-syn-Benzaldoxim. Sm. 104-1050 (B. 30, 517).
 - 12) N-[3-Nitrobenzyl]-syn-Benzaldoxim. Sm. 114-115° (A. 256, 244; **298**, 189). — III, 44.
 - 13) N-[4-Nitrobenzyl]-syn-Benzaldoxim. Sm. 113,5—114,5° (105—107°) (B. 23, 2751; A. 263, 199; 265, 239). - III, 44.
 - 14) Benzyläther d. anti-4-Nitrobenzaldoxim. Sm. 117,5—118,5° (A. 263, 353). — III, 49.
 - 15) Anhydro-o-Phenylendiimidoglykopyrogallol. Zers. bei 290° (B. 27, 1985). — IV, 565.
 - 16) Diphenylallophansäure, nur Ester bekannt, siehe (B. 4, 246). III, 382.
 - 17) s-Diphenharnstoff-2-Carbonsäure. Sm. 181°. Ag (B. 27, 977). II, 1251.
 - 18) s-Diphenylharnstoff-3-Carbonsäure. Sm. 270° (264°) u. Zers. (B. 17, 2882; **27**, 979). — **II**, 1261.
 - 19) s-Diphenylharnstoff-4-Carbonsäure. NH₄, Mg, Ca, Ba, Ag. II, 1272.
 - 20) α -Phenylhydrazon- α -[2-Oxyphenyl]essigsäure (B. 26, 221). IV, 709.
 - 21) 3-[2-Oxybenzyliden]hydrazidobenzol-1-Carbonsäure. Sm. 1950 (B. **23**, 3017). — **III**, 76.
 - 22) α -Phenylimido- β -[2-Pyrroyl]propionsäure. Sm. 179° u. Zers. (B. 23, 2157). — IV, 89.
 - 23) 3 Oxymethylazobenzol 3' Carbonsäure (3 Azobenzoësäurebenzylal-
 - kohol). Sm. 182—183° (B. **31**, 2204). **IV**, 1464. 24) **4-Oxyazobenzol-3,5-Dicarbonsäure.** Sm. 198—199°. Na (B. **26**, 603). - IV, 1471.
 - 25) Anhydrid d. 3-Amidobenzol-1-Carbonsäure (A. 123, 289). II, 1257.
 - 26) Methylester d. 4-Oxyazobenzol-3-Carbonsäure. Sm. 106 (108) (Soc. 69, 1265; A. 263, 228). — IV, 1468.
 - 27) Methylester d. 6-Oxyazobenzol-3-Carbonsäure. Sm. 116—1170 (B. **30**, 993). — **IV**, 1471.
 - 28) Acetat d. 4-Nitrosodiphenylhydroxylamin. Sm. 146-1570 (B. 31, 1515).
 - 29) N-Benzoat d. 2-Oxybenzenylamidoxim. Sm. 173° (B. 22, 2779). II, 1503.
 - 30) N-Benzoat d. 4-Oxybenzenylamidoxim. Sm. 160° (B. 24, 835). -II, 1531.
 - 31) Phenylamid d. 2-Nitrophenylessigsäure. Sm. 158-159° (B. 32, 792).
 - 32) 2-Nitrophenylamid d. 1-Methylbenzol-4-Carbonsäure. Sm. 1100 (A. **205**, 118; **210**, 328). — II, 1341. 33) Methylphenylamid d. 2-Nitrobenzol-1-Carbonsäure. Sm. 94,5° (C.
 - 1897 [1] 413).
 - 34) 4-Methylphenylamid d. 3-Nitrobenzol-1-Carbonsäure. Sm. 1620 (A. 210, 335; B. 10, 1712). — II, 1234.
 - 35) 4-Methylphenylamid d. 4-Nitrobenzol-1-Carbonsäure. Sm. 1970 (205°) (B. **25**, 1082; **26**, 2760). — II, 1236.
 - 36) Methyl-3-Nitrophenylamid d. Benzolcarbonsäure. Sm. 104-105° (Soc. 53, 778). — II, 1164.
 - 37) Methyl-4-Nitrophenylamid d. Benzolcarbonsäure. Sm. 111-1120 (Soc. 53, 778; B. 18, 687; 30, 2857 Anm.). — II, 1164.

C₁₄H₁₂O₃N₂ 38) 6-Nitro-1-Methyl-2-Phenylamid d. Benzolcarbonsäure. Sm. 167 bis 167,5° (145—146°) (A. 172, 224; B. 15, 3017; 17, 1959). — II, 1165. 39) 5-Nitro-1-Methyl-3-Phenylamid d. Benzolcarbonsäure. Sm. 177°

(A. 217, 200; B. 15, 1138). — II, 1165.

40) 2-Nitro-l-Methyl-4-Phenylamid d. Benzolcarbonsäure. Sm. 1720 (168°) (A. 172, 228; B. 7, 1504; 15, 3017). — II, 1165.

41) 3-Nitro-l-Methyl-4-Phenylamid d. Benzolcarbonsäure. Sm. 1430 (A. 208, 311; B. 8, 875). — II, 1165. 42) 2-Nitrobenzylamid d. Benzolcarbonsäure. Sm. 110° (B. 23, 2809).

– II, 1166.

43) 4-Nitrobenzylamid d. Benzolcarbonsäure. Sm. 155-156° (B. 23, 339). — II, 1166. 44) Phenyl-2-Nitrobenzylamid d. Ameisensäure. Sm. 77º (B. 22, 2683).

– II, 523. 45) Phenylmonohydrazid d. Benzol-1, 2-Dicarbonsäure.

u. Zers. (163°) (G. 16, 204; J. pr. [2] 35, 267). — IV, 709. 46) $\beta\beta$ -Diphenylmonohydrazid d. Oxalsäure. Sm. 171° u. Zers. (B. 25,

1553). — **IV**, 701.

47) Benzylidenhydrazid d. 2-Oxyphenylkohlensäure. Sm. 175° (A. 300, 149).

48) Verbindung (aus 1,2-Diamidobenzol u. Phtalsäureanhydrid). Sm. 144 bis 145° u. Zers. (G. 24 [1] 145). — IV, 563.

49) Verbindung (aus 3,5-Dioxy-1-Methylbenzol) (B. 7, 247; 8, 1650). -II, 966. C 59,2 — H 4,2 — O 16,9 — N 19,7 — M. G. 284.

 $C_{14}H_{12}O_3N_4$

1) α -Phenyl- β -[α -Imido-3-Nitrobenzyl]harnstoff (3-Nitrobenzimidophenylureïd). Sm. 157° (B. 28, 484). — IV, 846. 2) 3-Nitro-4'-Acetylamidoazobenzol. Sm. 166—167°. —

3) 2-Phenyloxydhydrat d. 1-Phenyl-1,2,3,5-Tetrazol-4-Carbonsäure.

Chlorid, Nitrat (B. 27, 2925). - IV, 1240.

 $C_{14}H_{12}O_3S$ 1) Dihydroanthracensulfonsäure. Na + H₂O, Ba (B. 12, 196; 13, 693; A. 212, 46).

2) α -Merkaptophenyläther- α -Oxy- α -Phenylessigsäure. Sm. 68,5° (B. 18, 891). — П, *1599*. С 61,8 — Н 4,4 — О 23,5 — N 10,3 — М. G. 272.

 $C_{14}H_{12}O_4N_2$

1) $\alpha\beta$ -Dinitro- $\alpha\beta$ -Diphenyläthan? Sm. bei 300° u. Zers. (B. 18, 2438). _ II, 248.

2) $\alpha \beta$ -Di[2-Nitrophenyl]äthan. Sm. 1220 (B. 30, 1039).

3) $\alpha\beta$ -Di[4-Nitrophenyl]äthan. Sm. 178° (166—167°) (A. 137, 260; 238, 364; B. 9, 15; 26, 2232; 30, 1053). — II, 234.

4) isom. $\alpha \beta$ -Di[?-Nitrophenyl]äthan. Sm. 74—75° (A. 137, 261; B. 9, 15). — II, 234.

5) 4-Nitro-2-[4-Nitrobenzyl]-1-Methylbenzol. Sm. 139—140° (B. 27, 2296). 6) 2-Nitro-4-[3-Nitrobenzyl]-1-Methylbenzol. Sm. 143° (B. 27, 2296).

7) 2-Nitro-4-[4-Nitrobenzyl]-1-Methylbenzol. Sm. 143° (B. 27, 2296). 8) ?-Dinitro-2-Benzyl-1-Methylbenzol. Sm. 100° (B. 7, 986). — II, 237. 9) ?-Dinitro-3-Benzyl-1-Methylbenzol. Sm. 141° (A. 220, 235). —

II, 237.

10) ?-Dinitro-4-Benzyl-l-Methylbenzol. Sm. 137° (B. 5, 684). — II, 237. 11) 6,6'-Dinitro-3,3'-Dimethylbiphenyl (B. 24, 2597). — II, 236.

12) ?-Nitro-41-Acetylamido-4-Oxybiphenyl. Sm. 2460 (A. 207, 351). — II, 895.

13) Methyläther d. ?-Nitro-?-Benzoylamido-1-Oxybenzol (A. 74, 305). - II, 1178.

14) 1,4 - Di[succinylamido] benzol. Sm. oberh. 360° (B. 9, 1668). —

IV, 593. 15) 5-[2-Nitro-4-Methylphenyl]amido-2-Methyl-1,4-Benzochinon (B. 23,

2796). — III, *360*. 16) N-Di[4-Oxyphenyl]glyoxim. Zers. bei 250° (A. 277, 87; B. 31, 298). - II, 678.

17) 4-Nitrobenzyläther d. Benzhydroxamsäure. Sm. 161° (B. 25, 44). **— II**, 1197.

18) Diacetat d. 1,4-Dioximido-1,4-Dihydronaphtalin. Sm. 160° (B. 21, 433). — III, *371*.

- $\mathbf{C}_{14}\mathbf{H}_{12}\mathbf{O}_{4}\mathbf{N}_{2}$ 19) 3-[2-Nitrobenzyl]amidobenzol-1-Carbonsäure. Sm. 170—171°. K (B. 25, 3592). - II, 1259.
 - 20) 5-Nitro-2-[2-Methylphenyl]amidobenzol-1-Carbonsäure. Sm. 253 bis 254° . Na + $3H_2O$, K + $2H_2O$, Ag (A. 279, 275). — II, 1283.
 - 21) 5-Nitro-2-[4-Methylphenyl]amidobenzol-1-Carbonsäure. Sm. 262,5°. K + 2¹/₂ H₂O, Ba + 7 H₂O (A. 279, 270). II, 1283.
 22) 3-Nitro-4-[2-Methylphenyl]amidobenzol-1-Carbonsäure. Sm. 210 bis
 - 211°. Na + H₂O (B. 23, 3451). II, 1286.
 - 23) 3-Nitro-4-[4-Methylphenyl]amidobenzol-1-Carbonsäure. Sm. 257°. Na (B. 23, 3288, 3453). — II, 1286.
 - 24) 2-Nitro-1-Phenylamidomethylbenzol-4-Carbonsäure. Sm. 160° u.
 - Zers. HCl (B. 27, 2164). II, 1353. 25) 4,4'-Diamidobiphenyl-2,2'-Dicarbonsäure. Zers. bei 170°. Ag₂ + H_2O , 2HCl, (2HCl, PtCl₄ + 2H₂O) (A. 196, 25; B. 7, 1610; 10, 76). $\stackrel{\cdot}{-}$
 - 26) isom. ?-Diamidobiphenyl-2,2'-Dicarbonsäure. Zers. oberh. 300°. 2HCl (B. 26, 219). — II, 1886.
 - 27) **4,4'-Diamidobiphenyl-2,3'-Dicarbonsäure.** 2HCl (B. **25**, 3598). II, 1883.
 - 28) **4,4'-Diamidobiphenyl-3,3'-Dicarbonsäure.** Zers. bei 250° (B. **7**, 1612;
 - 21, 983; 25, 2797). II, 1886. 29) s-Diphenylhydrazin-2,2'-Dicarbonsäure. Sm. 205° (B. 7, 1612; 17, 1904; **25**, 2797). — **IV**, 1507. 30) **s-Diphenylhydrazin-2**, 3'-**Dicarbonsäure.** Sm. 206° u. Zers. (B. 25,
 - 3597). IV, 1508.
 - 31) s-Diphenylhydrazin-3,3'-Dicarbonsäure. Ba (A.129, 141). IV, 1507.
 - 32) s-Diphenylhydrazin-4,4'-Dicarbonsäure (A. 132, 148; 135, 159). IV, 1508.
 - 33) Säure (aus s-Diphenylhydrazin-3,3'-Dicarbonsäure). Sm. oberh. 200°.
 - Na +4 \dot{H}_2 O, Ba +2 \dot{H}_2 O, HCl, HBr, H₂SO₄ (B. 23, 913). IV, 1508. 34) Aldehyd d. 4,4'-Dioxyhydrazobenzol-3,3'-Dicarbonsäure? (Hydrazosalicylaldehyd) (A. 135, 168). — III, 70.
 - 35) 2-Nitrophenylester d. Methylphenylamidoameisensäure. Sm. 1100 (B. **24**, 2108). — II, 680.
 - 36) 3-Nitrophenylester d. Methylphenylamidoameisensäure. Sm. 105° (B. **24**, 2109). — **II**, 681.
 - 37) 4-Nitrophenylester d. Methylphenylamidoameisensäure. Sm. 69 bis 70° (B. 24, 2109). — II, 683.
 - 38) 2-Nitro-4-Methylphenylester d. 3-Nitrobenzol-1-Carbonsäure. Sm. 143—144° (B. **28**, 1129).
 - 39) 2-Nitro-4-Methylphenylester d. 4-Nitrobenzol-1-Carbonsäure. Sm. 132—133° (B. 28, 1128).
 - 40) Phenylamid d. Oxyessig-4-Nitrophenyläthersäure. Sm. 170—171°
 - (J. pr. [2] 55, 115). 41) Di[2-Oxyphenylamid] d. Oxalsäure. Sm. 280—282° (B. 29, 2643).
 - 42) Di[4-0xyphenylamid] d. Oxalsäure. subl. oberh. 280° (G. 25 [2] 532; C. 1897 [1] 48; B. 31, 333).
 43) 2-Nitro-1-Naphtylimid d. Essigsäure. Sm. 115° (B. 17, 111; 19, 807).
 - II, 606.
 - 44) 4-Nitro-l-Naphtylimid d. Essigsäure. Sm. 144° (B. 17, 110; 19, 806; J. 1886, 869). — II, 607.
 - 45) 2-Oxybenzylidenhydrazid d. 2-Oxyphenylkohlensäure. Sm. 162° (A. 300, 150).
 - 46) 4-Oxybenzylidenhydrazid d. 2-Oxyphenylkohlensäure + H_2O . Sm. 175° (A. 300, 150). C 56,0 — H 4,0 — O 21,3 — N 18,7 — M. G. 300.
- $C_{14}H_{12}O_4N_4$ 1) α -[?-Nitrophenylamido]- α -[?-Nitrophenylimido] athan. HNO₃ (B. 7,
 - 541). II, 347. 2) Benzoyl-3-Nitrophenylamidoharnstoff. Sm. 188—189° (Soc. 73, 372).
 - 3) ?-Tetraamido-1,6-Dioxy-9,10-Anthrachinon (Hydrochrysamid) (A. 65, 241; **142**, 91; **183**, 180). — **III**, 429.

 - 4) P-Dinitro-2, 2'-Dimethylazobenzol. Sm. 142°. IV, 1376. 5) P-Dinitro-2, 2'-Dimethylazobenzol. Sm. 248—253° (J. r. 20, 609). IV, 1376.

- C₁₄H₁₂O₄N₄ 6) P-Dinitro-3,3'-Dimethylazobenzol. Sm. 192-1930 (B. 22, 836). IV, 1377.
 - 7) 2,2'-Dinitro-4,4'-Dimethylazobenzol. Sm. 114° (B. 6, 556; M. 9, 838). **- IV**, 1379.
 - 8) ?-Dinitro-4,4'-Dimethylazobenzol. Sm. 185-1870 (B. 20, 363).
 - 9) 3-Nitro-3'-Acetylamido-4'-Oxyazobenzol. Sm. 251—252° u. Zers. (Soc. 69, 1324). — IV, 1411.
 - 10) 1,2-Diacetyl-3,6-Difuranyl-1,2-Dihydro-1,2,4,5-Tetrazin. Sm. 1970 (B. **28**, 471; A. **298**, 31). — III, 699.
 - 11) 1,4-Diacetyl-3,6-Difuranyl-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 166° (B. 28, 472; A. 298, 33). — III, 700.
 - 12) 1,3-Dinitro-5-Aethyl-5,10-Dihydro-5,10-Naphtdiazin. Sm. 246° u. Zers. (B. 26, 2374). — IV, 993.
 - 13) 4-Oxyphenylazo-4-Oxyphenylhydrazonessigsäure (Di[4-Oxyphenyl]formazylameisensäure). Sm. 186° (B. 28, 1694). - IV, 1240.
 - 14) Diamid d. 1,4-Naphtylendioxaminsäure. Sm. noch nicht bei 300° (B. 30, 773). IV, 922.
 15) Diamid d. 1,5-Naphtylendioxaminsäure. Sm. noch nicht bei 300°

 - (B. 30, 774). IV, 924.
 16) β-Benzoylhydrazid d. 3-Nitrophenylamidoameisensäure. Sm. 226° (J. pr. [2] 53, 523).
 - 17) β -[3-Nitrobenzoyl] hydrazid d. Phenylamidoameisensäure. Sm. 2120 (J. pr. [2] **53**, 518).
- $\mathbf{C}_{14}\mathbf{H}_{12}\mathbf{O}_{4}\mathbf{N}_{6}$ C 51,2 - H 3,7 - O 19,5 - N 25,6 - M. G. 328.
 - 1) $\alpha\beta$ -Diimido- $\alpha\beta$ -Di[3-Nitrophenylamido] äthan (m-Dinitrocyananilin) (J. pr. [2] 35, 530). — II, 449.
 - 2) Di[4-Nitrobenzenyl]hydrazidin. Sm. 257°. 2HCl, 2HNO₃ (A. 298, 51).
- C₁₄H₁₂O₄Cl₄ 1) Aethylester d. 2,2,3,3-Tetrachlor-1-Acetoxyl-2,3-Dihydroinden-1-Carbonsäure. Sm. 119-120° (A. 267, 334). - II, 1662. 1) ?-Dimethyldiphenylendisulfon. Sm. 184° (Rl. [3] 15, 425). $\mathbf{C}_{14}\mathbf{H}_{12}\mathbf{O}_{4}\mathbf{S}_{2}$
- C₁₄H₁₂O₄Pb 1) Diformiat d. Bleidiphenyldioxydhydrat + H₂O. Sm. oberh. 200° u. Zers. (B. 20, 3334). — IV, 1715. C 58,3 - H 4,2 - O 27,8 - N 9,7 - M. G. 288.
- $\mathbf{C}_{14}\mathbf{H}_{12}\mathbf{O}_{5}\mathbf{N}_{2}$ 1) Benzyläther d. 2,6-Dinitro-4-Oxy-1-Methylbenzol. Sm. 109° (A. 224, 143). — II, 1049.
 - 2) 4-Nitrobenzyläther d. 3-Nitro-4-Oxy-1-Methylbenzol. Sm. 1630 (A. 224, 145). — II, 1060.
- C 53.2 H 3.8 O 25.3 N 17.7 M. G. 316. $C_{14}H_{12}O_5N_4$
 - 1) Di[2-Nitrobenzyl]nitrosamin. Sm. 120° (B. 24, 3094). II, 520. 2) 2, 4-Dinitro-4'-Acetylamidodiphenylamin. Sm. 238° (B. 23, 1853). —
 - IV, 584.
 3) 4-[2,4-Dinitrophenyl]amido-2-Formylamido-1-Methylbenzol. Sm. 157° (B. 15, 1237). — \vec{IV} , 602.
 - 4) ?-Dinitro-4, 4'-Dimethylazoxybenzol. Sm. 145° (B. 6, 557). — 1340.
 - 5) 5,6'-Dinitro-2'-Oxy-2,3'-Dimethylazobenzol. Zers. bei 250-260°
 - (B. **26**, 2353). **IV**, 1423. 6) 5,6'-Dinitro-4'-Oxy-2,3'-Dimethylazobenzol. Zers. bei 260-270° (B. 26, 2353). — IV, 1423.
 - 7) 5-Keto-3-Methyl-1-Phenyl-4,5-Dihydropyrazol-4-Alloxan $+3 H_2 O$ (A. 255, 231). - IV, 548.
- C 55,3 H 3,9 O 31,6 N 9,2 M. G. 304. $C_{14}H_{12}O_6N_2$
 - 1) P-Dinitro-4, 4'-Dioxy-3, 3'-Dimethylbiphenyl. Sm. 272—273° (B. 21, 750, 1068). — II, *994*.
 - 2) Di[2-Nitrophenyläther] d. $\alpha\beta$ -Dioxyäthan. Sm. 1630 (J. pr. [2] 21, 127; [2] **27**, 201). — II, 680.
 - 3) Di[3-Nitrophenyläther] d. $\alpha\beta$ -Dioxyäthan. Sm. 139° (J. pr. [2] 27, 201). — II, 681.
 - 4) Di[4-Nitrophenyläther] d. $\alpha\beta$ -Dioxyäthan. Sm. 142—143° (147°) (J. pr. [2] 21, 127; [2] 27, 201; C. 1898 [2] 423). II, 682.
 - 5) Bisnitrosyl-2-Nitrobenzyl. Sm. 141° u. Zers. (B. 30, 1900).
 - 6) Diacetat d. 3-Acetyl-5, 6-Dioxy-4-Keto-3, 4-Dihydro-2, 3-Benzdiazin. Sm. 184—186° (B. 27, 1422). — II, 1939.

- $C_{14}H_{12}O_6N_2$ 7) Di[2-Oxyphenylester] d. Hydrazin- $\alpha\beta$ -Dicarbonsäure. Sm. 207° (A. 300, 148).
- $C 50.6 H^{2}3.6 O 28.9 N 16.9 M. G. 332.$ $C_{14}H_{12}O_6N_4$
 - 1) 2,4,6-Trinitro-5-Phenylamido-1,3-Dimethylbenzol. Sm. 175° (B. 28, 2047).
 - 2) ?-Trinitrodi[4-Methylphenyl]amin. Sm. 268° (B. 28, 1650).
 - 3) Bisnitrosyl-4-Nitrobenzyl. Sm. 135—140° (A. 263, 347; B. 30, 1897).
- $C_{14}H_{12}O_6N_6$
- III, 50. C 66,7 H 3,3 O 26,7 N 23,3 M. G. 360. 1) Di[2-Nitrophenylhydrazid] d. Oxalsäure (B. 22, 2805). IV, 701.
- 1) 2',4'-Dioxy-4-Methyldiphenylketon-2-Sulfonsäure + 4H₂O. Ca + $C_{14}H_{12}O_6S$ $6 H_2 O$, Ba + $5 H_2 O$, Zn + $x H_2 O$, Pb + $7 H_2 O$, Ag + $2 H_2 O$ (Am. 17, 556). — III, 212.
- $C_{14}H_{12}O_6S_2$ 1) $\alpha\beta$ -Diphenyläthen-?-Disulfonsäure (Stilbendisulfonsäure). Ba $+ 2H_{\alpha}$ () (Å. 145, 335). — II, 249. C 50,0 — H 3,6 — O 38,1 — N 8,3 — M. G. 336.
- $C_{14}H_{12}O_8N_2$
 - 1) $\alpha\beta$ -Di[Furalamido] - $\alpha\beta$ -Dioxybernsteinsäure. $(NH_4)_2 + 2H_2O$ (A. ch. [6] **24**, 545). — III, 724. C 42,9 — H 3,1 — O 32,6 — N 21,4 — M. G. 392.
- $C_{14}H_{12}O_8N_6$
- 1) $\alpha\beta$ -Di[2,4-Dinitrophenylamido] äthan. Sm. 302-303° (J. pr. [2] 48, 201). — II, 343.
 - 2) ?-Tetranitro-4,4'-Di[Methylamido]biphenyl. Zers. oberh. 2000 (B. 19, 2127). **— IV**, 962.
- $C_{14}H_{12}O_8Cl_2$ 1) Tetracetat d. 1,2,4,5-Tetracybenzol. Sm. 235° (A. 146, 34). II, 1032.
- C14H12O8Br2 1) Methylester d. 2,6-Dibrom-3,4,5-Triacetoxylbenzol-1-Carbonsäure.
- Sm. 150° (Bl. [3] 9, 696). II, 1924.

 1) Acetat d. Anhydrid d. 4-Oxybenzol-1-Sulfonsäure (A. 178, 175). $C_{14}H_{12}O_8S_2$ II, 831.
- $\mathbf{C}_{14}\mathbf{H}_{12}\mathbf{O}_{12}\mathbf{N}_{2}$ C 42.0 - H 3.0 - O 48.0 - N 7.0 - M. G. 400.
 - 1) Tetramethylester d. 3,6-Dinitrobenzol-1,2,4,5-Tetracarbonsäure. Sm. 180,6° (A. **258**, 317). — II, 2074.
- 1) **2-**[α -Chlorbenzyliden]amido-1-Methylbenzol (B. 19, 282). II, 1164. 2) **4-**[α -Chlorbenzyliden]amido-1-Methylbenzol. Sm. 520 (B. 19, 980). $\mathbf{C}_{14}\mathbf{H}_{12}\mathbf{NCl}$
 - 3) α -Chlor- α -Benzylimido- α -Phenylmethan. Sd. 110% (B. 30, 1788).
 - 4) α-Chlor-α-[2-Methylphenyl]imido-α-Phenylmethan (Benz-o-Toluid-
 - imidehlorid). Sd. 173°₁₀ (B. 31, 241). 5) **2-[3-Chlorphenyl]-1,3-Dihydroisoindol.** Sm. 101° (B. 31, 629). 6) **2-[4-Chlorphenyl]-1,3-Dihydroisoindol.** Sm. 170° (B. 31, 629).
 - 7) Chlormethylat d. Phenanthridin. 2 + PtCl₄ (A. 266, 150). -IV, 407.

 - 8) Chlormethylat d. α-Naphtochinolin. Sm. 133° (J. pr. [2] 57, 72).
 9) Chlormethylat d. β-Naphtochinolin + 2 H₂O. Sm. 138-140° (236° wasserfrei) (J. pr. [2] 57, 50).
 1) 2-[3-Bromphenyl]-1,3-Dihydroisoindol. Sm. 112° (B. 31, 629).
 2) 2-[4-Bromphenyl]-1,3-Dihydroisoindol. Sm. 184° (B. 31, 629).
 1) Industrial of the late of the lat
- $C_{14}H_{12}NBr$
- 1) Jodnethylat d. α -Naphtochinolin + $2H_2O$. Sm. 179° (M. 4, 460; $\mathbf{C}_{14}\mathbf{H}_{12}\mathbf{NJ}$
 - J. pr. [2] 57, 71). IV, 408.
 Jodmethylat d. β-Naphtochinolin + 2H₂O. Sm. 200—205° u. Zers. (186° u. Zers.) (M. 4, 441; J. pr. [2] 57, 50). IV, 409.
 Jodmethylat d. Phenanthridin. Sm. 202° (A. 266, 149). IV, 407.
- $\mathbf{C_{14}H_{12}N_{2}Br_{2}}$ 1) α -[4-Bromphenylamido]- α -[4-Bromphenylimido] äthan. HCl, (2HCl, PtCl₄) (B. 13, 233). — II, 347.

 - 2) P-Dibrom-2, 2'-Dimethylazobenzol. IV, 1376. 3) 3,3'-Dibrom-4,4'-Dimethylazobenzol. Sm. 75° (B. 21, 1219). IV, 1379.

- C₁₄H₁₂N₂Br₄ 1) $a\beta$ -Dibrom- $a\beta$ -Di[a-Brombenzyl]hydrazin (Tetrabrombenzalazin). Sm. 134° (B. 28, 2347; J. pr. [2] 58, 385). III, 38. C₁₄H₁₂N₂S 1) Dehydrothio-o-Toluidin. Sm. 120° (B. 22, 425). II, 820. 2) Dehydrothio-p-Toluidin. Sm. 190—191°; Sd. 434° (B. 22, 333, 424, 969, 1066; 25, 1084; J. pr. [2] 53, 548; G. 27 [2] 165). II, 822.
 - 3) Phenylimidophenylthiocarbaminsäuremethylenäther. Sm. 68°. (2HCl, PtCl₄) (B. 21, 1872). — II, 396.

- $C_{14}H_{12}N_2S$ '4) Methyläther d. 2-Merkapto-1-[1-Naphtyl]imidazol. Sm. 127°. 2+ PtCl₄, Pikrat (B. 25, 2372). — IV, 504.
 - 5) 2-Thiocarbonyl-3-Phenyl-1,2,3,4-Tetrahydro-1,3-Benzdiazin. 260° (245-246°) (B. 25, 2857; 27, 1868, 2432; J. pr. [2] 52, 376).
 - 6) 2-Thiocarbonyl-4-Phenyl-1, 2, 3, 4-Tetrahydro-1, 3-Benzdiazin. Sm. 230° (B. 29, 1305). — IV, 973.
 - 7) 3-Phenylimido-3,4-Dihydro-2,4-Benzthiazin (Phenylimidocumothiazon; Benzophenyldihydrothiomiazin). Sm. 197°. (2HCl, PtCl₄), (HCl, AuCl₅) (B. **22**, 1671; **27**, 2426, 2432; **28**, 1033). — IV, 878.

8) Verbindung (aus d. Phenylamid d. Thioameisensäure). Sm. 140°. (2 HCl.

- PtCl₄) (B. 15, 211). II, 360. 9) Verbindung (aus d. Amid d. 3-Amidobenzol-1-Thiocarbonsäure). (2,5-Di-[3-Amidophenyl]-1,3,4-Thiodiazol). Sm. 128-129°. (2HCl, PtCl₄) (B. 6, 333). **— II**, *1*294.
- 1) 5-Merkapto-2, 3-Diphenyl-2, 3-Dihydro-1, 3, 4-Thiodiazol. Sm. 156, 5°. $\mathbf{C}_{14}\mathbf{H}_{12}\mathbf{N}_{2}\mathbf{S}_{2}$ $Na + 3H_2O$, K (B. 28, 2644). – IV, 750.

2) 2-Amidophenyläther d. 1-Merkaptomethylbenzthiazol. Sm. 88-89°. HBr (B. 30, 608, 2398).

3) Phenylamid d. Dithiooxalsäure (Dithiooxanilid). Sm. 1330 (B. 13, 527; R. 12, 293). — II, 412.

1) Anhydrid d. Phenylamidodithioameisensäure. Sm. 136-138° (B. 24, $C_{14}H_{12}N_2S_3$ 3023). — II, *388*.

 $C_{14}H_{12}N_3Br_3$ 1) 2,4,6-Tribrom-4'-Dimethylamidoazobenzol. Sm. 161° (J. pr. [2] 27, 124). — IV, 1356.

 $C_{14}H_{12}N_4Cl_2$ 1) 4,4'-Bidiazo-3,3'-Dimethylbiphenylchlorid. + CuCl (B. 21, 1097). **— IV**, 1543.

 $C_{14}H_{12}N_4Br_2$ 1) $\alpha\beta$ -Diimido - $\alpha\beta$ -Di[4-Bromphenylamido] $\ddot{a}than$ (p-Dibromeyananilin). Sm. 245°. (2HBr, Br₂) (J. pr. [2] 35, 525). — II, 449.

2) αβ-Di[4-Bromphenylhydrazon]äthan (p-Dibromglyoxalosazon). Sm.

241° (B. 30, 2877). — IV, 755. 1) 2,5-Di[Phenylamido]-1,3,4-Thiodiazol. Sm. 181°. (2HCl, PtCl₄), HNO₃, $C_{14}H_{12}N_4S$ $+ \text{ AgNO}_3 + \text{H}_2\text{O} (B. 22, 1177). - \text{IV}, 1235.$

2) 2 - Phenylimido - 5-Thiocarbonyl-1-Phenyltetrahydro - 1, 3, 4 - Triazol (Phenylimidophenylthiourazol). Sm. 239-240° (B. 26, 2880; 27, 1775). - II, 402.

1) 5-Phenylhydrazido-2-Thiocarbonyl-3-Phenyl-2, 3-Dihydro-1, 3,4- $\mathbf{C}_{14}\mathbf{H}_{12}\mathbf{N}_4\mathbf{S}_2$ Thiodiazol. Sm. 142° (B. 23, 2830). — IV, 687. 1) Di[4-Chlorbenzyl]sulfid. Sm. 42° (A. 167, 187; Am. 2, 166). —

 $\mathbf{C}_{14}\mathbf{H}_{12}\mathbf{Cl}_{2}\mathbf{S}$ II, 1057.

 $C_{14}H_{12}Cl_2S_2$ $\mathbf{C}_{14}\mathbf{H}_{12}\mathbf{Br}_{2}\mathbf{S}$

1) Di [4-Chlorbenzyl] disulfid. Sm. 59° (Am. 2, 166). — II, 1057.
1) Di [4-Brombenzyl] sulfid. Sm. 58—59° (Am. 5, 267). — II, 1058.
1) Di [4-Brombenzyl] disulfid. Sm. 87—88° (Am. 5, 267). — II, 1058.
2) Di [4-Brom-3-Methylphenyl] disulfid. Sm. 76—78° (A. 169, 42). — $\mathbf{C}_{14}\mathbf{H}_{12}\mathbf{Br}_{2}\mathbf{S}_{2}$ II, 822.

 $\mathbf{C}_{14}\mathbf{H}_{12}\mathbf{S}_{3}\mathbf{P}_{2}$ Phenylphosphorthiocarbaminsäureanhydrid (B. 12, 339) — IV, 1648. C 79,6 — H 6,2 — O 7,6 — N 6,6 — M. G. 211. $\mathbf{C}_{14}\mathbf{H}_{13}\mathbf{ON}$

1) 2-Oxy-1-[4-Methylphenylimido] methylbenzol. Sm. 100°. (2 HCl, PtCl₄) (Z. 1865, 440). — III, 73.

2) 4-Oxy-1-[4-Methylphenylimido] methylbenzol. Sm. 213° (B. 10, 2196). - III, 85.

3) 2-Benzylidenamido-1-Oxymethylbenzol. Sm. 115° (B. 25, 2970). **– III**, 32.

4) 4-Benzylidenamido-1-Oxymethylbenzol. Sm. 67-680 (B. 28, 881). **— III**, 32.

5) Benzyl-2-Oxybenzylidenamin. Sm. 29° (Soc. 65, 192) — III, 73. 6) Benzyl-4-Oxybenzylidenamin. Sm. 205—206° (Soc. 65, 192). — III, 85.

7) Methyläther d. 4-Oxy-1-Phenylimidomethylbenzol. Sm. 53° (A. 150, 195 Anm.; B. 31, 2606). — III, 85.

8) Methyläther d. 4-Benzylidenamido-1-Oxybenzol. Sm. 72° (B. 31, 2706). 9) Methyläther d. 4-Benzylidenamido-1-Oxybenzol. Sm. 62° (B. 25,

3248). — III, 32. 10) **2-A**mido-**4**[?]-**M**ethyldiphenylketon (B. **5**, 685). — III, 214.

11) 2-Amidophenyl-4-Methylphenylketon. Sm. 96°. Pikrat (B. 30, 1133).

- C₁₄H₁₂ON 12) 3-Amidophenyl-4-Methylphenylketon. Sm. 111°. HCl, H₂SO₄ (A. 286. 312). — III, 215.
 - 13) 4-Amidophenyl-4-Methylphenylketon. Sm. 179°. H₂SO₄ (A. 286, 325). — III, *215*.
 - 14) β -Ámido- α -Keto- $\alpha\beta$ -Diphenyläthan (Desylamin). HCl, 2HCl, Pikrat (B. **22**, 557; **23**, 996). — III, 220.
 - 15) α -Keto- β -[4-Amidophenyl]- α -Phenyläthan. Sm. 95°. HCl, (2HCl,
 - PtCl₄), H₂SO₄ (J. r. 6, 114; 11, 101). III, 219. 16) Phenylamidobenzoylmethan (Phenylamidomethylphenylketon). Sm. 93°. HCl, HBr (B. 14, 172; 15, .2466; 25, 2860). — III, 125.
 17) β-Oximido-αα-Diphenyläthan. Sm. 120° (B. 24, 1780). — III, 64.
 - 18) α Oximido $\alpha\beta$ Diphenyläthan (Desoxybenzoïnoxim). Sm. 98° (B. 21, 1298). — III, 218.
 - 19) anti-α-Oximido-2-Methyldiphenylmethan. Sm. 105° (B. 24, 4046). - III, 211.
 - 20) syn-α-Oximido-2-Methyldiphenylmethan. Sm. 69° (B. 24, 4047). —
 - 21) α-Oximido-3-Methyldiphenylmethan. Sm. 100-101° (B. 24, 2807). **— III**, 212.
 - 22) anti-α-Oximido-4-Methyldiphenylmethan. Sm. 153-154° (B. 23, 402, 2326; A. 252, 11). — III, 215,
 - 23) syn-α-Oximido-4-Methyldiphenylmethan. Sm. 115-116° (B. 23, 2326; **24**, 58). — III, 215.
 - 24) Methyläther d. α-Oximidodiphenylmethan. Sm. 92° (M. 5, 204). III, 189.
 - 25) N-Benzyläther d. syn-Benzaldoxim. Sm. 81—82°. HCl (A. 257, 223; 263, 191; B. 22, 435, 1534; 26, 2272; J. pr. [2] 56, 231). III, 43.
 26) α-Benzyläther d. anti-Benzaldoxim. Fl. (B. 22, 435, 1534). III, 42.
 - 27) N-[2-Methylphenyl] äther d. Benzaldoxim. Sm. 119-1200 (B. 29,
 - 3041). 28) N-[3-Methylphenyl]äther d. Benzaldoxim. Sm. 95—96° (B. 29, 3041).
 - 29) **N-[4-Methylphenyl]** äther d. Benzaldoxim. Sm. 123 1240 (B. 29,

 - 3041; C. 1898 [2] 80).
 30) Dibenzoylimid (A. 81, 122). III, 28.
 31) 2-Acetylamidobiphenyl. Sm. 119° (117,5°); Sd. 335° (A. 260, 236; 279, 266; B. 29, 1184). II, 633.
 - 32) 4-Acetylamidobiphenyl. Sm. 171° (167°) (A. 209, 344; 260, 236). II, 633.
 - 33) ?-Acetylamidoacenaphten. Sm. 176° (B. 21, 1457). II, 634.
 - 34) γ-Keto-γ-[?-Methyl-2-Pyrryl]-α-Phenylpropen (Methylpyrrylcinnamylketon). Sm. 193° (B. 22, 1919). — IV, 101.
 - 35) isom. γ-Keto-γ-[P-Methyl-2-Pyrryl]-α-Phenylpropen. Sm. 156—157° (B. 22, 1919). IV, 101.
 36) Methyläther d. α-[4-Oxyphenyl]-β-[2-Pyridyl]äthen (Anisilidenpyridyl alkin). Sm. 97°. (2 HCl, PtCl₄) (B. 23, 2719). IV, 395.

 - 37) Methyloxydhydrat d. Phenanthridin. Sm. 109°. Chlorid, Jodid (A. **266**, 149). — **IV**, 407.
 - 38) Methyloxydhydrat d. α Naphtochinolin. Chlorid $+ xH_2O$, Jodid, Sulfat $+ x H_2 O$, Bichromat (M. 4, 460; J. pr. [2] 57, 71).
 - 39) Methyloxydhydrat d. β -Naphtochinolin. Chlorid $+ 2 \, \mathrm{H}_2\mathrm{O}$, Jodid $+ 2 \, \mathrm{H}_2\mathrm{O}$, Sulfat $+ \, \mathrm{x} \, \mathrm{H}_2\mathrm{O}$, Bichromat $+ \, 2 \, \mathrm{H}_2\mathrm{O}$ (J. pr.~[2]~57,~50). 40) Amid d. Diphenylessigsäure. Sm. 165—166° (A. 233, 347; 250, 141).

 - II, 1464. 41) Amid d. 1-Benzylbenzol-2-Carbonsäure. Sm. 163° (164°) (B. 25, 3022; **27**, 2789; A. **291**, 24). — II, 1465.
 - 42) Phenylamid d. Phenylessigsäure. Sm. 117° (B. 13, 1225; A. 252, 68; **279**, 125; G. **20**, 177). — II, 1311.
 - 43) Phenylamid d. 1-Methylbenzol-2-Carbonsäure. Sm. 1250 (B. 24, 4047). - II, *1330*.
 - 44) Phenylamid d. 1-Methylbenzol-4-Carbonsäure Sm. 140-1410 (1390; 145°) (A. 205, 132; 252, 12; B. 12, 616; J. pr. [2] 41, 306). II. 1341.
 - 45) Methylphenylamid d. Benzolcarbonsäure. Sm. 630 (590); Sd. 315 bis 330° (B. 10, 329; 18, 685). — II, 1163.

C₁₄H₁₈ON 46) 2-Methylphenylamid d. Benzolcarbonsäure. Sm. 1310 (142—1430; $145-146^{\circ}$) (A. **205**, 130; B. **21**, 2553; **27**, 2422; Am. **18**, 387). II, 1164.

47) 3-Methylphenylamid d. Benzolcarbonsäure. Sm. 125° (B. 19, 983). **– II**, 1164.

48) **4-Methylphenylamid d. Benzolcarbonsäure.** Sm. 158°; Sd. 232° (Z. **1865**, 440; B. **8**, 875; **27**, 653; **32**, 220; A. **205**, 127; **208**, 310; **214**, 217). — II, 1164.

49) Benzylamid d. Benzolcarbonsäure. Sm. 105-106° (B. 23, 3332; **26**, 2273; **28**, 434; **31**, 2646; R. **16**, 319). — II, 1165.

50) Diphenylamid d. Essigsäure. Sm. 103° (101—102°) (B. 5, 284; 6, 1511; 14, 2366; A. 214, 235; J. 1888, 683, 685). — II, 367.
51) Diphenylmethylamid d. Ameisensäure. Sm. 132°; Sd. oberh. 360°

(B. 19, 2129; 31, 1772). — II, 635.

1) Verbindung (aus 4-Nitro-1-Methylbenzol) = $(C_{14}H_{18}ON_2)_x$ (B. 16, 943). $C_{14}H_{13}ON_{2}$ - II, 92.

2) Verbindung (aus Benzylhydroxylamin) = $(C_{14}H_{18}ON_2)_x$. Sm. 197—198° u. Zers. (A. 263, 211; B. 30, 2282). — II, 533. C 70,3 — H 5,4 — O 6,7 — N 17,6 — M. G. 239.

 $\mathbf{C}_{14}\mathbf{H}_{13}\mathbf{ON}_{3}$

 $\mathbf{C}_{14}\mathbf{H}_{13}\mathbf{ON}_{5}$

 $C_{14}H_{13}O_{2}N$

- 1) β -Phenylhydrazon- β -Amido- α -Keto- α -Phenyläthan (Benzoylamidrazon). Sm. 152° (B. 26, 2789). — IV, 1166.
- 2) α-[α-Benzoylamidobenzyliden]hydrazin (Hydrazinbenzoylbenzamidin).
- Sm. 189°. HCl (A. **296**, 288, 293). **IV**, 1137.

 3) Benzoylbenzenylhydrazidin. Sm. 188° u. Zers. 2 HCl, (HCl, AuCl₃) (B. **26**, 2131; 27, 993, 999; A. **297**, 244, 253). **II**, 1214.

 4) Acetyldiazoamidobenzol. Sm. 129—130° u. Zers. (B. **24**, 4157). —
- IV, 1560.
- 5) 3-Acetylamidoazobenzol. Sm. 130—131° (Soc. 67, 927). IV, 1354.
 6) 4-Acetylamidoazobenzol. Sm. 144° (141°) (G. 28 [1] 242; B. 17, 463,
- 1400). IV, 1357. 7) 5-Amido-3,5-Diphenyl-4,5-Dihydro-1,2,4-Oxdiazol. Sm. 124—125° u. Zers. HCl, $(2 \text{HCl}, \text{PtCl}_4 + 2 \text{H}_2 \text{O})$, HBr, $(\text{HBr}, \text{Br}_2)$, Pikrat (B. 22, 20)3149; **28**, 2228, 2231). — 11, 1205.

8) Aethyläther d. 5-Oxy-l-Phenyl-1, 2, 3-Benztriazol. Sm. 990 (J. pr. [2] **53**, 97).

9) Aethyläther d. 6-Oxy-1-Phenyl-1,2,3-Benztriazol. Sm. 107—108° (B. 25, 998; J. pr. [2] 53, 97). — IV, 1575.

10) Methyläther d. 3-[4-Oxyphenyl]-3,4-Dihydro-1,2-3-Benztriazin. Sm. 139° u. Zers. HCl, (2 HCl, PtCl₄), Pikrat (J. pr. [2] **52**, 405). - IV, 1148.

11) 5-Acetylamido-2-Methyl- β -Naphtimidazol $+ 2 H_2 O$. Sm. oberh. 280°. Acetat $+ 2 C_2 H_4 O_2$ (B. 31, 1176). — IV, 1172. 12) N-Aethylsafraninon (B. 31, 1186). — IV, 1178.

13) Aldehyd d. 1-[4-Methylphenyl]amidodiazobenzol-4-Carbonsäure. Sm. 145° (J. pr. [2] 56, 120). — IV, 1579.

14) Benzylidenhydrazid d. Phenylamidoameisensäure. Sm. 1740 (J. pr. [2] **53**, 529; [2] **58**, 219).

15) Benzylidenhydrazid d. 3-Amidobenzol-1-Carbonsäure. Sm. 180° (J. pr. [2] 52, 242). - III, 39.

16) Verbindung (aus uns-Phenyl-2-Amidobenzylhydrazin). Sm. 281° (B. 27, 2901). — IV, 1130. C 62,9 — H 4,9 — O 6,0 — N 26,2 — M. G. 267.

1) 6-Phenylureïdo-1-Methyl-1, 2, 3-Benztriazol. Sm. noch nicht bei 305° (B. 30, 2854). — IV, 1259. C 74,0 — H 5,7 — O 14,1 — N 6,2 — M. G. 227.

1) α -Nitro- $\alpha\beta$ -Diphenyläthan. Fl. (B. 28, 1860).

2) 2-[2-Oxybenzyliden]amido-1-Oxymethylbenzol. Sm. 117° (B. 25, 2971). — III, 74.

3) 2-[4-Oxybenzyliden]amido-1-Oxymethylbenzol. Sm. 137° (B. 25, 2971). - III, 85.

4) 4-[2-Oxybenzyliden]amido-1-Oxymethylbenzol. Sm. 155° (B. 28, 881). III, 74.

5) 3,5-Dioxy-2-Phenylimidomethyl-1-Methylbenzol. Sm. 125—126° (B. 12, 1002). — III, 105.

- 6) 5-Methyläther d. 2,5-Dioxy-l-Phenylimidomethylbenzol. Sm. 500 C, H, O, N (B. 14, 1992). — III, 98.
 - 2-Oxyphenyl-2-Methoxylbenzylidenamin. Sm. 188° (B. 25, 2754). · III, 73.
 - 8) 2-Oxyphenyl-4-Methoxylbenzylidenamin. Sm. 89° (B. 25, 2755). - III, 73.
 - 9) 3-Benzoylamido-4-Oxy-1-Methylbenzol. Sm. 1910 (B. 31, 2695).
 - 10) 4-Benzoylamido-1-Oxymethylbenzol. Sm. 150-151° (B. 28, 881). 11) 4-Oxy-1-[4-Acetylamidophenyl]benzol (4-Acetylamido-4'-Oxybiphenyl). Sm. 225° (B. 27, 2630).
 - 12) 3-[2-Methylphenyl]formylamido-1-Oxybenzol. Sm. 1690 (J. pr. [2] 34, 71). — II, 714.
 - 13) 4-[2-Methylphenyl]formylamido-1-Oxybenzol. Sm. 136,5° (J. pr. [2] **34**, 60). — II, 718.
 - 14) 3-[4-Methylphenyl] formylamido-l-Oxybenzol. Sm. 146° (J. pr. [2] 33, 214). — II, 715.
 - 15) Methyläther d. 2-Benzoylamido-1-Oxybenzol. Sm. 59,8° (A. 207, 244). — II, 1176.
 - 16) Methyläther d. 4-Benzoylamido-1-Oxybenzol. Sm. 153-154° (A. 175, 299). — II, 1177.
 - 17) Phenyläther d. 4-Acetylamido-l-Oxybenzol. Sm. 1270 (B. 29, 1447).
 - 18) 5-Amido-2-Oxy-4'-Methyldiphenylketon. Sm. 93°. HCl (B. 29, 3036).
 - 19) ?-Amido-?-Oxy-?-Methyldiphenylketon (B. 16, 1930). III, 216. 20) 4-Amidophenyläther d. Oxymethylphenylketon. Sm. 95°. HCl, HNO₃, H₂SO₄, Pikrat (C. 1897 [1] 411).
 - 21) 5-[2-Methylphenyl]amido-2-Methyl-1,4-Benzochinon. Sm. 145—146° A. 287, 192). — III, 360.
 - 22) $\mathbf{5}$ -[3-Methylphenyl]-2-Methyl-1,4-Benzochinon. Sm. 142° (A. 287, 198). — III, 360.
 - 23) β -Oximido- α -Oxy- $\alpha\beta$ -Diphenyläthan (Benzoïnoxim). Sm. 151—152° (B. 16, 504; 20, 492). — III, 226.
 - 24) isom. β -Oximido- α -Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 98—99° (B. 23, 2334).
 - III, 226. 25) α -Oximido-6-Oxy-3-Methyldiphenylmethan. Sm. $126-128.5^{\circ}$ (B.
 - 31, 2694). 26) 4-Methyläther d. anti-α-Oximido-4-Oxydiphenylmethan. Sm. 137
 - bis 138° (B. **24**, 53; A. **264**, 158). III, 194. 27) 4-Methyläther d. syn- α -Oximido-4-Oxydiphenylmethan. Sm. 115
 - bis 116° (B. 24, 53; A. 264, 158). III, 194. 28) β -Phenyläther d. α -Oximido- β -Oxy- α -Phenyläthan. Sm. 113-1140 (B. **28**, 3030). — **III**, 132.
 - 29) 1-Benzyläther d. 2-Oxybenzaldoxim, Sm. 62-63° (B. 23, 3321). - III, 76.
 - 30) 2-Benzyläther d. 2-Oxybenzaldoxim. Sm. 71,5° (B. 31, 3041).
 - 31) N-Benzyläther d. 2-Oxybenzaldoxim. Sm. 101—102° (B. 23, 3321;

 - 26, 2626; A. 298, 194). III, 76.
 32) 4-Benzyläther d. 4-Oxybenzaldoxim. Sm. 110—111,5° (B. 31, 3042).
 33) N-Benzyläther d. 4-Oxybenzaldoxim. Sm. 203° (A. 298, 193).
 34) Benzoylbenzylhydroxylamin. Sm. 106—107° (B. 26, 2629, 2632). —
 - II, *1209*.
 - 35) Benzyläther d. Benzoylhydroxylamin. Sm. 102-103° (B. 26, 2633). - II, 1209.
 - 36) Benzoat d. Benzylhydroxylamin. Fl. HCl (B. 26, 2282, 2632). II, 1209.
 - 37) Benzoat d. 2-[β-Oxyäthyl]pyridin. (2HCl, PtCl₄), (HCl, AuCl₃) (B. 24,
 - 1620; A. 301, 127). IV, 131. 38) α-Phenylamido-α-Phenylessigsäure. Sm. 164—168° u. Zers. HCl, HNO_3 , Ba (J. 1878, 779; B. 15, 2030). — II, 1324.
 - 39) 2-Benzylamidobenzol-1-Carbonsäure. Sm. 176°. HCl, (2HCl, PtCl₄) (B. **16**, 1285). — II, 1249.
 - 40) 4-[Methylphenylamido] benzol-1-Carbonsäure. Sm. 184°. Ba, Ag (B. 14, 2180). — II, 1272.
 - 41) 2-[2-Methylphenyl]amidobenzol-1-Carbonsäure. Sm. 179°. Ag (A. **279**, 277). — II, 1248.

- C₁₄H₁₃O₂N 42) 2-[4-Methylphenyl]amidobenzol-1-Carbonsäure. Sm. 191,5°. Ba (A. 279, 272). II, 1248.
 - 43) 1-Phenylamidomethylbenzol-4-Carbonsäure (B. 28, 1145).
 - 44) β-[2-Naphtyl]amidocrotonsäure. Sm. 92° (B. 17, 543; 21, 532). II, 622.
 - 45) 4-Biphenylamidoessigsäure (B. 13, 1966). III, 634.
 - 46) 2,6-Dimethyl-4-Phenylpyridin-3-Carbonsäure + 2 H₂O. Sm. 189 bis 190° (wasserfrei). (2 HCl, PtCl₄ + H₂O), Cu (B. 17, 2911). IV, 382.
 - 47) β-[6,8-Dimethyl-2-Chinolyl] akrylsäure. Zers. bei 180° (B. 20, 42).
 IV, 383.
 - 48) Aethylester d. Chinolin-2-Aethenyl- β -Carbonsäure (Ae. d. β -[2] Chinolylakrylsäure). Sm. 73° (A. 287, 28). IV, 381.
 - 49) Aethylester d. δ-Cyan-α-Phenyl-αγ-Butadiën-δ-Carbonsäure. Sm 114° (118—120°) (J. pr. [2] 50, 13; A. ch. [6] 29, 493). — II, 1442.
 - Phenylester d. Methylphenylamidoameisensäure. Sm. 58° (B. 24, 2108). II, 663.
 - 51) Phenylester d. 2-Methylphenylamidoameisensäure. Sm. 92° (B. 23, 699). II, 664.
 - 52) Phenylester d. 4-Methylphenylamidoameisensäure. Sm. 115° (B. 23, 698). II, 664.
 - 53) 2-Methylphenylester d. Phenylamidoameisensäure. Sm. 145° (J. pr. [2] 41, 319). II, 738.
 - 54) 4-Methylphenylester d. Phenylamidoameisensäure. Sm. 114° (*J. pr.* [2] 41, 319). II, 750.
 - 55) 2-Amidobenzylester d. Benzclearbonsäure. Fl. HCl (B. 25, 2964).
 - II, 1144. 56) 4-Amidobenzylester d. Benzolcarbonsäure. Sm. 223° (B. 24, 726).
 - II, 1144.
 57) Nitril d. 6-Oxy-4-Keto-2-Phenyl-1,2,3,4-Tetrahydrobenzolmethyläther-3-Carbonsäure. Sm. 173° (A. 294, 285).
 - 58) Nitril d. 6-Oxy-4-Keto-3-Methyl-2-Phenyl-1,2,3,4-Tetrahydroben-zol-3-Carbonsäure. Sm. 174° (A. 294, 287).
 - 59) Amid d. α-Oxydiphenylessigsäure. Sm. 154-155° (B. 22, 1214). II, 1697.
 - 60) Amid d. 2-Oxydiphenylessigsäure. Sm. 161-1620 (B. 31, 2814).
 - 61) Phenylamid d. α-Oxyphenylessigsäure. Sm. 151—152° (146°) (B. 23, 3702; 24, 4083; A. 279, 123; C. 1895 [2] 442; Bl. [3] 19, 775). II. 1552.
 - 62) Phenylamid d. Oxyessigphenyläthersäure. Sm. 99° (J. pr. [2] 20, 280; Bl. [3] 17, 359). II, 664.
 - 63) Phenylamid d. 4-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 158 bis 159° (53°) (A. 245, 44; B. 31, 2696). II, 1547.
 - 64) Phenylamid d. 2-Oxybenzolmethyläther-1-Carbonsäure. Sm. 62° (C. 1895 [2] 442).
 - 65) Phenylamid d. 4-Oxybenzolmethyläther-1-Carbonsäure. Sm. 168 bis 169° (A. 175, 292; J. pr. [2] 41, 312; C. 1895 [2] 442). II, 1530.
 66) Benzylamid d. 2-Oxybenzol-1-Carbonsäure. Sm. 134° (B. 26, 2627).
 - II, 1500.
 - 67) 2-Methylphenylamid d. 2-Oxybenzol-1-Carbonsäure. Sm. 144° (B. 29, 1191).
 - 68) **4-Methylphenylamid d. 2-Oxybenzol-1-Carbonsäure.** Sm. 155—156° (B. **6**, 337). II, 1500.
 - 69) 2-Oxybenzylamid d. Benzolcarbonsäure. Sm. 139—140° (J. pr. [2] 51, 283).
- $\mathbf{C}_{14}\mathbf{H}_{13}\mathbf{O}_{2}\mathbf{N}_{3}$ C 65,9 H 5,1 O 12,5 N 16,5 M. G. 255.
 - 1) 1-Methylamido-2-[2-Nitrobenzyliden] amidobenzol. Sm. 144° (B. 25, 2842). IV, 563.
 - 2) α-Diphenylbiuret. Sm. 210° (B. 4, 265; 21, 504; J. pr. [2] 7, 479). II, 382.
 - 3) β -Diphenylbiuret. Sm. 165° (B. 4, 250). II, 382.
 - 4) s-Phenyl-[α-Oximidobenzyl]harnstoff. Sm. 115° (B. 18, 1059). II, 1205.
 - 5) uns-Phenyl-[α-Oximidobenzyl]harnstoff. Sm. 165—167° (B. 19, 1671).
 Π, 1205.

- $C_{14}H_{13}O_2N_3$ 6) α -Formylamido- $\alpha\beta$ -Diphenylharnstoff. Sm. 164° (171—172°) (B. 26,
 - 2871; 27, 1516). IV, 674.

 7) Benzoylphenylamidoharnstoff. Sm. 210—211° (202—203°) (B. 20, 1716; 29, 1951; C. 1898 [1] 95; Soc. 71, 202). IV, 675.
 - S) 4-Benzoylphenylamidoharnstoff. Sm. 215,5° u. Zers. (Soc. 55, 614). **— III**, 186.
 - 9) α -[3-Nitrophenylhydrazon]- α -Phenyläthan. Sm. 160° (B. 22, 2814). - IV, 770.
 - 10) α -Phenylhydrazon- α -[4-Nitrophenyl]äthan. Sm. 132° (B. 22, 203). **– IV**, 771.
 - 11) 4-Nitro-3-Methylbenzylidenphenylhydrazin. Sm. 150° (B. 31, 392). **- IV**, 754.

 - 12) P-Nitro-2,2'-Dimethylazobenzol. Sm. 63-67°. IV, 1376.
 13) P-Nitro-2,2'-Dimethylazobenzol. Sm. 87° (J. r. 20, 609). IV, 1376.
 - 14) ?-Nitro-3,3'-Dimethylazobenzol. Sm. 192—195° (B. 22, 837). — IV, 1377.
 - 15) 2-Nitro-4,4'-Dimethylazobenzol. Sm. 76° (80°) (B. 6, 556; M. 10, 586). - IV, *1379*.
 - 16) 3'-Acetylamido-4-Oxyazobenzol? Sm. bei 280° (B. 15, 3021). IV, 1411.
 - 17) 2-[3-Nitrophenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 84-85° (J. pr. [2] 53, 424). - IV, 638.

 - 18) Dimethyldiamidochinoxazon. Sm. 223° (B. 25, 1061). IV, 1180. 19) $\alpha\beta$ -Diphenylguanidin-3-Carbonsäure. Sm. 165° u. Zers. $HCl+H_2O$ (B. 15, 2120; 16, 336). — II, 1269. 20) Phenylamid d. Phenylnitrosamidoessigsäure. Sm. 144° (A. 301, 65).

 - 21) Amid d. 3-[3-Amidobenzoyl]amidobenzol-1-Carbonsäure. Sm. 176°. $HCl + 7 H_2O$, H_2SO_4 (A. **251**, 169). — II, 1267.
 - 22) 3-Amidobenzoylamid d. 3-Amidobenzol-1-Carbonsäure. Sm. oberh. 300° (A. **251**, 160). — II, 1257.
 - 23) 1-Amid-2-Phenylhydrazid d. Benzol-1,2-Dicarbonsäure. (J. pr. [2] 35, 280). - IV, 710.
 - 24) Phenylhydrazid d. Phenyloxaminsäure. Sm. 235° (J. pr. [2] 48, 79).
 - 25) β-Benzoylhydrazid d. Phenylamidoameisensäure. Sm. 2120 (J. pr. [2] **53**, 518).
 - 26) 2-Oxybenzylidenhydrazid d. Phenylamidoameisensäure (J. pr. [2] **53**, 529).
- $C_{14}H_{13}O_2N_5$
- C 59,4 H 4,6 O 11,3 N 24,7 M. G. 283. 1) **A**mid d. **D**iazoamidobenzol-3,3'-Dicarbonsäure (A. **251**, 163). IV, 1577.
- C 51.7 H 4.0 O 9.8 N 34.4 M. G. 325.C14H13O2N7
 - 1) m²-Nitroguanazylbenzol. Sm. 206° (B. 30, 447). IV, 1494. 2) p¹-Nitroguanazylbenzol. Sm. 209° (B. 30, 448). IV, 1494.
- 1) Aethyläther d. 1-Oxy-?-Bromacetylnaphtalin. Sm. 1190 (B. 31, 174). $C_{14}H_{13}O_2Br$
- 1) Acetat d. Diphenyljodoniumhydrat. Sm. 120° u. Zers. (B. 27, 1593). $\mathbf{C}_{14}\mathbf{H}_{13}\mathbf{O}_{2}\mathbf{J}$ C 69,1 - H 5,3 - O 19,8 - N 5,8 - M. G. 243. $C_{14}H_{13}O_3N$
 - 1) α -Oxy- $\alpha\alpha$ -?-Nitrodiphenyläthan. Sm. 106-107° (B. 18, 664).
 - II, 1080. 2) ?-Nitro-2-Oxy-?-Methyldiphenylmethan. Sm. 117° (B. 26, 1854). —
 - II, 898.
 - 3) 1-Methyläther d. 4-[3,4-Dioxybenzyliden]amido-1-Oxybenzol. Sm. 161—161,5° (B. 31, 176).
 - 4) 43-Methyläther d. 4-[3,4-Dioxybenzyliden]amido-l-Oxybenzol. Sm. 203° (B. **31**, 175).
 - 5) Benzyläther d. 3-Nitro-4-Oxy-1-Methylbenzol. Sm. 540 (A. 224, 142). - II, 1049.
 - 6) 3-Methyläther d. N-Phenyl-3,4-Dioxybenzaldoxim. Sm. 207-208° (C. 1898 [2] 80).
 - 7) Phenylamidomethyl-3,4-Dioxyphenylketon. Sm. 149°. H₂SO₄ (B. 27, 1985; J. r. **25**, 279). — III, 138.
 - 8) 3-Acetyl-2,4-Diketo-6-Methyl-1-Phenyl-1,2,3,4-Tetrahydropyridin. Sm. 217—218° (A. 273, 209). — II, 424.
 - 9) α-Amido-2-Oxydiphenylessigsäure. Sm. 210—215°. HCl (B. 31, 2816).

- $C_{14}H_{13}O_3N$ 10) 1-Naphtylacetylamidoessigsäure. Sm. 154° (156°). Ba $+5H_2O$ (G. 19, 364; B. **25**, 2292; Ph. Ch. **10**, 643). — **II**, 613.
 - 11) 2-Naphtylacetylamidoessigsäure. Sm. 1720 (B. 25, 2298; Ph. Ch. 10, 643). — II, 621.
 - 12) 1-Naphtylsuccinaminsäure. Sm. 1710 (A. 248, 158; C. 1896 [1] 109). - II, 611.
 - 13) 2-Naphtylsuccinaminsäure. Sm. 190—192° (184—185°). Ag (A. 248,
 - 159; **292**, 190; C. **1896** [1] 997). II, 620. 14) 4-Keto-2, 6-Dimethyl-1-Phenyl-1, 4-Dihydropyridin-3-Carbonsäure. Sm. 265-267° u. Zers. Ba + 4H₂O (B. 20, 161, 947, 1399; 22, 84; Soc.
 - 51, 498). II, 2005. 15) Aethylester d. 1-Naphtyloxaminsäure. Sm. 106° (B. 6, 249; 30, 771). - II, 611.
 - 16) Aethylester d. 2-Naphtyloxaminsäure. Sm. 119,5° (B. 30, 771).
 - 17) Aethylester d. δ -Cyan- γ -Keto- α -Phenyl- α -Buten- δ -Carbonsäure. Sm. 104° (B. **21** [2] 644). — II, 1680.
 - 18) Acetat d. 4-Acetylamido-I-Oxynaphtalin. Sm. 158°; subl. 110° (B. 25, 978; **29**, 2947). — II, 865.
 - 19) Acetat d. 1-Acetylamido-2-Oxynaphtalin. Sm. 206° (Soc. 55, 121; B. 25, 3432). II, 885.
 - 20) Acetat d. 3-Acetylamido-2-Oxynaphtalin (B. 27, 764). II, 885.
 - 21) 1-Acetat d. Methyl-4-Amido-1-Oxy-2-Naphtylketon. Sm. 1070 (B. 28, 1949). — III, 175.
 - 22) β-Mononitrit d. αβ-Dioxy-αα-Diphenyläthan. Sm. 106—107° (A. 233, 330). — II, 231.
 - 23) Amid d. Dioxyessigdiphenyläthersäure. Sm. 108° (B. 27, 2797).
 - 24) Phenylamid d. Dehydracetsäure. Sm. 115° (B. 9, 1100). II, 1756. 25) Verbindung (aus Benzaldehyd u. 3-Amidobenzol-1-Carbonsäure) (B. 24,
 - 3521). III, 7. C 62,0 H 4,8 O 17,7 N 15,5 M. G. 271.
- $C_{14}H_{13}O_{8}N_{3}$
 - 1) α-Methyl-α-Phenyl-β-[3-Nitrophenyl]harnstoff. Sm. 230° (B. 24, 2112). — II, 380.
 - 2) s-Phenyl-[2-Nitro-4-Methylphenyl]harnstoff. Sm. 194° u. Zers. (J. pr. [2] **41**, 323). — II, 494.
 - 3) s-3-Nitrophenylbenzylharnstoff. Sm. 1880 (B. 24, 3817). II, 526.
 - 4) s-2-Nitrophenyl-2-Methylphenylharnstoff. Sm. 1890 (Am. 19, 316). 5) Phenylamidoformiat d. α-Oxy-β-Phenylharnstoff (Carbanilidophenyl-
 - oxyharnstoff). Sm. 178° u. Zers. (A. **263**, 263). II, 402
 - 6) 2-Nitro-1-[2-Methylphenyl]nitrosamidomethylbenzol (2-Nitrobenzyl-
 - 2-Methylphenylnitrosamin). Sm. 64—65° (J. pr. [2] 51, 276). 7) 2-Nitro-1-[4-Methylphenyl]nitrosamidomethylbenzol (2-Nitrobenzyl-4-Methylphenylnitrosamin). Sm. 80° (J. pr. [2] 51, 271).
 - 8) 4-Nitro-2-Acetylamidodiphenylamin. Sm. 163-164° (B. 28, 2971). - IV, 556.
 - 9) 4-Nitro-2'-Acetylamidodiphenylamin. Sm. 178 (B. 28, 2977). —
 - IV, 556. 10) 2-Nitro-4'-Acetylamidodiphenylamin. Sm. 147-148° (J. pr. [2] 46,
 - 527). IV, 588. 11) 5-Nitro-4-Benzoylamido-3-Amido-1-Methylbenzol. Sm. 137—138°
 - (A. 208, 317). IV, 617. 12) 2-Amidophenyl-2-Nitrobenzylformylamin. Sm. 158° (J. pr. [2] 54,
 - 267). IV, 558. 13) 2-Oxybenzenylphenyluramidoxim. Sm. 119° u. Zers. (B. 22, 2788).
 - **II**, 1502.
 - 14) Benzyläther d. 3-Nitrophenyloximidoamidomethan. Sm. 58° (B. 18, 1065). II, 1235. 15) 4-Nitrobenzyläther d. Benzenylamidoxim. Sm. 105-106° (B. 25,
 - 46). II, 1200.
 - 16) Methyläther d. Phenyl-2-Nitro-3-Oxybenzylidenhydrazin. Sm. 134° $(B. \ 22, \ 2351). - IV, 760.$
 - 17) Methyläther d. Phenyl-4-Nitro-3-Oxybenzylidenhydrazin. Sm. 1030 (B. **22**, 2363). — III, 80.
 - 18) Methyläther d. Phenyl-5-Nitro-3-Oxybenzylidenhydrazin. Sm. 126° (B. 22, 2355). - IV, 760.

- C₁₄H₁₃O₃N₃ 19) Methyläther d. Phenyl-6-Nitro-3-Oxybenzylidenhydrazin. Sm. 154° (B. 22, 2353). - IV, 760.
 - 20) Methyläther d. Phenyl-3-Nitro-4-Oxybenzylidenhydrazin, Sm. 130,5° (A. 243, 71). - IV, 761.
 - 21) β -Formyl- α -Phenyl- α -[2-Nitrobenzyl]hydrazin. Sm. 141—142° (B. **25**, 2900). — IV, 812.
 - 22) ?-Nitro-4,4'-Dimethylazoxybenzol. Sm. 84° (B. 6, 557). IV, 1340.
 - 23) isom. Nitro-4,4'-Dimethylazoxybenzol. Sm. 51° (M. 10, 600). IV, 1340.
 - 24) isom. Nitro-4,4'-Dimethylazoxybenzol. Sm. 82° (M. 10, 600). IV, 1340.
 - 25) 3,4-Dioximido-6-Aethyl-3,4-Dihydrophenoxazin $+ \frac{11}{3}$ H₂0. Sm. 140° u. Zers. (B. 31, 498).
 - 26) Phenylamid d. Phenyloxyallophansäure (Diphenyloxybiuret). Sm. 178° u. Zers. (B. **22**, 1934). — II, 543.
 - 27) Phenylnitrosohydrazid d. α-Oxyphenylessigsäure. Zers. bei 70° (B. **23**, 3705). — **IV**, 693. C 56,2 — H 4,3 — O 16,0 — N 23,4 — M. G. 299.
- C14H18O8N5
 - 1) m-Phenylenoxaminsäureazo-m-Phenylendiamin. Zers. bei 1890. Ag $+3 H_2 O$ (B. 30, 2204). — IV, 1363. C 64,9 — H 5,0 — O 24,7 — N 5,4 — M. G. 259.
- $C_{14}H_{13}O_4N$ 1) 6-Nitro-4, 4'-Dioxy-3, 3'-Dimethylbiphenyl. Sm. 187° (B. 25, 1034). - II, 993.
 - 2) Phenyl-2-Nitrophenyläther d. $\alpha\beta$ -Dioxyäthan. Sm. 86° (J. pr. [2]) **24**, 245). — II, 680.
 - 3) Monomethyläther d. α Oximido 2, 4, 6 Trioxydiphenylmethan (Cotoïnoxim) (B. 27, 416). III, 203.
 - 4) Diacetylderivat d. 3-Amido-1, 2-Dioxynaphtalin. Sm. 1950 (A. 295, 14).
 - 5) Phenylamidomethyl-P-Trioxyphenylketon (Gallanilidoacetophenon). Sm. 132° (J. r. 25, 122). — III, 139.
 - 6) 1-Naphtylamidobernsteinsäure. Sm. 210° u. Zers. Na₂, K₂, Ca, Ba (B. 25, 966). - II, 614.
 - 7) 2-Naphtylamidobernsteinsäure. Sm. 189° u. Zers. Na₂, Ca, Ba (B. **25**, 970). — II, 622.
 - 8) 1-Naphtylimidodiessigsäure. Sm. 133-133,5° (B. 23, 2004; Ph. Ch.
 - 10, 645). II, 613. 9) 2-Naphtylimidodiessigsäure. Zers. bei 1820 (B. 23, 2008; Ph. Ch. 10,
 - 645). II, 621. 10) 2-Methyl-5-Phenylpyrazol-1-Methylcarbonsäure-3-Carbonsäure.
 - Sm. 152° (B. 19, 3160). IV, 357. 11) 2,5-Dimethyl-1-Phenylpyrrol-3,4-Dicarbonsäure. Zers. bei 224°.
 - Ca (B. 18, 303; A. 236, 305). IV, 92. 12) $\gamma \varepsilon$ -Lakton d. ε -Oxy- β -Phenylamidoformoxyl- $\beta \delta$ -Hexadiën- γ -Carbon-
 - säure. Sm. 102° (A. 303, 141). 13) Aethylester d. α -Cyan- β -[4-Acetoxylphenyl]akrylsäure. Sm. 87,5° (J. pr. [2] **54**, 536).
 - 14) Aethylester d. 2,6-Dioxy-4-Phenylpyridin-3-Carbonsäure. Sm. 200° (Soc. 75, 248).
 - 15) Isopropylester d. 5-Nitronaphtalin-1-Carbonsäure. Sm. 101,5° (B. 16, 2252). — II, 1448.
 - 16) Isopropylester d. 5 [oder 8]-Nitronaphtalin-2-Carbonsäure (vom Sm. 295°). Sm. 75—76° (B. 16, 2252). — Π , 1457.
 - 17) 4-Methylphenylamid d. 3,4,5-Trioxybenzol-1-Carbonsäure. Sm. 211°. Zn (Bl. [3] 11, 83). — II, 1923.
 - 18) Salicylsaures Benzolcarbonsäureamid. Sm. 120° (B. 23, 2936). II, 1492
 - 19) Verbindung (aus 3,5-Dioxy-1-Methylbenzol) (B. 7, 247; 8, 1650). —
 - $C_{58,6} H_{4,5} O_{22,3} N_{14,6} M.G._{287}$

C14H18O4N8

- 1) Di[?-Nitro-4-Methylphenyl]amin. Sm. 191° (B. 15, 832). II, 486.
 2) Di[2-Nitrobenzyl]amin. Sm. 99—100° (102°). HCl, (2HCl, PtCl₄) (B. 24, 3093; J. pr. [2] 55, 360). II, 520.
- 3) Di [4-Nitrobenzyl]amin (4-Dinitrodibenzylamin). Sm. 93°. HCl, (2 HCl, $PtCl_4$) (B. 6, 1057). — II, 520.

 $C_{14}H_{13}O_5N_3$

 $\mathbf{C}_{14}\mathbf{H}_{13}\mathbf{NJ}_{2}$

 $\mathbf{C}_{14}\mathbf{H}_{13}\mathbf{O}_4\mathbf{N}_3$ 4) isom. Dinitrodibenzylamin. Sm. bei 100°. (HCl Sm. 173°) (B. 6, 1059). — II, 520. 5) 4-Nitrobenzyläther d. 4-Oxy-1-Methylbenzol. Sm. 91° (A. 224, 144). - II, 1060. 6) α -Oxy- β -Phenyl- α -[2-Nitrobenzyl]harnstoff. Sm. 141° (B. 30, 518). 7) 2-Nitro-1,4-Di[Acetylamido]naphtalin. Sm. bei 295° u. Zers. (B. 19, 335). — IV, 922. 8) 1,3-Diacetyl-2,5-Difuranyl-2,3-Dihydro-1,3,4-Triazol (Diacetyldifurylamidin). Sm. 138° (B. 28, 473; A. 298, 34). — IV, 1167.

9) Antipyrintartronylimid. Sm. 258° u. Zers. (A. 255, 239). — IV, 548.

10) Verbindung (aus d. Säure C₁₄H₁₂O₄N₂) (B. 23, 916). — IV, 1508.

C 53,3 — H 4,1 — O 20,3 — N 22,2 — M. G. 315.

 $C_{14}H_{13}O_4N_5$

1) 5,5'-Dinitro-2,2'-Dimethyldiazoamidobenzol. Sm. 212° u. Zers. (200 bis 201°) (B. 22, 2567; 25, 3155). — IV, 1568. 2) 2,2'-Dinitro-4,4'-Dimethyldiazoamidobenzol. Sm. 163° (B. 22, 2565).

- IV, 1568.

3) Aethyl-3,3'-Dinitrodiazoamidobenzol. Sm. 119° (B. 19, 3245; Soc. **51**, 441). — IV, 1563.

4) Aethyl-3,4'-Dinitrodiazoamidobenzol. Sm. 151-155° u. Zers. (B. 19,

3241; Soc. 51, 442; 55, 417; 57, 785). — IV, 1564. 5) isom. Aethyl-3, 4'-Dinitrodiazoamidobenzol. Sm. 174—175° (Soc. 51, 442; B. 19, 3246). — IV, 1564. 6) Aethyl-4, 3'-Dinitrodiazoamidobenzol. Sm. 187° (B. 19, 3247; Soc.

51, 442). — **IV**, 1564.

7) Aethyl-4,4'-Dinitrodiazoamidobenzol. Sm. 191—192° (B. 19, 3247; Soc. 49, 630). — IV, 1565. C 61,1 — H 4,7 — O 29,1 — N 5,1 — M. G. 275.

C14H13O5N

1) 2-Methylester - β -Aethylester d. β -Cyan- α -Keto- α -Phenyläthan- β , 2-Dicarbonsäure. Sm. 64—65°. Na, Ag (A. ch. [7] 1, 491). — II, 1962. C 55,4 — H 4,3 — O 26,4 — N 13,9 — M. G. 303.

1) Di[2-Nitrobenzyl]hydroxylamin. Sm. 124° (B. 30, 59). 2) Di[4-Nitrobenzyl]hydroxylamin. Sm. 157—158°. HCl (A. 263, 189). - II, 535.

3) Aethyläther d. 2-[2,4-Dinitrophenyl]amido-1-Oxybenzol. Sm. 1640 (B. **22**, 902). — II, 704. C 50.8 - H 3.9 - O 24.2 - N 21.1 - M. G. 331.

C14H18O5N5

1) Dinitroamidooxydimethylazobenzol (Am. 2, 242). — IV, 1414.

2) Dimethyläther d. ?-Dinitro-?-Phenylamido-1,3-Dioxybenzol. 196° (Am. 13, 177). — II, 930.

3) 1-Aethyläther d. 3,5-Dinitro-2-Phenylamido-1,4-Dioxybenzol. Sm.

122°. K (B. **24**, 3824). — II, 949. C 48,4 — H 3,7 — O 27,7 — N 20,2 — M. G. 347. $\mathbf{C}_{14}\mathbf{H}_{13}\mathbf{O}_{6}\mathbf{N}_{5}$

1) 2,4,6-Trinitro-3'-Dimethylamidodiphenylamin (B. 31, 1182).

2) Dimethyläther d. 5,5'-Dinitro-2,2'-Dioxydiazoamidobenzol (A. 121, 278). - IV, 1575.

C₁₄H₁₃O₇Br 1) Triacetat d. Brommethyl-?-Trioxyphenylketon (Tr. d. Bromgallacetophenon). Sm. 103° (B. 30, 1466).

C₁₄H₁₃NCl₂ 1) Di[4-Chlorbenzyl]amin. Sun. 29°. HCl, (2 HCl, PtCl₄), HBr (A. 151, 141; Am. 2, 94). — II, 519. 2) isom. ?-Dichlordibenzylamin (A. 151, 141; Am. 2, 94). — II, 519.

C₁₄H₁₃NBr₂ 1) Di[2-Brombenzyl]amin. Sm. 36°. HCl, (2HCl, PtCl₄) (Am. 2, 318). - II, 519.

2) Di[4-Brombenzyl]amin. Sm. 50°. HCl, (2HCl, PtCl₄) (Am. 3, 251; A. 151, 370). — II, 519.

3) αβ-Dibrom-α-Phenyl-β-[6-Methyl-2-Pyridyl] äthan (Methylstilbazol-dibromid). Sm. 156° u. Zers. (B. 25, 2401). — IV, 380.

4) 4-Methyl-2- $[\alpha\beta$ -Dibrom- β -Phenyläthyl]pyridin. Sm. 139—140° (B. 21, 3075). — IV, 397.

1) Di[4-Jodbenzyl]amin. Sm. 76°. HCl, (2HCl, PtCl₄) (B. 11, 58; Am. 2, 250). — II, 519.

 $C_{14}H_{13}NS$

1) Thiodiphenyläthylamin. Sm. 102° (A. 230, 94). — II, 806.

- 2) α-Imidobenzylsulfid. HCl (Sm. 181°) (A. 197, 350). II, 1294. $C_{14}H_{13}NS$
 - 3) Amid d. 1-Benzylbenzol-2-Thiocarbonsäure. Sm. 1530 (B. 25, 3024). - II, 1466.
 - 4) Phenylamid d. 1-Methylbenzol-4-Thiocarbonsäure. Sm. 140-141° (B. 25, 3527). - II, 1354.
 - 5) 2-Methylphenylamid d. Benzolthiocarbonsäure. Sm. 85-86° (B. **22**, 3159). — **II**, 1293.
 - 6) 4-Methylphenylamid d. Benzolthiocarbonsäure. Sm. 128-1290 (B. 10, 2134; 11, 1759). — II, 1294.
 - 7) Diphenylamid d. Thioessigsäure. Sm. 110,5-111° (A. 192, 39). -II, 369.
- α-Phenylhydrazon-α-[4-Chlorphenyl]äthan. Sm. 114° (Bl. [3] 21, 69).
 6-Chlor-3, 4'-Dimethylazobenzol. Sm. 97° (B. 19, 3026). TV, 1378. $C_{14}H_{13}N_2Cl$
- 3) Chlormethylat d. P-Amido- β -Naphtochinolin + $2\,\mathrm{H}_2\mathrm{O}$. Sm. 256° (*J. pr.* [2] **57**, 67). IV, 1012. C₁₄H₁₃N₂Cl₃ 1) $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[Phenylamido] äthan. Sm. 107.5° (100— 101°). (2 HCl,
- $PtCl_4$)? (B. 5, 251; 9, 198; A. 302, 359). II, 443.
- 2) β-Chlor-α α-Di | 4-Chlorphenylamido | äthan. Sm. 78-79° (A. 302, 358). $\mathbf{C}_{14}\mathbf{H}_{13}\mathbf{N}_{2}\mathbf{Br}$ 1) α -Phenylhydrazin- α -[4-Bromphenyl]äthan. Sm. 126° (106—113°) (\dot{B} .
 - 24, 3767; Am. 21, 30). IV, 771. 2) α -Benzyliden- β -[2-Brom-4-Methylphenyl]hydrazin. Sm. 84° (Soc. 73, 178). — IV, 810.
 3) P-Brom-2, 2'-Dimethylazobenzol. — IV, 1376.

 - 4) 2-Brom-4, 4'-Dimethylazobenzol. Sm. 139° (B. 6, 557; 21, 1214). IV, 1379.
 - 5) 3-Brom-4,4'-Dimethylazobenzol. Sm. 128° (B. 21, 1217). IV, 1379.
- $C_{14}H_{13}N_{2}J$ 1) Jodmethylat d. 1-[1-Naphtyl]imidazol. Sm. 1956 (B. 25, 2373). — IV, 502.
 - 2) Jodmethylat d. 2-Phenylindazol. Sm. 188° (B. 24, 963). IV, 866. 3) Jodmethylat d. ?-Amido- β -Naphtochinolin + $2\,\mathrm{H}_2\mathrm{O}$. Sm. 237° (J. pr. [2] **57**, 66). — **IV**, 1012.
 - 4) Jodathylat d. 5,10-Naphtdiazin (J. d. Phenazin). + J (B. 26, 182). - IV. 1000.
- $C_{14}H_{13}N_3Cl_2$ 1) 2,3'-Dichlor-4-Dimethylamidoazobenzol. Sm. 84-85° (B. 31, 2531) Anm.). — IV, 1356.
 - 2) Aethyl-4, 4'-Dichlordiazoamidobenzol. Sm. 85,5° (Soc. 53, 671). IV, 1561.
- $C_{14}H_{13}N_3S$ 1) α-Benzylidenamido-β-Phenylthioharnstoff. Sm. 191° (B. 27, 616). —
 - 2) α -Phenyl- β - $[\alpha$ -Imidobenzyliden]thioharnstoff. Sm. 125° (B. 22, 1609). **– IV**, 846.
 - 3) s-Dimethylthionin. HJ (B. 20, 931; 22, 2066). II, 809.
 - 4) uns-Dimethylthionin. HJ (A. 251, 91). II, 809.
 - 5) Verbindung (aus uns-Phenyl-2-Amidobenzylhydrazin). Sm. 243° (B. 27, 2902). — IV, 1130.
- 1) 4,4'-Biphenylenamid d. Imidodi [thioameisensäure] (B. 27, 1558). 1) α -Chlor- $\alpha\beta$ -Di [Phenylhydrazon] äthan (Bl. [3] 17, 549). IV, 756. $\mathbf{C}_{14}\mathbf{H}_{13}\mathbf{N}_{3}\mathbf{S}_{2}$
- $C_{14}H_{13}N_4Cl$ 2) 4-Chlor-1-[Imido-4-Methylphenylamidomethyl]azobenzol (4-Chlordiazobenzol-4-Tolylguanidin). Sm. 167° (B. 28, 2080). — IV, 1453.
 - 3) 3,4'-Dimethyl-6-Diazoazobenzolchlorid. 2 + PtCl₄ (B. 19, 1455). -IV, 1532.
 - 4) 2-Chlorphenylat d. 4-Methyl-1-Phenyl-1, 2, 3, 5-Tetrazol. 2 + PtCl₄ (B. **31**, 1756). — **IV**, 1234.
 - 5) Verbindung (aus Formazylmethan). Sm. 2320 (B. 30, 2999).
- $C_{14}H_{13}N_4Br_3$ 1) 2,3'-Dimethyl-4'-Diazoazobenzoltribromid. Sm. 96° (B. 20, 1181). - IV, 1532. 2) 3,4'-Dimethyl-6-Diazoazobenzoltribromid. Sm. 125° (B. 19, 1455).
 - **IV**, 1532.
- 1) 6-Phenylthiureïdo-1-Methyl-1, 2, 3-Benztriazol. Sm. 227-228° (B. C14H13N5S 30, 2854). — IV, 1259.
- 1) ?-Joddi[2-Methylphenyl]jodoniumchlorid. Sm. 162,50. + HgCl₂ (B. C₁₄H₁₃ClJ₂ 28, 1814).
 - 2) ?-Joddi[4-Methylphenyl]jodoniumchlorid. Sm. 165,50. + HgCl₂ (B. 28, 99).

- 1) ?-Joddi[2-Methylphenyl]jodoniumbromid. Sm. 162° (B. 28, 1814). $C_{14}H_{13}BrJ_{2}$ 2) P-Joddi 4-Methylphenyl jodoniumbromid. Sm. 163° (B. 28, 99). C 74.3 - H 6.2 - O 7.1 - N 12.4 - M. G. 226. $C_{14}H_{14}ON_{2}$
- 1) α-Methyl-αβ-Diphenylharnstoff. Sm. 104°; Sd. 203—205° (B. 17, 2093, 3036). — II, 380.
 - 2) s-Phenylbenzylharnstoff. Sm. 168° (B. 5, 93; 23, 2749; J. pr. [2] 56, 89). — II, 526.
 - 3) s-Phenyl-2-Methylphenylharnstoff. Sm. 212° (B. 19, 2410). II, 464.
 - 4) s-Phenyl-3-Methylphenylharnstoff. Sm. 173—1740 (1650) (B. 22, 840; Soc. 67, 562). — II, 479.
 - 5) s-Phenyl-4-Methylphenylharnstoff. Sm. 212° (B. 27, 2426; Soc. 67,
 - 6) Benzhydrylharnstoff (Diphenylmethylharnstoff). Sm. 143° (B. 19, 2130). - II, 635.
 - 7) Dibenzylnitrosamin. Sm. 61° (52°) (A. 151, 368; B. 19, 3288). -- II, 519.
 - 8) Di[4-Methylphenyl]nitrosamin. Sm. 103° (100—101°) (B. 13, 1092, 1544). — II, 486.
 - 9) Benzyl-4-Methylphenylnitrosamin. Sm. 53° (A. 241, 360). II, 518. 10) Methyl-?-Nitrosophenylbenzylamin. Sm. 56° (A. 263, 311). II, 517.
 - 11) 4-Nitroso-2-Benzylamido-l-Methylbenzol. Sm. 115° (A. 263, 308).
 - **II**, 518. 12) 4-Nitroso-3-Benzylamido-1-Methylbenzol. Sm. 121° (A. 263, 211).
 - **II**, 518. 13) 1-Methylamido-2-[2-Oxybenzyliden]amidobenzol. Sm. 110-1110 (B. **25**, 2843). — IV, 564.

 - 14) 4-Acetylamidodiphenylamin. Sm. 158° (B. 12, 1402). IV, 588. 15) 4-Amido-4'-Acetylamidobiphenyl. Sm. 199° (A. 207, 332). IV, 964.
 - 16) 4-Benzoylamido-2-Amido-1-Methylbenzol. Sm. 1420 (B. 7, 1505). IV, 606.
 - 17) 4-Benzoylamido-3-Amido-1-Methylbenzol. Sm. 193-1940 (A. 208, 314; B. 24, 633). — IV, 417.
 - 18) ?-Amido-4-Amidophenyl-4-Methylphenylketon. Sm. 178°. H₂SO₄ (A. 286, 327). — III, 215.
 - 19) ?-Diamido-?-Methyldiphenylketon. Sm. etwas über 220° (B. 16, 1929). **– III**, 216.
 - 20) 4-[4-Dimethylamidophenyl]imido-1-Keto-1,4-Dihydrobenzol (Phenolblau; Chinondimethylanilimid). Sm. 133-1340 (B. 16, 2851; 18, 2914; 21, 889; Bl. [3] 11, 1133; A. 289, 129). — IV, 598.
 - 21) 6-Amido-3-Methyl-1,4-Benzochinon-4-[4-Methylphenyl]imid. Sm. $143-145^{\circ}$ (B. 17, 2442; 26, 2775; J. r. 19, 146). — III, 359.
 - 22) Aethyläther d. β -Oxy- α -Cyan- α -[2-Cyanphenyl]- α -Buten. Sm. 58° (B. 27, 2242). — II, 1966.
 - 23) α -Oximido- β -[4-Amidophenyl]- α -Phenyläthan. Sm. 141° (B. 21, 2449). — III, 220.
 - 24) α -Oximido- α -[3-Amidophenyl]- α -[4-Methylphenyl]methan. Sm. 146° (A. 286, 315). — III, 215.
 - 25) Benzenyl-2-Methylphenylamidoxim. Sm. 1470 (1420) (B. 22, 3160; 31, 241). — II, 1204.
 - 26) Benzenyl-4-Methylphenylamidoxim. Sm. 176°. HCl (B. 22, 2406). **— II**, 1204.
 - 27) Benzyläther d. Benzenylamidoxim. Sm. 90,5° (B. 18, 1056; 19, 1480).
 - 28) 4-Acetylhydrazidobiphenyl. Sm. 2030 (B. 27, 3106). IV, 970.
 - 29) Phenyl-2-Oxy-3-Methylbenzylidenhydrazin. Sm. 95° (B. 24, 3668). • IV, 761.
 - 30) Phenyl-4-Oxy-3-Methylbenzylidenhydrazin. Sm. 151° (B. 24, 3671). **- IV**, 761.
 - 31) Methyläther d. 4-Oxybenzylidenphenylhydrazin. Sm. 120-1210 (A. 248, 103). - IV, 760.
 - 32) 4-Phenylhydrazonmethyl-1-Oxymethylbenzol (Bl. [3] 11, 382).
 - 33) β -Hydrazon- α -Oxy- α β -Diphenyläthan (Benzoïnhydrazin). Sm. 75°. Na, Na_2 (J. pr. [2] 52, 124). — III, 225.

- C₁₄H₁₄ON, 34) β-Phenylhydrazon-α-Oxy-α-Phenyläthan (Phenylhydrazon d. α-Oxy
 - phenylessigsäurealdehyd). Sm. 142° (*J. pr.* [2] 49, 406). 35) α-Phenylhydrazon-β-Oxy-α-Phenyläthan. Sm. 112° (*A.* 243, 245). **IV**, 771.
 - 36) α -Phenylhydrazon- α -[2-Oxyphenyl]äthan. Sm. 107° (108°) (B. 25. 1309; Soc. 75, 69). — IV, 772.
 - 37) α -Phenylhydrazon- α -[4-Oxyphenyl]äthan. Sm. 136° (B. 30, 1770). **— IV**, 772.
 - 38) Phenyläther d. β -Phenylhydrazon- α -Oxyäthan. Sm. 86° (M. 15.
 - 744). IV, 755.
 39) 2,2'-Dimethylazoxybenzol. Sm. 59—60° (B. 6, 557; 18, 2555; 20, 2016; **31**, 559, 990). — **IV**, 1339.
 - 40) 3,3'-Dimethylazoxybenzol. Sm. 37—39° (B. 22, 835; 30, 2278). —
 - IV, 1340. 41) **4,4'-Dimethylazoxybenzol.** Sm. 70° (B. **3**, 551; **22**, 1173; **31**, 559; Z. **1870**, 30; M. **9**, 832; **10**, 596). IV, 1340.
 - 42) isom. 4,4'-Dimethylazoxybenzol. Sm. 75° (B. 22, 41, 1173; 30, 2278; M. 10, 595). — IV, 1340.
 - 43) 4-Oxy-2,2'-Dimethylazobenzol. Sm. 112°. Na (A. 287, 186). — IV, 1422.
 - 44) 4-Oxy-2,3'-Dimethylazobenzol. Sm. 106-107° (A. 287, 187). — IV, 1422

 - 45) 4'-Oxy-2, 3'-Dimethylazobenzol. Sm. 132° (B. 23, 3259). IV, 1421. Sm. 98° (B. 23, 3263). IV, 1422. Sm. 98° (B. 23, 3263). IV, 1422. Sm. 134° (A. 287, 211). IV, 1414. Sm. 135° (A. 287, 189). IV, 1422. Sm. 115° (A. 287, 185). IV, 1422. Sm. 115° (A. 287, 185). IV, 1422. Sm. 95° (B. 27, 2703). IV, 1423. Sm. 95° (B. 287, 185). IV, 1423. 27, 2703). — IV, 1422.
 - 51) 4-Oxy-3,4'-Dimethylazobenzol. Sm. 163° (B. 23, 3261). IV, 1422. 52) 6-Oxy-3,4'-Dimethylazobenzol (p-Toluolazo-p-kresol). Sm. 112—1130

 - (B. 17, 354, 362; 27, 2706). IV, 1422.
 53) 2-Oxy-3,5-Dimethylazobenzol. Sm. 175° (B. 19, 148). IV, 1424.
 54) Aethyläther d. 4-Oxyazobenzol. Sm. 85° (77—78°); Sd. 325—326°.
 (2HCl, PtCl₄) (Bl. [3] 11, 897; B. 25, 994; 30, 1629). IV, 1408.
 55) 2-[4-Oxyphenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 167—168°
 - (J. pr. [2] 53, 425). IV, 639.
 - 56) Aethyläther d. 2-Methyl-5-Oxy-α-Naphtimidazol. Sm. 179° (J. pr. [2] **45**, 552). — II, 866.
 - 57) 4-Nitroso-3-Methyl-1, 2, 3, 4-Tetrahydro-β-Naphtochinolin. Sm. 69 bis $69,5^{\circ}$ (B. 24, 2647). — IV, 379.
 - 58) Methylharmin. Sm. 209°, (2HCl, PtCl₄ + 2H₂O), HJ (B. 18, 402; 30, 2482).
 - 59) Nitril d. 1-Keto-3-Butyl-1,2-Dihydroisochinolin-4-Carbonsäure. Sm.
 - 227—229° (B. 30, 895). IV, 342. 60) Nitril d. 1-Keto-2-Methyl-3-Isopropyl-1,2-Dihydroisochinolin-4-Carbonsäure. Sm. 200—210° (B. 30, 892). — IV, 339.
 - 61) Amid d. 1-Phenylamidomethylbenzol-4-Carbonsäure. Sm. 150° (B. 28, 1144).
 - 62) Amid d. α-Phenylamido-α-Phenylessigsäure (B. 15, 2030). II, 1324. 63) Phenylamid d. Phenylamidoessigsäure. Sm. 112-1136 (110-1116)
 - (Z. 1868, 74; B. 8, 1156; 21, 112; 27, 1988; 30, 2316; 31, 386; A. 301, 66). — II, 428.
 - 64) Phenylamid d. 2-Amidophenylessigsäure. Sm. 1320 (B. 32, 793). 65) Phenylamid d. 4-Amido-l-Methylbenzol-3-Carbonsäure. Sm. 240°
 - (J. pr. [2] 33, 67). II, 1338.66) Methylphenylamid d. 2-Amidobenzol-l-Carbonsäure. Sm. 1270 (C.
 - **1897** [1] 413). 67) 2-Amidobenzylamid d. Benzolcarbonsäure. Sm. 108-109° (B. 23, 2809; J. pr. [2] **51**, 284). — IV, 631.
 - 68) Phenylhydrazid d. Phenylessigsäure. Sm. 1730 (1680; 175-1760) (B. 27 [2] 592; 27, 1518; 29, 1989; A. 236, 196; G. 20, 176). — IV, 670.
 - 69) Phenylhydrazid d. 1-Methylbenzol-4-Carbonsäure. Sm. 1670 (R. 16, 326). — IV, 670.

- C₁₄H₁₄ON₂ 70) 2-Methylphenylhydrazid d. Benzolcarbonsäure. Sm. 180° (B. 25, 1079). **— IV**, 801.
 - 71) 4-Methylphenylhydrazid d. Benzolcarbonsäure (s-Benzoyl-p-Tolyl-
 - hydrazin). Sm. 146° (B. 27, 1696). IV, 809. β-Acetyl-αα-Diphenylhydrazin. Sm. 184° (B. 25, 414, 1077). 72) β -Acetyl- $\alpha \alpha$ -Diphenylhydrazin. IV, 665.
 - 73) Acetyl-s-Diphenylhydrazin. Sm. 159° (B. 17, 380). IV, 1496.
 - 74) β -Benzoyl- α -Methyl- α -Phenylhydrazin. Sm. 153° (B. 18, 1743). C 66,1 - H 5,5 - O 6,3 - N 22,0 - M. G. 254.

C14H14ON4

- 1) α -Oxy- $\alpha\beta$ -Di[Phenylhydrazon] äthan. Sm. 146°. Ba, SbOH (Bl. [3] 17, 549). - IV, 756.
- 2) 2,3'-Dimethyl-4'-Diazoazobenzol. Tribromid, Nitrat (B. 20, 1181). —
- IV, 1532.
 3) 3, 4'-Dimethyl-6-Diazoazobenzol. Salze siehe (B. 19, 1454). —
- IV, 1532. 4) 4,4'-Dimethyldiazobenzolanhydrid. K₂ (B. 29, 457). IV, 1531.
- 5) 4-Amido-4'-Acetylamidoazobenzol. Sm. 212°. HCl (B. 17, 345). IV, 1362.

C14H14ON6

- C 59.6 H 4.9 O 5.7 N 29.8 M. G. 282.
- 1) 2-Oxyguanazylbenzol. Sm. 191-192° (B. 31, 2354). IV, 1494. 1) P-Joddi[2-Methylphenyl]jodoniumhydrat. Salze siehe (B. 28, 1814).
- $C_{14}H_{14}OJ_2$ 2) ?-Joddi [4-Methylphenyl] jodoniumhydrat. Salze, siehe diese (B. 28, 98).
- 1) Benzylsulfoxyd. Sm. 133° (130°) (A. 136, 90; B. 13, 1284). II, 1055. $C_{14}H_{14}OS$
 - 2) Di [4-Methylphenyl] sulfoxyd. Sm. 92° (B. 23, 1845). II, 825. 1) Di [2-Methylphenyl] selenoxyd. Sm. bei 116° (B. 28, 1672).
- $C_{14}H_{14}OSe$
 - 2) Di 4-Methylphenyl selenoxyd. Sm. bei 90° (B. 28, 1673). C 69.4 - H 5.8 - O 13.2 - N 11.6 - M. G. 242.

 $C_{14}H_{14}O_{2}N_{2}$

- 1) 2-Nitro-1-Benzylamidomethylbenzol (2-Nitrodibenzylamin). Fl. HCl (J. pr. [2] 51, 258).
- 2) 2-Nitrodi[4-Methylphenyl]amin. Sm. 85° (B. 15, 831). II, 486.
- 3) 2-Nitrobenzyl-2-Methylphenylamin. Sm. 96° (B. 25, 3582). -II, 518.
- 4) 4-Nitrobenzyl-2-Methylphenylamin. Sm. 93° (B. **25**, 3582). — II, 518.
- 5) 2-Nitrobenzyl-4-Methylphenylamin. Sm. 72°. HCl (B. 19, 1609). -II, 518.
- 6) 4-Nitrobenzyl-4-Methylphenylamin. Sm. 68° (B. **25**, 3582). — II, 518.
- 7) Methylphenyl-2-Nitrobenzylamin (Methylphenylamido-2-Nitrophenylmethan). Sm. 72° (B. 28, 932).
- 8) 4-Nitro-2-[4-Amidobenzyl]-1-Methylbenzol. Sm. 119°. HCl (B. 26,
- 1853, 2811). II, 637.
 9) Methyläther d. 4-Oxy-l-Phenylnitrosamidomethylbenzol. Sm. 104° (A. **241**, 338). — **II**, 754.
- 10) Aethyläther d. 4-Phenylnitrosamido-1-Oxybenzol. Sm. 73-75° (B. 26, 696). — II, 717.
- 11) Aethyläther d. 4-[4-Nitrosophenyl] amido-1-Oxybenzol. Sm. 150—155° (B. 26, 697), - II, 717.
- 12) Dibenzylnitrosohydroxylamin. Sm. 73—74° (A. 275, 136). II, 534.
- 13) 4'-Nitroso-2, 3'-Dimethyldiphenylhydroxylamin + H₂O. Sm. 110 bis 115° (B. 31, 1517).
- 14) Benzyläther d. Benzylnitrosohydroxylamin. Sm. 58-59° (A. 263. 218). — II, *534*.
- 15) Bisnitrosylbenzyl (Binitrosotoluol)? Sm. 128—130° (B. 23, 1774; 30, 1896; A. 263, 210). — III, 45.
- 16) α-Oxy-β-Phenyl-α-Benzylharnstoff. Sm. 162° (163°) (A. 273, 28; J. pr. [2] **56**, 75). — II, *533*.
- 17) s-Phenyl-2-Oxymethylphenylharnstoff. Sm. 1910 (B. 22, 1670). II, 1062.
- 18) s-Phenyl-2-Oxybenzylharnstoff. Sm. 155° (B. 23, 2746). II, 743.
- 19) Methyläther d. α -Oxy- $\alpha\beta$ -Diphenylharnstoff. Sm. 74° (J. pr. [2] **56**, 85).

- C₁₄H₁₄O₂N₂20) Benzyläther d. s-Phenyloxyharnstoff. Sm. 106° (B. 24, 384). II, 532

 - 11, 352.
 21) 1, 2-Di [Acetylamido] naphtalin. Sm. 234° (B. 18, 801). IV, 918.
 22) 1, 3-Di [Acetylamido] naphtalin. Sm. 263° (B. 28, 1953). IV, 921.
 23) 1, 4-Di [Acetylamido] naphtalin. Sm. 303—304° (B. 19, 334). IV, 924.
 24) 1, 6-Di [Acetylamido] naphtalin. Sm. bei 257° (B. 25, 2008). IV, 924.

 - 25) 1,7-Di[Acetylamido] naphtalin. Sm. 213° (B. 25, 2083). IV, 92 20' 2,3-Di[Acetylamido] naphtalin. Sm. 247° (B. 27, 764). IV, 925. 27' 2,6-Di[Acetylamido] naphtalin (B. 26, 3034). IV, 925.

 - 28) β -[4-Amidophenyl]äther d. α -Oximido- β -Oxy- α -Phenyläthan (C, 1897) 1] 411).
 - 29) 2-Methyläther d. 2,4-Dioxybenzylidenphenylhydrazin. Sm. 151 bis 152° (B. **24**, 3653). — IV, 763.
 - 30) 3-Methyläther d. 3,4-Dioxybenzylidenphenylhydrazin. Sm. 1050 (B. 18, 1662). — IV, 763.
 - 31) a-Phenylhydrazon-a-[2,4-Dioxyphenyl]äthan (Resacctophenonphenyl-
 - hydrazon). Sm. 158° (139°) (Am. 7, 276; Bl. [3] 6, 154). IV, 772. 32) 4-Methylbenzolazoorcin. Sm. 203—206° (G. 12, 223). IV, 1447.
 - 33) 2,4-Dioxy-?-Dimethylazobenzol. Sm. 205-2066 (B. 15, 28; 20, 1579). · IV, 1445.
 - 34) 2'-Methyläther d. 5,2'-Dioxy-2-Methylazobenzol? Sm. 161° (J. r.
 - 17, 369). IV, 1423. 35) 2-Methyläther d. 2,?-Dioxy-?-Methylazobenzol. Sm. 68° (J. r. 17, 370). — IV, 1423.
 - 36) Dimethyläther d. 2,4-Dioxyazobenzol. Sm. 92° (B. 22, 2375). IV, 1442.
 - 37) Dimethyläther d. 2,6-Dioxyazobenzol. Sm. 96-97° (B. 22, 2377). IV, 1441.
 - 38) Dimethyläther d. 3,4-Dioxyazobenzol. Sm. 44,5-45° (B. 29, 2686). - IV, 1440.
 - 39) Dimethyläther d. 2,2'-Dioxyazobenzol. Sm. 141° (103°) (J. r. 17, 369; J. pr. [2] 58, 207). — IV, 1405.
 - 40) Monoathyläther d. 2,4-Dioxyazobenzol. Sm. 87° (B. 20, 1123). IV, 1442.
 - 41) Monoäthyläther d. 2,6-Dioxyazobenzol. Sm. 150° (B. 20, 1146). IV, 1441.
 - 42) 2-Aethyläther d. 2,4'-Dioxyazobenzol. Sm. 131° (128—129°). HCl (A. 287, 213; B. 31, 2117; C. 1897 [2] 549). IV, 1406. 43) 3-Aethyläther d. 3,4'-Dioxyazobenzol. Sm. 105—106° (107°). 1/2 H₂O
 - (Sm. 89—91°). HCl (A. 287, 215; B. 31, 2118). IV, 1407.
 - 44) Monoäthyläther d. 4,4'-Dioxyazobenzol. Sm. 125° . $+ H_2O$ (Sm. 104
 - bis 109°), HCl (C. 1897 [2] 549; A. 287, 215; B. 31, 2119). IV, 1406. 45) 2,4,2',4'-Tetramethylpyrokoll. Sm. 272—272,5° (B. 21, 2877). IV, 85.
 - 46) Glyoxalbenzidin (B. 11, 832). IV, 967.
 - 47) 6-Oxy-4-Methyl-5-[β-Ketopropyl]-2-Phenyl-1,3-Diazin. Sm. 2250 (B. 22, 2621). IV, 991.
 - 48) 3-Amido-4-[2-Methylphenyl]amidobenzol-1-Carbonsäure. Sm. 1670 (B. 23, 3452). — II, 1275.
 - 49) 3-Amido-4[4-Methylphenyl]amidobenzol-1-Carbonsäure. Sm. 185,5° (B. 23, 3453). - II, 1275.
 - 50) 2-[2-Methylphenyl] amido-5-Amidobenzol-1-Carbonsäure. oberh. 200°. HCl (A. 279, 276). - II, 1274.
 - 5!) 2-[4-Methylphenyl]amido-5-Amidobenzol-1-Carbonsäure. Sm. 220°. HCl (A. **279**, 271). — II, 1274.
 - 52) Di[Phenylamido] essigsäure (B. 11, 1560). II, 431.
 - 53) β -Phenylhydrazidophenylessigsäure. Sm. 158° u. Zers. (A. 227, 345). - IV, 741.
 - 54) 4-Methyl-s-Diphenylhydrazin-2'-Carbonsäure. Sm. 1440 (B. 25, 3171). — IV, 1507.
 - 55) Säure (aus 4-Methylazobenzol-2'-Carbonsäure). Sm. 1986. HCl (B. 25, 3171). — IV, 1507.
 - 56) Methylester d. s-Diphenylhydrazin-4-Carbonsäure. Sm. 114-1156 (A. 303, 389). — IV, 1507.

 $C_{14}H_{14}O_2N_2$ 57) 2-Amidophenylester d. Methylphenylamidoameisensäure. Sm. 1030 (B. 24, 2110). — II, 709.

58) 3-Amidophenylester d. Methylphenylamidoameisensäure. Sm. 940 (B. 24, 2110). — II, 715.

59) 4-Amidophenylester d. Methylphenylamidoameisensäure. Sm. 104° (B. 24, 2110). — II, 716.

60) Dibenzylester d. Untersalpetrigen Säure. Sm. 43-45° u. Zers. (A. **292**, 329).

61) Acetat d. 4-Oxy-s-Diphenylhydrazin. Sm. 114-115° (B. 24, 2309; A. 303, 341). — IV, 1504.

62) Amid d. α-Amido-2-Oxydiphenylessigsäure. Sm. 150—151° u. Zers. (B. **31**, 2815).

- 63) Phenylamid d. Oxyessig-4-Amidophenyläthersäure. Sm. 104-105° (J. pr. [2] 55, 116).
- 64) Mono-2-Naphtyldiamid d. Bernsteinsäure. Sm. 219° (A. 292, 190). 65) Phenylhydrazid d. 1-Oxymethylbenzol-2-Carbonsäure. Sm. 173 bis 174° (B. 19, 1707, 2132; 20, 401). — IV, 694.

66) Phenylhydrazid d. 4-Oxybenzolmethyläther-1-Carbonsäure. 179° (R. 16, 329). — IV, 747.

- 67) Phenylhydrazid d. α-Oxyphenylessigsäure. Sm. 1820 (B. 22, 693). - IV, 693.
- 68) Phenylhydrazid d. Oxyessigphenyläthersäure. Sm. 180° (C. 1898 [1] 988).

 (69) Verbindung (aus α-Styrolnitrosit). HCl (B. 29, 360).
 (C) 62,2 - H 5,2 - O 11,8 - N 20,7 - M. G. 270. $C_{14}H_{14}O_{2}N_{4}$

- 1) αβ-Di[Phenylnitrosamido] äthan. Sm. 157° (B. 12, 1794; 31, 3256). **–** II, 343.
- 2) αβ-Di[4-Nitrosophenylamido] äthan. 2HCl (Soc. 71, 423).

3) Biphenylen-4,4'-Diharnstoff (C. 1896 [1] 489).

4) $\alpha\beta$ -Dioximido- $\alpha\beta$ -Di[Phenylamido]äthan (Oxanilidodioxim). Sm. 215° u. Zers. (R. 12, 294; 26, 1406). — II, 409. 5) N-Di[4-Amidophenyl]glyoxim. Sm. 208° (B. 31, 295).

6) 3-Nitro-1-[Methyl-4-Methylphenyl]amidodiazobenzol. Sm.101-1020 (Soc. 57, 793). — IV, 1571.

7) 4-Nitro-4'[?]-Aethylamidobenzol. Sm. 114-115° (B. 28, 845, 1894). **- IV**, *1358*

- 8) 2 oder 3-Nitro-4-Dimethylamidoazobenzol. Sm. 1980 (B. 20, 2993). **– IV**, 1358,
- 9) 3-Nitro-4'-Dimethylamidoazobenzol. Sm. 159-160° (157-158°) (B. 19, 1954; Soc. 45, 120). — IV, 1358.

10) 4-Nitro-4'-Dimethylamidoazobenzol. Sm. 229—230°. HCl, (2HCl, PtCl₄) (B. 20, 2994; 28, 842; Soc. 45, 107). — IV, 1358.

11) 4-Nitro-?-Amidodimethylazobenzol (aus 2-Amido-1, 3-Dimethylbenzol). Sm. 174-177° (M. 19, 641).

12) 4-Nitrobenzolazo-4-Amido-1,3-Dimethylbenzol. Sm. 1410 (2HCl, PtCl₄) (Soc. 43, 428). - IV, 1388.

- 13) α^1 -Imido α^2 -[4-Amidophenyl] amido α^3 -Phenylamidomethan α^3 2-Carbonsäure (4-Amidophenylbenzglykocyamin). 2HCl (B. 16, 338). -IV, 595.
- 14) Phenylamid d. Hydrazin- $\alpha\beta$ -Dicarbonsäure. Sm. 245° (J. pr. [2] **58**, 223).
- 15) Di[Phenylhydrazid] d. Oxalsäure. Sm. 277—278° (A. 190, 131). IV, 701.
- 16) Verbindung (aus Harnstoff u. Benzidin) (B. 11, 833). IV, 965. $C_{14}H_{14}O_2Br_2$ 1) Acetat d. 2, 6-Dibrom-3-Oxy-4-Isopropyl-1-Methylbenzol. Fl. (G. 22 [2] 583). — II, 772.
- $C_{14}H_{14}O_2S$ 1) s-Di[6-Oxy-3-Methylphenyl]sulfid (B. 20, 676). — II, 959. 2) s-Di[?-Oxy-?-Methylphenyl]sulfid. Sm. 123-1240 (G. 17, 93). II, 966.
 - 3) s-Di[?-Oxy-?-Methylphenyl]sulfid. Sm. 117—118° (G. 17, 93). II, 967.
 - 4) Dimethyläther d. s-Di[?-Oxyphenyl]sulfid (Thioanisol). Sm. 46° (B. **27**, 2540).
 - 5) Dibenzylsulfon. Sm. 150° (A. 165, 375; B. 13, 1277, 1284). II, 1055.

- $C_{14}H_{14}O_{2}S$
- 6) Benzyl-2-Methylphenylsulfon. Fl. (J. pr. [2] 54, 526).
- 7) Benzyl 4 Methylphenylsulfon. Sm. 144-1456 (B. 13, 1278). -II, 1055.
- 8) Di[2-Methylphenyl]sulfon. Sm. 134-135° (G. 20, 31) II, 820.
- 9) Di[4-Methylphenyl]sulfon. Sm. 158°; Sd. 404,6-405,2°, 14 (A. 44, 306; 154, 193; B. 10, 584; 11, 2068; 12, 1177; 19, 2426). II, 825.
- 10) Phenyl-1, 3-Dimethylphenylsulfon. Sm. 80° (B. 11, 2069). II, 827.
- $C_{14}H_{14}O_2S_2$
- 1) Dimethyläther d. ?-Dioxydiphenyldisulfid. Sm. 1190 (M. 4, 168). II, 913.
- 2) Di[2-Methylphenyl]disulfoxyd. Sm. 95—96° (J. pr. [2] 54, 518).
- 3) Di[4-Methylphenyl]disulfoxyd. Sm. 76° (A. 136, 83; 145, 13; 149, 101; J. 1882, 1013; B. 15, 131; 19, 1240; 20, 2091; J. pr. [2] 56, 214). - II, 826.
- C₁₄H₁₄O₂Hg 1) Dimethyläther d. Quecksilberdi[2-Oxyphenyl]. Sm. 108° (B. 27, 256). - IV, 1708.
 - 2) Dimethyläther d. Quecksilberdi[4-Oxyphenyl]. Sm. 2020 (B. 23, 2344). **— IV**, *1709*.
 - 3) Butyrat d. Quecksilber-1-Naphtyloxydhydrat. Sm. 200° (A. 154. 193). - IV, 1712.
- 1) Dimethyläther d. Di[?-Oxyphenyl]selenid. Sm. 48° (B. 28, 610). $C_{14}H_{14}O_{2}Se$ $C_{14}H_{14}O_3N_2$ C 65,1 - H 5,4 - O 18,6 - N 10,9 - M. G. 258.
 - 1) Methyläther d. 2-Oxyphenyl-2-Nitrobenzylamin. Sm. 80°. HCl (J. pr. [2] **52**, 401; [2] **54**, 277).
 - 2) Methyläther d. 4-Oxyphenyl-2-Nitrobenzylamin. Sm. 73°. HCl (J pr. [2] **54**, 283).
 - 3) Aethyläther d. 4-[2-Nitrophenyl] amido-l-Oxybenzol. Sm. 840 (B. **26**, 683). — **II**, 718.
 - 4) Aethyläther d. 4-Nitro-3-Phenylamido-1-Oxybenzol. Sm. 106 bis $106,5^{\circ}$ (B. **26**, 684). — II, 714.
 - 5) Benzyl-4-Nitrobenzylhydroxylamin. Sm. 125,5—126,5°. HCl, Br
 - (A. 257, 245; 263, 194). II, 535. 6) Benzyläther d. 4-Nitrobenzylhydroxylamin. Sm. 49°. H₂SO₄ (A.
 - 257, 241). II, 535. 7) 1,4-Di[Acetylamido]-2-Oxynaphtalin. Sm. 250-260° u. Zers. (B. 29, 1418).
 - 8) 1,6-Di[Acetylamido]-2-Oxynaphtalin. Sm. 2350 (B. 31, 2413).
 - 9) α -Phenylhydrazon- α -[2,3,4-Trioxyphenyl]äthan. Sm. 146° (Bl. [3] 6, 158). - IV, 772.
 - 10) Dimethyläther d. 2,2'-Dioxyazoxybenzol. Sm. 81° (J. pr. [2] 58, 206).
 - 11) Dimethyläther d. 4,4'-Dioxyazoxybenzol. Sm. 116° (B. 23, 1738; Ph. Ch. 27, 167). — IV, 1342.
 - 12) 4'-Aethyläther d. 2,4,4'-Trioxyazobenzol? Sm. 165-167° (B. 17, 883). — IV, 1446.
 - 13) 6-Oxy-2-[4-Isopropylphenyl]-1,3-Diazin-4-Carbonsäure. Sm. 266° u. Zers. (B. 30, 2009). — IV, 990.
 - 14) 6-Oxy-4-Methyl-2-Phenyl-1,3-Diazin-5-Aethyl-β-Carbonsäure. Sm. 215° (B. 22, 2620). \rightarrow IV, 990.
 - 15) 7-Acetylamido-2,8-Dimethylchinolin-5-Carbonsäure. Ag (A. 274, 363). — IV, 950.
 - 16) Aethylester d. 1-Naphtenylamidoximkohlensäure. Sm. 111º (B. 22, 2458). — II, 1446.
 - 17) Aethylester d. 2-Naphtenylamidoximkohlensäure. Sm. 121° B. 22, 2453). — II, 1455.
 - 18) Aethylester d. 6-Oxy-2-Phenyl-1,3-Diazin-4-Methylcarbonsäure. Sm. 155° (B. 28, 480). IV, 988.
 - 19) Acetat d. 6-Oxy-4-Methyl-2-[α-Oxybenzyl]-1,3-Diazin. Sm. 180°. Ag, HCl, Pikrat (PINNER, Imidoather 283). - IV, 972.
 - 20) 3-Phenylamid d. 2,4-Dimethylpyrrol-3,5-Dicarbonsäure (A. 236, 327). — IV, 93.
 - 21) Phenylhydrazid d. Oxyessig-2-Oxyphenyläthersäure. Sm. 1930 u. Zers. (Bl. [3] 21, 103).
 - 22) 1-Naphtylhydrazid d. Oxalsäuremonoäthylester. Sm. 163° (B. 24, 4192). — IV, 927.

C₁₄H₁₄O₂N₂O₃) 2-Naphtylhydrazid d. Oxalsäuremonoäthylester. Sm. 159° (B. 24, 4182). — IV, 930.

24) Verbindung (aus Dehydracctsäure u. Phenylhydrazin). Sm. 2070 u. Zers. (Soc. **51**, 494). — IV, 709. C 58,7 — H 4,9 — O 16,8 — N 19,6 — M. G. 286.

 $C_{14}H_{14}O_3N_4$

- 1) 4-Nitro-2-Amido-4'-Acetylamidodiphenylamin. Sm. 254—255° (B. **31**, 3084).
- 2) Hydrocyannitroharmalin (A. 72, 307). III, 885.
 3) Phenyläther d. Oxykaffeïn. Sm. 143°. III, 961.

4) Nitrosobenzoylbenzenylhydrazidin? HCl+ H₂O (A. 297, 254).

C 53,5 - H 4,5 - O 15,3 - N 26,7 - M. G. 314. $C_{14}H_{14}O_3N_6$

1) Phenylnitrosamidokaffein. Zers. bei 225° (B. 27, 3091). — III, 960. 1) Dimethyläther d. Di[?-Oxyphenyl]sulfoxyd (Thionylanisol). Sm. 960 $C_{14}H_{14}O_{8}S$ (B. 27, 2542).

2) Aethylester d. Biphenylsulfonsäure. Sm. 73-74° (B. 13, 388). -II, 225.

C₁₄H₁₄O₃Hg 1) Dimethyläther d. Di[4-Oxyphenylquecksilber]oxyd. Sm. 177° (B. 23, 2345). — IV, 1709.

1) Anhydrid d. 4-Methylphenylsiliconsäure (A. 173, 166). — IV, 1702. $\mathbf{C}_{14}\mathbf{H}_{14}\mathbf{O}_{3}\mathbf{Si}$ C 61,3 - H 5,1 - O 23,4 - N 10,2 - M. G. 274. $C_{14}H_{14}O_4N_2$ 1) Aethyläther d. 3-Nitro-4-Acetylamido-l-Oxynaphtalin. Sm. 2210

(J. pr. [2] 45, 550). - II, 866.

2) 1-Phenylamido-2, 5-Dimethylpyrrol-3, 4-Dicarbonsäure (B. 18, 308, 1568). — IV, 549.

3) Phenylhydrazonmethronsäure. Sm. 211-212° u. Zers. (A. 250, 188). - IV, 715.

4) Esoanhydrid d. Methylbenzenylamidoximfumarsäureäthylester. Sm. 104° (B. 31, 2111).

5) Esoanhydrid d. Phenyläthenylamidoximfumarsäureäthylester. Sm. 158° (B. 31, 2112).

C 55,6 - H 4,6 - O 21,2 - N 18,6 - M. G. 302. $C_{14}H_{14}O_4N_4$

1) 3-Dimethylamido-1-[2,4-Dinitrophenyl]amidobenzol. Sm. 136—137°

(B. 28, 511). — IV, 572.
2) 4-Dimethylamido-1-[2,4-Dinitrophenyl]amidobenzol. Sm. 168°. HCl (B. 23, 2739). — IV, 584. 3) αα-Di[4-Nitrophenylamido]äthan. Sm. 167° (A. 302, 353).

4) $\alpha\beta$ -Di[2-Nitrophenylamido]äthan. Sm. 190° (J. pr. [2] 48, 194). — II, 343.

5) $\alpha \beta$ -Di[3-Nitrophenylamido]äthan. Sm. 206° (B. 17, 778). — II, 343. 6) $\alpha \beta$ -Di[4-Nitrophenylamido]äthan. Sm. 216° (J. pr. [2] 48, 199). —

II, 343. 7) 5,5'-Dinitro-4,4'-Diamido-3,3'-Dimethylbiphenyl. Sm. 266—267° (B. **21**, 749). — IV, 981.

8) 1-Nitro-2-Naphtyläther d. β-Semicarbazon-α-Oxypropan. Sm. 208° (B. 31, 759).

9) Dimethyläther d. 3,3'-Dioxy-4,4'-Tetrazobiphenyl. Chlorid, Sulfat (J. pr. [2] 58, 221).

10) 4,4'-Dihydrazidobiphenyl-3,3'-Dicarbonsäure (B. 31, 2580).

C₁₄H₁₄O₄Cl₂ 1) Diacetat d. Dichlornaphtydrenglykol. Sm. 130-131° (Bl. 18, 208). - II, 184.

 $C_{14}H_{14}O_4Br_4$ 1) Curcumintetrabromid. Sm. bei 1850 u. Zers. (Am. 4, 364). — III, 660. 1) Dipropylester d. 2,3,5,6-Tetrajodbenzol-1,4-Dicarbonsäure. Sm. $C_{14}H_{14}O_4J_4$ 239° (B. 29, 2837).

1) s-Di[?-Oxymethylphenyl]sulfon. Sm. 156° (Bl. [3] 9, 708). — II, 1055. 2) s-Di[?-Oxy-?-Methylphenyl]sulfon. Sm. 209° (G. 19, 348). — II, 967. 3) s-Di[?-Oxy-?-Methylphenyl]sulfon. Sm. 236° u. Zers. (G. 19, 346). — C14H14O4S

II, 967.

4) Dimethyläther d. s-Di[?-Oxyphenyl]sulfon. Sm. 130° (A. 74, 311 172, 45). — II, 839.

5) Dimethyläther d. Di[?-Oxyphenyl]sulfon (Anisolsulfon). Sm. 1200 (B. 27, 2542).

6) ?-Oxydiphenyläthan-?-Sulfonsäure (B. 7, 239). -

 $\mathbf{C}_{14}\mathbf{H}_{14}\mathbf{O}_{4}\mathbf{S}_{2}$ 1) αα-Di[Phenylsulfon]äthan. Sm. 101-102° (B. 19, 2815; 28, 1120). **— II**, 790.

- 2) $\alpha\beta$ -Di[Phenylsulfon]äthan. Sm. 179,5 -180° (B. 4, 717; 13, 1280; 27, 3056; J. pr. [2] 30, 174, 321; [2] 40, 530; [2] 49, 389). $-\Pi$, 783. $C_{14}H_{14}O_4S_2$
- 1) Sulfid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 131—134° (B. 24, 1136). $C_{14}H_{14}O_4S_3$ - II, *163*.
- 1) Aethylenester d. Benzolthiolsulfonsäure. Sm. 84-85° (B. 20, 2079; $C_{14}H_{14}O_4S_4$ 25, 1482). — II, 162.
 - 2) Disulfid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 1090 (B. 24, 1127). II, 163.
- 1) Trisulfid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 180° (B. 3, 963; 24, $C_{14}H_{14}O_4S_5$ 1129). — II, 163. C 57,9 — H 4,8 — O 27,6 — N 9,7 — M. G. 290.
- $C_{14}H_{14}O_5N_2$
 - l) 5-Keto-3-Methyl-1-Phenyl-4, 5-Dihydropyrazol-4-Aethyl- $\alpha\beta$ -Dicarbonsäure. Sm. 210—212° (B. 23, 3758). — IV, 727.
 - 2) 5-Aethylester d. 2-Keto-4-Phenyl-1, 2, 3, 4-Tetrahydro-1, 3-Diazin-5,6-Dicarbonsäure (Ae. d. Benzuramidofumarsäure). Sm. 232° u. Zers. (G. 23 [1] 402). - II, 1954.
- 1) Aethylester d. Diphenylsulfon-3-Sulfonsäure. Sm. 89° (B. 19, 2421). $C_{14}H_{14}O_5S_2$ II, 814.
- C 54.9 H 4.6 O 31.4 N 9.2 M. G. 306. $\mathbf{C}_{14}\mathbf{H}_{14}\mathbf{O}_{6}\mathbf{N}_{2}$
 - 1) Diäthyläther d. ?-Dinitro-?-Dioxynaphtalin. Sm. 228-229° (Bl. 36, 435). — II, 985.
 - 2) Diacetat-3,4-Methylenäther d. 3,4-Dioxy-1- $[\alpha\beta$ -Dioximidopropyl]benzol. Sm. 138° (G. **22** [2] 475). — II, 979. C 50,3 — H 4,2 — O 28,7 — N 16,8 — M. G. 334.
- $C_{14}H_{14}O_6N_4$ 1) Dimethyläther d. 6,6'-Dinitro-4,4'-Diamido-3,3'-Dioxybiphenyl (J. pr. [2] 58, 219).
 - 2) Verbindung (aus Dimethylamidobenzol u. 1,3,5-Trinitrobenzol). Sm. 106 bis 108° (A. 215, 358). — II, 328.
- 1) $\alpha \beta$ -Di[3-Oxyphenylsulfon]äthan? Sm. 266° (A. 294, 246). $C_{14}H_{14}O_6S_2$
 - 2) 4-Benzyl-1-Methylbenzol-?-Disulfonsäure. Sm. 38° . $K_2 + 3^{1/2} H_2 O_1$ Ba $+ 8^{1}/_{2}$ H₂O, Cu $+ 4^{1}/_{2}$ H₂O (B. 5, 685). — II, 237.
 - 3) s-Diphenyläthandisulfonsäure (Bibenzyldisulfonsäure) + $5\,\mathrm{H}_2\mathrm{O}$. K₂ + $2\,\mathrm{H}_2\mathrm{O}$, Ba + 1^4 /₂H₂O, Pb + H₂O (B. 6, 953). II, 235. 4) 3,3'-Dimethylbiphenyl-6,6'-Disulfonsäure. Ba + $5\,\mathrm{H}_2\mathrm{O}$ (A. 270, 363).
 - II, 236.
- 1) $Di[4-Methylphenyl]disulfid-3,3'-Disulfonsäure. <math>K_2 + H_2O$ (Soc. $C_{14}H_{14}O_6S_4$
 - 73, 754).
 2) Di[2-Methylphenyl]disulfid-4,4'-Disulfonsäure. $K_2 + 2H_2O$ (Soc.
 - 73, 758).
 3) Di[2-Methylphenyl]disulfid-5,5'-Disulfonsäure. $K_2 + H_2O$ (Soc. **73**, 756).
- C 42,6 -H 3,5 — O 32,5 — N 21,3 — M. G. 394. $C_{14}H_{14}O_8N_6$ 1) 6-Nitro-3-Dimethylamido-1-Amidobenzol + 1,3,5-Trinitrobenzol.
 - Sm. 130° (R. 14, 69). IV, 570.
- 1) 4,4'-Dioxy-3,3'-Dimethylbiphenyl-6,6'-Disulfonsäure. $K_2 + 3H_2O$, $C_{14}H_{14}O_8S_2$ $Ba + 8H_2O$ (A. 270, 366). — II, 994. 2) Aethylenglykoldiphenylätherdisulfonsäure. Ba, Pb (Z. 1869, 447).
- **-- II**, 832. C₁₄H₁₄O₈Hg₄1) Tetracetat d. Phenyl-1, 2, 4, 5-Tetraquecksilberoxydhydrat (C. 1899,
- [1] 734). IV, 1707. C 45,4 H 3,8 O 43,2 N 7,6 M. G. 370. $\mathbf{C}_{14}\mathbf{H}_{14}\mathbf{O}_{10}\mathbf{N}_{2}$
 - 1) $\alpha \alpha$ -Diäthylester d. 2,6-Dinitrophenylmethan- α , α , 4-Tricarbonsäure.
- Sm. 176°. (NH₄, Ag) (B. 28, 3064; Am. 19, 22). C₁₄H₁₄O₁₂S₄ 1) $\alpha\beta$ -Diphenyläthan-P-Tetrasulfonsäure. K₄ + 3H₂O (B. 6, 954). —
- 1) Dibenzylchloramin. Sm. 56° (B. 26 [2] 189). II, 519. C14H14NCI 2) 2-Chlor-1-[4-Methylphenyl]amidomethylbenzol (2-Chlorbenzyl-4-
- Methylphenylamin). Sm. 58—61°. HCl (*J. pr.* [2] **51**, 270). C₁₄H₁₄N₂Cl₂ 1) αα-Di[4-Chlorphenylamido]äthan. Sm. 64—65° (*A.* 302, 354). 2) ββ-Dichlor-αα-Di[Phenylamido]äthan. Sm. 70—71° (*A.* 302, 358). 3) ?-Dichlor-4, 4′-Diamido-3, 3′-Dimethylbiphenyl (Dichlortolidin) (*C.* 2000) α (*C.*
- 1898 [2] 522). $C_{14}H_{14}N_2J_2$ 1) Dijodmethylat d. Pseudophenanthrolin + H_2O (M. 4, 576). -IV, 999.

C14H14N4S2

1) α -Methyl- $\alpha\beta$ -Diphenylthioharnstoff. Sm. 87°; Sd. 204—206° (B. 17, C14H14N.S 2089, 3034). — II, 396.

2) s-Phenylbenzylthioharnstoff. Sm. 153-1540 (Soc. 59, 562; J. pr. [2] 56, 88). - II, 528.

3) uns-Phenylbenzylthioharnstoff. Sm. 136,5° (B. 26 [2] 607; Soc. 67, 571). — II, *528*.

4) s-Phenyl-2-Methylphenylthioharnstoff. Sm. 139° (B. 13, 137; 15, 1419). — II, 465.

5) s-Phenyl-3-Methylphenylthioharnstoff. Sm. $91-92^{\circ}$ (Soc. 67, 557). 6) s-Phenyl-4-Methylphenylthioharnstoff. Sm. 141-1420 (136-1370) (B. 13, 137; 15, 1420; 17, 3035; 25, 3099). — II, 498.

7) s-Allyl-1-Naphtylthioharnstoff. Sm. 145° (130°) (A. 84, 347; B. 22, 3000). — II, 609.

8) 2-[1-Nayhtyl]amido-5-Methyl-4,5-Dihydrothiazol. Sm. 134°. Pikrat (B. 22, 3001). — II, 609. 9) Phenylamidophenylimidodimethylsulfid. Sm. 110°. HJ (B. 14, 1489).

- II, 395. 10) Benzyläther d. Phenylamidoimidomerkaptomethan.

Sm. 81—82°. HCl, (HCl, Hg₂Cl₂), Pikrat (Soc. 57, 275). — II, 1053. 11) Amid d. α -Phenylamido- α -Phenylthioessigsäure. Sm. 187° (B. 31, 2717).

12) 3-Amido-4-Methylphenylamid d. Benzolthiocarbonsäure (Thiobenztoluylendiamin). Sm. 197° (B. 11, 1760). — IV, 606. $C_{14}H_{14}N_3Cl$ 1) 4-Chlor-1-[Methyl-4-Methylphenyl]amidodiazobenzol. Sm. 99,5 bis

Sm. 99,5 bis 100° (Soc. 55, 436). — IV, 1571. 2) isom. 4-Chlor-1-[Methyl-4-Methylphenyl] amidodiazobenzol. Sm.

80-82° (Soc. 55, 436; 57, 786). - IV, 1571.

3) 4-Methyl-1-[Methyl-4-Chlorphenyl]amidodiazobenzol. Sm. 91—92° (Soc. 55, 436). — IV, 1571. 4) 3-Chlor-4'-Dimethylamidoazobenzol. Sm. 98° (B. 19, 1955).

IV, 1358.

 $\textbf{C}_{14}\textbf{H}_{14}\textbf{N}_{3}\textbf{Br} \ 1) \ \textbf{4-Brom-1-[Methyl-4-Methylphenyl]} \\ \textbf{amidodiazobenzol.} \ \ \textbf{Sm.} \ 113-114^{0}$ (Soc. 55, 432). — IV, 1571. 2) isom. 4-Brom-1-[Methyl-4-Methylphenyl]amidodiazobenzol. Sm. 97

bis 97,5° (Soc. 55, 432). — IV, 1571.

3) 4-Methyl-1-[Methyl-4-Bromphenyl]amidodiazobenzol. Sm. 99-99,50 (Soc. 55, 432). — IV, 1571. 4) 4-Brom-4'-Dimethylamidoazobenzol. Sm. 156° (B. 25, 1374). —

IV, 1356.

1) 4,4'-Biphenylendithioharnstoff (B. 27, 1559). — IV, 965. 2) Base (aus 2-Oxy-4-Methylthiazol). Sm. 152° (B. 20, 3130). — - IV, 1288. 3) Phenylamid d. Hydrazindi [Thiocarbonsäure]. Sm. 187º (B. 26, 2880; **27**, 616). — II, 401.

1) Disulfid d. β-Phenylhydrazidodithioameisensäure (B. 29, 2151). — $C_{14}H_{14}N_4S_4$

IV, 677. 1) Di[2-Methylphenyl]jodoniumchlorid. Sm. 179°. $+ \text{HgCl}_2$, $+ \text{AuCl}_3$, $C_{14}H_{14}ClJ$ $2 + \text{PtCl}_4$ (B. 28, 1815).

2) Di[4-Methylphenyl]jodoniumchlorid. Sm. 178°. + HgCl₂, + AuCl₃, 2 + PtCl₄ (B. 28, 97).

C₁₄H₁₄ClAs 1) Di[4-Methylphenyl]chlorarsin. Sd. 340—345° (A. 208, 18). — IV, 1692. $C_{14}H_{14}Cl_{2}Pb$ 1) Bleidi [4-Methylphenyl]dichlorid (B. 21, 3425). — IV, 1716. $C_{14}H_{14}Cl_{2}Se$ 1) Di [2-Methylphenyl]selenidchlorid. Sm. 152—153° u. Zers. (B. 28, 1672).

2) Di 4-Methylphenyl selenidchlorid. Sm. 177—178° u. Zers. (B. 28, 1673).

 $\begin{array}{c} \textbf{2)} \text{ Di } \textbf{4-Methylphenyl jseientdemorid. Sin, 111.} \\ \textbf{C}_{14}\textbf{H}_{14}\textbf{Cl}_{3}\textbf{As} \textbf{1)} \text{ Di } \textbf{[4-Methylphenyl jarsintrichlorid } (A. \textbf{208}, 20). \textbf{— IV}, 1692. \\ \textbf{C}_{14}\textbf{H}_{14}\textbf{BrJ} \textbf{1)} \text{ Di } \textbf{[2-Methylphenyl jodoniumbromid. Sm. 178}^{\circ} (B. \textbf{28}, 1815). \\ \textbf{2)} \text{ Di } \textbf{[4-Methylphenyl jodoniumbromid. Sm. 178}^{\circ} \textbf{.} + \text{HgCl}_{2} (B. \textbf{28}, 97). \\ \textbf{2)} \textbf{Di } \textbf{(4-Methylphenyl jodoniumbromid. Sm. 178}^{\circ} \textbf{.} + \text{HgCl}_{2} (B. \textbf{28}, 97). \\ \textbf{2)} \textbf{11} \textbf{(4-Methylphenyl jodoniumbromid. Sm. 178}^{\circ} \textbf{.} \textbf{(4-Methylphenyl jodoniumbromid. Sm. 17$

 $C_{14}H_{14}Br_2Pb1$) Bleidi[4-Methylphenyl]dibromid (B. 21, 3425). — IV, 1716. $C_{14}H_{14}Br_2Se$ 1) Di[2-Methylphenyl]selenidbromid. Sm. 84° (B. 28, 1671).

2) Di[4-Methylphenyl]selenidbromid. Sm. 162° u. Zers. (B. 28, 1673). C₁₄H₁₄Br₂Te1) Di[2-Methylphenyl]telluridbromid. Sm. 182° (B. 28, 1670). 2) Di[4-Methylphenyl]telluridbromid. Sm. 201° (B. 28, 1671).

 $C_{14}H_{14}Br_4S_2$ 1) Tetrabromid d. Diphenyläther d. $\alpha\beta$ -Dimerkaptoäthan (B. 4, 717).

- II, 783. $\mathbf{C}_{14}\mathbf{H}_{14}\mathbf{J}_{2}\mathbf{Pb}$ 1) Bleidi [4-Methylphenyl] dijodid (B. 21, 3426). — IV, 1716. $C_{14}H_{14}SPb$ 1) Bleidi [4-Methylphenyl] sulfid. Sm. 98^6 (B. 21, 3428). — IV, 1716. $C_{14}H_{15}ON$

C 78.9 - H 7.0 - O 7.5 - N 6.6 - M. G. 213.

- 1) β -Amido- α -Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 165° (160—161°). HCl, (2HCl, PtCl₄ + 2H₂O), Pikrat, Formiat (B. 20, 493; 21, 488; 23, 2784; 27, 213; 28, 2523, 3168; 29, 295, 1213; 30, 1525; G. 20, 689). — II, 1079. 2) isom. β -Amido- α -Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 128° (129°). HCl, (2+2 HCl, PtCl₄) (B. 28, 1867, 2522, 3170, 3181; 29, 295, 1215; 30, 1525).

3) α - Oxy-2-Amido-4'-Methyldiphenylmethan. Sm. $100-101^{\circ}$ (B. 30, 1134).

4) 2-Oxy-1-[4-Methylphenylamido]methylbenzol. Sm. 116°. HCl, (2HCl, PtCl₄) (A. **241**, 347; B. **27**, 1804). — II, 742.

5) 4-Oxy-1-[4-Methylphenylamido] methylbenzol. Sm. 186°. (2 HCl. PtCl₄) (A. **241**, 356). — II, 754.

6) Methyläther d. α-Amido-4-Oxydiphenylmethan. Fl. HCl (Sm. 191°)

(B. 24, 3513). — II, 897.

7) Methyläther d. 4-Oxy-1-Phenylamidomethylbenzol. Sm. 64.5°. HCl, (2HCl, PtCl₄) (A. 241, 337). — II, 754.

8) Methyläther d. 4-Methylphenylamido-1-Oxybenzol. Sd. 313° (B. 17, 2433). — II, 717.

9) Aethyläther d. 4-Phenylamido-l-Oxybenzol. Sm. 73-74°; Sd. 348° (B. **26**, 696). — II, 717.

10) 2-Acetylamido-1,4-Dimethylnaphtalin. Sm. 220° (B. 28 [2] 619; G. 25 [1] 57; 26 [1] 14).

11) 1-[α -Oximidobutyl]naphtalin. Sd. 206 — 208 $^{\circ}_{13}$ (Bl. [3] 15, 65). — III, 176.

12) 2-[α-Oximidobutyl]naphtalin. Sm. 89° (Bl. [3] 15, 66). — III, 176.

13) 1-[α -Oximido- β -Methylpropyl]naphtalin. Sm. 140° (Bl. [3] 15, 67). - III, 176.

14) 2- $[\alpha$ -Oximido- β -Methylpropyl]naphtalin. Sm. 121—122°; Sd. 200 bis $20\tilde{3}^{0}$ (Bl. [3] 15, 68). — III, $17\tilde{6}$.

15) Dibenzylhydroxylamin. Sm. 123°. HCl, (2HCl, PtCl₄), (HCl, HgCl₂), HNO₂, Pikrat (B. 16, 2184; 19, 1626, 3293; 20, 1752; 28, 1278; 29, 2667; A. 257, 216; 274, 38). — II, 534.

16) Benzyläther d. Benzylhydroxylamin. Fl. HCl (A. 257, 228; A. 266, 314). — II, 534.

C 69,7 — H 6,2 — O 6,6 — N 17,4 — M. G. 241.

 $C_{14}H_{15}ON_3$

1) 4-Dimethylamido-1-Phenylnitrosamidobenzol. Sm. 116° u. Zers. (B. 21, 2613). — IV, 584.

2) 2-Amido-1-[2-Methylphenyl]nitrosamidomethylbenzol (2-Amidobenzyl-2-Methylphenylnitrosamin). Sm. 86-87° (J. pr. [2] 51, 277). IV, 627.

3) 4-Amido-4'-Acetylamidodiphenylamin. Sm. 178° (A. 303, 364).

4) 3,5-Diamido-4-Benzoylamido-1-Methylbenzol. 2 HCl, H₂SO₄ (A. 208, 318). **— IV**, *1129*.

5) α -Methyl- α -Phenyl- β -[3-Amidophenyl]harnstoff. Zers. 190—200° (B. 24, 2112). - IV, 575.

6) α-Phenyl-β-[2-Amido-4-Methylphenyl]harnstoff? Sm. 197—198°
 (J. pr. [2] 41, 323). — IV, 614.

7) β-Phenylamido-α-[2-Methylphenyl]harnstoff. Sm. 240°. -**- IV**, 674.

8) ?-Diamido-4-Amidophenyl-4-Methylphenylketon. Sm. 199° (A. 286, 327). — III, 215.

9) α-Nitroso-αβ-Dibenzylhydrazin. Sm. 89° (B. 28, 2346; J. pr. [2] 58, 379). — IV, 811.

10) β-Formyl-α-Phenyl-α-[2-Amidobenzyl]hydrazin. Sm. 157° (B. 25, 2901). — IV, *1129*.

11) 4-Acetylamido-s-Diphenylhydrazin. Sm. 146° u. Zers. (B. 17, 463; A. 303, 362). — IV, 1499.

12) 4-Methyl-1-Benzyloxamidodiazobenzol. Sm. $106,5^{\circ}$ (B. 30,2286). — IV, 1584.

13) Hydrocyanharmalin. HCl (A. 68, 351). — III, 885.

. 14) Base (aus 3,4-Diamido-1-Methylbenzol). Sm. 246-247° (B. 23, 3802). **– IV**, 611.

15) Phenylamid d. α-Phenylhydrazidoessigsäure. Sm. 1490 (B. 28, 1718; A. 301, 59). — IV, 739. 16) Phenylamid d. β -Phenylhydrazidoessigsäure. Sm. 144°. — IV, 738.

- $C_{14}H_{15}ON_3$ 17) α -Phenylhydrazid d. Phenylamidoessigsäure. Sm. 159—160° (153)
 - bis 154°) (A. 301, 83). IV, 664. 18) Phenylhydrazid d. 4-Amido-l-Methylbenzol-3-Carbonsäure. Sm. 198° (*J. pr*. [2] **33**, 68). — IV, *670*. C 62,4 — H 5,6 — O 5,9 — N 26,0 — M. G. 269.
- $C_{14}H_{15}ON_5$
- 1) Monacetyl-2,4,3'-Triamidoazobenzol. Sm. 165° (B. 30, 2114). — IV, 1363.
- 2) Verbindung (aus Cyanphenylhydrazin). Sm. 180° (J. pr. [2] 35, 538). **— IV**, 743.
- $C_{14}H_{15}OJ$

 $C_{14}H_{15}OP$

- 1) Di[2-Methylphenyl]jodoniumhydrat. Salze siehe (B. 28, 1815). 2) Di 4-Methylphenyl jodoniumhydrat. Salze, siehe diese u. Nitrat, Bi-
- chromat (B. 28, 97). 1) Aethyldiphenylphosphinoxyd. Sm. 121° (A. 229, 317). — IV, 1658. C 73,4 — H 6,5 — O 14,0 — N 6,1 — M. G. 229.
- $C_{14}H_{15}O_2N$ 1) Methyläther d. 1-Oxy-2-[?]-[α-Oximidopropyl]naphtalin. Sm. 172° (B. 23, 1209). — III, 176.
 - 2) 4-Butyrylamido-1-Oxynaphtalin. Sm. 160-161° (B. 29, 2954).
 - 3) Aethyläther d. 4-Acetylamido-l-Oxynaphtalin. Sm. 189° (192°) (J. pr. [2] 45, 547; B. 25, 3060). II, 865.
 - 4) Aethyläther d. 1-Acetylamido-2-Oxynaphtalin. Sm. 144° (C. 1896) [2] 1057).
 - 5) Aethyläther d. 8-Acetylamido-2-Oxynaphtalin. Sm. 1390 (J. pr. 21 **43**, 29). — **II**, 886.
 - 6) Aethyläther d. ?-Acetylamido-2-Oxynaphtalin. Sm. 184,50 (J. pr. [2] **43**, 28). — II, 886.
 - 7) Di[2-Oxybenzyl]amin. Sm. 170°. HCl, (2HCl, PtCl₄) (A. 241, 349; B. 27, 1800). — II, 742.
 - 8) Acetat d. ε -Oximido- α -Phenyl- $\alpha\gamma$ -Hexadiën. Sm. 83° (B. 28, 1726). **— III**, 172.
 - 9) Benzoat d. 1-Oximido-5-Methyl-1, 2, 3, 4-Tetrahydrobenzol. Sm. 1160 (A. **281**, 100). — **II**, 1209.
 - 10) 8-Oxy-3, 6-Dimethyl-1-[β -Ketopropyl]isochinolin + $\frac{1}{3}$ H₂O. Sm. 164 bis 165°. HCl, (2HCl, PtCl₄) (Soc. 69, 300). — IV, 374.
 - 11) α -[1-Naphtyl] amidobuttersäure. Sm. 126° u. Zers. (B. 25, 2323). II, 614.
 - 12) α -[2-Naphtyl]amidobuttersäure. Sm. 158° (B. 25, 2324). II, 622.

 - 13) α-[1-Naphtyl]amidoisobuttersäure. Sm. 146° (B. 25, 2346). II, 614.
 14) α-[2-Naphtyl]amidoisobuttersäure. Sm. 188° (B. 25, 2349). II, 622.
 15) 2-Isobutylchinolin-4-Carbonsäure + 1½ H₂O (α-Isobutylchinohonsäure). Sm. 186° (wasserfrei). Ag, HCl + H₂O, (2 HCl, PtCl₄) (A. 242, 280). IV, 359.
 - 16) 3,6-Dimethyl-2-Aethylchinolin-8-Carbonsäure. Sm. 182—183° (B. 23, 2273). — IV, 359.
 - 17) Aldehyd d. 4-Oxy-2, 5, 6, 8-Tetramethylchinolin-3-Carbonsäure (B. **21**, 1976). — **IV**, *373*.
 - 18) Aethylester d. 1-Naphtylamidoessigsäure. Sd. 244° (B. 25, 2290). **- II**, 613.
 - 19) Aethylester d. 2-Naphtylamidoessigsäure. Sm. 88° (B. 25, 2296). - II, 621.
 - 20) Aethylester d. 2-Methyl-5-Phenylpyrrol-3-Carbonsäure. Sm. 120° (B. 18, 2593). — IV, 356.
 - 21) Aethylester d. 1-Methylen-2-Methylchinolinammonium-3-Carbonsäure. Sm. 235° (A. 282, 112).
 - 22) Propylester d. 2-Methylchinolin-3-Carbonsäure. Sm. 51° (A. 282, 124). — IV, 353.
 - 23) Isopropylester d. 1-Naphtylamidoameisensäure. Sm. 78—79° (G. 17. 169). — II, 608.
 - 24) Isopropylester d. 2-Naphtylamidoameisensäure. Sm. 70° (G. 17, 170). — II, 617.
 - 25) Benzoat d. Ketonoxim C₇H₁₁ON (aus Holztheeröl). Sm. 167—168° (C. 1898 [2] 1232).
 - 26) 1-Naphtylamid d. α-Oxy-norm. Buttersäure. Sm. 96°; Sd. 335° 162 (A. 279, 107).
 - 27) 2-Naphtylamid d. α -Oxy-norm. Buttersäure. Sm. 126° (A. 279, 108).

- C₁₄H₁₅O₂N 28) 1-Naphtylamid d. α-Oxyisobuttersäure. Sm. 159—161° (A. 279, 117). 29) 2-Naphtylamid d. α-Oxyisobuttersäure. Sm. 157—159°. K (B. 25, 2930; A. **279**, 109). — II, 620.
 - 30) Phenylimid d. Isotrimethylglutakonsäure. Sm. 1480 (Soc. 71, 1186). C 65,4 - H 5,8 - O 12,4 - N 16,3 - M. G. 257.
- $C_{14}H_{15}O_2N_3$ 1) 5-Nitro-4,4'-Diamido-3,3'-Dimethylbiphenyl. Sm. 156° (B. 25, 1032). **– IV**, 981.
 - 2) Amylester d. Phenylazocyanessigsäure. α-Modif. Sm. 77-78°; β-Modif. Sm. 57—59° (C. 1896 [1] 1106).
- C 58.9 H 5.3 O 11.2 N 24.6 M. G. 285. $C_{14}H_{15}O_{2}N_{5}$ 1) Phenylamidokaffein. Sm. bei etwa 260° u. Zers. HCl (B. 27, 3091). **– III**, 960.
- C₁₄H₁₅O₂Cl₅ 1) Chlorid d. 3,4,5,6-Tetrachlor-2-Benzoylbenzol-1-Carbonsäure. Sm. 183° (A. 238, 342). II, 1704.
- 1) Dibenzylphosphinsäure. Sm. 191°. $NH_4 + 7H_2O$, $Na + 7H_2O$, K + $C_{14}H_{15}O_{2}P$ $7H_2O$, $Mg + 7H_2O$, $Ca + 8H_2O$, $Ba + 8H_2O$, Cd, Cd, Cd, Cu, Ag (B. **22**, 2145). — **IV**, 1664.
 - 2) Aethylester d. Diphenylphosphinsäure. Sm. 165° (B. 11, 888). - IV, 1657.
- $C_{14}H_{15}O_{2}As$ 1) Dibenzylarsinsäure. Sm. 210°. $Ca + 6H_{2}O$, $Ba + 8H_{2}O$, Ag, HCl, HBr, HNO_{3} (A. 233, 82). IV, 1690.
 - 2) Di[4-Methylphenyl]arsinsäure. Sm. 167°. Ag (A. 208, 20). IV, 1692.
- C 68.6 H 6.1 O 19.6 N 5.7 M. G. 245. $C_{14}H_{15}O_3N$ 1) 3,4-Methylenäther d. 1-Oximido-5-Methyl-3-[3,4-Dioxyphenyl]-1,2,3,4-Tetrahydrobenzol. Sm. 137° u. Zers. (A. 303, 231).
 - 2) Acetat d. 2-Oximido-3-Isopropyl-1, 2-Benzpyron (A. d. α-Isopropylcumaroxim). Sm. 85° (B. 24, 3464). — II, 1666.
 - 3) 2[oder 3]-Acetat d. 2-Oximido-3-Oxy-1,4-Dimethyl-2,3-Dihydronaphtalin. Sm. 116-1170 (G. 26 [1] 28).
 - 4) γ-Cyan-α-Keto-α-Phenylhexan-γ-Carbonsäure. Sm. 188-189° (Bl. 3] **15**, 776).
 - 5) Anilidomesityloxydoxalsäure. Sm. 120-121° (A. 291, 135).
 - 6) Ketolakton-2-Methylphenylimid d. β -Acetylpropan- $\alpha\gamma$ -Dicarbonsäure. Sm. 138° (A. 295, 118).
 - 7) Ketolakton-4-Methylphenylimid d. β -Acetylpropan- $\alpha \gamma$ -Dicarbonsäure. Sm. 135° (A. 295, 119).
 - 8) Aethylester d. 2-Keto-3-Phenyl-5-Methyl-2, 3-Dihydropyrrol-4-Carbonsäure. Sm. 127—128° (B. 18, 795; A. 260, 155). — II, 1965.
 - 9) Aethylester d. 2-Oxychinolinäthyläther-4-Carbonsäure. Sm. 86° (B. 16, 2156). — IV, 360.
 - 10) Phenylamidoformiat d. m-Methyldihydroresorcin. Sm. 96-970 (A. **297**, 149).
 - 11) Verbindung (aus Benzylidenpapaverinium). Sm. 165° (J. pr. [2] 56,
 - 327; siehe auch M. 9, 333, 756). 12) Verbindung (aus d. Verb. C₁₅H₁₁O₈N Sm. 225—230°). Sm. 80° (J. pr.
- C 61.5 H 5.5 O 17.6 N 15.4 M. G. 273. $C_{14}H_{15}O_3N_3$ 1) Acetat d. 5-Oxy-3-Methyl-1-[4-Acetylamidophenyl]pyrazol. Sm. 160—161° (C. 1897 [2] 967).
- C 64.4 H 5.7 O 24.5 N 5.4 M. G. 261. $\mathbf{C}_{14}\mathbf{H}_{15}\mathbf{O}_{4}\mathbf{N}$ 1) i-α-[1,2-Phtalyl]amidopentan-α-Carbonsäure (Phtalylamidocapronsäure). Sm. 142°. $Pt(NH_3)_2 + 3^1/_2 H_2 O$ (A. 242, 9). – II, 1811.
 - 2) 1-α-[1,2-Phtalyl]amidopentan-α-Carbonsäure. Sm. 115-116°. NH₄, Cu, $Pt(NH_3)_2$ (A. **242**, 9). — II, 1811.
 - 3) Oximderivat d. Filixsäure. Sm. bei 150° (G. 26 [2] 442). 4) isom. Oximderivat d. Filixsäure. Sm. 197—198° (G. 26 [2] 444).
 - 5) Monomethylester d. 4-Methylphenylamidomethylenglutakonsäure.
 - Sm. 147—148° (A. 273, 182).

 6) Dimethylester d. Phenylamidomethylenglutakonsäure. Sm. 119 bis 120° (A. **273**, 178). — II, 441.
 - 7) Aethylester d. α-Benzoylamido-γ-Keto-α-Buten-β-Carbonsäure. Sm. 95° (A. **297**, 32).

 $C_{14}H_{15}O_4N$ 8) Aethylester d. $\alpha\beta$ -Dioxy- β -[2-Chinolyl]propionsäure. Sm. 107—108° (A. 287, 37). — IV, 369.

9) Aethylester d. 2,4-Dioxychinolin-2-Aethyläther-3-Carbonsäure.
Sm. 107° (A. 251, 364). — IV, 368.

10) $\alpha \gamma$ -Imid d. β -Phenylpropan- $\alpha \alpha \gamma$ -Tricarbonsäure- α -Aethylester. Sm. 119° (C. 1899 [1] 730).

C 58,1 - H 5,2 - O 22,1 - N 14,5 - M. G. 289. $C_{14}H_{15}O_4N_3$

1) P-Dinitro-3,6,8-Trimethyl-2-Aethylchinolin. Sm. 152,5° (B. 23, 2272). - IV, 343.

Diäthylester d. Phenylhydrazoncyanessigsäure-N-Carbonsäure. Sm. 107° (J. pr. [2] 49, 332). — IV, 1455.
 Diäthylester d. Phenylazocyanmethan-αα-Dicarbonsäure (J. pr. [2]

47, 592). — IV, 1473. 4) Diäthylester d. 1-Phenyl-1,2,4-Triazol-3,5-Dicarbonsäure. Sm. 81,50

(B. 23, 3788). — IV, 1117.

 $C_{14}H_{15}O_4N_7$ C 48,7 - H 4,3 - O 18,6 - N 28,4 - M. G. 345

1) Diazoderivat (aus ?-Nitro-2,4-Diamido-1-Methylbenzol) (E. 8, 1212). IV, 601.

1) $Di[\alpha$ -Oxybenzyl] phosphinsäure. Sm. bei 165° . Ag (Bl. 50, 604). — $\mathbf{C}_{14}\mathbf{H}_{15}\mathbf{O}_{4}\mathbf{P}$ IV, 1664.

2) Dibenzylester d. Phosphorsäure. Sm. 78-79°. Ca + 6 H₂O (A. 262, 211). — II, 1050.

C 60,7 - H 5,4 - O 28,9 - N 5,0 - M. G. 277. $C_{14}H_{15}O_5N$

1) Aethylester d. 6-[4-Nitrophenyl]dehydrohexon-5-Carbonsäure.

 $C_{14}H_{15}O_5N_3$

- Sm. 62—63° (Soc. 51, 735). II, 1684. C 55,1 H 4,9 O 26,2 N 13,8 M. G. 305. 1) Aethylester d. 2-Keto-6-Methyl-4-[3-Nitrophenyl]-1,2,3,4-Tetrahydro-1,3-Diazin-5-Carbonsäure. Sm. 231-232° (G. 23 [1] 370). -II, 1681.
- ${\bf C_{14}H_{15}O_5Cl}$ 1) Chlorfilixsäure. Pb (Gm. 7, 1064). II, 1968. ${\bf C_{14}H_{15}O_5Br}$ 1) Bromfilixsäure. Sm. 122° (B. 21, 2965). II, 1968. C 57,3 - H 5,1 - O 32,8 - N 4,8 - M G 293. $C_{14}H_{15}O_6N$

Diäthylester d. α-[2-Nitrophenyl]äthen-ββ-Dicarbonsäure (D. d. o-Nitrobenzalmalonsäure). Sm. 53° (Soc. 47, 158). — II, 1864.

2) Diäthylester d. α -[3-Nitrophenyl] äthen- $\beta\beta$ -Dicarbonsäure. Sm. 73° (Soc. 49, 361). — II, 1864.

3) Diäthylester d. α -[4-Nitrophenyl]äthen- $\beta\beta$ -Dicarbonsäure. Sm. 93° (94°) (Soc. 47, 158; B. 31, 2593). — II, 1864.

 $\mathbf{C}_{14}\mathbf{H}_{15}\mathbf{O}_{6}\mathbf{N}_{5}$ C 48.1 - H 4.3 - O 27.5 - N 20.1 - M. G. 349.

1) Verbindung (aus Dimethylamidobenzol u. 2,4,6-Trinitro-1-Amidobenzol). Sm. 139—141° (A. 215, 359). — II, 328.

 $C_{14}H_{15}O_6Br$ 1) $\alpha\beta$ -Diacetat d. $\alpha\beta$ -Dioxyäthyl-3-Brom-4-Methoxylphenylketon. Fl. (B. 29, 351).

1) Di[α, 2-Dioxybenzyl] phosphinige Säure. Ba (A. ch. [6] 23, 329). $C_{14}H_{15}O_6P$ IV, 1674.

C 54.4 - H 4.8 - O 36.2 - N 4.5 - M. G. 309. $C_{14}H_{15}O_7N$

1) Triacetat d. 1-Acetylamido-?-Trioxybenzol. Sm. 1820 (M. 16, 251). 2) Diäthylester d. α -Keto- α -[2-Nitrophenyl]äthan- $\beta\beta$ -Dicarbonsäure

(D. d. 2-Nitrobenzoylmalonsäure). Sm. 54°. Na, K, Fe (B. 17, 2796; **24**, 2031; A. **251**, 360). — II, 1961.

C 51,7 — H 4,6 — O 39,4 — N 4,3 — M. G. 325. $C_{14}H_{15}O_8N_6$

1) α, 2-Lakton d. α-Oxy-α-[6-Nitro-3,4-Dioxyphenyl]äthan-3,4-Dimethyläther-β, 2-Dicarbonsäure-β-Aethylester (Aethylester d. Nitromekoninessigsäure). Sm. 129° (B. 19, 2295). — II, 2045.

 $C_{14}H_{15}N_2Br$ 1) 2-Brom-s-Di[4-Methylphenyl]hydrazin. Sm. 110° (B. 21, 1215). IV, 1503.

2) 3-Brom-s-Di[4-Methylphenyl]hydrazin. Sm. 1130 (B. 21, 1218). -IV, 1503.

1) β -Jod- $\alpha \alpha$ -Di[Phenylamido] äthan (A. ch. [6] 16, 154). — II, 443. $C_{14}H_{15}N_2J$

1) Phenylhydrazon-4-Aethylphenylphosphin. Sm. 1390 (A. 293, 325). $C_{14}H_{15}N_{2}P$ · IV, 1674.

1) α-Methylphenylamido-β-Phenylthioharnstoff. Sm. 154° (A. 190, 166; $C_{14}H_{15}N_3S$ B. 27, 868). — IV, 679.

- 2) α -[2-Methylphenyl]amido- β -Phenylthioharnstoff. Sm. 145—146° u. C, H, N,S Zers. (Soc. 57, 259). — IV, 802.
 - 3) α -Phenylamido α -Methyl- β -Phenylthioharnstoff. Sm. 175° (B. 25. 3114). — IV, 680.
 - 4) α -Phenylamido- β -Methyl- β -Phenylthioharnstoff. Sm. 142° (B. 30. 848). — IV, 680.
 - 5) α -Phenylamido- β -[2-Methylphenyl]thioharnstoff. Sm. 153° (B. 30, 846; Soc. 57, 258).
 - 6) anti-α-Phenylamido-β-[4-Methylphenyl] thioharnstoff. Sm. bei 150° (Soc. 61, 1013; B. 25, 3107). — IV, 680.
 - 7) $syn-\alpha$ -Phenylamido- β -[4-Methylphenyl]thioharnstoff. Sm. 176° (Soc. 61, 1013; B. 25, 3107). — IV, 680.
 - 8) α-Phenylamido-β-Benzylthioharnstoff. Sm. 115—116° (Soc. 61, 1021). - IV, 680.
 - 9) α-Diphenylamido-β-Methylthioharnstoff. Sm. 203-204° u. Zers. (B. 25, 3113). — IV, 680.
 - 10) β -[2-Naphtyl]amido- α -Allylthioharnstoff. Sm. 155° (B. 24, 269). IV, 928.
 - 11) anti α Merkapto α Phenylamido α [4 Methylphenyl] hydrazonmethan. Sm. 123° (117°) (B. 25, 3107; Soc. 61, 1014). — IV, 806.
 - 12) $syn \alpha Merkapto \alpha Phenylamido \alpha [4 Methylphenyl] hydrazon$ methan. Sm. 175° (172°) (B. 25, 3107; Soc. 61, 1014). — IV, 806.
 - 13) 2-[2-Naphtyl]hydrazido-5-Methyl-4,5-Dihydrothiazol. Sm. bei 160°
- $(B.\ 24,\ 270).\ -\ IV,\ 929.$ $C_{14}H_{15}N_4Cl\ 1)$ 5-Chlorphenylat d. 2-Amido-3-Methylamido-5,10-Naphtdiazin. $HCl + 2H_2O$ (B. **26**, 380). — IV, 1281.
- $C_{14}H_{15}N_4Cl_3$ 1) $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[Phenylhydrazido]äthan (Bl. [3] 17, 548). IV, 747. C₁₄H₁₅Cl₂As 1) Aethyldiphenylarsindichlorid. Sm. 137° (A. 201, 235). — IV, 1688. $\mathbf{C}_{14}\mathbf{H}_{16}\mathbf{ON}_{2}$
 - C 73.7 H 7.0 O 7.0 N 12.3 M. G. 228.
 - 1) 1-Diäthylnitrosamidonaphtalin. Sm. 165° (Soc. 41, 180). II, 599. 2) 4-Acetylamido-1-Dimethylamidonaphtalin. Sm. 194—195° (B. 21, 3125; *M.* 16, 802). — IV, 921. 3) 3 oder 4-Amido-4 oder 3-[2-Oxybenzyl] amido-1-Methylbenzol. Sm.
 - 167° (B. 28, 935). IV, 611.
 - 4) Methyläther d. 2-Oxyphenyl-2-Amidobenzylamin. Sm. 990 (950). 2 HCl (J. pr. [2] 52, 401; [2] 54, 279). — IV, 629.
 - 5) Methyläther d. 4-Oxyphenyl-2-Amidobenzylamin. Sm. 82° (J. pr. [2] **52**, 404). — IV, 629.
 - 6) Aethyläther d. 3-Phenylamido-4-Amido-1-Oxybenzol. Sm. 79-80°.
 - HCl (B. 25, 995; 26, 686). II, 723. 7) Aethyläther d. 2-Amido-4'-Oxydiphenylamin. Sm. 95° (B. 26, 683). - IV, 555.
 - 8) Aethyläther d. 4-Amido-4'-Oxydiphenylamin. Sm. 98-99,5°. HCl (B. 26, 697). — IV, 584.
 - 9) Aethyläther d. 4,4'-Diamido-3-Oxybiphenyl. Sm. 134—135° (B. 20, 3176). — II, 894.
 - 10) Aethyläther d. 6,4'-Diamido-3-Oxybiphenyl. Sm. 97°. 2HCl (A. **303**, 350).
 - 11) 3,3'-Diamido-?-Oxy-4,4'-Dimethylazobenzol. Sm. 212° u. Zers. 2 HCl, (2HCl, PtCl₄), H₂SO₄ (A. **229**, 346). — IV, 1423.
 - 12) 6-Oxy-4-Methyl-2-[4-Isopropylphenyl]-1, 3-Diazin. Sm. 165° (B. 30, 2007). — IV, 983.
 - 13) 6-Oxy-4-Methyl-5-Aethyl-2-Benzyl-1,3-Diazin. Sm. 193,5° (B. 22, 1623). — IV, 983.
 - 14) 6-Oxy-4-Methyl-5-Aethyl-2-[4-Methylphenyl]-1,3-Diazin. Sm. 218° (B. 23, 3826). - IV, 983.
 - 15) Methylharmalin. Sm. 162° u. Zers. HJ (B. 18, 405; 30, 2484).
 - 16) Verbindung (aus 4,4'-Dimethylazoxybenzol). Sm. 70° (M. 10, 597). IV, 1340.
 - 17) Verbindung (aus Benzol u. 4-Nitroso-1-Dimethylamidobenzol) (B. 12, 1824). — II, *329*.
 - 18) Verbindung (aus d. Verb. C₁₅H₁₆O₃N₂ aus d. Dehydrodiacetyllävulinsäure). Sm. 137° (G. 22 [1] 443). — I, 734.

 $.\mathbf{C}_{14}\mathbf{H}_{16}\mathbf{ON}_{4}$ C 65,6 - H 6,2 - O 6,2 - N 21,9 - M. G. 256.

1) Diazobenzolnitrosodimethylanilin. Sm. 103° u. Zers. (B. 21, 2610; 22, 623). — IV, 797. 2) 3,3'-Diamido-2,2'-Dimethylazoxybenzol. Sm. 149° (Soc. 59, 1016).

– IV, *1339*.

3) 5,5'-Diamido-2,2'-Dimethylazoxybenzol. Sm. 148°. 2HCl, (2HCl, $PtCl_4$) (B. 11, 1452). — IV, 1339.

4) 3,3'-Diamido-4,4'-Dimethylazoxybenzol. Sm. 168°. 2HCl, (2HCl,

PtCl₄), 2HBr, $H_2SO_4 + \frac{1}{2}H_2O$ (A. 229, 344). — IV, 1340. 5) 5-Methyloxydhydrat d. 2-Amido-3-Methylamido-5,10-Naphtdiazin.

Chlorid + $2\text{H}_2\text{O}$ (B. 26, 380). — IV, 1281. 6) α -Phenylhydrazid d. α -Phenylhydrazidoessigsäure. Sm. 155° (A. 301, 85).

7) β -Phenylhydrazid d. α -Phenylhydrazidoessigsäure. Sm. 1780 (B. 29, 623; A. 301, 74).

 $\mathbf{C}_{14}\mathbf{H}_{16}\mathbf{O}_{2}\mathbf{N}_{2}$ C 68,8 - H 6,6 - O 13,1 - N 11,5 - M. G. 244

- 1) $\alpha\beta$ -Diamido- $\alpha\beta$ -Di[2-Oxyphenyl]äthan (Dioxystilbendiamin). Sm. 180,5°. $(2 \text{HCl}, \text{PtCl}_4 + 4 \text{H}_2 \text{O})$, Pikrat (Soc. 45, 675, 682; B. 17, 2404). — II, 994; III, 286.
- 2) Dimethyläther d. 5-Amido-4-Phenylamido-1,2-Dioxybenzol. Sm.
- 151° (B. 29, 2688).
 3) Dimethyläther d. 4,4'-Diamido-3,3'-Dioxybiphenyl. Sm. 131,5°. 2 HCl, (2 HCl, PtCl₄), H₂SO₄, H₂CrO₄, Oxalat (J. pr. [2] 58, 211).
 4) Di[2-Amidophenyläther] d. αβ-Dioxyäthan. Sm. 128°. 2 HCl + 2 H₂O (J. pr. [2] 27, 201). II, 702.

5) Di [3-Amidophenyläther] d. $\alpha\beta$ -Dioxyäthan. Sm. 135° (J. pr. [2] 27, .209). — II, 714.

6) Di[4-Amidophenyläther] d. $\alpha\beta$ -Dioxyäthan. Sm. 168—172° (176°)

(J. pr. [2] 27, 206; C. 1898 [2] 423). — II, 716.

7) α-[γ-Furyl-β-Phenylpropyl]harnstoff. Sm. 101° (B. 23, 2851). — III, 694.

8) Dimethyläther d. s-Di[2-Oxyphenyl]hydrazin. Sm. 102° (J. pr. [2] 58, 209).

9) 1-[1,2-Phtalylamido] methylhexahydropyridin. Sm. 117-1180 (B. 31, 3233).

10) 6-Oxy-4-Methyl-5-Aethyl-2-[α-Oxybenzyl]-1,3-Diazin. Sm. 148—152° (B. 23, 2951). — IV, 983.

11) 24-Aethyläther d. 6-Oxy-4,5-Dimethyl-2-[4-Oxyphenyl]-1,3-Diazin. Sm. 216° (B. 23, 2954). — IV, 972. 12) Oxim d. Benzoylnortropinon. Sm. 175° (B. 29, 1584). — III, 791.

13) ?-Nitro-3, 6, 8-Trimethyl-2-Aethylchinolin. Sm. 90° (B. 23, 2272). **– IV**, 343.

14) Aethylester d. 3,5-Dimethyl-1-Phenylpyrazol-4-Carbonsäure. Sm. 68-70°; Sd. 268°₂₆₀ (B. **20**, 1101). — IV, 546.

15) Ketoimid-4-Methylphenylimid d. β -Acetylpropan- $\alpha\gamma$ -Dicarbonsäure. Sm. 189° (A. 295, 119).

16) Benzoylderivat d. Verb. $C_7H_{12}ON_2$ (aus d. 2-Amidohexahydrobenzol-1-Carbonsäureamid). Sm. 187° (Å. 295, 210). — IV, 482. C 61,8 — H 5,9 — O 11,8 — N 20,6 — M. G. 272. 1) Verbindung (aus 6,7-Diamido-2,3-Dimethyl-1,4-Benzdiazin) (B. 22, 444). $C_{14}H_{16}O_{2}N_{4}$

— IV, 1244. C 56,0 — H 5,3 — O 10,7 — N 28,0 — M. G. 300.

 $\mathbf{C}_{14}\mathbf{H}_{16}\mathbf{O}_{2}\mathbf{N}_{6}$ 1) 4,4'-Disemicarbazidobiphenyl. Sm. 306-308° u. Zers. (A. 239, 209).

— IV, 1276. $\mathbf{C}_{14}\mathbf{H}_{16}\mathbf{O}_{2}\mathbf{Pb}\ 1)\ \mathbf{Bleidi[4-Methylphenyl]dioxydhydrat}.\ \ \mathbf{Salze\ siehe}\ (B.\ \mathbf{21},\ 3425).\ \mathbf{-}$ IV, 1716.

C 64,6 - H 6,1 - O 18,5 - N 10,8 - M. G. 260. $C_{14}H_{16}O_3N_2$

1) Harmalolacetat (B. 22, 639). - III, 885.

2) 5-Acetat-14-Aethyläther d. 5-Oxy-3-Methyl-1-[4-Oxyphenyl]pyrazol. Sm. 76° (*J. pr.* [2] **55**, 154). — IV, *514*. 3) **1-[2,4-Dimethyl-3-Pyrroyl]-2,4-Dimethylpyrrol-3-Carbonsäure.**

Ba (B. 22, 36). — IV, 86.

4) Methylester d. 3,4-Dimethyl-l-Phenylpyrazol-5-Oxyessigsäure. Sm. 55° (J. pr. [2] 55, 164). — IV, 522.

- C₁₄H₁₆O₃N₂ 5) Methylester d. 3-Keto-4,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol-
 - 1-Methylcarbonsäure. Sm. 112° (J. pr. |2] 55, 160). IV, 522.
 6) Methylester d. 5-Keto-3,4-Dimethyl-1-Phenyl-4,5-Dihydropyrazol-
 - 4-Methylearbonsäure. Sm. 143° (J. pr. [2] 55, 162). IV, 548.
 7) Aethylester d. β-Benzylidenharnstofferotonsäure (Ae. d. β-Benzuramidocrotonsäure). Sm. 207—208° (G. 21 [1] 498). III, 32.
 - 8) Aethylester d. 5-Aethoxyl-1-Phenylpyrazol-3-Carbonsäure.
 - 83-84° (Am. 14, 580). IV, 536.

 9) Aethylester d. 3-Methyl-1-Phenylpyrazol-5-Oxyessigsäure. Sm. 47° (J. pr. [2] 55, 158). IV, 512.

 10) Aethylester d. 3-Keto-5-Methyl-2-Phenyl-2,3-Dihydropyrazol-
 - 1-Methylcarbonsäure. Sm. 118°. Pikrat (J. pr. [2] 55, 157). IV, 512.
 - 11) Aethylester d. 5-Keto-3-Methyl-1-Phenyl-4,5-Dihydropyrazol-4-Methylcarbonsäure. Sm. 138° (B. 17, 2052; A. 238, 163; Soc. 71, 332). — IV, 546.
 - 12) Aethylester d. 5-Keto-4-Methyl-1-Phenyl-4,5-Dihydropyrazol-3-Methylcarbonsäure. Sm. 129° (B. 28, 3203; A. 289, 59). — IV, 546.
 - 13) Aethylester d. 2-Keto-6-Methyl-4-Phenyl-1,2,3,4-Tetrahydro-**1,3-Diazin-5-Carbonsäure.** Sm. 206—206,5° (G. **23** [1] 363). — II, 1681.
- C 58,3 H 5,5 O 16,7 N 19,4 M. G. 288 $C_{14}H_{16}O_{3}N_{4}$
 - 1) Methylisoxazolonphenylhydrazin. Sm. 102-103° u. Zers. (A. 296, 54). **- IV**, 654.
 - 2) 6,7-Di[Acetylamido]-1-Acetyl-2-Methylbenzimidazol + H₂0. Sm. 260° (B. 22, 1650). — IV, 1243.
- C 53,1 H 5,1 O 15,2 N 26,6 M. G. 316. $C_{14}H_{16}O_8N_6$
- 1) Salpetersaures Diphenylguanylguanidin. Sm. 231° (B. 14, 1584).
- C 60.9 H 5.8 O 23.2 N 10.1 M. G. 276. $C_{14}H_{16}O_4N_2$ Coffearin. Sm. 140° u. Zers. HCl + H₂O, (2 HCl, PtCl₄), (HCl, AuCl₃)
 (B. 27 [2] 406; G. 25 [1] 105). — III, 888.
 - 2) Diacetat d. $\beta\gamma$ -Dioximido- α -Phenylbutan. Sm. 80° (B. 16, 2188). —
 - III, 149.
 - 3) 1,4-Phenylendiimidobuttersäure. Sm. 176° (B. 17, 545). IV, 592. 4) 4-Methylester-3-Aethylester d. 5-Phenylpyrazol-3,4-Dicarbon-
 - säure. Sm. 76° (B. 26, 259). IV, 893. 5) 3-Methylester-4-Aethylester d. 5-Phenylpyrazol-3,4-Dicarbonsäure. Sm. 107° (B. 26, 259). — IV, 893.
 - 6) Aethylester d. 2-Keto-4-[2-Oxyphenyl]-6-Methyl-1,2,3,4-Tetrahydro-1, 3-Diazin-5-Carbonsäure (Salicyluramidocrotonsäureäthylester). Sm. 203—204° (199—200°) (G. 23 [1] 374). — II, 1868.
 - 7) Aethylester d. 2,6-Dioxy-1,4-Benzdiazin-6-Aethyläther-2-Carbonsäure. Sm. 186° (B. 25, 499). IV, 947.
 - 8) α-Imido-4-Methylbenzylamid d. Oxalessigsäureäthylester. Sm. 190° u. Zers. (B. 25, 1422). — IV, 852.
 - 9) Verbindung (aus 2,6-Dioxy-3-Aethylpyridin). Zers. bei 170° (Soc. 63, 882). — IV, *132*.
- C14H16O4Br2 1) Diacetat d. 3,6-Dibrom-2,5-Dioxy-4-Isopropyl-1-Methylbenzol. Sm. $121-122^{\circ}$ (B. 15, 658). - II, 971.
- C₁₄H₁₆O₄Se 1) Dimethyläther d. Di[?-Oxyphenyl]selendioxydhydrat. Sm. 1370 (B. **28**, 610).
- C₁₄H₁₆O₄Te 1) Dimethyläther d. Di[?-Oxyphenyl]telluridhydroxyd. Chlorid, Nitrat (B. 30, 2830).
- C 57.5 H 5.5 O 27.4 N 9.6 M. G. 292. $\mathbf{C}_{14}\mathbf{H}_{16}\mathbf{O}_{5}\mathbf{N}_{2}$

 - Diacetat d. α-Diisonitrosoanethol. Sm. 89° (G. 23 [2] 177). II, 852.
 Diacetat d. β-Diisonitrosoanethol. Sm. 104° (G. 23 [2] 182). II, 853. 3) 3-Acetat-4,5-Dimethyläther d. 7-Acetylamido-3,4,5-Trioxypseudo-
 - isoindol. Zers. bei 242° (B. 31, 935).
 - 4) 5-Aethylester d. 2-Keto-4-Phenylhexahydro-1,3-Diazin-5,6-Dicarbonsäure (Ae. d. Benzuramidobernsteinsäure). Sm. 224-225° (G. 23 [1] 402). — II, 1963.
 - Diäthylester d. β-Phenylhydrazon-α-Ketoäthan-αβ-Dicarbonsäure. Sm. 72—73° u. Zers. (B. 25, 3451). IV, 727.
- C₁₄H₁₆O₅Br₂ 1) Diacetat d. 2,6-Dibrom-3,4,5-Trioxy-1-Propylbenzolmonomethyläther. Sm. 79° (M. 4, 185). — II, 1024.

C 54.5 - H 5.2 - O 31.2 - N 9.1 - M. G. 308.C14H16O6N2 1) Phtalyldisarkosin. Sm. 168° (B. 21, 278). — II, 1810. 2) Dinitrourushinsäure. Fe (Soc. 43, 478). — II, 1435. 3) Diäthylester d. αζ-Dicyan-βε-Diketohexan-αζ-Dicarbonsäure (D. d. Succinyldicyanessigsäure). Sm. 135—136°. $Na_2 + 5H_2O$ (B. 26 [2] 6). — I. 1226. 4) Diäthylester d. 1,3-Phenylendioxaminsäure. Sm. 1540 (B. 29, 2642). **– IV**, 577. 5) Diäthylester d. 1,4-Phenylendioxaminsäure. Sm. 215° (B. 29, 2642). - IV, 593. 6) Diacetat d. 4,6-Di[Acetylamido]-1,3-Dioxybenzol. Sm. 180° (B. 30, 7) Diacetat d. 2,3-Di[Acetylamido]-1,4-Dioxybenzol. Sm. 216° (B. 19, 2248). — II, 948. 8) Diacetat d. 2,5-Di[Acetylamido]-1,4-Dioxybenzol. Sm. 190° (225°) (B. 22, 1657; 30, 2101). — II, 948. C 49.4 - H 4.7 - O 37.6 - N 8.2 - M. G. 340. $C_{14}H_{16}O_8N_2$ 1) Tetramethylester d. 3,6-Diamidobenzol-1,2,4,5-Tetracarbonsäure. Sm. 149,6° (A. **258**, 317). — II, 2074. 1) Tetracetat d. 1,4-Dijodobenzol (p Phenylendijodidtetracetat). Sm. 2320 $C_{14}H_{16}O_8J_2$ u. Zers. (B. 27, 1793). C14H16NCl 1) Chlormethylat d. 2,6-Dimethyl-4-Phenylpyridin. 2+PtCl₄ (B. 20, 2594). **— IV**, *378*. 1) Jodmethylat d. 2,6-Dimethyl-4-Phenylpyridin (B. 20, 2593). $\mathbf{C}_{14}\mathbf{H}_{16}\mathbf{NJ}$ 1) Jodanethylat d. 2,5
1 V, 378.

1 Di [4-Methylamidophenyl]sulfid. Sm. 60° (B. 23, 3021). — II, 804.
2) Di [6-Amido-3-Methylphenyl]sulfid. Sm. 103°. 2HCl, (2HCl, PtCl₄), 2HBr, 2HJ, H₂SO₄ + 2H₂O, Pikrat (B. 4, 393; G. 20, 32). — II, 821.
3) Di [2-Amidobenzyl]sulfid. Sm. 81—82°.(70°). 2HCl + 2H₂O, (2HCl, PtCl₄) (M. 10, 879; B. 27, 3520; 28, 915; A. 305, 122). — II, 1055.
4) Di [4-Amidobenzyl]sulfid. Sm. 104—105°. 2HCl, 2HBr, Dioxalat (B. 2002). $C_{14}H_{16}N_2S$ 5) ?-[α-Phenylhydrazonäthyl]-2-Aethylthiophen. Sm. 68° (B. 19, 661). - III, 765. 6) $?-[\alpha-Phenylhydrazon athyl]-2,4-Dimethylthiophen. Sm. 70° (B. 20,$ 2020). — III, 765.

1) Di[2-Amidobenzyl]disulfid. Sm. 90—91° (B. 28, 1026).

2) Di[3-Amidobenzyl]disulfid. 2HCl (B. 30, 1070). $C_{14}H_{16}N_2S_2$ 2) Di[3-Amidobenzyl]disulfid. 2HCl (B. 30, 1070). 3) Di[4-Amidobenzyl]disulfid. Sm. 96—98°. 2HCl (A. 305, 120). 4) Di[2-Methylamidophenyl]disulfid. Sm. 67—68° (B. 27, 86°). — II, 816. 5) Di[6-Amido-3-Methylphenyl]disulfid. Sm. 89° (B. 22, 903). — II, 822. $C_{14}H_{16}N_{2}Hg\ 1$) Quecksilberdi [4-Methylamidophenyl]. Sm. 178—179° (G. 23 [2] 533). - IV, 1706. 2) Quecksilberdi [6-Amido-3-Methylphenyl]. Sm. 156° (G. 28 [2] 112). - IV, 1711. $\mathbf{C}_{14}\mathbf{H}_{16}\mathbf{N}_{3}\mathbf{C}\mathbf{1}$ 1) Phenylhydrazon d. Pyridylacetonylchlorid. Sm. 133—1340 (C. 1899) 117). $\mathbf{C}_{14}\mathbf{H}_{16}\mathbf{N}_{4}\mathbf{J}_{4}$ 1) Dimethyldiphenyltetrazontetrajodid (A. 190, 173). — IV, 1308. $\mathbf{C}_{14}\mathbf{H}_{16}\mathbf{ClP}$ 1) Dimethyldiphenylphosphoniumchlorid. 2+PtCl₄ (A. 207, 211). -IV, 1658. 1) Dimethyldiphenylarsoniumchlorid. 2 + PtCl₄ (A. 207, 205). - $\mathbf{C}_{14}\mathbf{H}_{16}\mathbf{ClAs}$ IV, 1688. $\mathbf{C}_{14}\mathbf{H}_{16}\mathbf{JP}$ 1) Dimethyldiphenylphosphoniumjodid. Sm. 241° (A. 207, 210).

IV, 1658.
Dimethyldiphenylarsoniumjodid. Sm. 190° (A. 207, 204). — IV, 1688.
C 78,1 — H 7,9 — O 7,4 — N 6,5 — M. G. 215.
I-Cinnamylhexahydropyridin. Sm. 122° (B. 22, 2265). — IV, 16.

2) 3-[β -Oxyisoamyl] chinolin. Sm. 93°. Pikrat (B. 20, 2041). — IV, 342.

3) 4-Oxy-3-Amylchinolin. Sm. 85° (B. 28, 2821). — IV, 342.
4) Aethyläther d. 1-Oxy-3-Propylinolin. Sd. 287° (2HC)

4) Aethyläther d. 1-Oxy-3-Propylisochinolin. Sd. 287°₇₅₆. (2HCl, PtCl₄), (HCl, AuCl₃), Pikrat (B. 29, 2396). — IV, 338.
5) Aethyläther d. 1-Oxy-3-Isopropylisochinolin. Sd. 283—285°₇₇₁ (B.

30, 894). — IV, 339.

 $\mathbf{C}_{14}\mathbf{H}_{16}\mathbf{J}\mathbf{A}\mathbf{s}$

 $C_{14}H_{17}ON$

C., H., ON

6) 3-Acetyl-1,2,4-Trimethyl-?-Dihydrochinolin. Sm. 100,5-101,5°. (2HCl, PtCl₄) (G. **24** [2] 193). — IV, 243. 7) Acetylcarbazolin. Sm. 98° (A. **202**, 25). — IV, 229.

- 8) 3-Oximido-?-Benzyliden-l-Methylhexahydrobenzol. Sm. 109—1106 (B. 29, 1597, 2961).
 9) Verbindung (aus Acetylhydrocotarninessigsäure). HCl (B. 20, 2432). —
- III, 917. C 69.1 - H 7.0 - O 6.6 - N 17.3 - M. G. 243.

 $C_{14}H_{17}ON_{8}$

- γ-Oximido-β-[8-Chinolyl]amido-β-Methylbutan. Sm. 153—154° (A. 262, 339). IV, 915.
 3-Semicarbazon-5-Methyl-1-Phenyl-1, 2, 3, 4-Tetrahydrobenzol. Sm.
- 170—171° (B. 31, 2474).
- 3) isom. 3 Semicarbazon 5 Methyl-1-Phenyl-1, 2, 3, 4-Tetrahydrobenzol. Sm. 199—200° (B. 31, 2474).
- 4) Di[2-Amidobenzyl]hydroxylamin. Sm. 1420 (B. 30, 60). IV. 639.
- 5) 4-Phenylhydrazon-2-Oxy-3,3,6-Trimethyl-3,4-Dihydropyridin, Sm. 155° (B. **31**, 1344). C 72.7 - H 7.4 - O 13.8 - N 6.1 - M. G. 231.

C, H, O, N

- 1) 32-Methyläther d. 1-Oximido-5-Methyl-3-[2-Oxyphenyl]-1,2,3,4-
- Tetrahydrobenzol. Sm. 133° (A. 303, 253).

 2) 34-Methyläther d. 1-Oximido-5-Methyl-3-[4-Oxyphenyl]-1,2,3,4-Tetrahydrobenzol. Sm. 108° (A. 303, 249).

 3) Benzoyltropigenin. Sm. 125° (B. 29, 1580). — III, 793.

 4) N-Benzoylpseudotropigenin. Sm. 165—166° (B. 29, 1639, 2231). —

III, 793.

5) 1-Isoamylindol-2-Carbonsäure. Sm. 1220 (B. 30, 2821).

- 6) Aethylester d. α -[2-Cyanphenyl] butan- β -Carbonsäure. 2888).
- 7) Acetylphenylamid d. Brenztraubensäure. Sm. 1750 (G. 21 [1] 273). **– II**, 371.
- 8) Phenylimid d. β -Methylpentan- γ δ -Dicarbonsäure. Sm. 85° (Soc. 69,
- 9) Phenylimid d. β -Methylpentan- $\delta \varepsilon$ -Dicarbonsäure. Sm. 109° (Soc. **73**, 64).
- 10) Phenylimid d. $\beta\gamma$ -Dimethylbutan- $\beta\gamma$ -Dicarbonsäure. Sm. 88° (B. **23**, 3623; A. **292**, 176). — II, 415.
- 11) 4-Methylphenylimid d. Pentan-αγ-Dicarbonsäure. Sm. 94-95° (A. 292, 216).
- 12) 4-Methylphenylimid d. Pentan-βγ-Dicarbonsäure. Sm. 109—110° (A. 298, 163).
- 13) **4-Methylphenylimid d. mal. Pentan-** $\beta\delta$ **-Dicarbonsäure.** Sm. 120° (A. 292, 200).
- 14) 4-Methylphenylimid d. β -Methylbutan- $\alpha\beta$ -Dicarbonsäure. Sm. 64 bis 65° (A. 292, 184; 298, 176).
- 15) 4-Methylphenylimid d. β -Methylbutan- $\beta\gamma$ -Dicarbonsäure. Sm. 117° (A. **285**, 235). C 64,9 - H 6,6 - O 12,3 - N 16,2 - M. G. 259.

 $C_{14}H_{17}O_2N_3$

- 1) Aethylester d. 2,4,5-Trimethylbenzolazocyanessigsäure. Sm. 100°.
- K (J. pr. [2] 49, 348). IV, 1457. 2) Aethylester d. 2,4,5-Trimethylphenylhydrazoncyanessigsäure. Sm.
- 136° (J. pr. [2] 49, 348). IV, 1457. 3) Aethylester d. α-Cyan-γ-Phenylhydrazonbutan-α-Carbonsäure. Sm. 144° (C. 1895 [2] 918). — IV, 692.
- 4) Verbindung (aus Benzenylhydrazidin). Sm. unterh. 70° (A. 297, 270).
- 1) Aethylester d. α-Chlor-α-Phenyl-α-Penten-β-Carbonsäure. Sd. 247 $\mathbf{C}_{14}\mathbf{H}_{17}\mathbf{O}_{2}\mathbf{C}\mathbf{1}$ bis 249°₃₀₀ (Soc. 49, 162). — II, 1434. C 68.0 - H 6.9 - O 19.4 - N 5.7 - M. G. 247.

 $C_{14}H_{17}O_3N$

- 1) β-[2-Acetylamido-4-Isopropylphenyl]akrylsäure. Sm. 220° u, Zers. (B. 19, 263). — II, 1434.
- 2) β-[3-Acetylamido-4-Isopropylphenyl]akrylsäure. Sm. 240° (B. 19, 416). **— II**, *1434*.
- 3) 2-Benzoylamidohexahydrobenzol-1-Carbonsäure. Sm. 220-2210 (A. **295**, 202).

4) $\beta\delta$ -Lakton d. δ -Oxy- β -Methylpentan- $\beta\delta$ -Dicarbonsäure- δ -Phenylamid. Sm. 97° (A. 292, 229). $C_{14}H_{17}O_{8}N$

5) Inneres Anhydrid d. Oxyisobutyrylphenyl-β-Amidoisobuttersäure. Sm. 120° (B. 25, 2332; Ph. Ch. 10, 663). — II, 435.

6) Aethylester d. α-Cyan-δ-Oxyvalerianphenyläthersäure. Fl. (B. 30,

7) Aethylester d. 2-Methyl-2, 3-Dihydroindol-1-Ketoäthyl-β-Carbon-

saure. Sm. 209° (B. 26, 1298). — IV, 189. 8) Aethylester d. 2-Keto-3-Aethyl-1, 2, 3, 4-Tetrahydrochinolin-3-Car-

bonsäure. Sm. 114° (B. 20, 440). - II, 1857. 9) Acetat d. 8-Acetylamido-5-Oxy-1, 2, 3, 4-Tetrahydronaphtalin.

151—151,5° (B. **22**, 962). — **II**, 854. 10) Phenylmonamid d. Isotrimethylglutakonsäure. Sm. 1380 u. Zers.

(Soc. 71, 1186).

11) 4-Methylphenylimid d. γ -Oxy- β -Methylbutan- $\beta\gamma$ -Dicarbonsäure. Sm. 184—185° (B. **29**, 1546, 1624). C 61,1 — H 6,2 — O 17,4 — N 15,3 — M. G. **27**5.

 $C_{14}H_{17}O_3N_3$

1) Aethylester d. 3-Keto-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol-4-Amidoameisensäure. Sm. 206° (A. 293, 66). — IV, 1109.

2) Verbindung (aus d. Nitril d. 6-Oxy-4-Keto-3 Methyl 2-Phenyl-1,2,3,4-Tetrahydrobenzol-3-Carbonsäure). Sm. 155° u. Zers. (A. 294, 288).

C 55,4 — H 5,6 — O 15,8 — N 23,1 — M G 303. $C_{14}H_{17}O_3N_5$

1) 4-Oximido-3-Methyl-5- $[\beta$ -Oximido- α -4-Dimethylamidophenylimidoäthyl]-4,5-Dihydroisoxazol. Sm. bei 2060 u. Zers. (B. 30, 1305). — IV, 598.

C 63.9 - H 6.5 - O 24.3 - N 5.3 - M. G. 263. $C_{14}H_{17}O_4N$

1) Aethylester d. β -[3-Nitro-4-Isopropylphenyl]akrylsäure. Sm. 58 bis 59° (B. 19, 414). — II, 1433. 2) Aethylester d. 1-Oximido-5-Methyl-3-[2-Furanyl]-1,2,3,4-Tetra-

hydrobenzol-2 oder 4-Carbonsäure. Sm. 110-1120 (A. 303, 246).

3) Aethylester d. Oxalessigsäureäthylphenylamid. Sm. 67-69°. Cu (B. **24**, 1255). — **II**, 420.

Diäthylester d. β-Phenylamidoäthen-αα-Dicarbonsäure. Sm. 48 bis 49° (50°) (B. 27, 2744; A. 285, 144; 297, 77).

5) Diäthylester d. α -Phenylamidoäthen- $\alpha\beta$ -Dicarbonsäure (Aniloxalessigsäurediäthylester). Fl. (B. 22, 3349). — II, 420.

 $C_{14}H_{17}O_4N_3$

C 57,7 — H 5,8 — O 22,0 — N 14,4 — M. G. 291.

1) Diäthyläther d. 4-Nitro-5-Oxy-1-[4-Oxyphenyl]-3-Methylpyrazol.

Sm. 119° (B. 28, 639). — IV, 514.

1) Diacetat d. 6-Chlor-2,5-Dioxy-4-Isopropyl-1-Methylbenzol. Sm. $\mathbf{C}_{14}\mathbf{H}_{17}\mathbf{O}_{4}\mathbf{C}\mathbf{1}$ 87—88° (B. 15, 657). — II, 971.

2) Diäthylester d. β -Chlor- α -Phenyläthan- $\beta\beta$ -Dicarbonsäure (D. d. Benzylchlormalonsäure). Sd. 305° u. Zers. (A. 209, 243). — II, 1849.

C₁₄H₁₇O₄Br 1) Diacetat d. 6-Brom-2,5-Dioxy-4-Isopropyl-1-Methylbenzol. Sm. 910 (B. 15, 658). — II, 971.

 $\mathbf{C}_{14}\mathbf{H}_{17}\mathbf{O}_{4}\mathbf{P}$ 1) Diäthylester-l-Naphtylester d. Phosphorsäure. Fl. (B. 27, 2562). — II, 858.

2) Diäthylester-2-Naphtylester d. Phosphorsäure. Fl. (B. 27, 2564). — II, 877.

C 60,2 -- H 6,1 - O 28,7 - N 5,0 - M. G. 279. C14H17O5N

1) act. α -[2-Carboxylbenzoyl]amidopentan- α -Carbonsäure (Leucinphtaloylsäure). Sm. 130—132° u. Zers. Na₂, K₂, Ba, Pt(NH₃)₂ (A. 242, 17; B. 21, 277). — II, 1810.

2) inact. α -[2-Carboxylbenzoyl]amidopentan- α -Carbonsäure. Sm. 152

bis 153°. K₂, Ag₂ (A. **242**, 20). — II, 1811. 3) Phenylmonamid d. Methantricarbonsäurediäthylester. Sm. 123 bis 124°. Na (J. pr. [2] 35, 451). — II, 422.

C 54,7 - H 5,5 - O 26,1 - N 13,7 - M. G. 307. $C_{14}H_{17}O_5N_8$

1) Acetat d. 2,4,6-Tri Acetylamido]-1-Oxybenzol. Sm. 255° u. Zers. (M. 16, 264).

2) Acetat d. ?-Triacetylamido-l-Oxybenzol. Sm. 211° (B. 30, 184). C 56.9 - H 5.8 - O 32.5 - N 4.7 - M. G. 295. $C_{14}H_{17}O_6N$ 1) Mandelnitrilglykosid. Sm. 147-149° (B. 28, 1510). — III, 570.

- 2) Diäthylester d. α -[2-Nitrophenyl] äthan- $\beta\beta$ -Dicarbonsäure (D. d. $C_{14}H_{17}O_6N$ 2-Nitrobenzylmalonsäure). Fl. (B. 29, 634).
 - Diäthylester d. α-[4-Nitrophenyl] äthan-ββ-Dicarbonsäure. Sm. 63°
 (B. 20, 434; 29, 636). II, 1849.
 - 4) Triäthylester d. Pyridin-2, 4, 6-Tricarbonsäure. Sm. 127,5° (A. 228, 41). - IV, 180.
- 1) Verbindung (Base aus Harn) = $(C_{14}H_{17}O_8N_2)_x$ (B. 25 [2] 46). C 54,0 H 5,5 O 36,0 N 4,5 M. G. 311. $\mathbf{C}_{14}\mathbf{H}_{17}\mathbf{O}_{6}\mathbf{N}_{2}$ C14H17O7N
 - 1) 2-Amid d. 4,6-Dioxybenzol-1,3-Dicarbonsäure-2-Methylcarbonsäure. Sm. 186°. Na (B. 31, 2016).
- 2) 4-Aethoxylphenylmonamid d. Citronensäure. Sm. 72° (C. 1896 [1] 172).
 C 73,1 H 7,8 O 6,9 N 12,2 M. G. 230.
 1) 3-Keto-1,5-Dimethyl-2-[2,4,5-Trimethylphenyl]-2,3-Dihydropyra- $\mathbf{C}_{14}\mathbf{H}_{18}\mathbf{ON}_{2}$
 - zol. Sm. 105-106° (B. 18, 708). IV, 814. 2) ?-Nitro-3-Methyl-1,2,3,4,7,8,9,10-Oktohydro- β -Naphtochinolin.
 - Sm. 86° (B. **24**, 2664). **1V**, 234. C 68,3 H 7,3 O 13,0 N 11,4 M. G. 246.
- $C_{14}H_{18}O_2N_2$ 1) 1,5-Di[Acetylamido]-1,2,3,4-Tetrahydronaphtalin. Sm. 262° (B. 22, 955). **— IV**, 861.
 - 2) 5,6-Di[Acetylamido]-1,2,3,4-Tetrahydronaphtalin. Sm. 245° (B. 22, 1379). **— IV**, 861.
 - 3) 5,8-Di[Acetylamido]-1,2,3,4-Tetrahydronaphtalin. Sm. 285° (B. 22, 1383). **— IV**, 861.
 - 4) 1-Phenylamido-2,5-Diketo-3,3,4,4-Tetramethyltetrahydropyrrol
 - (Tetramethylsuccinylphenylhydrazin). Sm. 124° (B. 23, 3624). IV, 704. 5) Diäthyläther d. 5-Oxy-1-[4-Oxyphenyl]-3-Methylpyrazol. Sm. 84°
 - (B. 28, 635). IV, 514. 6) 4-Acetylamido-6-Isopropyl-1,3-Dimethylbenzoxazol. Sm. 132—1340 (G. 20, 423). — II, 774.
 - 7) 4-Acetylamido-3-Isopropyl-1, 6-Dimethylbenzoxazol. Sm. 190-1920 (G. 20, 428). - II, 768.
 - 8) Diäthyläther d. 5,8-Dioxy-2,3-Dimethyl-1,4-Benzdiazin. Sm. 1270
 - (B. 23, 1212). IV, 935. 9) Anagyrin. HCl + 4H₂O, (2HCl, PtCl₄), (HCl, AuCl₃) (G. 17, 325; Bl. 50, 626; C. 1896 [1] 375). III, 777.
 - 10) 2-Amidophenylimid d. βγ-Dimethylbutan-βγ-Dicarbonsäure. Sm. 142,5—143° (A. 292, 178). IV, 560.
 11) Aethylester d. δ-Phenylhydrazon-β-Penten-γ-Carbonsäure (Soc. 51,
 - 839). IV, 693. C 61,3 H 6,6 O 11,7 N 20,4 M. G. 274.
- $C_{14}H_{18}O_2N_4$
 - 1) Di[Isopropylidenhydrazid] d. Benzol-1, 3-Dicarbonsäure. Sm. 243 bis 244° (J. pr. [2] 54, 76).
 - 2) Di[Isopropylidenhydrazid] d. Benzol-1,4-Dicarbonsäure. Sm. 261 bis 262° (J. pr. [2] 54, 83).
- $C_{14}H_{18}O_2Cl_4$ 1) Diisobutyläther d. 2, 3, 5, 6-Tetrachlor-1, 4-Dioxybenzol (M. 3, 682).
- C 64,1 H 6,9 O 18,3 N 10,7 M. G. 262 $\mathbf{C}_{14}\mathbf{H}_{18}\mathbf{O}_{3}\mathbf{N}_{2}$ 1) Hämatoidin (A. 78, 353; Z. 1867, 414; J. 1855, 738; J. Th. 1878, 288). **- IV**, 1620.
 - 2) Aethylester d. 3-Keto-4-Methyl-6-Phenylhexahydro-1,3 Diazin-5-Carbonsäure (Benzuramidobuttersäureäthylester). Sm. 229—230° u. Zers. (G. 23 [1] 366). — II, 1665.
 - 3) Verbindung (aus α-Oximidophenylamidoessigsäureäthylester). Sm. 69-70° (B. 30, 2431).
- C 57.9' H 6.2 O 16.5 N 19.3 M. G. 290. $C_{14}H_{18}O_3N_4$ 1) Verbindung (aus Thiocarbanilidothiooxanilid). Sm. 2200 (J. pr. [2] 32, 13). — II, 412.
- $\mathbf{C}_{14}\mathbf{H}_{18}\mathbf{O}_{4}\mathbf{N}_{2}$ C'60.4 - H'6.5 - O'23.0 - N'10.1 - M.G. 278.1) Diacetat d. 1,4-Dioximido-5-Isopropyl-2-Methyl-1,4-Dihydrobenzol. 2 Modif.; α-Modif. Sm. 110°; β-Modif. Sm. 110° (B. 28, 1547). — III, 366.
 - Diäthylester d. β-[2-Amidophenyl]amidoäthen-αα-Dicarbonsäure.
 Sm. 92—93° (B. 30, 2026). IV, 561.
 - 3) Diäthylester d. β -Phenylhydrazidoäthen- $\alpha\alpha$ -Dicarbonsäure. Sm. 112° (B. 28, 36). IV, 714.

 $\mathbf{C}_{14}\mathbf{H}_{18}\mathbf{O}_4\mathbf{N}_2$ 4) Diäthylester d. Phenylhydrazonäthan- $\alpha\beta$ -Dicarbonsäure. Sm. 76 bis 78° (A. 246, 319). — IV, 713.

50 Diäthylester d. α-[3-Carboxylphenyl]hydrazonpropionsäure. Sm. 101–102° (A. 236, 168). — II, 1289. C₁₄H₁₈O₄N₄ C 54,9 — H 5,9 — O 20,9 — N 18,3 — M. G. 306. 1) 1,2,3,5-Tetra[Acetylamido]benzol. Sm. 245° (B. 30, 541). — IV, 1243. 2) 1,2,4,5-Tetra[Acetylamido]benzol. Sm. 285° (B. 22, 440). — IV, 1274. C₁₄H₁₈O₄Cl₅ 1) Verbindung (aus d-Limonen u. Trichloressigsäure). Sm. 104° (Bl. [3] 15, 267°, D 20, 260°. HT 522°

367; B. 29, 695). — III, 523.

1) Aethylester d. α-Merkapto-β-Ketopropan-3-Aethoxylphenyläther- $\mathbf{C}_{14}\mathbf{H}_{18}\mathbf{O}_{4}\mathbf{S}$ α-Carbonsäure. Fl. (B. 25, 2983). — II, 934. C 57,1 — H 6,1 — O 27,2 — N 9,5 — M. G. 294.

 $\mathbf{C}_{14}\mathbf{H}_{18}\mathbf{O}_{5}\mathbf{N}_{2}$

1) ?-Dinitro-2-Acetyl-5-Pseudobutyl-1, 3-Dimethylbenzol. Sm. 1360 (B. 31, 1346). 2) Acetat d. 3-Nitro-5-Acetylamido-2-Oxy-4-Isopropyl-1-Methyl-

benzol. Sm. 225-226° (G. 25 [2] 406).

3) Acetat d. 2-Nitro-6-Acetylamido-3-Oxy-4-Isopropyl-1-Methyl-

benzol. Sm. 157—159° (G. 25 [2] 404). 4) Diäthylester d. 1-Methylbenzol-2-Oxaminsäure-4-Amidoameisen-

säure (Oxamäthanotolylurethan). Sm. 1280 (A. 268, 318). - IV, 604. 5) Diäthylester d. 1-Methylbenzol-4-Oxaminsäure-2-Amidoameisen-

säure. Sm. 131° (A. **268**, 320). — IV, 604. C 54,2 — H 5,8 — O 31,0 — N 9,0 — M. G. 310. $C_{14}H_{18}O_6N_2$

1) Methylester d. 4,6-Dinitro-5-Pseudobutyl-1,3-Dimethylbenzol-2-Carbonsäure. Sm. 96° (B. 31, 1348).

C14H18O8Cl2 1) Diacetat d. Dichlorhexaoxydihydrobenzoltetramethyläther (Dichlordimethoxychinondimethyldiaeetylaeetal). Sm. 177-178° (Am. 20, 421). C 41,8 — H 4,5 — O 39,8 — N 13,9° — M. G. 402. $\mathbf{C}_{14}\mathbf{H}_{18}\mathbf{O}_{10}\mathbf{N}_{4}$

1) Diisobutyläther d. 2, 3, 5, 6-Tetranitro-1, 4-Dioxybenzol (M. 3, 686). • II, 947.

 $\mathbf{C}_{14}\mathbf{H}_{18}\mathbf{NCl}$ 1) Chlorisoamylat d. Chinolin. 2 + PtCl₄ (B. 16, 1279). - IV, 252.

2) Chlormethylat d. 3,6-Dimethyl-2-Aethylchinolin. 2 + PtCl₄ (B. 18, 3386). — IV, 340.

3) Chlormethylat d. 3,7-Dimethyl-2-Aethylchinolin. 2+PtCl₄ (B. 18, 3399). - IV, 341.

4) Chlormethylat d. 3,8-Dimethyl-2-Aethylchinolin. 2+PtCl₄ (B. 18, 3401). **— IV**, *341*.

1) Bromisoamylat d. Chinolin + H₂O. Sm. 87° (140° wasserfrei) (B. 16, $C_{14}H_{18}NBr$ 1278). — IV, 252.

 $\mathbf{C}_{14}\mathbf{H}_{18}\mathbf{NJ}$ 1) Jodisoamylat d. Chinolin. Sm. 184-1850 (M. 2, 82; R. 3, 352; 4, 62). - IV, 252.

2) Jodisobutylat d. 2-Methylchinolin. Sm. 1720 (A. 242, 307). — IV, 308. 3) Jodmethylat d. 3,6-Dimethyl-2-Aethylchinolin + H₂O. Sm. 218°

(B. 18, 3386). — IV, 340.

4) Jodmethylat d. 3,7-Dimethyl-2-Aethylchinolin+H₂O (B. 18, 3399). - IV, 341.

5) Jodmethylat d. 3, 8-Dimethyl-2-Aethylchinolin $+ 2H_2O$ (B. 18, 3401). - IV, 431.

 $C_{14}H_{18}N_2Cl_2$ 1) Dichlormethylat d. 3,3'-Dimethyl-4,4'-Bipyridyl. + CdJ₂, +4HgCl₂,

+ PtCl₄ (J. pr. [2] 48, 8). — IV, 971. 1) Jodäthylat d. 4,4'-Bipyridyl (A. 153, 280). — IV, 954. $\mathbf{C}_{14}\mathbf{H}_{18}\mathbf{N}_{2}\mathbf{J}_{2}$

2) Dijodmethylat d. 3,3'-Dimethyl-4,4'-Bipyridyl (J. pr. [2] 48, 7). IV, 971.

 $\mathbf{C}_{14}\mathbf{H}_{18}\mathbf{N}_{2}\mathbf{S}$ 1) α -Phenyl- β -[5-Methyl-1, 2, 3, 4-Tetrahydrophenyl] thioharnstoff. Sm., 122°. (A. 281, 103). — IV, 51. $C_{14}H_{18}N_4S_2$

1) 1,2-Phenylendi[Allylthioharnstoff]. Sm. 158,5° (A. 228, 201). IV, 560.

2) 1,3-Phenylendi[Allylthioharnstoff]. Sm. 105° (A. 221, 26). — IV, 576. 3) 1,4-Phenylen-s-Di[Allylthioharnstoff]. Sm. 200° (A. 221, 31). IV, 592.

 $C_{14}H_{18}N_4S_3$ 1) Phenylammoniumthiuramsulfid (A. 166, 142). — II, 388. C 77,4 — H 8,7 — O 7,4 — N 6,4 — M. G. 217. $\mathbf{C}_{14}\mathbf{H}_{19}\mathbf{ON}$

1) β -Dimethylamidoäthyläther d. 2-Oxy-1,2-Dihydronaphtalin. Fl. (B. **32**, 748).

C, H,ON

- 2) 2-[α-Oximidoäthyl]-l-Phenylhexahydrobenzol. Fl. (Soc. 57, 320). III, 167.
- 3) 2-Aethylacetylamido-1, 2, 3, 4-Tetrahydronaphtalin. Sd. 3280, 18 **22**, 1301). — **II**, 589.

4) Nitril d. α-Oxyheptanphenyläther-δ-Carbonsäure. Sd. 318-322° (B. 28, 1202).

- 5) Phenylamid d. cis-1-Methylhexahydrobenzol-2-Carbonsäure. Sm.
- 66-68° (109-110°) (Soc. 67, 126; C. 1899 [2] 100). 6) Phenylamid d. trans-1-Methylhexahydrobenzol-2-Carbonsäure. Sm. 148° (153°) (*Soc.* **67**, 124; *C.* **1899** [2] 100). C 72,1 — H 8,2 — O 13,7 — N 6,0 — M. G. 233.

 $C_{14}H_{19}O_{2}N$

- 1) Methylenäther d. α -[3,4-Dioxyphenyl]- β -[2-Hexahydropyridyl]äthan (Piperonyl-α-Pipekolin). Sd. 180—1820 HCl, (2HCl, PtCl₄),
- Pikrat (B. 30, 1581).

 2) Methyläther d. 4-Keto-2,2-Dimethyl-6-[4-Oxyphenyl]hexahydro-
- pyridin (Anisdiacetonamin). Fl. Oxalat (A. 227, 373). IV, 233. 3) 2-Diacetylamido-4-Isopropyl-1-Methylbenzol. Sm. 66° (A. 279, 375). 4) Benzoat d. 1- $[\beta$ -Oxyäthyl] hexahydropyridin. (2HCl, PtCl₄), HJ
- (B. **15**, 1143). **IV**, 18.
- 5) Benzoat d. 2-[β-Oxyäthyl]hexahydropyridin. HCl (Sm. 181—182°) (B. **24**, 1622; A. **301**, 131). — IV, 29.
- 6) 2-Heptylidenamidobenzól-1-Carbonsäure, Sm. 93° (B. 28, 2817).
- 7) P-Oenanthylidenamidobenzol-1-Carbonsäure. Fl. Pb (A. 210, 120). **II**, 1270.
- 8) Methylester d. β-[2,4,5-Trimethylphenyl]amidocrotonsäure. Sm. 60,5° (B. 21, 528). II, 552.
- 9) Phenylamidoformiat d. Oxy-R-Heptamethylen (Suberylester d. Phenylamidoameisensäure). Sm. 85° (J. r. 25, 371; J. pr. [2] 49, 417). II, 372.
- 10) Phenylamidoformiat d. cis-3-Oxy-1-Methylhexahydrobenzol. Sm. 91° (A. **297**, 153).
- 11) Phenylamidoformiat d. trans-3-Oxy-1-Methylhexahydrobenzol. Sm. 90° (A. 289, 143).

- C₁₄H₁₉O₂Br 1) α -Brom-0-[?-Propylphenyl] valerians aure (J. 1877, 381). II, 1400. C₁₄H₁₉O₃N C 67,5 H 7,6 O 19,3 N 5,6 M. G. 249.
 - 1) 3-Methyläther d. 4-Keto-2, 2-Dimethyl-6-[3, 4-Dioxyphenyl]hexahydropyridin (Vanillodiacetonamin). Fl. HCl, (2HCl, PtCl₄), HNO₃, H₂SO₄, Oxalat (A. 194, 53). — IV, 233.
 - 2) α -Oxy- β -[1-Piperidyl]- β -Phenylpropionsäure. Zers. bei 244° (A. 271, 157). — IV, 21.
 - 3) β -[3-Acetylamido-4-Isopropylphenyl]propionsäure. Sm. 168° (B. 19, 418). — II, *1398*.
 - 4) Aethylester d. β -[4-Aethoxylphenyl]amidopropen- α -Carbonsäure. Sm. 52,5—53° (B. **28** [2] 991).
 - 5) Isoamylester d. Benzoylamidoessigsäure. Sm. 27-28° (B. 11, 1247). II, 1184.
 - 6) Methylmonamid d. 1-Methylbenzol-3-Aethyl- $\beta\beta$ -Dicarbonsäuremonäthylester. Sm. 118—120° (B. 23, 111). — II, 1856.
 - 7) Phenylmonamid d. Hexan-αζ-Dicarbonsäure (Ph. d. Korksäure; Suberanilsäure). Sm. 128°. Ca, Ba, Ag (A. 68, 31). — II, 415.
 - 8) Phenylmonamid d. β -Methylpentan- $\beta\delta$ -Dicarbonsäure. Sm. 165° (A. 292, 224).
 - 9) δ -Phenylmonamid d.cis- β -Methylpentan- γ δ -Dicarbonsäure. Sm. 153°;
 - Zers. bei 160° (Soc. 69, 282). 10) δ -Phenylmonamid d. trans- β -Methylpentan- γ δ -Dicarbonsäure. Sm. 160°; Zers. bei 170° (Soc. 69, 282).
 - 11) Phenylmonamid d. β-Methylpentan-γε-Dicarbonsäure. Sm. 159°
 (C. 1896 [2] 703; Soc. 69, 1497, 1508; G. 26 [2] 519).
 - 12) Phenylmonamid d. β -Methylpentan- $\delta \varepsilon$ -Dicarbonsäure. Sm. 138 bis 139° (Soc. 73, 51).
 - 13) Phenylmonamid d. ββ-Dimethylbutan-αγ-Dicarbonsäure. Sm. 159° (150-151°) (Soc. 73, 30; 75, 66).
 14) Phenylmonamid d. βγ-Dimethylbutan-αγ-Dicarbonsäure. Sm. 155°
 - (Soc. 71, 1187).

C₁₄H₁₉O₃N 15) 4-Methylphenylmonamid d. Pentan-αγ-Dicarbonsäure. α-Modif. Sm. 119—120°; β-Modif. Sm. 145,5° (A. 292, 215).

16) 4-Methylphenylmonamid d. fum. Pentan-βγ-Dicarbonsäure. Sm 175

his 176° (A. 298, 163).

17) 4-Methylphenylmonamid d. mal. Pentan-βγ-Dicarbonsäure. Sm. 147 bis 148° (A. 298, 164). 18) 4-Methylphenylmonamid d. mal. Pentan- $\beta\delta$ -Dicarbonsäure. Sm. 179°

(A. 285, 237; 292, 202). 19) 4-Methylphenylmonamid d. β -Methylbutan- $\alpha\beta$ -Dicarbonsäure. Sm.

162º (A. 298, 176). 20) 4-Methylphenylmonamid d. β -Methylbutan- $\beta\gamma$ -Dicarbonsäure. Sm.

126° (A. 285, 235).

21) 4-Methylphenylmonamid d. β -Methylbutan- γ δ -Dicarbonsäure. Sm. 143-144° (A. 298, 179).

 $C_{14}H_{19}O_4N$

C 63,4 - H 7,2 - O 24,1 - N 5,3 - M. G. 265.1) 3,4-Methylenäther d. β -[3,4-Dioxybenzyliden]amido- $\alpha\alpha$ -Dioxyäthandiäthyläther (Piperonalacetalamin). Sd. 238,5% (A. 286, 7). — III, 103. 2) 2-Aethylester d. 1-Isopropylbenzol-4-Carbonsäure-2-Amidoformyl-

essigsäure. Sm. 140° (*J. pr.* [2] 40, 442). — II, 1388. 3) Diäthylester d. Phenylimidodiessigsäure. Sd. 195—200°₁₅ (*B.* 30,

4) Diäthylester d. Phenylamidobernsteinsäure. Sd. 214° u. Zers. (A. **252**, 168). — II, 436.

5) Diäthylester d. 4-Methylphenylamidomalonsäure. Sm. 55° (B. 31, 1815).

6) Diäthylester d. 2,4,6-Trimethylpyridin-3,5-Dicarbonsäure. Sd. 308 bis 310°. HCl, (2HCl, PtCl₄), HJ, (HJ, J₂), HNO₈ (A. **215**, 21; B. **14**, 1638). - IV, 169. C 57,3 - H 6,5 - O 21,8 - N 14,3 - M. G. 293.

C14 H19 O4 N3

1) 2-Propyl-1-[2,4-Dinitrophenyl]hexahydropyridin. Sm. 42° (B. 24, 2106). — IV, 33.

 $C_{14}H_{19}O_5N$

C 59.8 - H 6.8 - O 28.4 - N 5.0 - M. G. 281.

1) Diäthylester d. 4-Keto-1,2,6-Trimethyl-1,4-Dihydropyridin-3,5-Dicarbonsäure. Sm. 193° (B. 19, 25; 20, 159). — II, 2005.

2) Aethylcarbonat d. Aethyl-4-Oxyphenylamidoameisensäureäthyl-

ester. Sm. 60-62° (A. 305, 288).

3) Mono $[\beta\beta$ -Diäthoxylamid] d. Benzol-1, 2-Dicarbonsäure + H_2O (o-Benzoylamidoacetalcarbonsäure). Sm. bei 100° u. Zers. (B. 27, 3103). — II, 1796.

4) 4-Aethoxylphenylmonamid d. Aepfelsäuremonoäthylester. Sm. 235° (G. **28** [2] 195).

 $C_{14}H_{19}O_6N$

 $\dot{\mathbf{C}}$ 56,6 $-\mathbf{H}$ 6,4 $-\mathbf{O}$ 32,3 $-\mathbf{N}$ 4,7 $-\mathbf{M}$. G. 297.

1) Diäthylester d. 2,5-Dimethylpyrrol-3,4-Dicarbonsäure-l-Methylcarbonsäure. Sm. 169°. Pb (A. 236, 314). — IV, 97. C 51,1 - H 5,8 - O 38,9 - N 4,2 - M. G. 329.

 $C_{14}H_{19}O_8N$

1) Glykovanillinaldoxim. Sm. 152° (B. 18, 1664). — III, 578. 2) Nitril d. Tetracetylrhamnonsäure. Sm. 69—70° (B. 29, 1380).

1) Quercittetrachloracetochlorhydrin (A. ch. [5] 15, 48). $\mathbf{C}_{14}\mathbf{H}_{19}\mathbf{O}_{8}\mathbf{C}\mathbf{I}$

1) Acetochlorglykose. Fl. (A. ch. [4] 21, 363; Am. 1, 306). — I, 1048. $\mathbf{C}_{14}\mathbf{H}_{19}\mathbf{O}_{9}\mathbf{C}\mathbf{l}$ $C_{14}H_{19}O_{12}N$ C 42,7 - H 4,8 - O 48,8 - N 3,6 - M. G. 393.

1) Acetonitroglykose. Sm. 145° (J. 1873, 833). — I, 1048.

C14H20ON2

C 72,4 - H 8,6 - O 6,9 - N 12,1 - M. G. 2321) α -Allyl- α -Isobutyl- β -Phenylharnstoff. Sm. 37—39° (B. 24, 3044). —

2) β -Phenylhydrazon- γ -Ketooktan. Sm. 103—104° (G. 28 [2] 282;

J. pr. [2] 58, 402). 3) ζ -Phenylhydrazon- ε -Keto- β -Methylheptan. Sm. 99-100° (B. 22,

2123). — IV, 782.

4) ε -Phenylhydrazon- ζ -Keto- β -Methylheptan. Sm. 92—93 ° (G. 28 [2] 276; *J. pr.* [2] **58**, 398).

5) 6-Oxy-4-Methyl-2-Camphryl-1,3-Diazin. Sm. 124° (PINNER, Imidoäther 289). — IV, 889.

6) Verbindung (aus Valeryleyanessigsäureäthylester) (Bl. [3] 15, 133).

- $\mathbf{C}_{14}\mathbf{H}_{20}\mathbf{ON}_{4}$ C 64,6 - H 7,7 - O 6,2 - N 21,5 - M. G. 260.
 - 1) 1-[5-Acetylamido-2-Methylphenyl]azohexahydropyridin. Sm. 1540 (A. 235, 252). — IV, 1580.
 - 2) Acetaldehydphenylhydrazin. Sm. 77,5° (Bl. [3] 15, 844). IV, 746. 1) Cephaelin = $(C_{14}H_{20}O_{2}N)_{x}$. Sm. 102° (C. 1895 [1] 802). C 67,7 H 8,1 O 12,9 N 11,3 M. G. 248. 1) s-Oenanthylphenylharnstoff. Sm. 89° (B. 28, 476).

 $C_{14}H_{20}O_2N$ $\mathbf{C}_{14}\mathbf{H}_{20}\mathbf{O}_{2}\mathbf{N}_{2}$

- 2) 2,5-Di[Acetylamido]-4-Isopropyl-1-Methylbenzol. Sm. 260° (B. 23, 3563). - IV, 647.
- 3) 1,4-Di[Acetyläthylamido] benzol. Sm. 186-187° (A. 265, 189). -IV, 589.
- 4) $\beta\beta$ -Diisobutyryl- α -Phenylhydrazin. Sm. 158° (B. 27, 1967 Anm.). - IV, 667.
- 5) Phenylen-1,4-Di [Acetimidoäthyläther]. 2HCl. Sm. oberh. 240° u.
- Zers. (B. 21, 2660). II, 1852. 6) Aethylester d. δ-Phenylhydrazonpentan-β-Carbonsäure. Sm. 105° (G. 21 [2] 30). - IV, 692.
- 7) 4-Isopropylbenzylidenamid d. Essigsäure (Cumylendiacetamid). Sm. 212° (B. 8, 1150). — III, 56.
- $C_{14}H_{20}O_{2}Cl_{2}$ 1) Diisobutyläther d. 2,6-Dichlor-1,4-Dioxybenzol (M. 3, 682). II. 942.
- $C_{14}H_{20}O_2Br_2$ 1) Diisobutyläther d. 2,5-Dibrom-1,4-Dioxybenzol (M. 3, 683). II, 944.
- $C_{14}H_{20}O_2S_4$ 1) Tetraäthyläther d. 2, 3, 5, 6-Tetramerkapto-1, 4-Benzochinon. Sm. 90 bis 91° (Am. 19, 292).
- C 63.6 H 7.6 O 18.2 N 10.6 M. G. 264.C14H20O3N2
 - 1) 3,5-Di[Aethylacetylamido]-1-Oxybenzol. Sm. 195° (M. 14, 409). —
 - 2) 2,6-Di[Acetylamido]-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 260 bis 262° (G. 20, 425). II, 773.
 3) Verbindung (aus Nikotin u. Essigsäureanhydrid). Fl. (HCl, PtCl₄)
- $(Bl. \ [3] \ 11, \ 109). IV, 857.$ $C_{14}H_{20}O_{3}Br_{2} \ 1) \ 5, 5 Dibrom 2, 4, 6 Triketo 1, 1, 3, 3 Tetraäthylhexahydrobenzol.$ Sm. 80—82° (M. 10, 753; 14, 378). — II, 1026.
- C 60.0 H 7.1 O 22.9 N 10.0 M. G. 280. $\mathbf{C}_{14}\mathbf{H}_{20}\mathbf{O}_{4}\mathbf{N}_{2}$

 - 1) P-Dinitro-1-norm. Oktylbenzol. Sm. 2266 (B. 19, 2724). II, 107. 2) P-Dinitro-tert. Dibutylbenzol. Sm. 167—1686 (B. 27, 1608). 3) 2,5-Dinitro-1,4-Dipseudobutylbenzol. Sm. 1776 (Bl. [3] 19, 73). 4) 3,6-Dinitro-1,2,4,5-Tetraäthylbenzol. Sm. 1446 (B. 31, 1717).
 - 5) P-Dinitro-P-Tetraäthylbenzol. Sm. 115° (B. 16, 1745). II, 107.
 6) Diäthylester d. βε-Dicyanhexan-βε-Dicarbonsäure. Sd. 300—310°

 - (B. 24, 3998). I, 1226. 7) Diäthylester d. 1,2-Phenylendi[amidoessigsäure]. Sm. 135° (B. 16, 515). — IV, 559.
 - 8) Diäthylester d. 1,3-Phenylendi [amidoessigsäure]. Sm. 73° (B. 15,
 - 518; 16, 514). IV, 576. 9) Diäthylester d. 1,4-Phenylendi[amidoessigsäure]. Sm. 83° (B. 16, 515). — IV, 590.
 - 10) Base (aus Fibrin). Sm. 248-250° (G. 17, 509). III, 890.
- C₁₄H₂₀O₄Cl₄ 1) Tetrachlordiäthylester d. d-Camphersäure (A. ch. [2] 70, 360). I, 725.
- 1) 2-Oktylthiophen-?-Dicarbonsäure. Sm. 185° u. Zers. Ba $+ 1^{\circ}/_{2}$ H₂O, C14H20O4S Cu + $2^{1/2}$ H₂O, Ag₂ + 3H₂O (B. 19, 646). — III, 760. C 56,8 — H 6,8 — O 27,0 — N 9,4 — M. G. 296. 1) Pupin (B. 25 [2] 758). — III, 927.
- $C_{14}H_{20}O_5N_2$
 - - 2) Diäthylester d. 4-Methoxylbenzylidendi [amidoameisensäure]. Sm. 171—172° (B. **7**, 1080). — **III**, 85.
 - 3) Nitril d. 4-Methylphenylamidodextrosecarbonsäure. Sm. 128° (B. **27**, 1288).
 - 4) Nitril d. 4-Methylphenylamidogalaktosecarbonsäure. Sm. 145-146°
 - (B. **27**, 1289). 5) Verbindung (aus Oxalessigsäureäthylester u. Phenylhydrazin). Sm. 105 bis 106° (B. 24, 3006). — IV, 712.

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 $C_{14}H_{20}O_5Br_2$ 1) Diäthylester d. 5-Keto-3,4-Dibrom-1,3-Dimethylhexahydrobenzol-2, 6-Dicarbonsäure. Fl. (A. 281, 108). — II, 1930. C 53,8 — H 6,4 — O 30,8 — N 9,0 — M. G. 312.

1) Diäthylester d. $\delta \varepsilon$ -Diimido- $\beta \eta$ -Diketooktan- $\gamma \xi$ -Dicarbonsäure. Sm. 132° (B. 31, 2942). $C_{14}H_{20}O_8Cl_2$ 1) Tetracetat d. Dichlorhexinalkohol (aus Mannit). Sm. $128-130^{\circ}$

(Griner, thèse 75). — I, 416.

2) Tetracetat d. Dichlorhexinalkohol (aus Mannit). Sm. 169 — 170° (Griner, these 75). — I, 416.

3) Dipropylester d. αβ-Di[Chloracetoxyl]äthan-αβ-Dicarbonsäure. Sd. 204—205°₁₅ (Bl. [3] 13, 1057).
 1) Jodmethylat d. 3,3-Dimethyl-2-Isopropylpseudoindol. Sm. 185°

 $\mathbf{C}_{14}\mathbf{H}_{20}\mathbf{NJ}$ (B. 31, 1499). 2) Jodmethylat d. P-Diäthyl-P-Dihydrochinolin. Sm. 1890 (B. 29, 2479;

A. 242, 361). — IV, 230.

1) Di[Jodmethylat] d. Bipikolin. + J₀ (J. 1878, 440). — - IV, 126. $C_{14}H_{20}N_2J_2$

1) α-Allyl-α-Isobutyl-β-Phenylthioharnstoff. Sm. 41-43° (B. 24, 3045). $\mathbf{C}_{14}\mathbf{H}_{20}\mathbf{N}_{2}\mathbf{S}$ **— II**, 393. C₁₄H₂₀N₆Fe 1) Ferrocyanäthyl. Zers. bei 212-214° (B. 21, 935; C. 1897 [2] 195).

— I, 1463. C 76,7 — H 9,6 — O 7,3 — N 6,4 — M. G. 219. $\mathbf{C}_{14}\mathbf{H}_{21}\mathbf{ON}$

1) 3-Diäthylamido-2-Oxy-1,2,3,4-Tetrahydronaphtalin. Sd. 20208 HCl, (2HCl, PtCl₄), (HCl, AuCl₃), Pikrat (B. 26, 1837; A. 288, 120). II, 855.

2) 4 - Acetylamido - 2 - Propyl - 1, 3, 5 - Trimethylbenzol. Sm. 161° (B.

28, 2462).

3) α-Oximido-α-Phenyloktan. Sm. 50° (B. 30, 1943).
 4) α-Oximido-α-[4-Methylphenyl]heptan. Fl. (Soc. 67, 505). — III, 156.

5) 2-[α-Oximidobutyl]-4-Isopropyl-1-Methylbenzol. Fl. (J. pr. [2] 46, 487). — III, 157. 6) 2-[α-Oximidoisobutyl]-4-Isopropyl-1-Methylbenzol. Fl. (J. pr. [2])

46, 486). — III, 157. 7) N-Benzylönanthaldoxim. Sm. 85° (78°; 83°) (J. pr. [2] 56, 74; B. 25,

2595; A. 298, 191). — II, 536.

8) 2-[β-Oxyäthyl]-1-Benzylhexahydropyridin. Sd. 318—321° (A. 301, 143). 9) Phenyläther d. 1- $[\gamma$ -Oxypropyl]hexahydropyridin. Sd. 313 $^{\circ}_{755}$. HCl,

Pikrat (B. 29, 2388). — IV, 18.

10) Phenylamid d. β -Methylhexan- δ -Carbonsäure. Sm. 77 — 78° (Bl. [3] 13, 184).

11) 4-Methylphenylamid d. Oenanthsäure. Sm. 78-79° (Soc. 67, 506). **– II**, 494.

 $C_{14}H_{21}O_2N$

12) 4-Methylphenylamid d. β -Methylpentan- δ -Carbonsäure. Sm. 86° (Soc. 67, 512).

13) 5-Pseudobutyl-1,3-Dimethylphenylamid d. Essigsäure. (C. 1898 [2] 1232).

14) 1-Propyl-4-Isopropyl-?-Phenylamid d. Essigsäure. Sm. 70-710 (G. 21, 8). - II, 565.

C 68,0 - H 8,5 - 0 6,5 - N 17,0 - M. G. 247. $C_{14}H_{21}ON_{3}$

1) β -Phenylhydrazon- γ -Oximidooktan. Sm. 110° (G. 28 [2] 282; J. pr. 2] 58, 402).

 ξ -Phenylhydrazon- ε -Oximido- β -Methylheptan. Sm. 131,5° (B. 22, 2123). — IV, 782.

3) ε -Phenylhydrazon- ζ -Oximido- β -Methylheptan. Sm. 113—1140 (G. 28) [2] 276; J. pr. [2] **58**, 398). C 71,5 — H 8,9 — O 13,6 — N 6,0 — M. G. 235.

1) 2-Nitro-1-norm. Oktylbenzol. Fl. (B. 19, 2722). — II, 107.
2) 3-Nitro-1-norm. Oktylbenzol. Sm. 123—124° (B. 19, 2721). — II, 107.
3) 4-Nitro-1-norm. Oktylbenzol. Sm. 204° (B. 19, 2723). — II, 107.
4) Nitroderivat d. Kohlenw. $C_{14}H_{52}$ (aus Fichtentheer) (Bl. [3] 11, 1151).
5) α -[Phenylamido]önanthsäure. Sm. 147,3° (B. 25, 2051). — II, 436.

6) 3-Oenantholamidobenzol-1-Carbonsäure. Disulfit (A. 210, 125). II, 1270.

7) Aethylester d. α -Benzylamidoisovaleriansäure. Sd. $274-276^{\circ}_{768}$ (B. 30, 3171).

C₁₄H₂₁O₂N 8) Aethylester d. α-Methylphenylamidoisovaleriansäure. Sd. 180 bis 190°₅₈ (B. **31**, 3024).

9) Aethylester d. α-[2-Methylphenyl]amidoisovaleriansäure. Sm. 30°; Sd. 282-284°₇₆₂ (B. 30, 2465).
10) Aethylester d. α-[4-Methylphenyl]amidoisovaleriansäure. Sd. 295°₇₅₃.

(B. 30, 2469).

11) Aethylester d. α-Aethylphenylamidobuttersäure. Sd. 273-276°₇₅₁ (B. 30, 3179).

12) Aethylester d. α -[2,4-Dimethylphenyl]amidobuttersäure. Sd. 285 bis 290°_{753} (B. 30, 2476).

13) Aethylester d. α-[2,4-Dimethylphenyl]amidoisobuttersäure. Sd. 270 bis 275°₇₈₇ (B. 30, 2477).

14) Amylester d. β-[4-Amidophenyl]propionsäure. Fl. HCl (B. 28, 1921). C 66,9 - H 8,4 - O 19,1 - N 5,6 - M. G. 251.

1) Diäthyläther d. β -[3-Methoxylbenzyliden]amido- $\alpha\alpha$ -Dioxyäthan. Sd. 222°_{50} (A. 286, 7). — III, 79.
2) Diäthyläther d. β -[4-Methoxylbenzyliden]amido- $\alpha\alpha$ -Dioxyäthan.

(p-Methoxybenzalamidoacetal). Sd. 190°₁₂. Oxalat (B. 27, 3097). — III, 84.

3) α -Benzoat d. γ -Diäthylamido- $\alpha\beta$ -Dioxypropan. Fl. Pikrat (B. 15, 1152). — II, 1141.

4) Verbindung (Oxim aus Digitogensäure). Sm. 175°. Mg, Ba + 6 H₂O (B. **27** [2] 881) — III, 581.

C₁₄H₂₁O₃N₂ 1) Verbindung (aus Nikotin u. Essigsäureanhydrid) (Existenz fraglich). Sd.

C14H21O8N

 $\mathbf{C}_{14}\mathbf{H}_{21}\mathbf{O}_4\mathbf{N}$

330° u. Zers. (HCl,PtCl₄) (Bl. [3] 11, 109; B. 26, 2135).

C₁₄H₂₁O₃Br 1) 5-Brom-2, 4, 6-Triketo-1, 1, 3, 3-Tetraäthylhexahydrobenzol. Sm. 85 bis 88° (M. 9, 889; 10, 736). — II, 1025.

2) 5-Brom-2, 4-Diketo-6-Oxy-1, 1, 3, 3-Tetraäthyl-1, 2, 3, 4-Tetrahydro-

benzol. Sm. 115—118°. Na, K (M. 9, 889; 10, 736). — II, 1025.

3) 3-Methyläther- α , 4-Diäthylätherd. β -Brom- α -Oxy- α -[3, 4-Dioxyphenyl]propan. Fl. Zers. bei 225—230° (B. 29, 678). C 62.9 - H 7.9 - O 24.0 - N 5.2 - M. G. 267.

1) Diäthyläther d. β -[4-Methoxylbenzoyl]amido- $\alpha\alpha$ -Dioxyäthan (Anisylamidoacetal). Sm. 60-61° (B. 27, 3099). - II, 1529. 2) Diacetat d. Oxybishydrocarvoxim. Sm. 107° (A. 291, 348). — III, 483.

3) Aethylester d. Camphersäureimidoessigsäure. Sm. 860 (J. 1887, 1606). — **I**, *1393*.

4) Diäthylester d. 2,4,6-Trimethyl-2,3-Dihydropyridin-3,5-Dicarbonsäure (D. d. Dihydrocollidindicarbonsäure). Sm. 131°; Sd. oberh. 315° (B. 14, 1637; 24, 1666; A. 215, 8; 225, 123; 226, 314; C. 1897 [1] 903). - IV, 94.

C 59.4 - H 7.4 - O 28.3 - N 4.9 - M. G. 283.C14H21O5N 1) Oxim d. Dimethylester d. Ketonsäure C₁₂H₁₆O₅. Sm. 121° (C. 1896)

> 2] 1115). 2) Diäthylester d. 1-Oximido-3,5-Dimethyl-1,2,3,4-Tetrahydrobenzol-2,4-Dicarbonsäure. Sm. 175° (A. 281, 107). — II, 1930.

 $C_{14}H_{21}O_5Cl_3$ 1) 1,2,2,4-Tetraäthyläther d. 3,5,6-Trichlor-1,1,2,2,4-Pentaoxy-1,2-Dihydrobenzol. Sm. 140° u. Zers. (B. 27, 553). $\mathbf{C}_{14}\mathbf{H}_{21}\mathbf{O}_{6}\mathbf{N}$

C 56,2 - H 7,0 - O 32,1 - N 4,7 - M. G. 299.1) Triäthylester d. β -Cyanbutan- $\alpha\beta\gamma$ -Tricarbonsäure. Sd. 219,5 bis 221,5 $^{\circ}_{30}$ (A. ch. [6] 27, 283). — II, 1226.

2) Triäthylester d. α -Cyan- β -Methylpropan- $\alpha\beta\gamma$ -Tricarbonsäure. 190°_{15} (B. **25** [2] 579). — II, 1226.

1) s-Phenyl-α-Imidoheptylthioharnstoff (Heptenylimidophenylthioharn- $\mathbf{C}_{14}\mathbf{H}_{21}\mathbf{N}_{3}\mathbf{S}$ stoff). Sm. 64° (B. 28, 476).

1) Aethylphenylamid d. Dimethyläthyldithioallophansäure (Dimethyl-

 $C_{14}H_{21}N_3S_2$ diathylphenyldithiobiuret). Sm. 113,5-114° (B. 26, 1687). - II, 400. C 71.8 - H 9.4 - O 6.8 - N 12.0 - M. G. 234.C14H22ON2

- 1) 4-Isobutylnitrosamido-1-Isobutylbenzol (A. 211, 240). II, 557. 2) ζ -Phenylhydrazon- β -Oxy- β -Methylheptan. Sd. 226°_{28} (Bl. [3] 17, 186).
- IV, 769.
 Amid d. α-Phenylamidoönanthsäure. Sm. 105,3° (B. 25, 2051). II, 436.
- 1) 5-Acetyl-2-Oktylthiophen. Sd. 350-355° (B. 19, 646). III, 766. $C_{14}H_{22}OS$

 $C_{14}H_{23}O_3N$

C 67,2 — H 8,8 — O 12,8 — N 11,2 — M. G. 250. 1) Diacetyldipiperidein. Sd. 219,5—220,5° (B. 22, 1330). — IV, 532. $C_{14}H_{22}O_2N_2$ 2) s - $\beta\beta$ - Tetramethyldiamidoisopropylester d. Benzolcarbonsäure. $\begin{array}{c} (2 \text{HCl}, \text{PtCl}_4) & (B. \ 17, \ 510). \ -\ \text{II}, \ 1140. \\ \textbf{C}_{14} \textbf{H}_{22} \textbf{O}_2 \textbf{Br}_2 \ 1) & \textbf{Dibrommyristols} \\ \textbf{C}_{14} \textbf{H}_{22} \textbf{O}_2 \textbf{S}_4 & 1) & 2,3,5,6 - \text{Tetraäthyläther d.} \ 2,3,5,6 - \text{Tetramerkapto-1,4-Dioxybenzol.} \\ \textbf{Sm. } 58 - 59^0 & (Am. \ 19, \ 293). \\ \textbf{C}_{14} \textbf{H}_{22} \textbf{O}_3 \textbf{S} & 1) & \textbf{Oktylbenzolsulfonsäure.} \\ \textbf{Ba} + \textbf{H}_2 \textbf{O}, \ \textbf{Pb} + 3 \textbf{H}_2 \textbf{O}, \ \textbf{Ag} + \textbf{H}_2 \textbf{O} \ (B. \ 19,$ 642). — II. 160. 2) tert. Dibutylbenzolsulfonsäure. Ba + 7H₂O (B. 27, 1608). 3) 1,2,3,4-Tetraäthylbenzol-5-Sulfonsäure. $Na + 5H_2O$, $Ba + 6H_2O$, $Cd + 7H_2O$, $Cu + 8H_2O$ (B. 16, 1746; 21, 2818). — II, 160. 4) 1,2,4,5-Tetraäthylbenzol-3-Sulfonsäure. Na $+4H_2O$, Ba $+9H_2O$ (B. 21, 2820). — II, 160. 5) Sulfonsäure d. Kohlenw. C₁₄H₂₂ (aus Fichtentheer). Ba (Bl. [3] 11, $C_{14}H_{22}O_3Cl_2$ 1) Diäthyläther d. 3,6-Dichlor-2,5-Dioxy-1,4-Benzochinondiäthylhemiacetal. Sm. $140-143^{\circ}$. Na₂ (Am. $1\overline{7}$, 604). — III, 351. C 50,9 — H 6,7 — O 33,9 — N 8,5 — M. G. 330. $C_{14}H_{22}O_7N_2$ 1) Phenylhydrazon d. α-Galaoktose. Sm. 200-205° (205-210° cor.) (A. 288, 151). - IV, 794.2) Phenylhydrazon d. α-Glykooktose. Sm. 190° u. Zers. (A. 270, 97). — IV, 792.
3) Phenylhydrazon d. d-Mannoktose. Sm. 212° u. Zers. (B. 23, 2235). - IV, 794. 4) Phenylhydrazid d. Rhamnoheptonsäure. Sm. bei 215° u. Zers. (B. 23, 3107). — IV, 730. 5) Verbindung (aus Rhamnodiazin) (B. 22, 3248). — I, 290.
 C 48,6 — H 6,3 — O 37,0 — N 8,1 — M. G. 346.
 1) Phenylhydrazid d. α-Galaoktonsäure. Sm. bei 230° (235° cor.) u. $C_{14}H_{22}O_8N_2$ Zers. (A. 288, 149). — IV, 732. 2) Phenylhydrazid d. d-Mannooktonsäure. Sm. 243° u. Zers. (B. 23, 2233). — IV, 732. 1) Jodmethylat d. Methylbenzylhexahydropyridin (B. 15, 424). — IV, 9. $\mathbf{C}_{14}\mathbf{H}_{22}\mathbf{NJ}$ 2) Jodmethylat d. 1,2,4,4 oder 1,3,4,4-Tetramethyl-1,2,3,4-Tetrahydrochinolin. subl. bei 240° (*G.* 28 [1] 195). C 76,0 — H 10,4 — O 7,2 — N 6,3 — M. G. 221. C14H23ON 1) Bicyklo-Methylhexen-Methylhexanon. Sm. 1520 (B. 29, 1596, 2966). 2) Phenyläther d. α-Oxy-δ-Amidomethylheptan (ε-Phenoxyl-β-Propylamylamin). (2 HCl, PtCl₄), Pikrat (B. **28**, 1202). C 67,5 — H 9,2 — O 6,4 — N 16,9 — M. G. 249. $\mathbf{C}_{14}\mathbf{H}_{23}\mathbf{ON}_{3}$ 1) Semicarbazon d. Citriodorylidenaceton. Sm. 134-135° (J. pr. [2] 57, 80). 2) Semicarbazon d. Allo-Lemonylidenaceton. Sm. 142-143° (J. pr. [2] **58**, 89). 3) Semicarbazon d. Iron. Fl. (B. 28, 1755). — III, 117. 4) Semicarbazon d. α-Jonon. α-Modif. Sm. 107—108°; β Modif. Sm. 137 bis 138° (B. 28, 1754; 31, 876, 1738). — III, 117. 5) Semicarbazon d. β-Jonon. Sm. 148-149° (B. 31, 871, 1737; J. pr. [2] **57**, 495). 6) Semicarbazon d. Pseudojonon. Sm. 1420 (B. 31, 843, 1737; J. pr. [2] 57, 494). 1) Hydrochlorid d. Keton C₁₄H₂₂O. Sm. 90° (B. **29**, 1595, 2966).
1) Hydrobromid d. Keton C₁₄H₂₂O. Sm. 90—91° (B. **29**, 1595).
C 70,9 — H 9,7 — O 13,5 — N 5,9 — M. G. 237. $C_{14}H_{23}OC1$ $\mathbf{C}_{14}\mathbf{H}_{23}\mathbf{OBr}$ $\mathbf{C}_{14}\mathbf{H}_{23}\mathbf{O}_{2}\mathbf{N}$ 1) Propylderivat d. Cyancampher. Fl. (B. 22 [2] 576). — III, 497. C 63,4 — H 8,7 — O 12,1 — N 15,8 — M. G. 265. $\mathbf{C_{14}H_{28}O_{2}N_{3}}$ 1) ?-Nitro - 4 - Diäthylamido - 6 - Aethylamido - 1,3 - Dimethylbenzol? (2HCl,PtCl₄), HJ (A. 113, 164). — IV, 642. C 57,3 — H 7,8 — O 10,9 — N 23,9 — M. G. 293. $\mathbf{C}_{14}\mathbf{H}_{23}\mathbf{O}_{2}\mathbf{N}_{5}$ 1) Dipropylamidokaffein. Sm. 95° (B. 31, 1140).

C 66,4 — H 9,1 — O 19,0 — N 5,5 — M. G. 253. 1) Diäthyläther d. β -[4-Methoxylbenzyl]amido- $\alpha\alpha$ -Dioxyäthan (p-Me-

thoxybenzylamidoacetal). Sm. 1870, (B. 27, 3098).

2) Aethylester d. 1-Oximido-3-Isobutyl-5-Methyl-1, 2, 3, 4-Tetrahydro- $C_{14}H_{23}O_{3}N$ benzol-4-Carbonsäure. Sm. 101—103° (A. 288, 335).

 $\mathbf{C}_{14}\mathbf{H}_{23}\mathbf{O}_{3}\mathbf{Cl}_{3}$ 1) $C_{14}H_{23}O_4N$

- Chloralalkoholateampher. Fl. (J. 1878, 645). III, 487.
 C 62,4 H 8,5 O 23,8 N 5,2 M. G. 269.
 Isovalerianat d. d-Ecgonin. Sm. 216°. HCl, (2HCl, PtCl₄) (B. 24, 11). - III, 866.
- C₁₄H₂₃NBr₂ 1) Bromäthylat d. 2-Brommethyl-1-Diäthylamidomethylbenzol (B. 31,
- 1) Methyläther d. Thiodipiperidinammelin. Sm. 106—107°. (2 HCl, PtCl₄) (B. 18, 2779). IV, 14. $C_{14}H_{28}N_5S$

C 71,2 - H 10,2 - O 6,8 - N 11,8 - M. G. 236. $\mathbf{C}_{14}\mathbf{H}_{24}\mathbf{ON}_{2}$

1) Camphersäureäthylimid-Aethylimidin. Sd. 285—286°. HCl, (2HCl, PtCl₄), HJ (B. 13, 520; 14, 162; A. 214, 245). — I, 1392.
2) Base (aus Cuskoblättern). Sd. 215°₅₀. 2HCl, (2HCl, 2AuCl₃), 2HBr, 2HJ, Pikrat (B. 22, 678; 24, 409). — III, 878.

 $C_{14}H_{24}O_{2}Br_{4}$ 1) Tetrabrommyristinsäure (A. 202, 177). — I, 488. $\mathbf{C}_{14}\mathbf{H}_{24}\mathbf{O}_{3}\mathbf{N}_{2}$ C 62.8 - H 8.9 - O 17.9 - N 10.4 - M. G. 268.

- C₁₄H₂₄O₃N₂ C 52,8 H 8,9 O 17,9 N 10,4 M. G. 208.

 1) Nitrosocarpain. Sm. 144-145°. III, 804.

 C₁₄H₂₄O₄N₂ C 59,2 H 8,4 O 22,5 N 9,9 M. G. 284.

 1) Diäthylester d. Aethylendi[β-Amidopropen-α-Carbonsäure]. Sm. 126-127° (B. 20, 274). I, 1207.

 2) Diäthylester d. βη-Diamido-βζ-Oktadiën-γζ-Dicarbonsäure? (D. d. Diamidodiäthylidenadipinsäure). Sm. 173-174° (Soc. 57, 218). I, 821.

 C₁₄H₂₄O₄Br₂ 1) Diäthylester d. Dibromsebacinsäure. Fl. (B. 20, 2886).

 C₁₄H₂₄O₆N₂ C 53,2 H 7,6 O 30,4 N 8,8 M. G. 316.

- 1) Diäthylester d. γζ-Dioximidooktan-α θ-Dicarbonsäure. Sm. 129—130° (A. **294**, 175).
- 1) Tetraäthylester d. 1,3-Dioxybenzoldiphosphinsäure. Fl. (B. 27, $C_{14}H_{24}O_8P_2$ 2567). **— II**, *918*.
 - 2) Tetraäthylester d. 1,4-Dioxybenzoldiphosphinsäure. Fl. (B. 27, 2568). **- II**, 941.

 $C_{14}H_{24}O_{15}S$ 1) Stärkeschwefelsäure (A. 55, 13). — I, 1087.

- $C_{14}H_{24}NCl$ 1) Methyläthylisoamylphenylammoniumchlorid. $2 + PtCl_4$ (A. 79, 13). - II, 336.
- $\mathbf{C}_{14}\mathbf{H}_{24}\mathbf{NJ}$ 1) Methyläthylisoamylphenylammoniumjodid (A. 79, 13). — II, 336. 2) Trimethyl-[1-Isoamyl-?-Phenyl]ammoniumjodid (B. 7, 529).—II, 563.
- $C_{14}H_{24}N_2Cl_2$ 1) Dichloräthylat d. Nikotin. $+3HgCl_2$, $+PtCl_4$, $+2AuCl_3$ (A. 87, 3). **- IV**, 857.
 - 2) Di[Chlorpropylat] d. $\alpha\beta$ -Di[Methyläthylamido]äthan. 2 + PtCl₄ (C. 1898 [1] 727).

 $\mathbf{C}_{14}\mathbf{H}_{24}\mathbf{N}_{2}\mathbf{J}_{2}$

- 1) Dijodäthylat d. Nikotin (A. 87, 4). IV, 856. 2) 1,6-Dijodmethylat d. 6-Dimethylamido-1-Methyl-1,2,3,4-Tetrahydrochinolin. Sm. 171° (B. 21, 865). — IV, 853. 1) Triäthyl-4-Aethylphenylphosphoniumjodid (A. 293, 325). — IV, 1675.
- $C_{14}H_{24}JP$ 2) Triäthyl-2,4-Dimethylphenylphosphoniumjodid. Sm. 136° (B. 15, 2016). — **IV**, 1676.

3) Methyldiäthyl-2,4,5-Trimethylphenylphosphoniumjodid. Sm. 160°

(A. 294, 34). — IV, 1679. 4) Methyldiäthyl-2,4,6-Trimethylphenylphosphoniumjodid. Sm. 125°

 $\mathbf{C}_{14}\mathbf{H}_{25}\mathbf{ON}$

- u. Zers. (A. 294, 47). IV, 1680. C 75,3 H 11,2 O 7,2 N 6,3 M. G. 223. 1) 1-Butyrylfenchylamin. Sm. 77,5° (A. 276, 319). IV, 58. 2) Methyläthylisoamylphenylammoniumhydrat. (2HCl, PtCl₄), HJ (A.
- 79, 13). C 70,3 H 10,5 O 13,4 N 5,8 M. G. 239. 1) Carpaïn. Sm. 121°. HCl, (2HCl, PtCl₄), (HCl, AuCl₃ + 5H₂O), HBr, HJ, HNO₃ + H₂O, H₂SO₄ + 3H₂O (C. 1897 [1] 985; 1897 [2] 554). III, 804. $C_{14}H_{25}O_{2}N$

 $C_{14}H_{25}O_2Br$ 1) Säure (aus Myristinsäure). Ba (B. 25, 486). C 62.0 - H 9.2 - O 23.6 - N 5.2 - M. G. 271. $\mathbf{C}_{14}\mathbf{H}_{25}\mathbf{O}_{4}\mathbf{N}$

1) Cinneoldiäthylaminsäure. Sm. 162-163° (A. 271, 22). - I, 1398. 2) Diäthylester d. α -Piperidylpropan- $\alpha\beta$ -Dicarbonsäure. Sd. $163-164^{\circ}_{10}$. HCl (Soc. 73, 725).

3) Dipropylester d. i-Tropinsäure. Fl. (B. 28, 3291). — III, 794.

 $C_{14}H_{25}O_4Cl$ 1) 1-Diamylester d. i-Chlorbernsteinsäure (C. 1898 [2] 917). 2) i-Diamylester d. d-Chlorbernsteinsäure (C. 1898 [2] 917). 3) 1-Diamylester d. d-Chlorbernsteinsäure (C. 1898 [2] 917). C 70,6 — H 10,9 — O 6,7 — N 11,8 — M. G. 238. 1) Terpinennitroldiäthylamin. Sm. 117—118° (A. 241, 319). — III, 532. $\mathbf{C}_{14}\mathbf{H}_{26}\mathbf{ON}_{2}$ 1) Dibromderivat d. Diönanthylenaldehyd (B. 16, 212). - I, 962. $\mathbf{C}_{14}\mathbf{H}_{26}\mathbf{OBr}_{2}$ C 62,2 - H 9,6 - O 17,8 - N 10,4 - M.G. 270. $C_{14}H_{26}O_3N_2$ Methylester d. αα-Dipiperidyl-α-Oxyessigmethyläthersäure. Sd. 166°₂₀ (B. 28, 62).
 C 58,7 — H 9,1 — O 22,4 — N 9,8 — M. G. 286. $C_{14}H_{26}O_4N_2$ Oxychrysanthemin. HCl, (2HCl, AuCl₃) (6, 21 [1] 523). — III, 862.
 C 44,0 — H 6,7 — O 42,0 — N 7,3 — M. G. 382.
 Chitosan (B. 27, 3329; 28, 82; H. 20, 498; 22, 301, 305). — III, 576. $\mathbf{C}_{14}\mathbf{H}_{26}\mathbf{O}_{10}\mathbf{N}_{2}$ C₁₄H₂₈N₂Cl₂ 1) Dichlormethylat d. 1,2-Di [Dimethylamidomethyl] benzol. + HgCl₃, $+ \text{ PtCl}_4 + \frac{1}{2} \text{ H}_2 \text{ O} \text{ (B. 31, 593)}.$ 2) Dichlormethylat d. 4-Dimethylamido-1-Diäthylamidobenzol. +PtCl, +2AuCl₃ (M. 4, 788). — IV, 583. C₁₄H₂₆N₂Br₂1) Dibrommethylat d. 1,2-Di[Dimethylamidomethyl]benzol. Sm. 207 bis 208° (B. 31, 593). 1) Dijodmethylat d. 4-Dimethylamido-l-Diäthylamidobenzol. Sm. 2180. $C_{14}H_{26}N_2J_2$ $+ \operatorname{CdJ}_{2} (M. 4, 788). - \operatorname{IV}, 583.$ 1) s-Allyl-4-Isopropylbenzylthioharnstoff. Sm. 47° (B. 22, 932). — $C_{14}H_{26}N_{2}S$ II, 561. 2) s-Allyl-d-Menthylthioharnstoff. Sm. 110° (A. 276, 311). — IV, 43. C 74,7 — H 12,0 — O 7,1 — N 6,2 — M. G. 225.
1) d-Menthylamid d. Buttersäure. Sm. 105—106° (A. 276, 310). — $\mathbf{C}_{14}\mathbf{H}_{27}\mathbf{ON}$ IV, 43. 2) 1-Menthylamid d. Buttersäure. Sm. 80° (A. 276, 304). — IV, 42. Chlorid d. Myristinsäure. Sm. -1°; Sd. 168°₁₆ (B. 17, 1379). -1, 460.
 C 69,7 - H 11,2 - O 13,3 - N 5,8 - M. G. 241. $\mathbf{C}_{14}\mathbf{H}_{27}\mathbf{OCl}$ $\mathbf{C}_{14}\mathbf{H}_{27}\mathbf{O}_{2}\mathbf{N}$ 1) Aethylester d. trans-1-Diäthylamidomethylhexahydrobenzol-2-Carbonsäure. Sd. 165°_{25} (A. 300, 167). C 62,4 — H 10,0 — O 11,9 — N 15,6 — M. G. 269. $C_{14}H_{27}O_{2}N_{3}$ 1) β -Nitro- $\alpha\gamma$ -Dipiperidyl- β -Methylpropan. Sm. 98—99° (Bl. [3] 15, C 56,5 - H 9,1 - O 10,8 - N 23,6 - M. G. 297. $\mathbf{C}_{14}\mathbf{H}_{27}\mathbf{O}_{2}\mathbf{N}_{5}$ 1) Dicapronamidinbiuret. Sm. 236° (B. 23, 2922). — I, 1160. Brommyristinsäure. Sm. 31° (B. 22, 1746; 25, 486). — I, 488.
 Aethylester d. α-Bromundekan-α-Carbonsäure. Sd. 172—174°₁₀ $\mathbf{C}_{14}\mathbf{H}_{27}\mathbf{O}_{2}\mathbf{Br}$ (B. 24, 2224). — I, 488. 1) Diacetoxyldiisoamylunterphosphorige Säure. Fl. (A. ch. [6] 23, 325). $C_{14}H_{27}O_6P$ **- I**, 1505. C 70,0 — H 11,7 — O 6,6 — N 11,7 — M. G. 240. 1) Isobutyl-l-Menthylnitrosamin. Sm. $52-53^{\circ}$; Sd. $160-161^{\circ}_{20}$ (A. 300, $\mathbf{C}_{14}\mathbf{H}_{28}\mathbf{ON}_{2}$ 1) Diheptylenoxysulfid. Sd. 200-250° (A. Spl. 6, 35). — I, 956. $C_{14}H_{28}OS$ C 65,6 — H 10,9 — O 12,5 — N 10,9 — M. G. 256. 1) sym. Hexylönanthylharnstoff. Sm. 97° (B. 15, 759). — I, 1304. C14H28O2N2 2) Di[Methyloxydhydrat] d. 4-Dimethylamido-1-Diäthylamidobenzol. Chlorid, Jodid, Pikrat (M. 4, 788). — IV, 583.
3) Dipseudohexylamid d. Oxalsäure. Sm. 144° (B. 23, 194). — I, 1366. 4) Di $[\beta\beta$ -Dimethylbutylamid d. Oxalsäure. Sm. 102° (B. 26, 2493). C 61,8 — H 10,3 — O 17,6 — N 10,3 — M. G. 272. $C_{14}H_{28}O_3N_2$ 1) Chrysanthemin. (2HCl, PtCl₄), (2HCl, 2AuCl₈) (G. 21, 517; 25 [1] 255; C. 1895 [1] 1068). — III, 862. $C_{14}H_{28}N_2Cl_2$ 1) Diathylendipiperidyliumchlorid. + PtCl₄ (B. 4, 740). - IV, 10. $\begin{array}{c} \textbf{C}_{14}\textbf{H}_{28}\textbf{N}_{2}\textbf{C}_{12} \ \textbf{1} \\ \textbf{Diäthylendipiperidyliumbromid} \ (B. \ \textbf{4}, \ 740). \ - \ \textbf{IV}, \ 10. \\ \textbf{C}_{14}\textbf{H}_{28}\textbf{N}_{2}\textbf{Br}_{2} \ \textbf{1} \\ \textbf{Diäthylendipiperidyliumbromid} \ (B. \ \textbf{4}, \ 740). \ - \ \textbf{IV}, \ 10. \\ \textbf{C}_{14}\textbf{H}_{29}\textbf{ON} & \textbf{C} \ 74,0 \ - \ \textbf{H} \ 12,8 \ - \ \textbf{O} \ 7,0 \ - \ \textbf{N} \ 6,2 \ - \ \textbf{M}. \ \textbf{G}. \ 227. \\ \textbf{1)} \ \alpha \textbf{-Oximidottradekan.} & \textbf{Sm.} \ 82^{\circ} \ (B. \ \textbf{23}, \ 2361). \ - \ \textbf{I}, \ 970. \\ \textbf{2)} \ \textbf{Amid} \ \textbf{d.} \ \textbf{Myristinsäure.} & \textbf{Sm.} \ 102^{\circ} \ (104 \ - 105^{\circ}); \ \textbf{Sd.} \ 217^{\circ}_{12} \ (135 \ - 136^{\circ}_{0}) \\ \textbf{(A. 202, 174; B. 15, 1730; 18, 2016; 26, 2840; J. pr. [2] 52, 60; B. 29, \\ \textbf{1224} & \textbf{L. 1240}. \end{array}$

 $\stackrel{\text{16.23}}{\text{C}}$ 69,1 — H 11,9 — O 13,2 — N 5,8 — M. G. 243.

1) Amidomyristinsäure. Sm. 253° (B. 22, 1747). — I, 1205.

1324). — I, 1249.

 $\mathbf{C}_{14}\mathbf{H}_{29}\mathbf{O}_{2}\mathbf{N}$

- $C_{69,4} H_{12,4} O_{6,6} N_{11,6} M_{6,242}$ C14H30ON2
- 1) Myristinamidoxim. Sm. 97° (B. 26, 2844). C 62,3 H 11,1 O 5,9 N 20,7 M. G. 270. $C_{14}H_{30}ON_4$
- 1) α-Diisoamylamido-β-Semicarbazonpropan. Sm. 166° (B. 29, 873).
- $C_{14}H_{80}OS$ 1) norm. Diheptylsulfoxyd. Sm. 70° (J. 1887, 1280; Bl. 49, 72). I, 363.
- norm. Diheptylsulfon. Sm. 80° (J. 1887, 1281). I, 363.
 C 48,0 H 8,6 O 27,4 N 16,0 M. G. 350. C14H30O2S C14 H80 O8 N4
- 1) Tetraäthyläther d. Di $[\beta\beta$ -Dioxyäthylhydrazid] d. Oxalsäure. Sm. 134° (B. **27**, 183).
- C14 H31 O4P 1) Dioxydiönanthylunterphosphorige Säure. Sm. bei 160° u. Zers. K+
- $4\,\mathrm{H_2O}$, Ba $+3\,\mathrm{H_2O}$, Pb $+3\,\mathrm{H_2O}$ (A. ch. [6] 23, 312). I, 1505. 1) Kieselsäurediäthyldiisoamylester. Sd. $245-250^\circ$ (A. ch. [4] 9, 19). $\mathbf{C}_{14}\mathbf{H}_{32}\mathbf{O}_{4}\mathbf{Si}$ - I, 347.
- $\mathbf{C}_{14}\mathbf{H}_{34}\mathbf{N}_{2}\mathbf{J}_{2}$ Aethylenhexaäthyldiammoniumdijodid (J. 1859, 387). — I, 1154.
 Aethylenhexaäthyldiphosphoniumchlorid. 2 + PtCl₄ (A. Spl. 1, 187). $\mathbf{C}_{14}\mathbf{H}_{84}\mathbf{Cl}_{2}\mathbf{P}_{2}$
- **I**, 1506. 2) isom. Aethylenhexaäthyldiphosphoniumchlorid (A. Spl. 1, 210). —
 - I, 1506.
- $C_{14}H_{34}Cl_2As_2$ 1) Aethylenhexaäthyldiarsoniumchlorid. 2 + PtCl₄ (A. Spl. 1, 316). -I, 1514.
- 1) Aethylenhexaäthyldiphosphoniumbromid. + AgBr (J. 1860, 329; $\mathbf{C}_{14}\mathbf{H}_{34}\mathbf{Br}_{2}\mathbf{P}_{2}$ A. Spl. 1, 177). — I, 1506.
- C₁₄H₃₄Br₂As₂ 1) Aethylenhexaäthyldiarsoniumbromid (A. Spl. 1, 316). I, 1514. C₁₄H₃₄J₂P₂ 1) Aethylenhexaäthyldiphosphoniumjodid. Sm. 231° (A. Spl. 1, 188).
- **I**, 1506. 2) isom. Aethylenhexaäthyldiphosphoniumjodid (A. Spl. 1, 212). — I, 1506.
- 1) Aethylenhexaäthyldiarsoniumjodid (A. Spl. 1, 316). I, 1513. $\mathbf{C}_{14}\mathbf{H}_{34}\mathbf{J}_{2}\mathbf{A}\mathbf{s}_{2}$
- $C_{14}H_{86}O_{9}P_{9}$ 1) Aethylhexaäthyldiphosphoniumhydrat. Salze, siehe diese (J. 1860, 329; A. Spl. 1, 182). — I, 1506.
 - 2) isom. Aethylhexaäthyldiphosphoniumhydrat (A. Spl. 1, 208). I, 1506.
- $C_{14}H_{36}O_8P_2$ 1) Verbindung (aus Phosphorsäuretriäthylester u. Phosphorigsäuretriäthylester u. Alkohol). Sd. 157,5° (A. 224, 275; 256, 275).

C₁₄-Gruppe mit vier Elementen.

- C₁₄H₂O₈N₂Br₄ 1) ?-Tetrabrom-?-Dinitro-9,10-Anthrachinon. Sm. 105° (B. 14, 981).
- **III**, 413. C₁₄H₄O₂N₂Br₂ 1) ?-Dibrom -?-Dinitro-9,10-Anthrachinon. Sm. 239⁶ (B. 14, 1337). - III, 412.
- 1) 1,2,3,4-Tetrachlor-9,10-Anthrachinon-?-Disulfonsäure. Ca, Ba $C_{14}H_4O_8Cl_4S_2$ (A. 238, 349). — III, 416.
- 1) P-Dibrom-P-Nitro-9,10-Anthrachinon. Sm. 245° (B. 14, 980, 1334). C₁₄H₅O₄NBr₂ - III, 412.
- C₁₄H₅O₆N₂Br 1) ?-Brom-?-Dinitro-9,10-Anthrachinon. Sm. 2130 (B. 14, 1333). III, 412.
- $\mathbf{C_{14}H_{6}O_{2}N_{2}Br_{6}}$ 1) Glyoxim-N-2,4,6-Tribromphenyläther. Sm. 249,5° u. Zers. (B.
- 31, 563).
 1) P-Tetrabromanthracen-2-Sulfonsäure. Na $+ 4H_2O$ (B. 28, 2260). $\mathbf{C}_{14}\mathbf{H}_{6}\mathbf{O}_{3}\mathbf{Br}_{4}\mathbf{S}$ 1) P-Brom-P-Nitro-9,10-Anthrachinon. Sm. 261° (B. 14, 980). $C_{14}H_6O_4NBr$
- III, 412. 1) Dinitrotolallyldisulfid (A. 167, 194). — III, 226. $\mathbf{C}_{14}\mathbf{H}_{6}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{S}_{2}$
- $\mathbf{C}_{14}\mathbf{H}_{6}\mathbf{O}_{10}\mathbf{N}_{6}\mathbf{Br}_{2}\mathbf{1})$ s-Di $[\mathbf{4}$ -Brom-?-Dinitrophenylamid] d. Oxalsäure. Sm. 285—287° (Am. 9, 362). — II, 410.
- 1) P-Dinitro-2, 6-Dioxy-9, 10-Anthrachinon-P-Disulfonsäure. K2, K4 $\mathbf{C}_{14}\mathbf{H}_{6}\mathbf{O}_{14}\mathbf{N}_{2}\mathbf{S}_{2}$ (C. 1899 [1] 464).
- C₁₄H₇O₂NBr₂ 1) è-Dibrom-P-Amido-9,10-Anthrachinon. Sm. 169-170° (B. 14, 1334). **- III**, 414.
- $\mathbf{C}_{14}\mathbf{H}_7\mathbf{O}_4\mathbf{N}_2\mathbf{Cl}_5$ 1) $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[?-Chlor-?-Nitrophenyl]äthan. Sm. 143° (B. 7, 1181). \mathbf{H}_7 , 232.

C14H8O2NJ

1) Chlorid d. 9,10-Anthrachinon-2-Sulfonsäure. Sm. 1930 (B. 13, C₁₄H₇O₄ClS 692; **28**, 2259). — III, 415.

1) 1-Nitro-9,10-Anthrachinon-2-Sulfonsäure. Sm. 255° u. Zers. NII₄ + $^{1}/_{2}$ H₂O, Na + H₂O, K, Ca + H₂O, Ba (B. 15, 1515). — III, 417. C, H, O, NS 2) isom. ?-Nitro-9,10-Anthrachinon-?-Sulfonsäure. Sm. 250° u. Zers.

 $Ba + 3^{1/2}H_{2}O$, $Pb + 2H_{2}O$ (B. 15, 1516). — III, 417.

1) P-Nitro-9,10-Anthrachinon-P-Disulfonsäure. Sm. 181-1820 (B. 16, C14H7O10NS2 908). **— III**, 417.

 $C_{14}H_7O_{10}N_4Cl_3$ 1) $\beta\beta\dot{\beta}$ -Trichlor- $\alpha\alpha$ -Di[2,6-Dinitro-4-Dioxyphenyl]äthan. Sm. 252°. Azoxyderivat d. αβ-Di[2-Chlor-4-Nitrophenyl]äthen. Zers. oberh.

C₁₄H₈ON₂Cl₂

300° (B. 25, 83). — IV, 1342. 1) 4-Chlorphenylimid d. Benzol-1,2-Dicarbonsäure. Sm. 194—195° C14H8O,NCl

(B. 11, 2260). — II, 1804. 1) Bromnitrophenanthren. Sm. 195—196° (B. 11, 1218). — II, 269. 2) 4-Bromphenylimid d. Benzol-1,2-Dicarbonsäure. Sm. 203—204° C₁₄H₈O₂NBr (B. 11, 2261). — II, 1804.

1) 4-Jodphenylimid d. Benzol-1,2-Dicarbonsäure. Sm. 227-2289

(B. 11, 2261). — II, 1804. C₁₄H₈O₂N₂Cl₂ 1) Chlorid d. Azobenzol-4,4'-Dicarbonsäure. Sm. 144,5—145° (*J. r.* 23, 93). — IV, 1459.

C₁₄H₈O₂N₂Cl₄ 1) s-Di[2,4-Dichlorphenylamid] d. Oxalsäure. Sm. 255° (Am. 8, 349). $- \text{ II, } 410. \\ \textbf{C}_{14}\textbf{H}_{8}\textbf{O}_{2}\textbf{N}_{2}\textbf{Br}_{2} \text{ 1) } \textbf{Di}[\textbf{4}-\textbf{Bromphenyl}] \textbf{diisocyanat. } \textbf{Sm. } 199^{\circ} \text{ } (B. \ \textbf{13}, \ 229). - \textbf{II, } 376.$

1) Di 3,5-Dijod-2-Oxybenzyliden hydrazin. Zers. bei 200° (J. pr. [2] $\mathbf{C}_{14}\mathbf{H}_{8}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{J}_{4}$ **57**, 205; [2] **58**, 119).

1) Verbindung (aus 1-Merkaptobenzoxazol). Sm. 110° (B. 16, 1825; 20, 179; J. pr. [2] 42, 443). — II, 710. $\mathbf{C}_{14}\mathbf{H}_8\mathbf{O}_2\mathbf{N}_2\mathbf{S}_2$

1) Chlorid d. Diphenyldisulfid-2,2'-Dicarbonsäure. Sm. 153-154° C₁₄H₈O₂Cl₂S₂ (B. 31, 1670; Am. 21, 210).

C₁₄H₈O₃N₂Cl₂ 1) Chlorid d. Azoxybenzol-3,3'-Dicarbonsäure. Sm. 120-121,5° (J. r. 23, 93). — IV, 1344. 1) Acetat d. 5-Chlor-4-Oxy-3-Ketophenoxazin. Sm. bei 200° (B. 26, C₁₄H₈O₄NCl

2376). — III, *349*.

2) Chlorid d. 4-[3-Nitrobenzoyl]benzol-1-Carbonsäure. Sm. 94° (A. 286, 317). — II, 1705.

3) Chlorid d. 4-[4-Nitrobenzoyl]benzol-1-Carbonsäure. (A. 286, 331). — II, 1706. $C_{14}H_8O_4N_2Cl_2$ 1) $\beta\beta$ -Dichlor- $\alpha\alpha$ -Di[4-Nitrophenyl]äthen. Sm. 72° (A. 271, 2).

II, 250. 2) $\alpha \beta$ -Di[2-Chlor-4-Nitrophenyl]äthen. Sm. 294° (B. 25, 79). — II, 249.

 $C_{14}H_8O_4N_2Br_2$ 1) 4,4'-Dibromazobenzol-2,2'-Dicarbonsäure + $\frac{1}{2}H_2O$ (A. 143, 243). - IV, 1458.

1) ?-Dijodazobenzol-3,3'-Dicarbonsäure (B. 8, 386). — IV, 1459.
1) ?-Dinitrophenylbithiënyl. Sm. 273° (Bl. [3] 5, 278). — III, 769. $\mathbf{C}_{14}\mathbf{H}_8\mathbf{O}_4\mathbf{N}_2\mathbf{J}_2$ $\mathbf{C}_{14}\mathbf{H}_8\mathbf{O}_4\mathbf{N}_2\mathbf{S}_2$

 $C_{14}H_8O_4Br_2S_2$ 1) ?-Dibromdiphenyldisulfid-3,3'-Dicarbonsäure. Sm. 242—243° (254 bis 256°). Ba, Zn, Pb (Z. 1870, 295; 1871, 69). — II, 1522. C₁₄H₈O₆N₄Br₂ 1) s-Di[4-Brom-2-Nitrophenylamid] d. Oxalsäure. Sm. 285—288°

(Am. 9, 361). — II, 410. $\mathbf{C}_{14}\mathbf{H}_{8}\mathbf{O}_{6}\mathbf{Cl}_{2}\mathbf{S}_{2}$

1) Dichloranthracendisulfonsäure. Na₂, Ca, Ba, Sr (A. 158, 320; B. 3, 637). — II, 265. 1) Dibromanthracendisulfonsäure. Ba (A. 158, 322). — II, 266. $\mathbf{C}_{14}\mathbf{H}_{8}\mathbf{O}_{6}\mathbf{Br}_{2}\mathbf{S}_{2}$

 $\mathbf{C}_{14}\mathbf{H}_{8}\mathbf{O}_{9}\mathbf{ClP}$ 1) Verbindung (aus α-Digallussäure) (A. 170, 58). — II, 1925.

 $\mathbf{C}_{14}\mathbf{H}_{8}\mathbf{O}_{10}\mathbf{ClP}$ $\mathbf{C}_{14}\mathbf{H}_{9}\mathbf{ONCl}_{2}$ Verbindung (aus α-Digallussäure) (A. 170, 57). — II, 1924.

1) ?-Dichlor-9-Acetylcarbazol. Sm. 185-186° (G. 26 [2] 241). -IV, 392.
1) P-Dibrom-9-Acetylearbazol.

C₁₄H₉ONBr₉ Sm. 189—190° (G. 25 [2] 397). — IV, 392. $\mathbf{C}_{14}\mathbf{H}_{9}\mathbf{ON}_{2}\mathbf{Cl}$

1) Chlorphenylimesatin (J. 1855, 541). — II, 1608. 2) 4[oder 6]-Chlor-1-Nitroso-2-Phenylindol. Sm. 228-229° (B. 25, 2877). — IV, 413.

3) 2-Chlor-3-Phenylamido-1-Keto-4-Pyrinden. Sm. 162-1630 (A. 290, 343, 374). — IV, 246.

4) 2-Chlor-4-Keto-3-Phenyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 131,5°; Sd. 245°₁₅ (B. 30, 1691; Am. 21, 151).
5) 4-Keto-3-[4-Chlorphenyl]-3,4-Dihydro-1,3-Benzdiazin. Sm. 177°. C14HON2Cl

HCl, (2HCl, PtCl₄) (J. pr. [2] 48, 547). — IV, 872. 1) Bromphenylimesatin (J. 1855, 541). — II, 1608. C14HON2Br

2) 4-Keto-3-[4-Bromphenyl]-3,4-Dihydro-1,3-Benzdiazin.

- (J. pr. [2] 48, 553). IV, 872.

 1) 2,4-Dichlorphenylformylamid d. Benzolcarbonsäure. $\mathbf{C}_{14}\mathbf{H}_{9}\mathbf{O}_{2}\mathbf{NCl}_{2}$ Sm. 770 (Am. 18, 386).
- 1) P-Trichlor-s-Di[Phenylamid] d. Oxalsäure (Am. 8, 349). II, 410. l) Chlorid d. Anthracen-2-Sulfonsäure. Sm. 122° (B. 28, 2258). C14H9O9N9Cl3 C₁₄H₉O₂ClS
- 1) 3-Chlor-6-Nitro-9-Acetylcarbazol. Sm. 205-206° (G. 26 [1] 291). C14H9O8N2Cl · IV, 392
- 1) 9-Acetyl-?-Bromnitrocarbazol. Sm. 236—237° (G. 22 [2] 575). $\mathbf{C}_{14}\mathbf{H}_{9}\mathbf{O}_{3}\mathbf{N}_{2}\mathbf{Br}$ IV, 392.
- 1) Bromphenanthrensulfonsäure. K, Ba, Ag (B. 13, 1179). II, 269. C14H9O8BrS 1) Amid d. 9,10-Anthrachinon-2-Sulfonsäure. Sm. 261° (B. 13, 692). C₁₄H₉O₄NS
 - 2) Benzoylimid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm. 1650 (B. 30, 1267).
- C₁₄H₉O₄N₃Cl₂ 1) 4,4'-Dichlordiazoamidobenzol-3,3'-Dicarbonsäure (A. 135, 114). **– IV**, *1577*.
- 1) 1-Amido-9,10-Anthrachinon-2-Sulfonsäure + H₂O. Zers. oberh. $C_{14}H_9O_5NS$ 360°. Na + $^{1}_{1/2}$ H₂O, Ca + $^{5}_{1}$ H₂O, Ba + $^{3}_{1/2}$ H₂O, Pb + $^{2}_{1/2}$ H₂O, Cu + $^{7}_{1/2}$ H₂O (B. **15**, 1519). — **III**, 417.
 - 2) isom. ?-Amido-9,10-Anthrachinon-?-Sulfonsäure + H₀O. Sm. oberh. 360° u. Zers. Ba (B. 15, 1520). — III, 417.
 - 3) ?-Sulfophenylimid d. Benzol-1,2-Dicarbonsaure (Phtalimidosulfanil-
 - säure). NH₄, Na, Ba (A. 248, 153). II, 1804. 1) 2-Amido-1-Oxy-9,10-Anthrachinon-?-Sulfonsäure (J. pr. [2] 18, C14HOONS 183). — III, 420.
 - 2) 1-Amido-2-Oxy-9,10-Anthrachinon-P-Sulfonsäure (J. pr. [2] 18, 182). — III, 420.
 - 3) isom. ?-Amido-?-Oxy-9,10-Anthrachinon-?-Sulfonsäure. NH4 + $2^{1}/_{2}$ H₂O (B. **12**, 1419). — **III**, 420.
 - $C_{14}H_9O_8N_2Cl_3$ 1) $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[3-Nitro-4-Oxyphenyl]äthan. Sm. 159° u. Zers. Na₂ $+8 H_2 O$, K_2 , $Ca + 3 \frac{1}{2} H_2 O$ (J. pr. [2] 39, 500; [2] 47, 61). II, 995.
 - 1) Acetyldinitrodiphenylaminsulfoxyd (A. 230, 122). II, 808. $\mathbf{C}_{14}\mathbf{H}_{9}\mathbf{O}_{6}\mathbf{N}_{8}\mathbf{S}$ 1) P-Amido-P-Dioxy-9,10-Anthrachinon-P-Sulfonsäure (B. 15, 1524; C14H9ONS 16, 57, 905; 17, 902). — III, 431.
 - C₁₄H₉O₇N₄Cl 1) P-Trinitro-4-Methylphenylamid d. 2-Chlorbenzol-1-Carbonsäure. Sm. 239° (B. 13, 467). — II, 1217.
 - Verbindung (aus α-Digallussäure) (A. 170, 58). II, 1925. $C_{14}H_9O_9Cl_2P$ 1) α-Chlor-α-Benzoylimidophenylmethan (Benzoylbenzimidchlorid). Sm.
 - C₁₄H₁₀ONCl 84° (A. 296, 280).
 - 2) 3-Chlor-9-Acetylcarbazol. Sm. 124—125° (G. 26 [2] 239). IV, 392.
 - C14H10ONCl3 1) 3,5,6-Trichlor-2-Methylphenylamid d. Benzolcarbonsäure. Sm. 213° (A. 187, 279). — II, 1165. 1) P-Brom-2-Keto-3-Phenyl-2, 3-Dihydroindol. Sm. 191° (M. 18, 548).
 - $C_{14}H_{10}ONBr$ 2) ?-Brom-1-Acetylcarbazol. Sm. 128° (B. 15, 1759; G. 12, 276).
 - 1) 2, 2-Dichlor-4-Keto-3-Phenyl-1, 2, 3, 4-Tetrahydro-1, 3-Benzdiazin. $\mathbf{C}_{14}\mathbf{H}_{10}\mathbf{ON}_{2}\mathbf{Cl}_{2}$ Sm. 140° (Am. 21, 152).
 - 1) Carbonyl-s-Diphenylthioharnstoff. Sm. 84° (87°) (B. 14, 1486; 25, C₁₄H₁₀ON₂S 1461). — II, 397.
 - 2) 5-Thiocarbonyl-2,4-Diphenyl-4,5-Dihydro-1,3,4-Oxdiazol (Benzoylphenylthiocarbizin). Sm. 186° (A. 212, 330). — IV, 682. 3) 2-Thiocarbonyl-4-Keto-3-Phenyl-1,2,3,4-Tetrahydro-1,3-Benz-
 - diazin. Sm. oherh. 300° (B. 30, 1688; Am. 21, 146). IV, 897.

 4) Isobenzoylphenylthiocarbizin. Sm. 110° (B. 21, 2469). IV, 682.
 - 1) 3-Thiocarbonyl-5-Keto-2,4-Diphenyltetrahydro-1,2,4-Thiodiazol C14H10ON2S (Phenylsenföloxyd). Sm. 118°. HCl, HBr (B. 20, 787; A. 285, 196). - II, *389*.

 $\begin{array}{lll} \textbf{C}_{14}\textbf{H}_{10}\textbf{ON}_{3}\textbf{Cl} & 1) & \text{?-Chlor-3-Phenylhydrazon-2-Oxypseudoindol} & (\text{Phenylhydrazon d.} \\ & & \text{m-Chlorisatin}). & \text{Sm. } 271-272^{\circ} & (B.~\textbf{28},~544). & \textbf{-IV},~695. \\ \textbf{C}_{14}\textbf{H}_{10}\textbf{ON}_{3}\textbf{Br} & 1) & \text{?-Brom-3-Phenylhydrazon-2-Oxypseudoindol} & (\text{Phenylhydrazon d.} \\ \end{array}$

Bromisatin). Sm. 271—272° (B. 28, 545). — IV, 695.

1) 5-Phenylazo-2-Thiocarbonyl-3-Phenyl-2,3-Dihydro-1,3,4-Ox-

C, H, ON, S diazol. Sm. 170° u. Zers. (B. 23, 2834). — IV, 687.

2) 5-Phenylnitrosamido-2-Phenyl-1,2,4-Thiodiazol. Sm. 1190 u. Zers. (B. 24, 396). — IV, 847.

3) 5-Phenylazo-2-Keto-3-Phenyl-2, 3-Dihydro-1, 3, 4-Thiodiazol. Sm. 140° (B. 23, 2826). — IV, 687.

4) 3-Nitroso-2-Phenylimido-5-Phenyl-2,3-Dihydro-1,3,4-Triazol (B.

29, 2917). — IV, 1159. $C_{14}H_{10}O_2NBr_3$ 1) 1,3,6-Tribrom-2-Naphtylimid d. Essigsäure. Sm. 1590 (J. pr. [2] 43, 56). — II, 616.

 $C_{14}H_{10}O_2N_2Br_21$ Glyoxim-N-4-Bromphenyläther. Sm. 278° (B. 30, 2463, 2876). 2) $\alpha\beta$ -Di[3-Brombenzoyl]hydrazin. Sm. 265° (J. pr. [2] 58, 194). 3) s-Di[4-Bromphenylamid] d. Oxalsäure. Sm. oberh. 300° (Am. 8,

351). — II, 410.

1) s-Di[4-Jodphenylamid] d. Oxalsäure (Am. 8, 352). — II, 410.
1) 3 oder 5-Thiënyl-1-Phenylpyrazol-5 oder 3-Carbonsäure. Sm. $\mathbf{C}_{14}\mathbf{H}_{10}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{J}_{2}$ $\mathbf{C}_{14}\mathbf{H}_{10}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{S}$ 195°. Ag (G. 21 [2] 273). — IV, 893.

 $C_{14}H_{10}O_2N_2S_2$ 1) $\alpha\beta$ -Di[4-Thionylamidophenyl]äthen. Sm. 201—202° (A. **274**, 265). IV, 994.

 $C_{14}H_{10}O_2N_4Br_41$) Di[2,6-Dibromphenylamid] d. Hydrazin- $\alpha\beta$ -Dicarbonsäure. Sm. 215-218° (J. pr. [2] 58, 225).

C₁₄H₁₀O₂Cl₇Sb 1) Dimethyläther d. Di[3,5-Dichlor-4-Oxyphenyl]antimontrichlorid. Sm. 184° (B. 30, 2839). — IV, 1695.

C₁₄H₁₀O₂Br₄S 1) Dimethyläther d. Di[?-Dibrom-?-Oxyphenyl]sulfid. Sm. 1320 (B. 27, 2541). 2) Di[4-Dibrommethylphenyl]sulfon. Sm. 1370 (Bl. [3] 11, 504). -

II, 825.
1) ?-Chlor-3-Nitrophenyl-4-Methylphenylketon. Sm. 96° (A. 286, C₁₄H₁₀O₃NCl 309). — III, 214.

C₁₄H₁₀O₃NBr 1) ?-Brom-3-Nitrophenyl-4-Methylphenylketon. Sm. 1160 (A. 286, 309). — III, 214.

2) Benzoatd.?-Brom-4-Oximido-1-Keto-2-Methyl-1,4-Dihydrobenzol. Sm. 174° (Am. 20, 773).

C₁₄H₁₀O₃N₂Br₂1) Acetat d. 2', 3-Dibrom-4-Nitrosodiphenylhydroxylamin. Sm. 144 bis 145° (B. 31, 1519).
C₁₄H₁₀O₃N₂S 1) Verbindung (aus d. Nitril d. Benzolcarbonsäure u. SO₃). Sm. 157 bis 158° u. Zers. (B. 25, 461). — II, 1212.

C₁₄H₁₀O₃Br₄S 1) Dimethyläther d. Di[?-Dibrom-?-Oxyphenyl]sulfoxyd. Sm. 155° (B. 27, 2542).

 $C_{14}H_{10}O_4N_2Cl_2$ 1) $\beta\beta$ -Dichlor- $\alpha\alpha$ -Di[?-Nitrophenyl]äthan. Sm. 177—178° (A. 279, 325). $C_{14}H_{10}O_4N_2Br_2$ 1) $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[2-Nitrophenyl]äthan. Sm. 226° u. Zers. (B. 21, 2075). — II, *234*.

2) $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[4-Nitrophenyl]äthan. Sm. über 3000 u. Zers. $(\hat{J}. pr. [2] 34, 344). - II, 235.$

3) $\alpha \beta$ -Di[4-Brom-2-Nitrophenyl]äthan. Sm. 204—205° (A. 137, 270). - II, 234.

 $C_{14}H_{10}O_4N_2Br_41$) Dibromapophyllin + $4H_0O$. Sm. 229° u. Zers. HCl, 2HCl, (2HCl, $PtCl_4 + H_2O$, HBr, 2HBr, H_2SO_4 (B. 15, 1251; A. 210, 94). — III, 921.

 $\mathbf{C}_{14}\mathbf{H}_{10}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{S}$ 1) Dinitrothiophen + Naphtalin. Sm. 50° (B. 18, 1778). — II, 183. $C_{14}H_{10}O_4JAs$ 1) Diphenyljodarsin-4,4'-Dicarbonsäure. Sm. oberh. 280° (A. 208, 24). IV, 1693.

1) 2-Benzoat-I-Methyläther d. 5-Brom-3-Nitro-1,2-Dioxybenzol. Sm. C14H10O5NBr 103—104° (Soc. 73, 689).

2) 1-Benzoat-2-Methyläther d. 6-Brom-4-Nitro-1,2-Dioxybenzol. Sm.

117—118° (Soc. 73, 690). 1) ?-Diamido-9,10-Anthrachinon-?-Sulfonsäure. Ba, Pb (J. pr. [2] C14 H10 O5 NoS 19, 215). — III, 417. 2) 4-Nitrobenzylimid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm.

175,5—176° (B. **29**, 1049).

- C₁₄H₁₀O₅N₃Cl 1) ?-Dinitro-4-Methylphenylamid d. 2-Chlorbenzol-1-Carbonsäure. Sm. 228° (B. 13, 466). — II, 1217.
- C₁₄H₁₀O₂N₄S₂ 1) 4,4'-Bidiazo-3,3'-Dimethylbiphenyl-6,6'-Disulfonsäure. Zers. bei 86° (A. 270, 362). — IV, 1543.
- $C_{14}H_{10}O_7N_2S_2$ 1) 4,4'-Azoxy- $\alpha\beta$ -Diphenyläthen-2,2'-Disulfonsäure(Azoxystilbendisulfonsäure) (B. 28, 424, 2282).
- C₁₄H₁₀O₈N₂S₂ 1) s-Di[3-Nitrophenylsulfon]äthan. Sm. 226° (A. 278, 246; 294, 243). 2) αβ-Di[4-Nitrosophenyl] äthen-2,2'-Disulfonsäure. Na, Ba (B. 26, 2233; **28**, 423, 2281). — II, 249.
 - 3) ?-Diamido-9,10-Anthrachinon-?-Disulfonsäure (J. pr. [2] 19, 215).
- III, 417. $\mathbf{C}_{14}\mathbf{H}_{10}\mathbf{O}_{10}\mathbf{N}_2\mathbf{S}_2$ 1) $\alpha\beta$ -Di[4-Nitrophenyl]äthen-2,2'-Disulfonsäure. Na, \mathbf{K}_2 (B. 26,
- 2234; 30, 3100; 31, 355, 1078). II, 249. C₁₄ $\mathbf{H}_{10}\mathbf{N}_{2}\mathbf{Cl}_{2}\mathbf{S}_{2}$ 1) Phenylsenfölchlorid. Sm. 150—160° u. Zers. (B. 20, 786). II, 389. C₁₄ $\mathbf{H}_{10}\mathbf{N}_{2}\mathbf{Br}_{2}\mathbf{S}_{2}$ 1) Phenylsenfölbromid. Sm. 190° u. Zers. (B. 20, 789). II, 389.
- $C_{14}H_{10}N_2Br_2S_3$ 1) Verbindung (aus Phenylsenföl u. Brom) (B. 9, 1263). II, 389. $\mathbf{C}_{14}^{\mathbf{H}}\mathbf{H}_{10}\mathbf{N}_{2}^{2}\mathbf{S}_{2}^{\mathbf{P}}\mathbf{b}$ 1) Rhodanid d. Bleidiphenyldirhodanid (B. 20, 3334). — IV, 1715.
- $\mathbf{C}_{14}\mathbf{H}_{10}\mathbf{N}_{3}\mathbf{BrS}$ 1) 5-[4-Bromphenyl]amido-2-Phenyl-1, 2, 4-Thiodiazol (B. 24, 395). - IV, 847.
- C₁₄H₁₁ONCl₂ 1) N-2-Chlorbenzyl-syn-2-Chlorbenzaldoxim. Sm. 98-99° (A. 269, 396). — III, *45*.
- 2) N-4-Chlorbenzyl-4-Chlorbenzaldoxim. Sm. 141° (A. 298, 195).
- $C_{14}H_{11}ONBr_{2}$ 1) 3,5-Dibrom-4-Oxy-1-[4-Methylphenylimido] methylbenzol. Sm. 157° (B. 28, 3235). — III, 85.
- 1) 4-[3,5-Dijod-2-Oxybenzyliden]amido-1-Methylbenzol. Sm. 147,50 $\mathbf{C}_{14}\mathbf{H}_{11}\mathbf{ONJ}_{2}$ (J. pr. [2] 57, 205; [2] 58, 121).
 - 2) 4-[3,5-Dijod-4-Oxybenzyliden]amido-1-Methylbenzol. Sm. 189° u. Zers. (190°) (B. 29, 2305; J. pr. [2] 57, 205; [2] 58, 128).
- 1) Acetylthiodiphenylamin. Sm. 197—197,5° (A. 230, 95). II, 806. C14H11ONS
 - 2) 1-[4-Methoxylphenyl]benzthiazol. Sm. 134-135° (B. 25, 3529). -II, 1541.
 - 3) 3-Keto-2-Phenyl-3,4-Dihydro-1,4-Benzthiazin. Sm. 204° (B. 30, 2396).
 - 4) Verbindung (aus Dehydrothio-4-Amido-1-Methylbenzol). Sm. 255 bis 256° (B. 22, 334). II, 822.
- 1) 3-[3-Chlorphenyl]amido-1,4-Benzoxazin. Sm. 112-1140. HCl $\mathbf{C}_{14}\mathbf{H}_{11}\mathbf{ON}_{2}\mathbf{Cl}$ (Am. 20, 566).
 - 2) 3-[2-Chlorphenyl]-2-Keto-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 207° (J. pr. [2] 52, 377). — IV, 632.
- $C_{14}H_{11}ON_2Cl_3$ 1) 2,3,5-Trichlor-1,4-Benzochinondimethylamidophenylimid (J. pr. [2] **23**, 438; [2] **24**, 435). — III, 335.
- $C_{14}H_{11}ON_2Br$ 1) 3-[4-Bromphenyl]-2-Keto-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 226° (J. pr. [2] 52, 392). — IV, 632. 2) Benzylidenhydrazid d. 3-Brombenzol-1-Carbonsäure. Sm. 105°
 - (J. pr. [2] 58, 192).
 3) Benzylidenhydrazid d. 4-Brombenzol-1-Carbonsäure. Sm. 2350
 - (J. pr. [2] 58, 200).
- 1) Acetylthionin (B. 12, 2071). II, 809. $\mathbf{C}_{14}\mathbf{H}_{11}\mathbf{ON}_{3}\mathbf{S}$
 - 2) 5-Merkapto-2-Keto-1, 3-Diphenyl-2, 3-Dihydro-1, 3, 4-Triazol. Sm. 219—221°., Ag (B. 25, 3110). — IV, 686.
 - 3) 2-Phenylamido-5-Keto-4-Phenyl-4,5-Dihydro-1,3,4-Thiodiazol. Sm. 188° (B. 21, 2466; 25, 3109). — IV, 686.
- 1) 2-Phenylnitrosamido-5-Phenylamido-1, 3, 4-Thiodiazol. Zers. bei C14H11ON5S 179° (B. **22**, 1179). — **IV**, 1236.
- $C_{14}H_{11}O_2NCl_2$ 1) $\alpha\alpha$ -Dichlor-31-Nitro-42-Methyldiphenylmethan. Fl. (A. 286, 308).
- C₁₄H₁₁O₂NBr₂ 1) Methylenäther d. $\alpha\beta$ -Dibrom- α -[3,4-Dioxyphenyl]- β -[2-Pyridyl]-äthan (B. 30, 1580). IV, 379. 2) 1,6-Dibrom-2-Naphtylimid d. Essigsäure. Sm. 180° (J. pr. [2] 43,
- 49). II, 616. 1) Jodid d. Benzolcarbonsäureimid. Sm. 118-120° (B. 23, 3040). - $\mathbf{C}_{14}\mathbf{H}_{11}\mathbf{O}_{2}\mathbf{N}\mathbf{J}_{2}$
- 1) 2,4-Diketo-3-[1-Naphtyl]-3,4,5,6-Tetrahydro-1,3-Thiazin. Sm. $\mathbf{C}_{14}\mathbf{H}_{11}\mathbf{O}_{2}\mathbf{NS}$ 173°. — II, 608.

2) 2,4-Diketo-3-[2-Naphtyl]-3,4,5,6-Tetrahydro-1,3-Thiazin. Sm. C14H11O2NS 197°. — II, 618. 3) Phenylester d. Benzoylamidothiolameisensäure. Sm. 930 (A. ch. [5] **11**, 337). — **II**, 1181. 4) Amid d. Anthracen-2-Sulfonsäure. Sm. 261° (B. 28, 2299). 5) Verbindung (aus Isatin u. Merkaptobenzol) (B. 18, 890). - II, 1602. $\mathbf{C_{14}H_{11}O_{2}N_{2}Cl~1)~5-Chlor-2, 4'-Di[Formylamido]}~biphenyl.~Sm.~194^{o}~(A.~303,~319).$ 2) 4-Chlor-4'-Formylamidodiphenylformylamin. Sm. 1030 (A. 303, 316). 3) 1[oder 4]-Chlor-2-Oxyäthylphenazon. Sm. 215-2160 (A. 290, 305). IV, 1004.

4) Chlormethylat d. P-Nitro-β-Naphtochinolin. Sm. 218° (J. pr. [2]

57, 65).

5) Acetat d. 2-Chlor-4'-Oxyazobenzol. Sm. 100° (B. **26**, 2977). -IV, 1408. 6) Acetat d. 3-Chlor-4'-Oxyazobenzol. Sm. 92° (B. 26, 2977). -

IV, 1409. 7) Acetat d. 4-Chlor-4'-Oxyazobenzol. Sm. 160° (B. 26, 2978). —

IV, 1409. C₁₄H₁₁O₂N₂Br 1) 5-Brom-2,4'-Di[Formylamido]biphenyl. Sm. 191° (A. 303, 328).

2) Methylenäther d. Phenyl-?-Brom-3,4-Dioxybenzylidenhydrazin. Sm. 136° (B. 24, 2593). — IV, 764. 3) α-Phenylhydrazon-4-Bromphenylessigsäure. Sm. 180,5° (B. 28,

259). — IV, 695. 4) Acetat d. 2-Brom-4'-Oxyazobenzol. Sm. 89° (B. 31, 2115). -

IV, 1409. 5) Acetat d. 3-Brom-4'-Oxyazobenzol. Sm. 112° (B. 28, 802). —

IV, 1409. 6) Acetat d. 4-Brom-4'-Oxyazobenzol. Sm. 158° (B. 31, 2116). —

IV, 1410. 7) 2-Oxybenzylidenhydrazid d. 3-Brombenzol-1-Carbonsäure. Sm.

192° (J. pr. [2] 58, 193). 1) Jodnethylat d. P-Nitro- β -Naphtochinolin + 2H₂O. Sm. 210° u. C14H11O2N2J

Zers. (J. pr. [2] 57, 64). $C_{14}H_{11}O_2N_3Br_21$) α -[4-Brombenzoyl]amido- β -[4-Bromphenyl]harnstoff. Sm. 248° (J. pr. [2] 58, 203).

2) Di[4-Bromphenyl]biuret. Zers. bei 280° (B. 13, 230). — II, 383. C₁₄H₁₁O₂N₄Cl 1) 2-Chlorphenylat d. 1-Phenyl-1, 2, 3, 5-Tetrazol-4-Carbonsäure.

Sm. $256-257^{\circ}$ u. Zers. (B. **27**, 2925). — **IV**, 1240. $C_{14}H_{11}O_3NBr_2$ 1) Benzoat d. ?-Dibrom-4-Oximido-1-Keto-2-Methyl-?-Tetrahydrobenzol. Sm. 165° u. Zers. (Am. 20, 773).

2) Benzoat d. ?-Dibrom-4-Oximido-1-Keto-3-Methyl-?-Tetrahydrobenzol. Sm. 1590 u. Zers. (Am. 20, 776).

1) Methylester d. α -Naphtochinolin-5-Sulfonsäure. Sm. 127° (J. pr. $C_{14}H_{11}O_3NS$ [2] **57**, 81).

2) Benzylimid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm. 1180 (B. **29**, 1048).

3) 2-Methylphenylimid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm. 172—175° (Am. 17, 327). 3-Methylphenylimid d. Benzol-1-Carbonsäure-2-Sulfonsäure.

4) 3-Methylphenylimid Sm. 147,5° (Am. 17, 326).

5) 4-Methylphenylimid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm. 195,5° (Am. 17, 322).

 $C_{14}H_{11}O_3N_2Cl$ 1) 4-Chlorphenylamidomethyl-3-Nitrophenylketon. Sm. 197° (B. 30, 574).

2) 4-Chlorphenylamidomethyl-?-Nitrophenylketon. Sm. 181° (B. **30**, 574).

3) 4-Nitrobenzyläther d. Phenylchloroximidomethan. Sm. 92° (B. **25**, 45). — **II**, 1197

4) Methylester d. 2'-Chlor-4-Oxyazobenzol-3-Carbonsäure. Sm. 109° (Soc. **69**, 1259). — IV, 1468.

5) Methylester d. 3'-Chlor-4-Oxyazobenzol-3-Carbonsäure. Sm. 1140 (Soc. 69, 1263). — IV, 1469.

- C₁₄H₁₁O₃N₂Cl 6) Methylester d. 4'-Chlor-4-Oxyazobenzol-3-Carbonsäure. Sm. 1520
 - (Soc. 69, 1264). IV, 1469. 7) 4-Chlorphenyl-2-Nitrobenzylamid d. Ameisensäure. (J. pr. [2] **48**, 543). — II, 523.
 - 8) 2-Nitro-4-Methylphenylamid d. 2-Chlorbenzol-1-Carbonsäure. Sm. 139° (B. 13, 466). — II, 1217.
- C₁₄H₁₁O₃N₂Br 1) 2-Brom-4'-Oxy-4-Methylazobenzol-3'-Carbonsäure. Sm. 228° (B. 31, 1784). — IV, 1469. 2) 4-Bromphenyl-2-Nitrobenzylamid d. Ameisensäure. Sm. 105°
 - (J. pr. [2] 48, 550). II, 523.
- 1) α -[?-Nitrophenyl]- β -Benzoylthioharnstoff. Sm. 230° u. Zers. (A. ch. $\mathbf{C}_{14}\mathbf{H}_{11}\mathbf{O}_{3}\mathbf{N}_{3}\mathbf{S}$ [5] **11**, 322). — **II**, 1172.
- C₁₄H₁₁O₄NCl₂ 1) Methylester d. 3,5-Dichlor-6-Oxy-4-Keto-1-Phenyl-1,4-Dihydropyridinmethyläther-2-Carbonsäure. Sm. 140° (A. 267, 32). IV, 159.
- $C_{14}H_{11}O_4N_2Cl$ 1) α -Chlor- $\alpha\beta$ -Dinitro- $\alpha\beta$ -Diphenyläthan. Sm. 124—125° (Soc. 71, 223).
- $C_{14}H_{11}O_4N_3Cl_2$ 1) Di[2-Chlor-4-Nitrobenzyl]amin. Sm. 120° (B. 25, 88). II, 520.
- C₁₄H₁₁O₄N₃S 1) 1-Phenylazo-3-Oxyindol-1⁴-Sulfonsäure. K (B. 26, 226). IV, 1485. $C_{14}H_{11}O_4N_4Cl_3$ 1) $\beta\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[4-Nitrophenylamido] athan. Sm. 218° (A.
- 302, 366). C₁₄H₁₁O₄Cl₄Sb 1) Antimondi [3,5-Dichlor-4-Methoxylphenyl]säure. Sm. 228—229° u. Zers. $+ \text{HgCl}_2$ (B. 30, 2840). - IV, 1695.
- C14H11O5NS 1) 1-Succinylamidonaphtalin-4-Sulfonsäure. K + H₂O (A. 248, 157). **- II**, 626.
- $C_{14}H_{11}O_5N_3J$ 1) Aethyläther d. 2-Jod-4-[2,4-Dinitrophenyl]amido-1-Oxybenzol. Sm. 172° (B. **29**, 2596).
- 1) 3-Nitrophenyl-4-Methylphenylketon-?-Sulfonsäure + 3 H₂O. Sm. $\mathbf{C}_{14}\mathbf{H}_{11}\mathbf{O}_{6}\mathbf{NS}$ 140° (215° wasserfrei). Ba $+ 3 H_2 O$ (A. 286, 309). — III, 215.
- $C_{14}H_{11}NClBr$ 1) Chlormethylat d. 3-Brom- β -Naphtochinolin + xH₂O. Sm. 237° (J. pr. [2] 57, 63). C14H11NBrJ
- 1) Jodmethylat d. 3-Brom- β -Naphtochinolin + $1^{1}/_{2}$ H₂O. Sm. 225° (J. pr. [2] 57, 62).
- 1) 3-[2-Chlorphenyl]-2-Thiocarbonyl-1,2,3,4-Tetrahydro-1,3-Benz-C14H11N,CIS diazin. Sm. 2000 (J. pr. [2] 52, 376). — IV, 634.
 - 2) 3-[3-Chlorphenyl]-2-Thiocarbonyl-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 198—199° (J. pr. [2] 52, 379). — IV, 634.
 - 3) 3-[4-Chlorphenyl]-2-Thiocarbonyl-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 228° (J. pr. [2] 52, 384). — IV, 634.
- 1) 3-[4-Bromphenyl]-2-Thiocarbonyl-1, 2, 3, 4-Tetrahydro-1, 3-Benz-C14H11N2BrS diazin. Sm. 234° (J. pr. [2] 52, 392). — IV, 634.
- 1) Phenylamidomethyl-4-Chlorphenylketon. Sm. 187—188° (Bl. [3] C₁₄H₁₂ONCl
 - 2) 4-Chlorphenylamidomethylphenylketon. Sm. 167° (B. 30, 574). 3) 4-Chlorphenylamidobenzoylmethan. Sm. 138°. HCl (B. 25, 2867).
 - **III**, 125. 4) 2-Benzoylamido-1-Chlormethylbenzol. Sm. 124—125° (B. 27, 3523).
 - 5) α-Chlor-β-Oximido-αβ-Diphenyläthan (Stilbennitrosylchlorid). Sm. 138—139⁶ (Soc. 65, 327).
 6) N-Benzyläther d. 2-Chlorbenzaldoxim. Sm. 86⁶ (A. 298, 192).

 - 7) N-Benzyläther d. 4-Chlorbenzaldoxim. Sm. 1210 (A. 298, 197).
 - 8) N-4-Chlorbenzyläther d. Benzaldoxim. Sm. 125-126° (A. 298, 196).
 - 9) Amid d. Diphenylchloressigsäure. Sm. 115 ° (B. 22, 1539). II, 1464.
 - 10) Phenylamid d. Phenylchloressigsäure. Sm. 151,5-152° (A. 279, 124). — **II**, *1316*.
 - 11) 4-Methylphenylamid d. 2-Chlorbenzol-l-Carbonsäure. Sm. 131° (B. **13**, 465). — **II**, 1217.
 - 12) 2-Chlorbenzylamid d. Benzolcarbonsäure. Sm. 116-117° (J. pr. [2] **51**, 282).
 - 13) 2-Chlor-4-Methylphenylamid d. Benzolcarbonsäure. Sm. 137,5 bis 138,5° (B. 32, 220).
 - 14) 1-Naphtylamid d. β -Chlorpropen- α -Carbonsäure (1-N. d. β -Chlorcrotonsäure). Sm. 169—170° (B. 29, 1669).

14 IV. C₁₄H₁₂ONCl 15) 1-Naphtylamid d. isom. β -Chlorpropen- α -Carbonsäure (1-N. d. β -Chlorisocrotonsäure). Sm. 155° (B. 29, 1668). 16) Chlorid d. Phenylbenzylamidoameisensäure (J. pr. [2] 56, 13). 1) P-Brom-4-Acetylamidobiphenyl. Sm. 247° (A. 209, 345). — II, 633. C14H19ONBr 2) Phenylamidomethyl-4-Bromphenylketon. Sm. 119-1200 (Bl. [3] 3) 3-Bromphenylamidomethylphenylketon. Sm. 137°. HCl (B. 30, 574). 4) α-Oximido-2-Bromphenyl-4-Methylphenylmethan. Sm. 138-1400 (B. 27, 1452). — III, 214. 5) N-4-Brombenzyl-syn-Benzaldoxim. Sm. 1280 (B. 30, 1898). 6) 2-Brombenzylamid d. Benzolcarbonsäure. Sm. 134° (J. pr. [2] **51**, 282). 7) 2-Brom-4-Methylphenylamid d. Benzolcarbonsäure. Sm. 148.50

B. 24, 4170). — II, 1165. 1) 3, 4, 6-Tribrom-5-Oxy-2-Phenylamidomethyl-1-Methylbenzol. C14H10ONBr Sm. 120-125° (A. 302, 103).

1) Methyläther d. 3-Jod-4-Oxy-1-Phenylimidomethylbenzol. Sm. 107 C14H12ONJ bis 108° (J. pr. [2] 57, 496; [2] 58, 146).
2) 2-Methylphenylamid d. 2-Jodbenzol-1-Carbonsäure. Sm. 165°

(B. 26, 1745). — II, 1226. 3) 4-Methylphenylamid 6. 2-Jodbenzol-1-Carbonsäure. Sm. 1700

(B. 26, 1745). — II, 1226. 4) 2-Jodbenzylamid d. Benzolcarbonsäure. Sm. 154° (J. pr. [2] 51, 282).

C₁₄H₁₂ON₂Cl₂ 1) 5,5'-Dichlor-2,2'-Dimethylazoxybenzol. Sm. 128° (B. 5, 919). IV, 1339. 2) 3,3'-Dichlor-4,4'-Dimethylazoxybenzol. Sm. 119—120° (B. 32, 221).

 $C_{14}H_{12}ON_2Br_2$ 1) 2,6-Dibrom-4-[4-Dimethylamidophenyl]imido-1-Keto-1,4-Dihydrobenzol (Dimethylamidodibromdiphenazon) (A. 289, 95). -IV, 599.

C14H12ON,S

2) β -Acetyl- $\alpha\alpha$ -Di[4-Bromphenyl]hydrazin. Sm. 214° (B. 25, 1555). · IV, 665.

3) P-Dibrom-4,4'-Dimethylazoxybenzol. Sm. 138° (B. 6, 557). — IV, 1340.

4) 4-Bromphenylamid d. 4-Bromphenylamidoessigsäure. subl. bei

145°; Sm. 161° (B. 13, 237). — II, 428. 1) Methylenviolet. HCl (A. 230, 171; 251, 97; B. 22, 2067). — II, 810. 2) α -Phenyl- β -Benzoylthioharnstoff. Sm. 148—149° (A. ch. [5] II, 321). – II, *1172*.

3) 2-Thiocarbonyl-5-Keto-4-Methyl-1-[1-Naphtyl]tetrahydroimidazol. Sm. 242° (B. 24, 3282). — II, 610.

4) 6-Methyläther d. 2-Merkapto-6-Oxy-l-Phenylbenzimidazol. Sm. 208° (B. 29, 2682). 1) 4-Chloralamidoazobenzol. Sm. 127° (G. 28 [1] 241). — IV, 1355.

 $\mathbf{C}_{14}\mathbf{H}_{12}\mathbf{ON}_{3}\mathbf{Cl}_{3}$ $\mathbf{C}_{14}\mathbf{H}_{12}\mathbf{ON}_{4}\mathbf{S}$ 1) 5-Phenylhydrazido-2-Keto-3-Phenyl-2, 3-Dihydro-1, 3, 4-Thiodiazol. Sm. 124° (B. 23, 2827). — IV, 687. $\mathbf{C}_{14}\mathbf{H}_{12}\mathbf{O}_{2}\mathbf{NCl}$ 1) 2-Keto-5-Chlormethyl-3-[1-Naphtyl]tetrahydroxazol. Sm. 1180

(J. pr. [2] 44, 21). - II, 608.2) 2-Keto-5-Chlormethyl-3-[2-Naphtyl]tetrahydrobenzol. Sm. 107° (J. pr. [2] 44, 20). — II, 617.

 $\mathbf{C}_{14}\mathbf{H}_{12}\mathbf{O}_{2}\mathbf{NBr}$ 1) Methyläther d. α-Oximido-2-Brom-4'-Oxydiphenylmethan (B. 27, 1455). — III, 195.

2) Benzyläther d. labil. 5-Brom-1-Oximido-4-Keto-2-Methyl-1,4-Dihydrobenzol. Sm. 80-81° (A. 303, 32). 3) Benzyläther d. stabil. 5-Brom-1-Oximido-4-Keto-2-Methyl-1,4-

Dihydrobenzol. Sm. 95-96° (A. 303, 32). 4) 1-Brom-2-Naphtylimid d. Essigsäure. Sm. 105° (J. pr. [2] 43, 48).

— II, 616. 5) 3-Brom-2-Naphtylimid d. Essigsäure. Sm. 186,5° (Soc. 47, 509).

- II, 616. $C_{14}H_{12}O_2N_2Cl_2$ 1) $\alpha\alpha$ -Dichlor-4-Nitrophenyl-4-Methylphenylamidomethan. Sm.

119° (B. **25**, 1083). — II, 1236. 2) Bisnitrosyl-o-Chlorbenzyl. Sm. 115,5—117° (A. 269, 398). — III, 45.

3) Bisnitrosyl-m-Chlorbenzyl (2 isom. Formen). Sm. 70—71° (A. 260, 60). - III, 45.

- C, H, O, N, Cl, 4) Bisnitrosyl-p-Chlorbenzyl (2 isom. Formen). Sm. 106-107° (A. **260**, 63). — III, 46.
- $C_{14}H_{12}O_{9}N_{9}Br_{2}1$?-Dibrom-4-Nitro-2-[4-Amidobenzyl]-l-Methylbenzol. Sm. 150° (B. **26**, 1854). — **II**, 637.
 - 2) Bisnitrosyl-4-Brombenzyl. Sm. 137—138° (B. 30, 1898, 1970).
- $C_{14}H_{12}O_{2}N_{2}S$ 1) α-Phenyl-β-[2-Oxybenzoyl]thioharnstoff. Sm. 191-1920 (A. ch. [5] 11, 324). — II, 1500.
 - 2) Phenyloxybenzoylthioharnstoff? Sm. 190-191 (A. 169, 106; B. 3, 244). — II, 1263.
 - 3) s-Diphenylthioharnstoff-2-Carbonsäure. Sm. 185-190° u. Zers. (Am. 21, 147).
 - 4) s-Diphenylthioharnstoff-3-Carbonsäure. Sm. 260-2620 u. Zers. (B. **17**, 428). — II, 1263.
 - 5) 2-Methylphenylamid d. 4-Cyanbenzol-l-Sulfonsäure. Sm. 122—1230 (Am. 18, 163).
 - 6) 3-Methylphenylamid d. 4-Cyanbenzol-1-Sulfonsäure. Sm. 1280 (Am. 18, 165).
 - 7) 4-Methylphenylamid d. 4-Cyanbenzol-1-Sulfonsäure. Sm. 151 bis 152° (Am. 18, 167).
 - 8) Verbindung (aus 4-Methylbenzenylamidoxim). Sm. 89° (B. 24, 4167). **–** II, 1344.
- $C_{14}H_{12}O_{9}N_{2}S_{2}$ 1) 4,4'-Dithionylamido-3,3'-Dimethylbiphenyl. Sm. 90° (A. 274, 264). - IV, 981.
- $C_{14}H_{12}O_2N_3Br$ 1) α -[4-Brom-2-Nitrophenylhydrazon]- α -Phenyläthan. Sm. 148° (B. 22, 2817). — IV, 770.
- $C_{14}H_{12}O_2N_4Cl_2$ 1) Dimethyläther d. 3,3'-Dioxy-4,4'-Tetrazobiphenylchlorid (J. pr. [2] 58, 222).
- $\mathbf{C}_{14}\mathbf{H}_{19}\mathbf{O}_{9}\mathbf{N}_{4}\mathbf{S}$ 1) α-[3-Nitrobenzyliden]amido-β-Phenylthioharnstoff. Sm. 193—194° (B. 27, 617). - III, 40.
 - 2) α -Phenyl- β -[α -Imido-3-Nitrobenzyl]thioharnstoff (Nitrobenzimido-
- phenylthioharnstoff). Sm. 169—170° (B. 28, 484). IV, 846.

 C₁₄H₁₂O₂Cl₂S 1) Di[4-Chlorbenzyl]sulfon. Sm. 167° (A. 165, 375). II, 1057.
 2) isom. Dichlordibenzylsulfon. Sm. 149° (A. 165, 375). II, 1057.
 3) isom. Dichlordibenzylsulfon. Sm. 185° (A. 165, 375). II, 1057.
 C₁₄H₁₂O₂Cl₂S₂ 1) Di[4-Chlorbenzyl]disulfon. Sm. 120° (Am. 2, 169). II, 1057.
- 1) Di[4-Brombenzyl]sulfon. Sm. 1890 (Am. 5, 267). II, 1058. $\mathbf{C}_{14}\mathbf{H}_{12}\mathbf{O}_{2}\mathbf{Br}_{2}\mathbf{S}$ 2) s-Di[Brommethylphenyl|sulfon. Sm. 108° (Bl. [3] 9, 707). — II, 1055. 1) 4-Nitro-4'-Acetylamidodiphenylsulfid. Sm. 193° (B. 29, 2363). $\mathbf{C}_{14}\mathbf{H}_{12}\mathbf{O}_{3}\mathbf{N}_{2}\mathbf{S}$
- 1) Dehydrothio-4-Amido-1-Methylbenzol-P-Sulfonsäure + H₂O. NH₄ $\mathbf{C}_{14}\mathbf{H}_{12}\mathbf{O}_{3}\mathbf{N}_{2}\mathbf{S}_{2}$ $+ H_2O$ (B. **22**, 971). — II, 822.
 - 2) 2-Diacetylamidobenzylidenrhodaninsäure. Sm. 1890 (M. 8, 362). · III, 12.
- 1) 1,4-Diphenyl-1,4-Dihydro-1,2,4,5-Tetrazin-?-Sulfonsäure (Soc. 53, $C_{14}H_{12}O_3N_4S$ 852). — IV, 1234.
- C14H19O4NCl 1) Monäthyläther d. 6-Chlor-?-Phenylamido-?-Dioxy-1,4-Benzo-
- chinon. Sm. 180° u. Zers. (J. pr. [2] 43, 266). III, 354.

 1) Di [4-Nitro-2-Methylphenyl]jodoniumjodid. Sm. 99° (Soc. 73, 694).

 1) Di [2-Nitrobenzyl]sulfid. Sm. 125,5° (M. 10, 874, 876; B. 29, 162). $\mathbf{C}_{14}\mathbf{H}_{12}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{J}_{2}$ $C_{14}H_{12}O_4N_2S$ II, 1055.
 - 2) Di[3-Nitrobenzyl]sulfid. Sm. 109—110° (B. 30, 1072).
 - 3) Di[4-Nitrobenzyl]sulfid. Sm. 1590 (B. 28, 1338). 4) Inneres Anhydrid d. 2-[a-4-Methylphenylsulfonhydrazido]benzol-
- 1-Carbonsäure. Sm. 186° u. Zers. (B. 30, 2558; 31, 638). IV, 1553.

 C₁₄H₁₂O₄N₂S₂ 1) Di[2-Nitrobenzyl]disulfid. Sm. 112—113° (B. 25, 3029; 28, 1025; 29, 161; M. 10, 883). II, 1057, 1059.

 2) Di[3-Nitrobenzyl]disulfid. Sm. 103—104° (B. 30, 1069).

 3) Di[4-Nitrobenzyl]disulfid. Sm. 89° (B. 5, 698). II, 1060.
- 1) s-3-Nitrophenyl-2-Nitro-4-Methylphenylthioharnstoff. Sm. 188°
- (B. 16, 2335). II, 498. C₁₄H₁₂O₄Cl₂S₂ 1) Chlorid d. 3,3'-Dimethylbiphenyl-6,6'-Disulfonsäure. Sm. 228 bis 229° (A. 270, 364). II, 236. C₁₄H₁₂O₄Br₂S 1) Dimethyläther d. s-Dibromdioxydiphenylsulfon. Sm. 166° (A. 172, 48). II, 840.
- $C_{14}H_{12}O_5N_2S$ 1) Di[2-Nitrobenzyl]sulfoxyd, Sm. 1630 (M. 10, 882). II, 1055. RICHTER, Lex. d. Kohlenstoffverb.

C₁₄H₁₃ON₉Cl

 $\mathbf{C}_{14}\mathbf{H}_{13}\mathbf{ON}_{2}\mathbf{J}$

2) Benzoylamid d. P-Nitro-1-Methylbenzol-4-Sulfonsäure. Sm. 130°. C14H12O5N2S K, $Ca + 2H_2O$, Ba (Z. 1871, 422). — II, 1175. 1) Di[2-Nitrobenzyl]sulfon. Sm. 200° (M. 10, 882). — II, 1055.

C14H19O6N2S 2) 4,4'-Diamidodiphenylsulfon-1,1'-Dicarbonsäure. Sm. über 350°. Ba, Pb, Ag₂ (B. 10, 580). — II, 1308. 3) 4-Nitrobenzylamid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm.

170°. K, Ba (B. 29, 1049).

1) Dimethyläther d. s-Dinitrodioxydiphenylsulfon. Sm. 214-215° (A. 172, 49). — II, 840. C14H12O8N2S 1) Di[4-Sulfophenylamid] d. Oxalsäure (Oxanilid-p-Disulfonsäure). Ba

C14H1, O8N, S2

(A. 274, 16). — II, 570. $C_{14}H_{12}O_{10}N_2S_2$ 1) $\alpha\beta$ -Di[4-Nitrophenyl]äthan-2,2'-Disulfonsäure. Na, Na₂, K₂ (B. 28, 424; 30, 2618, 3099; 31, 354, 1078; C. 1898 [2] 952).

C₁₄H₁₂N₂Br₂S 1) Dibromid d. Dehydrothio-o-Toluidin. Sm. 190° (B. 22, 426). -

II. 821.

2) Dibromid d. Dehydrothio-p-Toluidin. Sm. 1840 (J. pr. [2] 53, 548). 1) Di[2-Chlorbenzyl]hydroxylamin. Sm. 116-117°. HCl (A. 269, 395). C₁₄H₁₃ONCl₂ **– II**, 535.

2) Di[4-Chlorbenzyl]hydroxylamin. Sm. 121-1220 (A. 298, 195). 1) Pyridinodibrompseudocumenol + 2H₂O. HBr + H₂O (B. 28, 2912).

C, H, ONBr, **– IV**, 115.

1) 4-Acetylamidodiphenylsulfid. Sm. 146° (B. 29, 2365). C14H18ONS

2) Benzylester d. Phenylamidothiolameisensäure. Sm. 96 — 97°. $+2 \text{ AgNO}_3$ (Soc. 57, 296). - II, 1053.

3) Amid d. 1-Oxymethylbenzolphenyläther-2-Thiocarbonsäure. Sm. 84° (B. 25, 3019). — II, 1560.

4) Phenylamid d. 4-Oxybenzolmethyläther-1-Thiocarbonsäure. Sm. 153—154° (B. **25**, 3528). — **II**, 1541.

1) 4-|2-Chlorbenzoyl|amido-3-Amido-1-Methylbenzol. Sm. 153°. HCl, HNO₃ (B. 13, 467). — IV, 617. 2) 5-Chlor-2-Acetylamidodiphenylamin. Sm. 150° (B. 23, 3424). —

IV, 555.

3) 4-Chlor-4'-Acetylamidodiphenylamin. Sm. 207° (A. 303, 316). 4) Methyläther d. Phenyl-2-Chlor-4-Oxybenzylidenhydrazin. Sm.

103° (B. 24, 711). — IV, 761. 5) 2-Chlor-4, 4'-Dimethylazoxybenzol. Sm. 103-104° (B. 32, 220)

6) Aethyläther d. 3-Chlor-4'-Oxyazobenzol. Sm. 51° (B. 30, 1629). - IV, 1409. 7) Aethyläther d. 4-Chlor-4'-Oxyazobenzol. Sm. 118° (B. 30, 1409).

- IV, 1409.

8) 4-Chlor-l-Phenylamido-2-Methyl-1,2-Dihydrobenzisoxazol (Chloroxazolid). Sm. 172° (C. 1898 [2] 158).

 $C_{14}H_{13}ON_2Cl_3$ 1) 4-[?-Dimethylamidophenyl]amido-2, 3, 5-Trichlor-1-Oxybenzol. Sm. 138—139°. HCl, H_2SO_4 (J. pr. [2] **24**, 440). — II, 728.

 $\mathbf{C}_{14}\mathbf{H}_{13}\mathbf{ON}_{2}\mathbf{Br}$ 1) $\alpha - [2 - \mathbf{Oxybenzyliden}] - \beta - [2 - \mathbf{Brom} - 4 - \mathbf{Methylphenyl}] \mathbf{hydrazin}$ 109° (Soc. 73, 178). — IV, 810. 2) 2-Brom-4,4'-Dimethylazoxybenzol. Sm. 93° (B. 22, 1174; M. 10,

597). — IV, 1340. 3) 3-Brom-4,4'-Dimethylazoxybenzol. Sm. 88° (B. 22, 1175; M. 10,

599). — IV, 1340. 4) P-Brom-4,4'-Dimethylazoxybenzol. Sm. 74° (B. 3, 552). — IV, 1340. 5) 4-Brom-1-Phenylamido-2-Methyl-1,2-Dihydrobenzisoxazol (Brom-

oxazolid). Sm. 167º (C. 1898 [2] 158). 1) Methyläther d. Phenyl-3-Jod-4-Oxybenzylidenhydrazin. Sm.

106,5-107° (J. pr. [2] 57, 496; [2] 58, 144). 1) α -Formylamido- $\alpha\beta$ -Diphenylthioharnstoff. Sm. 128—129° (B. 27, $C_{14}H_{13}ON_3S$

1517). — IV, 681. 2) $\alpha - [2 - Oxybenzyliden]$ amido $-\beta$ -Phenylthioharnstoff. Sm. 183° (B.

27, 616). — III, 76. 3) α-Benzoyl-β-Phenylamidothioharnstoff. Sm. noch nicht bei 220°

(Soc. 55, 304). — IV, 681. 4) β-Benzoylamido-α-Phenylthioharnstoff. Sm. 162° (B. 29, 2916).

5) α -Phenyl- β -[α -Oximidobenzyl]thioharnstoff. Sm. 172° (B. 18, 1060; **24**, 394). — II, 1205.

- C, H, ON, S
- 6) 4'-Thionylamido-2,3'-Dimethylazobenzol. Sm. 89° (B. 28, 2195). - IV, *1377*.
- 7) 4-Thionylamido-3,4'-Dimethylazobenzol. Sm. 86° (B. 28, 2196). · IV. 1378.
- 8) 6-Thionylamido-3,4'-Dimethylazobenzol. Sm. 95-105° (B. 28. 2200). — IV, *1378*.
- $C_{14}H_{13}O_2NCl_2$ 1) $\alpha\beta$ -Dichlor-norm. Propylester d. 1-Naphtylamidoameisensäure.
 - Sm. 93° (J. pr. [2] 44, 22). Π, 608. 2) ββ-Dichlorisopropylester d. 1-Naphtylamidoameisensäure. Sm. 115° (J. pr. [2] 44, 20). Π, 608.
 - 3) $\alpha\beta$ -Dichlor-norm. Propylester d. 2-Naphtylamidoameisensäure.
 - Sm. 99° (J. pr. [2] 44, 22). II, 617. 4) $\beta\beta$ -Dichlorisopropylester d. 2-Naphtylamidoameisensäure. Sm. 101° (J. pr. [2] 44, 20). — II, 617.
- $\mathbf{C_{14}H_{18}O_2NBr_2}$ 1) Aethylester d. $\gamma\delta$ -Dibrom- α -Cyan- δ -Phenyl- α -Buten- α -Carbonsäure. Sm. 95° (J. pr. [2] 50, 12). II, 1442.
- 1) 2-Phenylacetylamidoacetylthiophen. Sm. 141,5° (B. 19, 2892). $\mathbf{C}_{14}\mathbf{H}_{13}\mathbf{O}_{2}\mathbf{NS}$ III, 764.
 - 2) 4-Amidobiphenylmerkaptoessigsäure. Sm. oberh. 200° (B. 13, 1411). **– II**, 895.
 - 3) Acetat d. 1-Acetylamido-2-Merkaptonaphtalin. Sm. 173,5—1750
- $(B.~\bf 20,~1901).-\Pi,~888.$ $\bf C_{14}H_{18}O_2N_2Cl_3~1)~\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[2,6-Diamido-4-Oxyphenyl]äthan. Zers. bei 95° (J. pr. [2] 39, 501). — II, 995.
- C₁₄H₁₈O₂N₂Br 1) Phenylhydrazid d. Oxyessig-4-Bromphenyläthersäure. Sm. 1740 (C. 1898 [1] 988).
- 1) s-Phenyl-2-Nitro-4-Methylphenylthioharnstoff. Sm. 1430 (B. 16, $C_{14}H_{13}O_{2}N_{3}S$ 2336). — II, 498.
 - 2) s-3-Nitrophenyl-4-Methylphenylthioharnstoff. Sm. 1730 (B. 16, 2335). — II, *498*.
 - 3) 3-[Phenylthioharnstoff]amidobenzol-1-Carbonsäure. Sm. 204 bis 205° u. Zers. (A. 236, 173). — II, 1288.
- $C_{14}H_{13}O_{2}N_{4}Cl$ 1) Aethyl-3-Chlor-4'-Nitrodiazoamidobenzol. Sm. 106° (Soc. 53, 674). **— IV**, 1565.
 - 2) Aethyl-4-Chlor-3'-Nitrodiazoamidobenzol. Sm. 129,5° (Soc. 53,
 - 674). IV, 1565.
 3) 3-Nitro-2'-Chlor-4'-Dimethylamidoazobenzol? Sm. 155—156° (B.
- 19, 1956). IV, 1359. C₁₄H₁₃O₂N₄Br 1) Aethyl-4'-Brom-3-Nitrodiazoamidobenzol. Sm. 135-136° (Soc. 55, 428). **— IV**, *1566*.
 - 2) Aethyl-4-Brom-3'-Nitrodiazoamidobenzol. Sm. 111° (Soc. 55, 428).
 - IV, 1566.
 3) isom. Aethyl-4-Brom-3'-Nitrodiazoamidobenzol. Sm. 96—1170 (Soc. 55, 428; 57, 785). — IV, 1566.
 - 4) Aethyl-4-Brom-4'-Nitrodiazoamidobenzol. Sm. 139—140° (Soc. 55,
 - 423). IV, 1566. 5) isom. Aethyl-4-Brom-4'-Nitrodiazoamidobenzol. Sm. 115—116° (Soc. **55**, 423). — IV, 1566.
 - 6) Aethyl-4'-Brom-4-Nitrodiazoamidobenzol. Sm. 124-1250 (Soc. 55, 423). - IV, 1566.
- $C_{14}H_{13}O_2ClS$
- 1) Phenylchlormethyl-4-Methylphenylsulfon. Sm. 203 ° (J. pr. [2] **40**, 519). — **II**, 1055.
- 1) Acetylamidodiphenylsulfon. Sm. 140° (J. 1885, 1590). II, 814. C14H13O3NS 2) β-[1-Naphtylamidoformyl]merkaptopropionsäure. Sm. 151°. —
 - II, 608. 3) β -[2-Naphtylamidoformyl]merkaptopropionsäure. — II, 618.
 - 4) 1-Aethyl- $\beta\beta$ -Naphtindol-2-Sulfonsäure. Na, Ag (B. 25, 2546; 27, 3255). **— İV**, *389*.
 - 5) Acetylphenylamid d. Benzolsulfonsäure. Sm. 116,5° (Am. 19, 760).
 - 6) Benzoylamid d. 1-Methylbenzol-2-Sulfonsäure. Sm. 110-112°.
 - $K + \frac{1}{2}H_2O$, Ca, Ba, Ag (Z. 1870, 579). II, 1175. 7) Benzoylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 147—150°. K, Ca + H_2O , Ba, Ag, Ag + NH_3 (Z. 1870, 578). — II, 1175.

- C1. H1. O2N. Cl3 1) Verbindung (aus ?-Trichlor-1-Oxybenzol u. 4-Nitroso-1-Dimethylamidobenzol). Sm. 120° (Bl. [3] 13, 1069).
- 1) 3-Amidophenyl-4-Methylphenylketon-?-Sulfonsäure. Sm. oberh. $C_{14}H_{13}O_4NS$ 300° u. Zers. Ba (A. 286, 314). — III, 215. 2) Benzolsulfonat d. anti-Methylbenzhydroxamsäure. Sm. 72° (B.
 - 29, 1156).
 - 3) 1-[2-Methylphenyl]amid d. Benzol-1-Carbonsäure-2-Sulfonsäure. K, o-Toluidinsalz (Am. 20, 276).
 4) 1-[4-Methylphenyl]amid d. Benzol-1-Carbonsäure-2-Sulfonsäure.

 - Fl. K, K₂ + H₂O, Ba, p-Toluidinsalz (Am. 20, 274).
 5) 2-Benzylamid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Fl. Na, Ba (B. 29, 1048).
 - 6) 2-[4-Methylphenyl] amid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm. 155°. Ba + 3 H₂O (Am. 17, 323).
 - 7) 4-[2-Methylphenyl]amid d. Benzol-1-Carbonsäure-4-Sulfonsäure. Sm. $246-247^{\circ}$. Ba + 1(5)H₂O (Am. 18, 164).
 - 8) 4-[3-Methylphenyl]amid d. Benzol-1-Carbonsäure-4-Sulfonsäure. Sm. $241-242^{\circ}$. Ba + 3(5) H₂O (Am. 18, 166).
 - 9) 4-[4-Methylphenyl] amid d. Benzol-l-Carbonsäure-4-Sulfonsäure. Sm. 282—283°. Ba + H₂O (Am. 18, 168).
- 1) α-[?-Nitro-4-Methylphenyl]sulfonimido-α-Amido-α-Phenylmethan. $C_{14}H_{18}O_4N_8S$ Sm. 122—123° (B. 5, 142). — IV, 847.
- 1) Dimethyläther d. ?-Oxyphenyl-?-Brom-?-Oxyphenylsulfon (Brom-C14H19O4BrS anisolsulfon). Sm. 170° (B. 27, 2543).
- 1) Aethylester d. 4-Nitrobiphenyl-4'-Sulfonsäure. Sm. 168-169° $C_{14}H_{18}O_5NS$ (B. 13, 1410). — II, 226. 1) ?-Nitro-4,4'-Dimethylazobenzol-3-Sulfonsäure. K+H₂O, Ba+
- C14H18O5N3S
- IV, 1664. 1) ?-Dinitro-2,5-Dimethylphenylamid d. Benzolsulfonsäure. Sm. $C_{14}H_{13}O_6N_3S$
- $174 175^{\circ}$ (*Bt.* [3] **15**, 1037). 1) 4 - Amido - 4' - Diazo - 3, 3' - Dimethylbiphenyl - 6, 6' - Disulfonsäure $C_{14}H_{13}O_6N_3S_2$ (A. 270, 368). — IV, 1543.
- 1) Aethylester d. Di[4-Nitrophenyl]phosphorsäure. Sm. 135° (A. 224, $C_{14}H_{18}O_8N_9P$ 164). — II, 683.
- 1) s-Phenyl-6-Chlor-3-Methylphenylthioharnstoff. Sm. 107-1090 C14H18N2CIS (B. **20**, 201). — **II**, 479.
- 1) 5-Brom-2-[1-Naphtyl]amido-4,5-Dihydro-1,3-Thiazin. Pikrat $\mathbf{C}_{14}\mathbf{H}_{13}\mathbf{N}_{2}\mathbf{BrS}$ (Soc. 69, 29).
 - 2) 5-Brom-2-[2-Naphtyl]amido-4, 5-Dihydro-1, 3-Thiazin. Sm. 190 bis 191° (Soc. 69, 28).

 1) Jodmethylat d. 5-Brom-1-Benzyl-1, 2, 3-Benztriazol. Sm. 153 bis
- C14H13N3BrJ 154° (A. 249, 369). — IV, 1144. C14H14ONCl
- 1) 6,8-Dimethyl-2-[γγγ-Triehlor-β-Oxypropyl]chinolin. Sm. 108° (B. 20, 41). IV, 380. C₁₄H₁₄ONBr 1) 2-Brom-3-Piperidyl-1-Keto-2, 3-Dihydroinden. Sm. 117º (A. 247,
 - 149). IV, 23. 2) 1-Naphtylamid d. α-Brom-norm. Buttersäure. Sm. 151° (B. 25, 2925). — II, 607.
 - 3) 1-Naphtylamid d. α-Bromisobuttersäure. Sm. 116° (B. 25, 2929). - II, 607.
 - 4) 2-Naphtylamid d. α-Brom-norm. Buttersäure. Sm. 134° (B. 25, 2926). — II, 617.
 - 5) 2-Naphtylamid d. α-Bromisobuttersäure. Sm. 135° (B. 25, 2930). - II, 617.
- 1) 4-Thionylamido-1-Methylbenzylamidobenzol. $\mathbf{C}_{14}\mathbf{H}_{14}\mathbf{ON}_{2}\mathbf{S}$ Sm. 94° (B. 31, 2182).
 - 2) s-Phenyl-2-Oxymethylphenylthioharnstoff. Sm. 136° (B. 22, 1671). **- II**, 1062
 - 3) α -Oxy- β -Phenyl- α -Benzylthioharnstoff. Sm. 131—132° (J. pr. [2] **56**, 88).

- C14H14ON9S 4) Methyläther d. s-Phenyl-2-Oxyphenylthioharnstoff. Sm. 1270 (B. **21**, 1868), — **II**, 711.
 - 5) Benzyläther d. s-Phenyloxythioharnstoff. Sm. 115° (B. 24, 380). - II, 533.
- 1) Aethyläther d. 4-[4-Oxyphenyl]amidodiazobenzolchlorid (B. 26, $C_{14}H_{14}ON_3Cl$ 693). - IV, 1527.
- C₁₄H₁₄O₂NBr 1) Aethyläther d. 6-Brom-1-Acetylamido-2-Oxynaphtalin. Sm. 2469 (C. **1897** [1] 239).
- 1) Jodmethylat d. $4-\lceil \alpha\gamma$ -Diketobutyl]ehinolin + H₂O. Sm. 189 bis 191° u. Zers. Na (M. 17, 405). IV, 374. $C_{14}H_{14}O_{2}NJ$
- C₁₄H₁₄O₂N₂Cl₂ 1) s-Di[3-Chlor-4-Oxymethylphenyl]hydrazin. Sm. 35° (B. 25, 79).
- IV, 1507. C₁₄H₁₄O₂N₂J₂ 1) Jodid d. Amid d. Benzolcarbonsäure. Sm. 110—112° (B. 23, 3040). - II, 1159.
- 1) $\alpha [4 Methylphenyl]$ sulfonimido $-\alpha Amido \alpha Phenylmethan. Sm.$ $C_{14}H_{14}O_{2}N_{2}S$ 114° (B. 5, 141). — IV, 847.
 - 2) Aethylester d. α -[1-Naphtyl]thioharnstoff- β -Carbonsäure. 183—183,5° (Soc. 69, 328).
 - 3) Aethylester d. α -[2-Naphtyl] thioharnstoff- β -Carbonsäure. Sm. 155—155,5° (Soc. 69, 329).
- 1) αβ-Di Thionylphenylhydrazido äthan. Sm. 121—123° (A. 270, 122). $C_{14}H_{14}O_{2}N_{2}S_{2}$
- IV, 662.

 1) s-Di[?-Methylnitrosamidophenyl]sulfid. Sm. 133° (B. 23, 3022). - $C_{14}H_{14}O_{2}N_{4}S$ II, 804.
- $C_{14}H_{14}O_2ClP$ 1) Chlorid d. 4-Methylphenylphosphinsäuremono-4-Methylphenylester. Sm. 60°; Sd. oberh. 360° (A. 293, 264). — IV, 1669.
- C₁₄H₁₄O₂ClAs 1) Dimethyläther d. Di[4-Oxyphenyl]chlorarsin. Sm. 79-80° (B. 20 50). **— IV**, 1688.
- C₁₄H₁₄O₂Cl₂Se 1) Dimethyläther d. Di[?-Oxyphenyl]selenidehlorid (Dichlorselenanisol). Sm. 159° (B. **28**, 609).
- C₁₄H₁₄O₂Cl₂Te 1) Dimethyläther d. Di[?-Oxyphenyl] telluriddichlorid. Sm. 190°. $2 + \text{PtCl}_4$ (B. 30, 2829).
- $C_{14}H_{14}O_{2}Br_{2}Se1$) Dimethyläther d. Di[?-Oxyphenyl]selenidbromid. Sm. 124° (B. **28**, 610).
- $\mathbf{C}_{14}\mathbf{H}_{14}\mathbf{O}_{2}\mathbf{Br}_{2}\mathbf{Te}\,1)$ Dimethyläther d. Di[?-Oxyphenyl]telluriddibromid. Sm. $183,5^{\circ}$ (B. 30, 2830).
- C₁₄H₁₄O₂J₂Te 1) Dimethyläther d. Di[?-Oxyphenyl]telluriddijodid. Sm. 170° (B. **30**, 2831).
- 1) 2,2'-Dimethylazobenzol-?-Sulfonsäure + 3 H₂O. IV, 1376. $C_{14}H_{14}O_3N_2S$
 - 2) 4,4'-Dimethylazobenzol-3-Sulfonsäure. Na $+4^{1}/_{2}H_{2}O$, K $+5H_{2}O$, $Ba + 11 H_2O$, Pb (B. 3, 551; 21, 119). — IV, 1380.
 - 3) 5-Methyl-2-Phenyl-2, 3-Dihydrobenzimidazol-23-Sulfonsäure. Na (B. 24, 793). — IV, 620.
 - 4) α Phenylhydrazon α [4-Sulfophenyl] äthan (Acetophenonsulfonsäurephenylhydrazon). Phenylhydrazinsalz (B. 19, 2626). - IV, 771.
 - 5) Amid d. Phenylsulfon 2 Methylamidobenzol 1 Carbonsäure. Sm. 154° (*J. pr.* [2] **44**, 427). — II, 1253. 6) **M**ethylamid d. **P**henylsulfon - **2** - **A**midobenzol - **1** - Carbonsäure.

 - Sm. 114° (J. pr. [2] 44, 425). II, 1253.
 7) 2-Methylphenylimid d. Benzel-1-Carbonsäure-2-Sulfonsäure.
 Sm. 193° (Am. 11, 347). II, 1296.
 - 8) 4-Methylphenylimid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm. 202° (Am. 11, 348). II, 1296.
 - 9) Phenyläthenylamidoximester d. Benzolsulfonsäure. Zers. bei 100° (B. 24, 4174; 26, 605). - II, 1315.
- 1) s-Di[?-Methylnitrosamidophenyl]sulfoxyd. Sm. 171° (B. 23, 3021). $C_{14}H_{14}O_3N_4S$ **- II**, 805.
 - 2) 2,3'-Dimethyl-4'-Diazoazobenzolsulfonsäure. Na (B. 20, 1182). **IV**, 1532.
- $C_{14}H_{14}O_4NCl_7$ 1) Diäthylester d. ? Heptachlor 2, 4, 6 Trimethyl 2, 3 Dihydropyridin-3,5-Dicarbonsäure. Sm. 152° (A. 215, 19). — IV, 95.
- 1) 4-[4-Dimethylamidophenyl]imido-1-Keto-1,4-Dihydrobenzol-2 $C_{14}H_{14}O_4N_9S$ oder 3-Sulfonsäure (B. 21, 888). — IV, 599.

- 2) 4, 4'-Dimethylazoxybenzol-?-Sulfonsäure. Ba (B. 22, 44), -C₁₄H₁₄O₄N₂S IV, 1341.
 - 3) 4-Oxy-2, 2'-Dimethylazobenzol-5'-Sulfonsäure. Na. Ba (B. 17, 366). **– IV**, 1423.
 - 4) 6-Oxy-3,4'-Dimethylazobenzol-2'-Sulfonsäure. Na. Ba + 4H₀O (B. 17, 358). — IV, 1423.
 - 5) 2-Oxy-3,5-Dimethylazobenzol-4'-Sulfonsäure (B. 19, 148). IV, 1424.
 - 6) Amid d. 1-Diacetylamidonaphtalin-5-Sulfonsäure. Sm. 200° (B. 23, 1120). — II, 626.
 - 7) 4-Methylphenylamid d. 2-Nitro-l-Methylbenzol-4-Sulfonsäure. Sm. 130—131° (Z. 1870, 324). — II, 504.
 - 8) 6-Nitro-2,4-Dimethylphenylamid d. Benzolsulfonsäure. Sm. 152 his 153° (Bl. [3] **15**, 1036).
- 1) Dibenzolsulfondimethylendiimid. Sm. 1320 (B. 26, 2149). II. 116. $C_{14}H_{14}O_4N_2S_2$ $C_{14}H_{14}O_5NP$ 1) Phosphat d. 4-Oxy-1-Methylbenzol-3-Carbonsäurephenylamid. Sm. 187—189° (B. 31, 2697).
- $C_{14}H_{14}O_5N_2S$ 1) 2,4-Dioxydimethylazobenzolsulfonsäure (B. 11, 2197). — IV, 1445. 1) 2-Diacetylamid d. 6-Brom-3,4-Dioxybenzoldimethyläther-2-Car- $C_{14}H_{14}O_6NBr$ bonsäure-1-Carbonsäurealdehyd. Sm. 150° (B. 31, 929). C₁₄H₁₄O₆N₂S₂ 1) $\alpha\beta$ -Di[4-Amidophenyl]äthen-2,2'-Disulfonsäure (B. 19, 3235). —
- IV, 994. 2) 2,2'-Dimethylazobenzol-4,4'-Disulfonsäure. K_2 , $Ca + 3H_2O$, Ba $+ H_9O$, Pb $+ H_9O$ (A. 221, 183). — IV, 1380.
 - 3) 2, 2'-Dimethylazobenzol-5, 5'-Disulfonsäure $+7^{1/2}$ H₂O. Zers. bei 180°. $K_2 + 2^{1/2}H_2O$, $Ca + 5H_2O$, $Ba + 4H_2O$, $Pb + 4H_2O$ (A. 203, 74; 221, 181). — IV, 1380.
 - 4) 4,4'-Dimethylazobenzol-2,2'-Disulfonsäure. Ba + 3 H₂O (A. 221, 182). — IV, *1380*.
 - 5) 4,4'-Dimethylazobenzol-3,3'-Disulfonsäure. Zers. bei 190°. K2 $+3 H_2 O$, Ca $+3 H_2 O$, Ba $+H_2 O$, Pb $+2 H_2 O$ (A. 203, 80; 221, 182). -1 V, 1380.
 - 6) 4,4'-Dimethylazobenzol-\alpha \alpha'-Disulfons\text{\text{aure}} (4,4'-Azobenzyldisulfonsaure). $K_2 + \frac{1}{2}H_2O$, $Ba + \frac{11}{2}H_2O$, $Ag_2 + \frac{1}{2}O$ (A. 221, 223). IV, 1386.
- $C_{14}H_{14}O_6N_4S$ 1) 5-Nitro-2-Methylphenylhydrazid d. 4-Nitro-1-Methylbenzol-2-Sulfonsäure. Sm. 140-142° u. Zers. (B. 20, 1241). - IV, 803.
- C14H14O7NC1 1) Methylester d. $1 - [\beta - \text{Chlor} - \beta - \text{Nitro} - \alpha - \text{Acetoxylathyl}]$ benzol-2-Ketocarbonsäure. Sm. 115° (A. 278, 205). — II, 1782.
- $C_{14}H_{14}O_7NBr$ 1) Diäthylester d. β -Brom- α -Keto- α -[2-Nitrophenyl] äthan- $\beta\beta$ -Dicarbonsäure (D. d. 2-Nitrobenzoylbrommalonsäure). Sm. 720 (B. 17, 2793). - II, 1961.
- C₁₄H₁₄O₇N₂S₂ 1) 4,4'-Dimethylazoxybenzol-?-Disulfonsäure. Ag₂ (B. 22, 44). IV, 1341.
- $C_{14}H_{14}O_8N_4S_2$ 1) 3,3'-Dimethoxyl-4,4'-Tetrazobiphenyl-NN-Disulfonsäure. Na₂, K_2 (J. pr. [2] 58, 223). $\mathbf{C}_{14}\mathbf{H}_{14}\mathbf{N}_{3}\mathbf{BrS}$ 1) α-Phenyl-β-[2-Brom-4-Methylphenyl]amidothioharnstoff. Sm. 1420
- (Soc. 73, 177). IV, 806. $\mathbf{C}_{14}\mathbf{H}_{15}\mathbf{ON}_{2}\mathbf{J}$ 1) Jodmethylat d. Harmin. Sm. 298° (B. 18, 402; 30, 2482). — III, 885.
- 1) 2-Methylphenylimid-2-Methylphenylamid d. Phosphorsäure. Sm. $\mathbf{C}_{14}\mathbf{H}_{15}\mathbf{ON}_{2}\mathbf{P}$ 309° (B. 29, 726).
 - 2) 4-Methylphenylimid-4-Methylphenylamid d. Phosphorsäure. Sm. 328° (B. 29, 725).
- $C_{14}H_{15}OSAs$ 1) Dibenzylthiolarsinsäure. Sm. 197-199 (A. 233, 90). - IV, 1690. C14H15O2NS 1) Dimethylamidodiphenylsulfon. Sm. 82° (B. 10, 1742; 12, 1275, 1792). — II, 814.
 - 2) Methylbenzylamid d. Benzolsulfonsäure. Sm. 93° (A. 265, 183; **273**, 19). — II, *531*.
 - 3) Methylphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 94—95° (J. pr. [2] 47, 371). II, 425.
 4) 2-Methylphenylamid d. 1-Methylbenzol-2-Sulfonsäure. Sm. 134°
 - (B. 12, 1348). II, 468.
 - 5) 2-Methylphenylamid d. 1-Methylbenzol-3-Sulfonsäure. Sm. 108° (Am. 19, 198).

- $C_{14}H_{15}O_{2}NS$ 6) 3-Methylphenylamid d. 1-Methylbenzol-3-Sulfonsäure. Sm. 1030 (B. 12, 1349). — II, 479.
 - 7) 4-Methylphenylamid d. 1-Methylbenzol-3-Sulfonsäure. (Am. **19**, 198).
 - 8) 4-Methylphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 1170 (Z. 1870, 324; B. 12, 1348). - II, 504.
 - 9) 2,4-Dimethylphenylamid d. Benzolsulfonsäure. Sm. 128-1290 [Bl. [3] **15**, 1036).
 - 10) 2,5-Dimethylphenylamid d. Benzolsulfonsäure. Sm. 138—139° (*Bl.* [3] **15**, 1037).
- C₁₄H₁₅O₃NCl₂ 1) Diäthyläther d. 3,4-Dichlor-2,2-Dioxy-5-Keto-1-Phenyl-2,5-Dihydropyrrol (Dichlormaleïnanildiäthyläther). Sm. 96—97° (A. 263, 161; B. 28, 57). — II, 416.
- C14H15O2NS 1) Dibenzylsulfaminsäure + H₂O. Sm. 160-170° u. Zers. (J. pr. [2] **44**, 515). — **II**, *582*.
 - 2) 1-Methylbenzylamidobenzol-?-Sulfonsäure. Na+3H₂O (B. 23, 558). - II, 582.
 - 3) Phenylamid d. 3-Oxybenzoläthyläther-1-Sulfonsäure. Sm. 88° (B. **25**, 1836). — **II**, 832.
 - 4) Phenylamid d. 4-Oxybenzoläthyläther-1-Sulfonsäure. (B. **25**, 1838). — II, 832.
 - 5) 4-Aethoxylphenylamid d. Benzolsulfonsäure. Sm. 1420 (A. 265, 184). — II, 721.
- $C_{14}H_{15}O_3N_3S$ 1) 3-[α-Sulfophenylhydrazonpropyl]pyridin. Sm. 235° (B. 24, 2540). **– IV**, 799.
 - 2) 1-[Methyl-4-Methylphenyl]amidodiazobenzol-4-Sulfonsäure. Na, Ag (B. 24, 2082). — IV, 1572.
 - 3) 4-Aethylamidoazobenzol-4'-Sulfonsäure. Na (B. 20, 929). IV, 1369.
 - 4) 6-Methylamido-3-Methylazobenzol-4'-Sulfonsäure. Sm. 198 bis 199° (B. **24**, 2082). — IV, 1384.
 - 5) 4-Dimethylamidoazobenzol-4'-Sulfonsäure (Orange III; Helianthin;
- Tropäolin D) (B. 10, 528; 17, 1491; 20, 2996). IV, 1369. $\mathbf{C}_{14}\mathbf{H}_{15}\mathbf{O}_{3}\mathbf{N}_{3}\mathbf{S}_{2}$ 1) Dimethylindaminthiosulfonat (A. 251, 89). II, 801.
- $C_{14}H_{15}O_4NBr_4$ 1) Verbindung (aus Amidobenzol u. Xanthogallol) (A. 245, 341). II, 1014.
- 1) Phenylamid d. 1,2 Dioxybenzoldimethyläther 4 Sulfonsäure. $\mathbf{C}_{14}\mathbf{H}_{15}\mathbf{O}_{4}\mathbf{NS}$ Sm. 130,5—131,5° (G. 26 [2] 235).
- 1) 4-Methoxylbenzaldehyd-4-Oxyphenylthionaminsäure. Sm. 1880 C14H15O5NS A. **274**, 245). — III, 82.
- $\mathbf{C_{14}H_{15}O_5N_2Br}$ 1) Diacetat d. α -Diisonitrosobromanethol. Sm. $101-102^{\circ}$ (G. 23 [2] 189). — II, 853.
 - 2) Diacetat d. β -Diisonitrosobromanethol. Sm. 130—131° (G. 23 [2]) 189). **— II**, *853*.
- 1) Benzaldehyd-3-Amidobenzolcarbonsäuredisulfit (A. 210, 124). $\mathbf{C}_{14}\mathbf{H}_{15}\mathbf{O}_{6}\mathbf{NS}$ III, 13.
- 1) 4-Amido 3, 3' Dimethylbiphenyl 6, 6' Disulfonsäure. Ba $+ 5 H_2 O$ $\mathbf{C}_{14}\mathbf{H}_{15}\mathbf{O}_{6}\mathbf{NS}_{2}$ (A. 270, 369). - II, 636.2) Dibenzylamindisulfonsäure? Ba (A. 144, 317). — II, 582.
- $\mathbf{C}_{14}\mathbf{H}_{15}\mathbf{O}_{8}\mathbf{N}_{2}\mathbf{Cl} \ 1) \ \mathbf{Diacetat} \ \mathbf{d.} \ \ \mathbf{2}\text{-}\mathbf{Chlor} \mathbf{3}, \mathbf{6} \mathbf{Di}[\mathbf{Acetylamido}] \mathbf{1}, \mathbf{4}\text{-}\mathbf{Dioxybenzol}. \quad \mathbf{Sm.}$ 255° (J. pr. [2] 40, 490). — II, 948.
- $C_{14}H_{15}O_8N_3S_2$ 1) 6-Amido-3,4'-Dimethylazobenzol-?-Disulfonsäure. Ba $+4H_2O$
- (B. 17, 80). IV, 1381. 1) 4'-Amido-4-Oxy-3,3'-Dimethylbiphenyl-6,6'-Disulfonsäure. Ba+ $\mathbf{C}_{14}\mathbf{H}_{15}\mathbf{O}_{7}\mathbf{NS}_{2}$ $4^{1}/_{2}$ H₂O (A. **270**, 370). — II, 898.
- 1) 2-Methylphenylamid-2-Methylphenylimid d. Thiophosphorsäure $C_{14}H_{15}N_2SP$ (Sulfophosphazo-o-Toluol-o-Toluid) (B. 28, 1244).
 - 2) 4-Methylphenylamid-4-Methylphenylimid d. Thiophosphorsäure (Sulfophosphazo-p-Toluol-p-Toluid). Sm. 1820 (B. 28, 1245).
- 1) s-Dimethyldiamidodiphenylsulfoxyd. Sm. 154° (B. 23, 3020). $\mathbf{C}_{14}\mathbf{H}_{16}\mathbf{ON}_{2}\mathbf{S}$ II, 805.
- 1) Diäthyläther d. 3-Chlor-2,4-Dioxy-6-Methylchinolin. Sm. 70,5 $\mathbf{C}_{14}\mathbf{H}_{16}\mathbf{O}_{2}\mathbf{NCl}$ bis $71,5^{\circ}$ (B. 18, 2982). — IV, 320.

2) Chloräthylat d. 2-Methylchinolin-3-Carbonsäuremethylester. Sm. C14H16O2NC1 150° u. Zers. $2 + PtCl_4$ (A. 282, 122). — IV, 352.

3) Chlormethylat d. 2-Methylchinolin-3-Carbonsäureäthylester. Sm. 158° u. Zers. 2 + PtCl₄ (A. **282**, 110; B. **19**, 38). - IV, 352.

- C₁₄H₁₆O₂NBr 1) Bromäthylat d. **2-M**ethylchinolin-3-Carbonsäuremethylester. Sm. 154° (A. **282**, 123). IV, 352.
- 1) Jodäthylat d. 2-Methylchinolin-3-Carbonsäuremethylester. Sm. C14H16O2NJ 210° u. Zers. (A. 282, 121). - IV, 352. 2) Jodmethylat d. 2-Methylchinolin-3-Carbonsäureäthylester. Sm.

208° u. Zers. (B. 19, 37; A. 282, 109). — IV, 352.

1) ?-Methylbenzylamidophenylphosphinsäure. Sm. 96°. Na + 2 H₂O $\mathbf{C}_{14}\mathbf{H}_{16}\mathbf{O}_{2}\mathbf{NP}$ (A. 260, 35). - IV, 1650.2) 4-Methylphenylmonamid d. 4-Methylphenylphosphinsäure. Sm.

208° (A. **293**, 269). — **IV**, 1669.

1) Phenylamid d. β-Phenylamidoäthan-α-Sulfonsäure. Sm. 74°. HCl $C_{14}H_{16}O_{2}N_{2}S$ (B. 18, 870; Am. 19, 747). — II, 427.

2) 6-Amido-2, 4-Dimethylphenylamid d. Benzolsulfonsäure. Sm. 140 bis 141° (Bl. [3] 15, 1037).

3) 2-Methylphenylhydrazid d. 1-Methylbenzol-2-Sulfonsäure. 140—142° u. Zers. (B. 20, 1241). — IV, 803.

4) 4-Methylphenylhydrazid d. 1-Methylbenzol-4-Sulfonsäure. 140° (B. 20, 1241). — IV, 809.

- 1) $\beta\delta$ -Lakton d. δ -Brom- β -Oxypentan- $\beta\delta$ -Dicarbonsäure- β -[4-Methyl-C14H16O2NBr phenyl]amid. Sm. 172° (A. 292, 232).
- $C_{14}H_{16}O_3NP$ 1) Amid d. Di[4-Methylphenyl]phosphorsäure. Sm. 146° (B. 30,
- 1) 2 [oder 3]-[a-Phenylhydrazonisobutyl] thiophen-?-Sulfonsäure. $C_{14}H_{16}O_3N_2S_2$ Phenylhydrazinsalz (B. 19, 2627). — III, 765.
- 1) 4,4'-Diamido-3-Oxybiphenyläthyläther-6-Sulfonsäure. HCl + $\mathbf{C}_{14}\mathbf{H}_{16}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{S}$ 2H₂O (B. **20**, 3175). — II, 894. 2) Dimethyläther d. s-Diamidodioxydiphenylsulfon. 2HJ (A. 172, 50). - II, 841.
- 1) $\alpha\beta$ -Di[3-Amidophenylsulfon] athan. Sm. 245°. HCl (A. 294, 245). $C_{14}H_{16}O_4N_9S_9$ 2) αβ-Di[Phenylsulfonamido] äthan (Aethylenamid d. Benzolsulfonsäure). Sm. 168° (A. 287, 221; B. 28, 3074).
 - 3) Amid d. 3,3'-Dimethylbiphenyl-6,6'-Disulfonsäure. Zers. bei 360° (A. 270, 364). — II, 236.
 - 4) Amid d. 2,2'-Dimethylazobenzol-4,4'-Disulfonsäure. Sm. oberh.
 - 250° (A. 221, 185). IV, 1380. 5) Amid d. 2,2'-Dimethylazobenzol-5,5'-Disulfonsäure. Sm. 300°
 - (319°). K₂ (A. **203**, 76; **270**, 373). IV, 1380. 6) Amid d. **4**,4'-Dimethylazobenzol-3,3'-Disulfonsäure. Sm. 270° (A. 203, 82; 221, 210). — IV, 1381.
- $C_{14}H_{16}O_5N_2S_2$ 1) Verbindung (aus Chloracetessigsäureäthylester). Sm. 142° (B. 20, 3132). - I, 1229.
- $\mathbf{C}_{14}\mathbf{H}_{16}\mathbf{O}_{6}\mathbf{NBr}$ 1) Diäthylester d. α -Brom- α -[2-Nitrophenyl]äthan- $\beta\beta$ -Dicarbonsäure. Sm. 68° (Soc. 49, 363). — II, 1849. 2) Diäthylester d. α -Brom- α -[3-Nitrophenyl]äthan- $\beta\beta$ -Dicarbonsäure. Sm. 88° (Soc. 49, 360). — II, 1849.

3) Diäthylester d. α -Brom- α -[4-Nitrophenyl]äthan- $\beta\beta$ -Dicarbonsäure.

- Sm. 89° (Soc. 49, 362). II, 1850. 1) $\alpha\beta$ -Di[4-Amidophenyl]äthan-2,2'-Disulfonsäure (B. 28, 424; 30, $C_{14}H_{16}O_6N_2S_2$
 - 2620, 3099; 31, 354, 1078; C. 1898 [2] 952). IV, 978. 2) 4,4'-Diamido-2,2'-Dimethylbiphenyl-5,5'-Disulfonsäure. Ba + $4 H_2 O$ (A. 270, 364). — IV, $98 \bar{0}$.
 - 3) 4,4'-Diamido-3,3'-Dimethylbiphenyl-5,5'-Disulfonsäure+1'/21120. $\begin{array}{c} K + 3H_2O, K_2, Ca + 3\frac{1}{2}H_2O, Ba + 5H_2O, Pb + 2\frac{1}{2}H_2O \end{array}$ (A. 203, 76; 270, 361; B. 19, 3234). — IV, 982.
 - 4) 4,4'-Diamido-3,3'-Dimethylbiphenyl-?-Disulfonsäure. Na2+5H2O, $Ca + 5H_2O$, $Ba + 3H_2O$ (B. 22, 2474). — IV, 982.
- $C_{14}H_{16}O_7N_2S_2$ 1) Thiocyanacetessigsäureäthylesteroxyd. Sm. $160-165^6$ (A. 250, 293). - IV, 541.

- C₁₄H₁₆N₂Cl₂Hg₂1) Chlorid d. Quecksilberammoniumbase C₁₄H₁₈O₂N₂Hg₂. Sm. 170° (G. 28 [2] 112). — IV, 1711.
- C₁₄H₁₆N₂Cl₂Si 1) Di[2-Methylphenylamid] d. Dichlorkieselsäure (Soc. 51, 44). II, 460.
- $\mathbf{C}_{14}\mathbf{H}_{16}\mathbf{N}_{3}\mathbf{JS}$ 1) Jodmethylat d. anti-β-Phenylamido-α-Phenylthioharnstoff. Sm. 164° (B. 25, 3108). — IV, 679.
 - 2) Jodmethylat d. syn-β-Phenylamido-α-Phenylthioharnstoff. Sm. 245° (B. **25**, 3109). — IV, 679.
- Piperidid d. αβ-Dibrom-β-Phenylpropionsäure. Sm. 189° u. Zers. (C. 1899 [1] 730). $\mathbf{C}_{14}\mathbf{H}_{17}\mathbf{ONBr}_{2}$
- 1) Jodmethylat d. Harmalin. Sm. 260° (B. 18, 405; 30, 2484). $\mathbf{C}_{14}\mathbf{H}_{17}\mathbf{ON}_{2}\mathbf{J}$ III, 885.
- $\mathbf{C}_{14}\mathbf{H}_{17}\mathbf{ON}_{4}\mathbf{P}$ 1) Verbindung (aus 3,4-Diamido-1-Methylbenzol). Sm. bei 2000 (B. 27, 2178). — IV, 613.
- $C_{14}H_{17}O_{2}N_{2}J$ 1) Jodmethylat d. 5-Amido-2-Methylchinolin-3-Carbonsäureäthylester. Sm. 198-200° u. Zers. (J. pr. [2] 56, 387). — IV, 947.
 - 2) Jodmethylat d. 8-Amido-2-Methylchinolin-3-Carbonsäureäthyl-
- ester. Zers. bei 170° (*J. pr.* [2] **56**, 381). **IV**, 947. 1) **Di[2-Methylphenylamid] d. Phosphorsäure.** Sm. 120° (95°). Ba, $C_{14}H_{17}O_{2}N_{2}P$ Cu (B. 26, 567; 27, 2579). — II, 460.
 - 2) Di [4-Methylphenylamid] d. Phosphorsäure. Sm. 170° (124°). Ba, Cu (B. 26, 571; 27, 2577). — II, 491.
- 1) ?-Diamido-2,5-Dimethylphenylamid d. Benzolsulfonsäure. Sm. $C_{14}H_{17}O_{2}N_{3}S$ 180—181° (*Bl.* [3] **15**, 1037).
- $\mathbf{C}_{14}\mathbf{H}_{17}\mathbf{O}_{3}\mathbf{NS}$ 1) 1-Diäthylamidonaphtalin - ? - Sulfonsäure. Ba (Soc. 41, 184). — II, 629.
 - 2) 3,6,8-Trimethyl-2-Aethylchinolin-?-Sulfonsäure (B. 23, 2272). IV, 343.
- $C_{14}H_{17}O_4NBr_4$ 1) Diäthylester d. ?-Tetrabrom-2, 4, 6-Trimethyl-2, 3-Dihydropyridin-3,5-Dicarbonsäure. Sm. 102° (A. 215, 17). — IV, 95.
- $C_{14}H_{17}O_4NS$ 1) Methandicarbonsäurediäthylesterthiocarbonsäurephenylamid.
- $\mathbf{C}_{14}\mathbf{H}_{17}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{Br}$
- $C_{14}H_{17}O_4N_5S_2$
 - 221, 211). IV, 1568. 1) 4-Hydrazido-4'-Amido-3,3'-Dimethylbiphenyl-6,6'-Disulfon-
- $C_{14}H_{17}O_6N_3S_2$ säure. Ba + 6 H₂O (A. 270, 370). — IV, 1169.
- $C_{14}H_{18}O_2N_2Hg_2$ 1) Diquecksilbermethylanilin. Salze siehe (G. 22 [2] 32; 24 [2] 461). **– IV**, 1706.
 - 2) Quecksilberdi [6-Amido 3-Methylphenyl] quecksilberdiammoniumhydrat. Sm. 212—213°. Chlorid, Diacetat (G. 28 [2] 111). — IV, 1711.
- $\mathbf{C}_{14}\mathbf{H}_{18}\mathbf{O}_{3}\mathbf{N}\mathbf{J}$ 1) Jodäthylat d. Cotarnin (Soc. 29, 169). — III, 916.
- 1) Benzylthionhydroxylaminsaures Benzylhydroxylamin. $\mathbf{C}_{14}\mathbf{H}_{18}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{S}$ bis 85° u. Zers. (B. 26, 2156). — II, 532.
- 1) Diamid d. 4,4'-Diamido-3,3'-Dimethylbiphenyl-5,5'-Disulfon- $C_{14}H_{18}O_4N_4S_2$ säure. Sm. $304,5^{\circ}$. $2 \text{HCl} + 2 \text{H}_2 \text{O}$, $\text{H}_2 \text{SO}_4$, $\text{Ba} + 4 \text{H}_2 \text{O}$ (A. 270, 373; B. 22, 2373). — IV, 982.
 - 2) Amid d. s-Di[2-Methylphenyl]hydrazin-5,5'-Disulfonsäure. Sm.
- 221—222° (A. 270, 371). IV, 1502. 1) Verbindung (aus 1-Methylbenzol-4-Sulfinsäure). Sm. 180,5° u. Zers. (J. pr. [2] 56, 223). $C_{14}H_{18}O_5N_2S_2$
- 1) Verbindung (aus Chloralacetamid). Sm. 1200 (J. 1879, 552). I, 1244. C14H18O5N4Cl8 1) 4,4'- Dihydrazido - 3,3'- Dimethylbiphenyl - 5,5'- Disulfonsäure. $C_{14}H_{18}O_6N_4S_2$
- Ba + $5 H_2 O$ (A. 270, 367). IV, 1277. 1) 3,3'-Dimethoxyl-4,4'-Dihydrazidobiphenyl-NN-Disulfonsäure. $C_{14}H_{18}O_8N_4S_2$ K₂ (J. pr. [2] 58, 224).
- 1) 4,6-Dibrom-2-Oxy-5-Piperidylmethyl-1,3-Dimethylbenzol. Sm. C₁₄H₁₉ONBr₂ 134° (A. 302, 83).
 - 2) 3,6-Dibrom-5-Oxy-2-Piperidylmethyl-1,4-Dimethylbenzol. Sm. 91°. HBr, HJ (B. 28, 2907; 29, 1128). — IV, 20.

Sm. 199-200° (B. 25, 3530). — II, 1689.

amid. Sm. 68° (Am. 13, 199). — II, 1824.

1) Phenylamid d. 4-Oxynaphtalinäthyläther-1-Thiocarbonsäure.

1) Diäthylesterdibromid d.?-Dibrom-2,4,6-Trimethyl-2,3-Dihydropyridin-3,5-Dicarbonsäure. Sm. 88° (B. 14, 1638; A. 215, 14).

1) Verbindung (aus 4-Bromphenylhydrazin u. α -Keto- $\beta\beta$ -Dimethylbutan- $\alpha\gamma$ -Dicarbonsäure). Sm. 146—147° u. Zers. (G. 26 [1] 55). — IV, 715. 1) 1,2-Dipropylester d. Benzol-1,2-Dicarbonsäure-3-Sulfonsäure-

1) 6-Brom-5-Oxy-2-Piperidylmethyl-1,4-Dimethylbenzol. Sm. 81

1) Jodmethylat d.4-Dimethylamido-3-Keto-1,5-Dimethyl-2-Phenyl-

2,3-Dihydropyrazol. Zers. bei 220° (A. 293, 67). — IV, 1109.

1) Chlormethylat d. Methylanhalonin. 2 + PtCl₄ (B. 31, 1199).

2) Chloräthylat d. Hydrocotarnin. 2 + PtCl₄ (Soc. 29, 165). —

1) Cotarnmethinmethylchloridnitril (A. 254, 338). — III, 917.

C14H19ONS

 $C_{14}H_{19}O_3N_2Cl$

C₁₄H₁₉O₄NBr₄

 $\mathbf{C}_{14}\mathbf{H}_{19}\mathbf{O}_{5}\mathbf{N}_{9}\mathbf{Br}$ $\mathbf{C}_{14}\mathbf{H}_{19}\mathbf{O}_{6}\mathbf{NS}$

C14H20ONBr

 $\mathbf{C}_{14}\mathbf{H}_{20}\mathbf{ON}_{3}\mathbf{J}$

 $\mathbf{C}_{14}\mathbf{H}_{20}\mathbf{O}_{3}\mathbf{NCl}$

 $\mathbf{C}_{14}\mathbf{H}_{20}\mathbf{O}_{3}\mathbf{N}\mathbf{J}$

IV, 95.

III, 908.

his 82° (A. 302, 122).

1) Jodmethylat d. Methylanhalonin. Sm. 210° (B. 31, 1198).
2) Jodäthylat d. Hydrocotarnin (Soc. 29, 165). — III, 908.
1) Cotarnmethinmethylchlorid + 3 H₂O. 2 + PtCl₄ (A. 249, 158). — C14H20O4NCI III. 916. 2) Chlormethylat d. Methoxylhydrocotarnin. 2 + PtCl₄ (A. 254, 364). — III, 916. 1) Cotarnmethinmethyljodid (A. 249, 157). — III, 916. C₁₄H₂₀O₄NJ 2) Jodmethylat d. Methoxylhydrocotarnin. Sm. 173° u. Zers. (A. 254, 360). — III, 916. 1) Chlormethylat d. Dimethylcytisin. (HCl, PtCl₄ + 2¹/₂H₂O). — C14H21ON,Cl 1) Jodnethylat d. Dimethylcytisin. — III, 879. $\mathbf{C}_{14}\mathbf{H}_{21}\mathbf{ON}_{2}\mathbf{J}$ 1) Chloräthylat d. 6-Oxy-1-Aethyl-1,2,3,4-Tetrahydrochinolin-6- $\mathbf{C}_{14}\mathbf{H}_{22}\mathbf{ONCl}$ Methyläther. 2 + PtCl₄ (M. 6, 781). - IV, 198. 1) Jodäthylat d. 6-Oxy-1-Aethyl-1, 2, 3, 4-Tetrahydrochinolin-6- $C_{14}H_{22}ONJ$ Methyläther. Sm. 131—133° u. Zers. (M. 6, 781). — IV, 198. $C_{14}H_{22}O_{2}N_{2}S$ 1) Diäthyläther d. α - $[\beta\beta$ -Dioxyäthyl]- β -[4-Methylphenyl]thioharnstoff (s-Acetalyl-p-Tolylthioharnstoff). Sm. 54-56°. Pikrat (B. 25, 2363). — II, 511. 1) Chlormethylat d. Pellotin. Sm. 226° (B. 27, 2979; 29, 216). — $C_{14}H_{22}O_3NC1$ 2) Verbindung (aus Chloressigsäure). Fl. 2 + PtCl₄ (J. pr. [2] 29, 296). — II, 713. $\mathbf{C}_{14}\mathbf{H}_{22}\mathbf{O}_{3}\mathbf{NJ}$ 1) Jodmethylat d. Pellotin $+ 2H_2O$. Sm. 198° (wasserfrei) (B. 27, 2978; 29, 218 Anm.). — III, 778. 1) Amid d. 1,2,3,4-Tetraäthylbenzol-5-Sulfonsäure. Sm. 107° (104 $\mathbf{C}_{14}\mathbf{H}_{23}\mathbf{O}_{2}\mathbf{NS}$ bis 105°) (B. 16, 1746; 21, 2818). — II, 160. 2) Amid d. 1,2,4,5-Tetraäthylbenzol-3-Sulfonsäure. Sm. 122° (B. 21, 2821). — II. 160. 3) Diisobutylamid d. Benzolsulfonsäure. Sm. 55,5—56° (C. 1898) 2] 888). 1) Verbindung (aus Hexamethylentetramin). HCl, (2HCl, PtCl₄+H₂O) C14H25ON8Cl (J. pr. [2] 46, 3). - I, 1169. $\mathbf{C}_{14}\mathbf{H}_{25}\mathbf{NJP}$ 1) Triäthyl-4-Dimethylamidophenylphosphoniumjodid. Sm. 1800 (A. 260, 26). - IV, 1656. $\mathbf{C}_{14}\mathbf{H}_{26}\mathbf{O}_{4}\mathbf{NC1}$ 1) Chlormethylatd. Methylcincholoiponsäurediäthylester. 2+PtCl4, $+ \text{ AuCl}_3$ (M. 17, 390). — III, 843. 2) isom. Chlormethylat d. Methylcincholoiponsäurediäthylester. 2 + PtCl₄ (M. 17, 392). — III, 843.

1) Jodmethylat d. Methylcincholoiponsäurediäthylester. Sm. 176° (174°) (M. 17, 388; B. 31, 2356). — III, 843. $C_{14}H_{26}O_4NJ$ 2) isom. Jodnethylat d. Methylcincholoiponsäurediäthylester. Sm. 120° (M. 17, 392). — III, 843. $C_{14}H_{28}O_6N_2S$ 1) Diäthylester d. δ-Sulfondi amidovaleriansäure. Sm. 69° (B. 27, $\mathbf{C}_{14}\mathbf{H}_{30}\mathbf{ONJ}$ 1) Jodmethylat d. α-Diisoamylamido-β-Ketopropan. Sm. über 290° (B. **29**, 872).

- C₁₄H₃₀O₃N₂S 1) Myristinamidoximschwefligesäure (B. 26, 2845).
- $C_{14}H_{31}O_2N_5S_2$ 1) Aethylsenföl + Aldehydammoniak. Sm. 118-1190 (B. 9, 573).
- C₁₄H₃₂O₃N₂Cl₂1) Verbindung (aus α-Oxyisobuttersäure u. Trimethyl-β-Oxyäthylammoniumhydrat). $+ PtCl_4 + 2H_9O$ (B. 27 [2] 739).
- C_{1.4}H_{3.4}Cl₂PAs 1) Aethylenhexaäthylphospharsoniumchlorid. + PtCl₄ (A. Spl. 1, 306). - I, 1514.
- C₁₄H₃₄Br₂PAs 1) Aethylenhexaäthylphospharsoniumbromid (A. Spl. 1, 306). I, 1514.
- $\mathbf{C}_{14}^{14}\mathbf{H}_{36}^{20}\mathbf{O}_{2}^{2}\mathbf{PAs}$ 1) Aethylenhexaäthylphospharsoniumhydrat (A. Spl. 1, 306). I, 1514.
- C₁₄H₃₇O₁₁NSi₄ 1) Amid d. Tetrakieselsäureheptaäthylester (A. ch. [5] 7, 472). I, 346.

C₁₄-Gruppe mit fünf Elementen.

- 1) Chlorid d. ?-Tetrabromanthracen-2-Sulfonsäure. Sm. 125° (B. C14H5O2ClBr4S 28, 2260).
- 1) Chlorid d. 1-Nitro-9,10-Anthrachinon-2-Sulfonsäure, Sm. 1940 C14H6O6NCIS (B. 15, 1516). — III, 417.
- $\textbf{C}_{14}\textbf{H}_{7}\textbf{O}_{4}\textbf{N}_{2}\textbf{Cl}_{3}\textbf{Br}_{2}\textbf{1}) \ \beta\beta\beta-\textbf{Trichlor}-\alpha\alpha-\textbf{Di}[\textbf{P-Brom-P-Nitrophenyl}]\\ \ddot{\textbf{a}}\textbf{than.} \ \ \textbf{Sm.} \ 168-170^{\circ}$ (B. 7, 1181). — II, 232.
- C, H, ONCIBr 1) 3-Chlor-6-Brom-9-Acetylcarbazol. Sm. 178-179° (G. 25 [2] 361).
- IV, 392. $\mathbf{C_{14}H_{10}O_6N_2Br_4S_2}$ 1) 4,6,4',6'-Tetrabrom-2,2'-Dimethylazobenzol-5,5'-Disulfonsäure. $K_2 + 2H_2O$, $Ca + 8H_2O$, $Ba + 9H_2O$, $Pb + 9H_2O$ (A. 221, 188). — IV, 1381.
- 1) Verbindung (aus d. Benzoylamid d. ?-Nitro-1-Methylbenzol-4-Sulfon-C14H11O4N2CIS säure). Sm. 125° (B. 5, 141). — II, 1175.
- 1) Verbindung (aus d. Benzoylamid d. 1-Methylbenzol-4-Sulfonsäure). C14H12O2NCIS Sm. 100° (B. 5, 140). — II, 1175.
- $\textbf{C}_{14}\textbf{H}_{12}\textbf{O}_{4}\textbf{N}_{2}\textbf{Cl}_{2}\textbf{S}_{2} \ 1) \ \textbf{Chlorid d.} \ \textbf{2}, \textbf{2}'-\textbf{Dimethylazobenzol-4}, \textbf{4}'-\textbf{Disulfonsäure.} \ \text{Sm.} \ 218^{o}$ (A. 221, 184). — IV, 1380.
 - 2) Chlorid d. 2,2'-Dimethylazobenzol-5,5'-Disulfonsäure. Sm. 220°.
 - + 2C₆H₆ (A. 203, 76). IV, 1380. 3) Chlorid d. 4,4'-Dimethylazobenzol-3,3'-Disulfonsäure. Sm. 194° (A. 203, 81). — IV, 1380.
 - 4) Chlorid d. 4,4'-Dimethylazobenzol-αα'-Disulfonsäure. Sm. 149° (A. 221, 225). — IV, 1386.
- $\mathbf{C}_{14}\mathbf{H}_{12}\mathbf{O}_{4}\mathbf{N}_{4}\mathbf{Br}_{4}\mathbf{S}_{2}\mathbf{1}$ Amid d. 4,6,4',6'-Tetrabrom-2,2'-Dimethylazobenzol-5,5'-Di-
- sulfonsäure. Sm. 218° (A. 221, 191). IV, 1381. C₁₄ $\mathbf{H}_{12}\mathbf{O}_{6}\mathbf{N}_{2}\mathbf{Br}_{2}\mathbf{S}_{2}$ 1) ?-Dibrom-4,4′-Dimethylazobenzol-3,3′-Disulfonsäure. \mathbf{K}_{2} + $4 H_2 O$, $Ca + 4^{1/2} H_2 O$, $Ba + 5 H_2 O$, $Pb + 5 H_2 O$ (A. 221, 186). -IV, 1381.
- C₁₄H₁₃ON₂Br₂P 1) 2-Brom-4-Methylphenylimid-2-Brom-4-Methylphenylamid d. Phosphorsäure (B. 29, 725).
- 1) Verbindung (siehe $C_{14}H_{15}O_3NCIP + H_2O$) (B. 14, 2374). II, 368. $\mathbf{C}_{14}\mathbf{H}_{13}\mathbf{O}_{2}\mathbf{NClP}$
- 1) 2-Brom-4,4'-Dimethylazobenzol-3'-Sulfonsäure. Na, K (B. 21, $C_{14}H_{13}O_3N_2BrS$
 - 1215). IV, 1381. 2) P-Brom-4,4'-Dimethylazobenzol-3'-Sulfonsäure (B. 21, 121). IV, 1381.
- C₁₄H₁₃O₄N₂Cl₃S 1) ?-Trichlor-?-Dimethylamidophenylamido-1-Oxybenzol-?-Sulfonsäure. Ba (J. pr. [2] 24, 442). — II, 835.

 1) 2-Methylphenylimid d. Thiophosphorsäuremono-4-Methyl-
- C14H14ONSP phenylester. Sm. 247° (B. 28, 1243).
- 1) Phenylamid d. 4-Jod-1, 3-Dimethylbenzol-6-Sulfonsäure. Sin. $C_{14}H_{14}O_2NJS$
- $153^{\circ}~(B.~\mathbf{26},~1106).~\mathbf{\Pi},~425.$ $\mathbf{C_{14}H_{14}O_{2}ClSP}~\mathbf{1})~\mathbf{Monochlorid}~\mathbf{d}.~\mathbf{Thiophosphors\"{a}uredi-4-Methylphenylester}.$ $\mathbf{Sm.}~53^{\circ}~(B.~\mathbf{31},~1107).$ $\mathbf{C_{14}H_{14}O_{4}N_{4}Br_{2}S_{2}1)~\mathbf{Amid}~\mathbf{d}.~\mathbf{?-Dibrom-4},4'-\mathbf{Dimethylazobenzol-3},3'-\mathbf{Disulfons\"{a}ure}.$
- Sm. oberh. 260° (A. 221, 188). IV, 1381.
- 1) Verbindung (aus Diphenylacetamid) + H₂O. Na₂, Ag₂ (B. 14, 2374). $\mathbf{C}_{14}\mathbf{H}_{15}\mathbf{O}_{3}\mathbf{NClP}$ · II, 368.
- 1) Di[2-Methylphenylamid] d. Phosphorsäuremonochlorid. Sm. C14H16ON2ClP 190° (B. 27, 2578).

2) Di 4-Methylphenylamid d. Phosphorsäuremonochlorid. Sm. $C_{14}H_{16}ON_2ClP$ 210° (B. **27**, 2577).

1) Monamid d. Thiophosphorsäuredi-4-Methylphenylester. Sm. C, H, O, NSP

131° (B. 31, 1107). 1) Chlorid d. 5-Keto-4,4-Diäthoxyl-3-Methyl-1-Phenyl-4,5-Di-C, H, O, N, CIS hydropyrazol-14-Sulfonsäure. Sm. 680 (B. 25, 1947). - IV, 736.

C₁₄-Gruppe mit sechs Elementen.

1) Chlorid d. 4,6,4',6'-Tetrabrom-2,2'-Dimethylazobenzol-C, H, O, N, Cl, Br, S, 5,5'-Disulfonsäure. Sm. bei 243° (A. 221, 190). — IV, 1381.

C₁₄H₁₀O₄N₂Cl₂Br₂S₂ 1) Chlorid d. ?-Dibrom-4,4'-Dimethylazobenzol-3,3'-Disulfonsäure. Sm. 226° (A. 221, 187). — IV, 1381.

C₁₅-Gruppe mit einem Element.

C 94,7 — H 5,3 — M. G. 190. $\mathbf{C}_{15}\mathbf{H}_{10}$

1) Fluoranthen (Idryl). Sm. 109—110°; Sd. 250—251° 60. Pikrat (A. 193, 142; 200, 1; J. 1881, 373; B. 10, 2022; M. 1, 221; 2, 7). — II, 278. 2) Succisteren. Sm. 160°; Sd. oberh. 300° u. ger. Zers. (A. ch. [3] 9, 96).

— II, 279. C 93,8 — H 6,2 — M. G. 192. 1) 1-Methylanthracen. Sm. 199—200° (B. 20, 2070). — II, 272.

 $C_{15}H_{12}$

1) 1-Methylanthracen. Sm. 199-200 (B. 20, 2010). — 11, 212.
2) 2-Methylanthracen. subl. über 100°; Sm. 199-200° (A. 183, 163; 212, 34; B. 7, 1185, 1195; 10, 118, 1049, 2014; 11, 273, 1065; 17, 2848; J. pr. [2] 35, 474; [2] 41, 3). — II, 272.
3) isom. Methylanthracen. Sm. 203° (B. 15, 1821; A. 234, 238). — II, 273.
4) Isomethylanthracen. Sm. 203° (B. 15, 1821; A. 234, 238). — II, 273.

5) Methanthren. Sm. 117°; Sd. oberh. 360° (J. pr. [2] 9, 416; A. 170, 243). - II, 273.

6) Idrylhydrür. Sm. 76°. Pikrat (M. 1, 225). — II, 279. C 92,8 — H 7,2 — M. G. 194.

1) α -Phenyl- β -[4-Methylphenyl]äthen. Sm. 120° (117°) (B. 14, 1646; 18, 1946). — II, 251. C 91,8 — H 8,2 — M. G. 196.

C15 H16

1) $\alpha\beta$ -Diphenylpropan. Sd. 277—279° (291—293°) (J. 1879, 379; B. 23, 3274; J. r. 27, 298). — II, 239.

2) αγ-Diphenylpropan (Dibenzylmethan). Sd. 290-300° (B. 7, 1627; 10,

760; 14, 2466; 18, 2935). — II, 238. 3) $\beta\beta$ -Diphenylpropan. Sd. 281—282° (Bl. 34, 674; 35, 289). — II, 238. 4) α -Phenyl- β -[4-Methylphenyl]äthan. Sm. 27°; Sd. 278—280° (286°)

(B. 7, 1016; 14, 1646). — II, 237.

5) Ditolylmethan (Di[?-Methylphenyl]methan). Sm. 22—23°; Sd. 285,5 bis 286,5° (B. 7, 1181; 12, 2302; 14, 1531; 18, 347; Bl. 41, 323; 43, 50). — II, 238.

6) Phenyl-1, 3-Dimethylphenylmethan. Sd. 290° (295—296°) (B. 5, 799;

9, 1761; 15, 1682; Soc. 67, 828). — II, 238.

7) Phenyl-2, 5-Dimethylphenylmethan. Sd. 293,5—294,5° (B. 5, 799). II, 239.

S) Phenyl-?-Aethylphenylmethan. Sd. 294-295° (B. 5, 686; 15, 1682). - II, 239. C 90,9 — H 9,1 — M. G. 198.

 $C_{15}H_{18}$

 $C_{15}H_{14}$

1) Idryloktohydrür. Sm. 309—311° (M. 1, 226). — II, 279.

2) 1-Methylhexahydroanthracen (A. 242, 256). — II, 272,

3) 1-Isoamylnaphtalin. Sd. 303°. (Pikrat Sm. 85—90°) (B. 15, 2236; G. 12, 209). — II, 220.

4) 2-Isoamylnaphtalin. Sd. 288—292° (Pikrat Sm. 110°) (A. ch. [6] 12, 319; G. 20, 719). — II, 220.

5) isom. Amylnaphtalin. Sd. 304-306° (Pikrat Sm. 140-141°) (B. 15, 2236; 16, 802).

- $C_{15}H_{18}$
- 6) Triscyklo-Trimethylenbenzol. Sm. 96-97° (B. 30, 1094).
- 7) Kohlenwasserstoff. Sd. 245° (Bl. 37, 303). C 90.0 — H 10.0 — M. G. 200.

 $C_{15}H_{20}$

1) Kohlenwasserstoff (aus Aceton). Sd. 280-2820 (Am. 15, 269; B. 28 [2] 780). — II, 176. C 89.1 — H 10.9 — M. G. 202.

 $\mathbf{C}_{15}\mathbf{H}_{22}$

1) Kohlenwasserstoff (aus Knoblauchöl) (J. 1876, 398). — III, 547. 2) Kohlenwasserstoff (aus Nelkenöl). Sd. 250-260° (Soc. [2] 14, 1). -II, 173.

3) Kohlenwasserstoff (aus Sandelöl). Sd. 245° (B. 15, 1197). 4) Kohlenwasserstoff (aus Santalai). Sd. 140—145° (C. 1896 [2] 668). III, 549. U 88.2 - H 11.8 - M. G. 204.

 $C_{15}H_{24}$

 $C_{15}H_{28}$

- 1) 4-Oktyl-1-Methylbenzol. Sm. 11-12°; Sd. 281-283° (B. 31, 940).
- 2) 1-Methyl-4-Isopropyl-2-Isoamylbenzol. Sd. 245° (J. pr. [2] 46, 489). - II, 39.
- 3) Cadinen. Sd. 274—275° (A. 34, 323; 238, 80; 252, 150; 271, 303; G. 5, 468; Bl. [3] 11, 576; C. 1898 [2] 666, 786). III, 537.

 4) Caparrapen. Fl. + 2HCl (Bl. [3] 19, 643).

 5) Caryophyllen. Sd. 258—260° (J. 1875, 853; A. 9, 68—69 Anm.; 271, 298; J. pr. [2] 56, 146; C. 1899 [1] 108). III, 537.

 6) Cedren. Sd. 237° (A. 39, 249; 48, 37). III, 538.

 7) isom. Cedren. Sd. 261—262° (C. 1896 [2] 668; Bl. [3] 17, 486). III.

8) Cloven. Sd. 261—263° (A. 271, 294). — III, 538.

9) Conimen. Sd. 264° (A. 180, 253). — III, 557.
10) Cubeben. Sd. 250—260° (B. 10, 189; J. 1869, 333). — III, 538.
11) Galipen. Sd. 255—260° (C. 1898 [2] 786).
12) Hanföl. Sd. 120—121°, (258—259°) (G. 11, 196; 25 [1] 114; Soc. 69, 542). — III, 538.

13) Heveen. Sd. 315° (A. 27, 35). — III, 538.

14) Humulen. Sd. 166-170° (Soc. 67, 59, 780; C. 1898 [2] 360; 1899 [1] 108). — III, 538.

- 15) Leden. Sd. 255° (B. 28, 3088). III, 538. 16) Patschoulen. Sd. 254—256° (Bl. 28, 415; A. 279, 394). III, 538. 17) Trivalerylen. Sd. 265—270° (240—250°) (A. 143, 373; Z. 1867, 174; Bl. 33, 24). III, 539.

- 18) Sesquiterpen (aus Asa foetida). Sd. 123° (B. 23, 3532). III, 545.
 19) Sesquiterpen (aus Canangaöl) (Bl. [3] 11, 1045). III, 546.
 20) Sesquiterpen (aus Cedrol). Sd. 115—117° (6,5 (Bl. [3] 17, 488).
 21) Sesquiterpen (aus Citronenöl). Sd. 240—242° (G. 21, 322). III, 542.
 22) Sesquiterpene (aus Cubebenöl). Sd. 220° u. 250° (Z. 1870, 190). —
- III, 546.

23) Sesquiterpen (aus Guajol). Sd. 124—128° (A. 279, 397). — III, 539. 24) Sesquiterpen (aus Hopfenöl). Sd. 261—265° (B. 27 [2] 596). 25) Sesquiterpen (aus Knoblauchöl). Sd. 253,9° (J. 1876, 398). — III, 547. 26) Sesquiterpen (aus Lavendelöl). Sd. 130°₁₅ (B. 25, 1187). 27) Sesquiterpen (aus Pimentöl). Sd. 255° (A. 131, 277). — III, 549. 28) Sesquiterpen (aus Salveiöl). Sd. 264–271° (J. 1878, 981). — III, 549. 29) Sesquiterpen (aus Salveiöl). Sd. 264–271° (J. 1878, 981). — III, 549.

- 29) Sesquiterpen (aus Selleriöl). Sd. 262-269° (B. 30, 496).
- 30) Kohlenwasserstoff (aus Jodsanton). Fl. (B. 7, 1104). 31) Kohlenwasserstoff (aus Sandelöl). Sd. 260° (B. 15, 1197) 32) Kohlenwasserstoff (aus Santonin). Sd. 247° (B. 26 [2] 599).

C 87,4 — H 12,6 — M. G. 206. $C_{15}H_{26}$

1) Santon. Sd. 235—245° (B. 7, 1104). — I, 139.

- 2) Kohlenwasserstoff (aus Benylenbromid). Sd. 220° (A. 147, 255). I, 139. C 86,5 — H 13,5 — M. G. 208.
 - 1) Benylen (aus Triamylenbromid). Sd. 223—228° (A. 147, 252). I, 137. 2) Tetrahydrosesquiterpen. Sd. 257—261° (A. 271, 296). III, 539.

3) Kohlenwasserstoff (aus Lävulinsäure) (A. 206, 249).

C15H30 C 85,7 — H 14,3 — M. G. 210.

1) Triamylen. Sd. 245-248° (J. 1861, 660); siehe auch (A. 137, 249; 147, 254). — I, 124.

C15H8O6

C15H8O7

 $\mathbf{C}_{15}\mathbf{H}_{8}\mathbf{Br}_{9}$

 $\mathbf{C}_{15}\mathbf{H}_{9}\mathbf{N}_{8}$

2) Pentadekanaphten. Sd. 246-248° (J. r. 15, 339). — II, 16. C15H30 3) Kohlenwasserstoff (aus Petroleum). Sd. 240-250° (B. 15, 734).

C 84.9 - H 15.1 - M. G. 212. $\mathbf{C}_{15}\mathbf{H}_{32}$ 1) norm. Pentadekan. Sm. 10°; Sd. 270,5° (B. 15, 1701; 22, 2134).

2) Kohlenwasserstoff. Sd. 255-260° (J. 1863, 530).

1) Verbindung (aus Pyren). Sm. über 300° (B. 16, 2880). — II, 285. C15 Cl10

C₁₅-Gruppe mit zwei Elementen.

C 72,0 - H 2,4 - O 25,6 - M. G. 250. $\mathbf{C}_{15}\mathbf{H}_{6}\mathbf{O}_{4}$

1) Anhydrid d. Pyrensäure (A. 240, 174). — II, 1980.

 $C_{15}H_7Cl_8$ $\mathbf{C}_{15}\mathbf{H}_{7}\mathbf{Br}_{8}$ C15H8O2

1) Trichloridryl (M. 1, 223). — II, 279.

1) Trichloridryl (M. 1, 224). — II, 279.

1) Tribromidryl (M. 1, 224). — II, 279.

1) C 81,8 — H 3,6 — O 14,5 — M. G. 220.

1) Fluoranthenchinon. Sm. 188°. + 2 Molec. Fluoranthen (Sm. 102°) (A. 193, 149; 200, 3; B. 10, 2029). — III, 459.

1) C 1/2 Arthyrid (M. 1, 223). — III, 459.

1) C 1/2 Arthyrid (M. 1, 223). — III, 459.

1) C 1/2 Arthyrid (M. 1, 223). — III, 459.

1) C 1/2 Arthyrid (M. 1, 223). — III, 259.

1) C 1/2 Arthyrid (M. 1, 223). — III, 279.

1) C 1/2 Arthyrid (M. 1, 223). — III, 279.

1) C 1/2 Arthyrid (M. 1, 223). — III, 279.

1) C 1/2 Arthyrid (M. 1, 223). — III, 279.

1) C 1/2 Arthyrid (M. 1, 223). — III, 279.

1) C 1/2 Arthyrid (M. 1, 223). — III, 279.

1) C 1/2 Arthyrid (M. 1, 223). — III, 279.

1) C 1/2 Arthyrid (M. 1, 223). — III, 279.

1) C 1/2 Arthyrid (M. 1, 224). — III, 279.

1) C 1/2 Arthyrid (M. 1, 224). — III, 279.

1) C 1/2 Arthyrid (M. 1, 224). — III, 279.

1) C 1/2 Arthyrid (M. 1, 224). — III, 279.

1) C 1/2 Arthyrid (M. 1, 224). — III, 279.

1) C 1/2 Arthyrid (M. 1, 224). — III, 279.

1) C 1/2 Arthyrid (M. 1, 224). — III, 279.

1) C 1/2 Arthyrid (M. 1, 224). — III, 279.

1) C 1/2 Arthyrid (M. 1, 224). — III, 279.

1) C 1/2 Arthyrid (M. 1, 224). — III, 279.

1) C 1/2 Arthyrid (M. 1, 224). — III, 279.

1) C 1/2 Arthyrid (M. 1, 224). — III, 279.

1) C 1/2 Arthyrid (M. 1, 224). — III, 279.

1) C 1/2 Arthyrid (M. 1, 224). — III, 279.

1) C 1/2 Arthyrid (M. 1, 224). — III, 279.

1) C 1/2 Arthyrid (M. 1, 224). — III, 279.

1) C 1/2 Arthyrid (M. 1, 224). — III, 279.

1) C 1/2 Arthyrid (M. 1, 224). — III, 279.

1) C 1/2 Arthyrid (M. 1, 224). — III, 279.

1) C 1/2 Arthyrid (M. 1, 224). — III, 279.

1) C 1/2 Arthyrid (M. 1, 224). — III, 279.

1) C 1/2 Arthyrid (M. 1, 224). — III, 279.

1) C 1/2 Arthyrid (M. 1, 224). — III, 279.

1) C 1/2 Arthyrid (M. 1, 224). — III, 279.

1) C 1/2 Arthyrid (M. 1, 224). — III, 279.

1) C 1/2 Arthyrid (M. 1, 224). — III, 279.

1) C 1/2 Arthyrid (M. 1, 224). — III, 279.

1) C 1/2 Arthyrid (M. 1, 224). — III, 279.

1) C

C15 H8 O4

Sm. 293—294°. Ba (B.

1) 9,10-Anthrachinon-1-Carbonsäure (γ-Säure). Sm. 293—294°. Ba (Ε 13, 49; 15, 1822; 30, 1115; A. 290, 231). — II, 1905.
2) 9,10-Anthrachinon-2-Carbonsäure (β-Säure). Sm. 282—284°. Ca, Ba (Ε, 7, 1186, 1196; 8, 248; 16, 2609; 17, 888; A. 183, 168; 212, 35). — II, 1904. Ca, Ba

3) 9,10-Phenanthrenchinon-?-Carbonsäure. Sm. oberh. 315° (A. 196, 14). — II, 1905.

4) Anhydrid d. 3-Benzoylbenzol-1,2-Dicarbonsäure. Sm. 183° (A.

5) α , 2- α , 2'-Dilakton d. $\alpha\alpha$ -Dioxy- $\alpha\alpha$ -Diphenylmethan-2, 2'-Dicarbonsäure. Sm. 212° (A. **242**, 246). — II, 1975. C 67,1 — H 3,0 — O 29,8 — M. G. 268.

 $C_{15}H_8O_5$

1) Pyrensäure. Zers. oberh. 250°. Ba + H₂O, Ag₂ (A. 240, 168). -II, 1980.

2) 9-Ketofluoren-1,4-Diearbonsäure. Ag₂ (A. 229, 151). — II, 1979. 3) 1-Oxy-9,10-Anthrachinon-2[?]-Carbonsäure. Sm. 260°. Ba (B. 11,

83). — II, 1979.
4) 6[oder 7]-Oxy-9,10-Anthrachinon-2-Carbonsäure. Sm. 314° (Soc. 65, 846). — II, 1979.

5) 1-Oxy-9,10-Anthrachinon-4-Carbonsäure (Erythrooxyanthrachinoncarbonsäure). Sm. 236—238° u. Zers. (B. **20**, 2438). — II, 1979. C 63,4 — H 2,8 — O 33,8 — M. G. 284.

1) 1,2-Dioxy-9,10-Diketo-9,10-Dihydroanthracen-?-Carbonsäure (Alizarin β-Carbonsäure). Sm. 305°. Ba₃ (Soc. 65, 847; B. 11, 86). — II, 2027.

2) 1,3-Dioxy-9,10-Diketo-9,10-Dihydroanthracen-?-Carbonsaure (Purpuroxanthinearbonsäure). Sm. 231°. Pb (A. 130, 325; B. 10, 172, 616, 790; Bl. 28, 219, 407). — II, 2027.

3) Xanthon-4, 5-Diearbonsäure. Sm. noch nicht bei 285° (B. 25, 3647). **- II**, 2055.

C 60,0 - H 2,7 - O 37,3 - M. G. 300.

1) ?-Trioxyanthrachinon-1-Carbonsäure (Pseudopurpurin-1-Carbonsäure). Sm. 218—220° (Bl. 4, 13; B. 10, 614, 1618; A. ch. [5] 13, 256). — II, 2059.

2) 5,6,8 oder 5,7,8 -Trioxyanthrachinon-2-Carbonsaure. Sm. oberh. 315° (Soc. **65**, 848). — II, 2059. C 54,2 — H 2,4 — O 43,4 — M. G. 332.

C15 H8O9

1) 3,4,5-Trioxyfluoron-1,8-Dicarbonsäure (B. 31, 267).
1) Dibromidryl. Sm. 204—205° (A. 193, 146; M. 1, 224). — II, 279.
1) P-Tetrabrom-2-Methylanthracen (B. 11, 1606; A. 212, 36). — II, 273. $\mathbf{C}_{15}\mathbf{H}_{8}\mathbf{Br}_{4}$ 1) Delokansäure = $(C_{15}\Pi_{\theta}O_{\theta})_x$ (B. 18, 3427). — III, 597. $\mathbf{C}_{15}\mathbf{H}_{9}\mathbf{O}_{6}$ C 88,7 - H 4,4 - O 6,9 - M. G. 203. $\mathbf{C}_{15}\mathbf{H}_{9}\mathbf{N}$

1) Nitril d. Anthracen-1-Carbonsäure (B. 13, 47).

2) Nitril d. β -Anthracencarbonsäure (B. 8, 246; 13, 47). C 77,9 — H 3,9 — N 18,2 — M. G. 231.

1) Phenotripyridin. Sm. 236°; Sd. oberh. 360°. HCl, 2HCl, (2HCl, PtCl₄ + $3\,\mathrm{H}_2\mathrm{O}$), $\mathrm{H}_2\mathrm{SO}_4 + 1^{1}/_2\,\mathrm{H}_2\mathrm{O}$, $\mathrm{H}_2\mathrm{CrO}_4$ (Bl. [3] 13, 28). — IV, 1200.

C15H10O2

C15 H10 O3

C15H10O4

C 81,1 - H 4,5 - O 14,4 - M. G. 222.

- 1) 1-Methyl-9,10-Anthrachinon. Sm. 166—167° (B. 20, 2070). — III. 448.
- 2) 2-Methyl-9,10-Anthrachinon. Sm. 177° (B. 8, 675; 10, 1485; 15. 1820; 16, 696, 1632; J. pr. [2] 41, 4; A. 234, 239; Soc. 65, 843). III, 450.

3) Methanthrachinon. Sm. 187° (J. pr. [2] 9, 421). — III, 455.

- 4) 1,3-Diketo-2-Phenyl-2,3-Dihydroinden. Sm. 145°. Na (B. 26, 2576).
- 5) 2-Keto-1-Benzyliden-1, 2-Dihydrobenzfuran. Sm. 108° (B. 30, 1082; 31, 1759).
- 6) 1-Benzoylbenzfuran (Cumarylphenylketon; Benzoylcumaron). Sm. 91°; Sd. 360° (B. 29, 237; G. 25 [2] 286). — III, 247, 733.
- 7) 3-Phenyl-1, 2-Benzpyron (3-Phenylcumarin). Sm. 139—140° (J. 1879. 731; G. 14, 563). — II, 1707.
- 8) 3-Phenyl-1, 2-Isobenzpyron (3-Phenylisocumarin; Isobenzalphtalid). Sm.

- 90—91° (B. 18, 2445; 31, 377). II, 1711. 9) 2-Phenyl-1,4-Benzpyron (Flavon). Sm. 97° (B. 31, 1760). 10) Methyläther d. Morphenol. Sm. 65° (B. 15, 1487, 2179; 22, 183; 29, 68; 30, 2439; 31, 54; A. 222, 233, 3200). III, 443.
- 11) Anthracen-l-Carbonsäure (β-Säure). Sm. 260° (245°). Ca, Ba, Pb (B. 8, 246; 13, 48; 30, 1118). — II, 1478.
- 12) Anthracen-2-Carbonsäure (γ-Säure). Sm. oberh. 280°. Na, Ba (B. 13,
- 47; 16, 2610; A. 290, 232). II, 1478. 13) Anthracen-9-Carbonsäure. Sm. 206° u. Zers. Ag (B. 2, 678). II, 1477.
- 14) Phenanthren-9-Carbonsäure (β -Säure). Sm. 250-252°. Na + 5 H₀O, $Ba + 6H_2O$ (Soc. 37, 84; B. 29, 499). — II, 1479.
- 15) Phenanthren-P-Carbonsäure (α-Säure). Sm. 266°. Na + 4H₂O, Ba + 7 H₂O (A. 196, 13; Soc. 37, 86). — II, 1479.
- 16) Lakton d. 1-[α-Oxy-β-Phenyläthenyl]benzol-2-Carbonsäure (Benzylidenphtalid). Sm. 98-99° (B. 11, 1017; 18, 3470; 20, 2863). -**H**, 1708. C 75,6 — H 4,2 — O 20,2 — M. G. 238.

- αβγ-Triketo-αγ-Diphenylpropan (Diphenyltriketon). Sm. 69—70°; Sd. 247—248°₆₀ (289°₁₇₅). + H₂O (Sm. 90°) (B. 23, 3379). III, 316.
 3-Oxy-1-Methyl-9,10-Anthrachinon. subl. bei 200°; Sm. 299—300°
- (B. 31, 2795).
- 3) 4-Oxy-1-Methyl-9,10-Anthrachinon. Sm. 169-170° (B. 20, 2069; A. 212, 346). — III, 449.
- 4) 3-Oxy-2-Methyl-9,10-Anthrachinon. Sm. 260-262° u. Zers. (A. 202, 163). — III, 450.
- 5) P-Oxy-2-Methyl-9,10-Anthrachinon. Sm. 177-178° (B. 16, 699). -III, 451.
- 6) 7-Oxy-4-Phenyl-1, 2-Benzpyron (β-Phenylumbelliferon). Sm. 244° (B. 16, 2126). — II, 1888.
- 7) 6-Oxy-2-Phenyl-1, 4-Benzpyron. Sm. 231—232° (B. 32, 331).
- 8) 7-Oxy-2-Phenyl-1,4-Benzpyron (Oxyflavon). Sm. 240° (B. 31, 703). 9) Phenyläther d. Oxymethylenphtalyl. Sm. 142—143,5° (B. 14, 922).
- **III**, 274. 10) 9-Oxyanthracen-?-Carbonsäure. Sm. 252-253° (A. 242, 255). -
- II, 1720. 11) Methylester d. 9-Ketofluoren-4-Carbonsäure. Sm. 132º (A. 247, 278). - II, 1719.
- 12) Acetat d. 1-Oxy-9-Ketofluoren. Sm. 130-131° (B. 31, 3034). C 70,9 — H 3,9 — O 25,2 — M. G. 254.
- 1) 5,7-Dioxy-4-Phenyl-1,2-Benzpyron (5,7-Dioxy-4-Phenylcumarin). Sm. $233-234^{\circ}$ ($234-235^{\circ}$) (B. **26**, 2907; **27**, 421; M. **18**, 744). — III, 248.
- 2) 5,7-Dioxy-2-Phenyl-1,4-Benzpyron (Chrysin; Dioxyflavon). Sm. 275° (B. 6, 884; 7, 888; 26, 2901; 27, 21; Soc. 73, 669). III, 627.
- 3) 7,8-Dioxy-2-Phenyl-1,4-Benzpyron (Benzalanhydroglykogallol). 221°. Ba (B. 29, 879, 1751, 1886, 2430). — III, 248. 4) 7-Oxy-2-[3-Oxyphenyl]-1,4-Benzpyron. Zers. bei 240° (B. 30, 300).
- 5) 7-Oxy-2-[4-Oxyphenyl]-1,4-Benzpyron. Sm. 3150 (B. 32, 325).

 $C_{15}H_{10}O_5$

- C15H10O4 6) 2-[3,4-Dioxyphenyl]-1,4-Benzpyron (Dioxyflavon). Sm. 2240 (B. 30, 1082).
 - 7) β-Phenyldaphnetin + H₂O. Sm. 190-192° (wasserfrei) (B. 26, 2906). **- III**, 248.
 - 8) Chrysophansäure. Sm. 178° (162°; 190—191°) (A. 48, 13; 50, 214; 53, 260; 107, 324; 183, 171; 212, 36; 284, 178, 191; B. 2, 373; 15, 902; 28 [2] 1058; 30, 365; J. 1857, 516; 1864, 555). III, 452.

9) 2,4-Dioxy-1-Methyl-9,10-Anthrachinon (Rubiadin). Sm. bei 290° (Soc. 63, 973; 65, 183). — III, 449.

- 10) 5,7-Dioxy-1-Methyl-9,10-Anthrachinon (Soc. 69, 69). III, 449.
- 11) 6,8-Dioxy-1-Methyl-9,10-Anthrachinon. Sm. 246° (Soc. 69, 70). III, 449.
- 12) 1, 3-Dioxy-2-Methyl-9, 10-Anthrachinon. Sm. 290° (Soc. 65, 183). III, 451.
- 13) 1,4-Dioxy-2-Methyl-9,10-Anthrachinon. Sm. 160° (B. 10, 2012; 19, 2330). — III, 451.
- 14) 3,4-Dioxy-2-Methyl-9,10-Anthrachinon. Sm. 250-252° (B. 8, 676; 19, 2330; A. 202, 166). — III, 451.
- 15) 5,7-Dioxy-2-Methyl-9,10-Anthrachinon. Sm. 267° (Soc. 63, 1142; 65, 863). — III, 451.
- 16) 6,8-Dioxy-2-Methyl-9,10-Anthrachinon (Soc. 69, 69). III, 451.
- 17) 1-Methyläther d. 1,2-Dioxy-9,10-Anthrachinon (M. d. Alizarin). Sm. 228-229° (J. 1873, 446; B. 20, 86; 28, 1428; Sqc. 65, 185). — III, 421.
- 18) 2-Methyläther d. 1,2-Dioxy-9,10-Anthrachinon. Sm. 178-179° (Soc. 63, 1174). — III, 422. 19) Methyläther d. 2,3-Dioxy-9,10-Anthrachinon. Sm. 232° (Soc. 67,
- 822). III, 429.
- 20) Rumicin. Sm. 186—188° (A. 291, 306; B. 29, 325). III, 453.
- 21) Acetat d. 1-Oxyxanthon. Sm. 167-168° (Am. 5, 91). III, 201.
- 22) Acetat d. 2-Oxyxanthon. Sm. 161° (B. 25, 1649). III, 201. 23) Acetat d. 3-Oxyxanthon. Sm. 157-158° (B. 25, 1651). - III, 201.
- 24) Acetat d. 4-Oxyxanthon. Sm. 137—138° (B. 25, 1650). III, 201.
- 25) Fluoren-1, 4-Dicarbonsäure. Ag₂ (A. 229, 161). II, 1895.
- 26) αβ-Diketo-αβ-Diphenyläthan-2-Carbonsäure (Benzil-o-Carbonsäure). α-Modif. Sm. 115—125°; β-Modif. Sm. 141,5° (B. 21, 2003; 29, 2745; C. 1898 [2] 481). — II, 1895.
- 27) α,2-Lakton d. α-Oxy-αα-Diphenylmethan-2,21-Dicarbonsäure (L. d. Benzhydroldicarbonsäure). Sm. 203°. Ba $+ 2^{1}/_{2}$ H₂O, Cu + 3 H₂O, Ag (A. **242**, 238). — II, 1973.
- 28) α , 2-Lakton d. α -Oxy- $\alpha\alpha$ -Diphenylmethan-2, 4-Dicarbonsäure (L. d. Benzhydrylisophtalsäure). Sm. 206—207°. Ca, Ba $+ \frac{2^{1}}{2}$ H₂O, Ag (B. 9, 1764). — II, *1973*.
- 29) α , 2-Lakton d. α -Oxy- $\alpha\alpha$ -Diphenylmethan-2, 5-Dicarbonsäure (L. d.
- Benzhydrylterephtalsäure). Ca + 3 H₂O (J. 1878, 403). II, 1973.

 30) Verbindung (aus d. Lakton d. Benzhydroldicarbonsäure). Sm. 171 bis 172° (A. 242, 239). II, 1973.

31) Verbindung (aus Krapp) (B. 3, 294). — III, 425. C 66,7 — H 3,7 — O 29,6 — M. G. 270.

- 1) 4,5,6[oder 4,7,8]-Trioxy-1-Methyl-9,10-Anthrachinon (A. 240, 304). III, 450.
- 2) 5, 6, 7-Trioxy-1-Methyl-9, 10-Anthrachinon? Sm. 235—240° (A. 240, 284). — III, 449.
- 3) 6, 7, 8-Trioxy-1-Methyl-9, 10-Anthrachinon (Methylanthragallol). Sm. 297—298° (A. 240, 283). — III, 449.
- 4) 5, 6, 7-Trioxy-2-Methyl-9, 10-Anthrachinon. Sm. 275° (A. 240, 284). - III, 453.
- 5) 6,7,8-Trioxy-2-Methyl-9,10-Anthrachinon? Sm. 312-313° (A. 240, 284). — III, 449.
- 6) ?-Trioxy-2-Methyl-9,10-Anthrachinon (Emodin). Sm. 253-254° (A. 183, 161; B. 2, 373; 9, 1775; 21 [2] 842; 28 [2] 1058; J. 1857, 517; Soc. 57, 46; 67, 1086). — III, 454.
- 7) Trioxymethylanthrachinon (aus Aloë). Sm. 216° (C. 1898 [2] 118, 211). 8) Methyläther d. 1,2,3-Trioxy-9,10-Anthrachinon. Sm. 275° (Soc. **63**, 1171). — **III**, *432*.

- $C_{15}H_{10}O_5$
- 9) 5,7-Dioxy-2-[4-Oxyphenyl]-1,4-Benzpyron (Apigenin). subl. bei 292 bis 295° u. Zers. (B. 9, 1124; Soc. 71, 807; 73, 666). — III, 571.
- 10) 7,8-Dioxy-2-[2-Oxyphenyl]-1,4-Benzpyron. Sm. 214-216° (B. 29) 2433).
- 11) 7,8-Dioxy-2-[3-Oxyphenyl]-1,4-Benzpyron. Sm. 221—223° (B. 29, 2433).

- 2455).

 12) 7,8-Dioxy-2-[4-Oxyphenyl]-1,4-Benzpyron. Sm. 220° (B. 29, 2434).

 13) 7-Oxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron (Trioxyflavon) (B. 30, 299).

 14) Erythrolaecin + H₂O (C. 1899 [1] 688).

 15) Galangin + H₂O. Sm. 214-215°. Pb (B. 14, 2807). III, 632.

 16) Morindon. Sm. 271-272° (J. 1847/48, 749; 1864, 543; Z. 1866, 343; 20, 51, 56; 53, 171; 65, 256).

- Soc. 51, 56; 53, 171; 65, 856). III, 455.

 17) Protophyscion. Sm. 198° (A. 284, 185; J. pr. [2] 57, 437). III, 641.

 18) Pseudobaptigenin (C. 1897 [2] 1077).

 19) 3-Benzoylbenzol-1, 2-Dicarbonsäure + H₂O (A. 290, 230; B. 30, 1115).
- 20) 4[P]-Benzoylbenzol-1, 2-Dicarbonsäure. Sm. 127-1280 (A. 247, 188). - II, 1976.
- 21) isom. Benzoylbenzol-1, 2-Dicarbonsäure. Sm. 155° (J. 1886, 1651). II, 1976.

22) **2-Benzoylbenzol-1, 3-Dicarbonsäure.** Sm. 260° (A. **290**, 232).

23) 4[?]-Benzoylbenzol-1,3-Dicarbonsäure. Sm. $278-280^{\circ}$. Ca + H_2O_1

Ba + H₂O, Ag₂ (B. 9, 1762). — II, 1975.

24) 2-Benzoylbenzol-1, 4-Dicarbonsäure. Sm. oberh. 290°. Ca + H₂O, Ba + 5H₂O (J. 1878, 402; J. pr. [2] 35, 479). — II, 1975.

25) Diphenylketomethan - 2, 2'-Dicarbonsäure (Benzophenon-o o-Dicarbonsiure)

säure). Sm. $150-155^{\circ}$ u. Zers. Ba + $5\,\mathrm{H}_2\mathrm{U}$ (A. 242, 243). — II, 1975. 26) Diphenylketomethan-2, 4'-Dicarbonsäure + $\mathrm{H}_2\mathrm{U}$. Sm. 239° (wasser-

frei) (B. 28, 1134). — II, 1976.

27) Diphenylketomethan-4, 4'-Dicarbonsäure. subl. $Ag_2 + Ag_3O$ (B. 20, 522). — II, 1976.

28) isom. Diphenylketomethan-??-Dicarbonsäure. Sm. oberh. 200°. Ag, (B. 7, 1185; 10, 2175). — II, 1976. 29) Säure (aus d. Kohlenwasserstoff C₂₁H₂₀). 2 isom. Formen (B. 7, 1154,

1155). — II, *1976*.

C 62,9 - H 3,5 - O 33,5 - M. G. 286. $C_{15}H_{10}O_6$

1) Aloëxantin. Sm. 260—265° (J. 1877, 909). — III, 618.

2) Digitoflavon (C. 1899 [1] 495).

- 3) Fisetin + 4H₂O. Sm. oberh. 360° u. Zers. Na, H₂SO₄ (J. 1864, 564; B. 19, 1739; Soc. 67, 648; 69, 1304; 71, 1195; M. 12, 182). III, 583.
- 4) Luteolin $+ 2H_2O$. Sm. oberh. 320°. PbO, HCl $+ H_2O$, HBr $+ H_2O$, HJ, H_2SO_4 (J. 1861, 707; Z. 1866, 602; A. 100, 180; M. 17, 422; Soc. 69, 206, 799, 1442; B. 29, 1013). III, 584.

 5) Paradatiscetin. Sr. Ba (A. 112, 102; J. 1864, 563). III, 606.
 6) Rhein. Sm. oberh. 280° (B. 28 [2] 1058).

7) Ventilagin (Soc. 65, 940). — III, 455.

8) 4-Keto-1-[4-Oxybenzyliden]-1,4-Dihydrobenzol-13,3-Dicarbonsäure (Formaurindicarbonsäure) (B. 31, 148).

9) Biphenyl-2, 3, 6-Tricarbonsäure. Ag₃ (A. 229, 159). — II, 2024.
10) Phtaloylsalicylsäure. Sm. 244°. Ba. Ag₂ (A. 303, 280).
11) Anhydro-αα-Di[2,3,4(?)-Trioxyphenyl]propionsäure (B. 16, 2406). · II, 2078. C 59,6 - H 3,3 - O 37,1 - M. G. 302.

 $C_{15}H_{10}O_7$

 $C_{15}H_{10}O_8$

1) **5-Oxy-2-[2,4-Oxyphenyl]-1,4-Benzpyron** (Morin; Morinsäure). Sm. 285°. 1) Joseph Level 1, 4-Bens By Folk (Morin; Morinsaure): Sal. 288 .

Na, K. Ca, Zn, PbO, HCl, HBr, HJ, H₂SO₄ (J. 1850, 529; 1864, 557;

Fr. 14, 119; A. 127, 351; M. 5, 167; 17, 427; 18, 708; Soc. 67, 937;

69, 792, 1441; 73, 670; C. 1898 [1] 851). — III, 683.

2) Quercetin + 2 H₂O (1,3,3',4'-Tetraoxyflavonol). Sm. oberh. 250°. Na,

K, Zn, HCl, HBr, H₂SO₄. Lit. bedeutend. — III, 603.

3) Quercetinsäure + 3 H₂O (J. 1859, 525; 1864, 560). — II, 2055.

4) Farbstoff (aus d. Blättern von Arctostaphylos uva ursi) (C. 1898 [1] 1306). C 56,6 - H 3,1 - O 40,2 - M. G. 318

1) Myricetin (Oxyquercetin). Sm. oberh. 300°. HBr, H₂SO₄ (Soc. 69, 1287, 1301; **73**, 375, 1016). — III, 606.

 $C_{15}H_{11}N_3$

 $\mathbf{C}_{15}\mathbf{H}_{12}\mathbf{O}_{2}$

C 53.9 - H 3.0 - O 43.1 - M. G. 334. $C_{15}H_{10}O_9$ 1) 3,4,5,6-Tetraoxyxanthen-1,8-Dicarbonsäure (B. 31, 270).

2) Anhydrid d. Methylendigallussäure (B. 31, 260).

3) Anhydrid d. isom. Methylendigallussäure (B. 31, 263). C 82,6 — H 4,6 — N 12,8 — M. G. 218.

 $C_{15}H_{10}N_2$ 1) Chinindolin. Sm. 342-343°. HCl, (2HCl, PtCl₄) (B. 30, 3020). -

IV, 1037. 2) Nitril d. Diphenylmethan-4,4'-Dicarbonsäure. Sm. 165°; Sd. 407 bis 410°_{757} (B. **27**, 2325). — II, 1888. C 73,2 — H 4,1 — N 22,7 — M. G. 246.

 $C_{15}H_{10}N_4$

1) Amidophenantriazin. Sm. 262° (A. 302, 310). — IV, 1295.

2) Nitril d. 1,5-Diphenyl-1,2,4-Triazol-3-Carbonsäure. Sm. 156—156,5° (B. 22, 797). — IV, 1164.

1) P-Dibrom-2-Methylanthracen. Sm. 156° (138-140°) (B. 7, 1196; 11, $\mathbf{C}_{15}\mathbf{H}_{10}\mathbf{Br}_{2}$ 1606; A. **212**, 35). — **II**, 273.

2) ?-Dibrom-Isomethylanthracen. Sm. 148° (B. 15, 1822). — II, 273. C 87,8 — H 5,4 — N 6,8 — M. G. 205. 1) o-Benzylenindol. Sm. 245° (235°) u. Zers. (B. 22, 2022; Soc. 65, 494). C, H, N **– IV**, 432.

2) 2-Phenylchinolin. Sm. 86° (84°); Sd. oberh. 300°. (2HCl, PtCl₄ + 2H₂O), (HCl, AuCl₃), (2HCl, AuCl₅), H₂Cr₂O₇, Pikrat (J. 1883, 1326; B. 16, 1665, 1835; 19, 1466; 28, 986; A. 242, 294; 245, 379; 281, 4; M. 13, 59; Bl. [3] 13, 26; J. pr. [2] 56, 298). — IV, 425.

3) 3-Phenylchinolin. Fl. HCl, (2HCl, PtCl₄) (B. 16, 1836). — IV, 428.
4) 4-Phenylchinolin. Sm. 61—62°. HCl, (2HCl, PtCl₄), H₂SO₄, Pikrat

38; B. 26, 2004). — IV, 430. 7) 1-Phenylisochinolin. Sm. 87—88°. (2HCl, PtCl₄) (M. 18, 5). —

IV. 430.

8) 3-Phenylisochinolin. Sm. 103—105°. (2 HCl, PtCl₄) (B. 13, 1685; 18, 3477; 25, 3573). — IV, 431.

9) Nitril d. $\alpha\beta$ -Diphenylakrylsäure. Sm. 86°; Sd. 359—360° (A. 250,

124, 129, 155, 157; *J. pr.* [2] **53**, 454). — II, 1474.

10) Truxonanilid. Sm. 270° u. Zers. (*B.* **22**, 785). — III, 170.

11) Verbindung (aus 3-Keto-1-Benzyl-1,3-Dihydroisoindol). Pikrat (*B.* **20**, 2865; **29**, 2743). — II, 1710.

C 77,3 — H 4,7 — N 18,0 — M. G. 233.

1) 2,4-Diphenyl-1,3,5-Triazin. Sm. 75°; Sd. 205°_{9} (B. 23, 2383). — IV, 1190.

2) 2-Phenylazochinolin. Sm. 93° (B. 24, 2819). — IV, 1485.

3) Methylindophenazin. Sm. 248° (B. 29, 201). — IV, 1190. 4) Toluindophenazin (Toluindazin). Sm. oberh. 290° (A. 237, 344). — IV, 1190.

C 69,0 - H 4,2 - N 26,8 - M. G. 261. $C_{15}H_{11}N_5$

1) Nitril d. 2,3-Diphenyl-2,3-Dihydro-1,2,3,4-Tetrazin-5-Carbonsäure

(Glyoxylylcyanidosotetrazon). Sm. 137° u. Žers. (B. 21, 3000). — IV, 756. 1) ααβ-Tribrom-γγ-Diphenylpropen. Sm. 117—130° u. Žers. (Am. 19, 649). C 86,5 — H 5,7 — O 7,7 — M. G. 208. 1) Methanthrol. Sm. 122° (A. 170, 267). — II, 1686. $\mathbf{C}_{15}\mathbf{H}_{11}\mathbf{Br}_{3}$ $C_{15}H_{12}O$

2) Methyläther d. 2-Oxyanthracen. Sm. 175-178° (B. 15, 1427). -II, 901.

3) Methyläther d. 9-Oxyphenanthren. Sm. 96-97° (Soc. 71, 1122).

4) γ-Keto-αγ-Diphenylpropen (Benzylidenacetophenon). Sm. 57-58°; Sd. 345-348° (B. 14, 2463; 20, 657; 29, 1492; A. 281, 49). — III, 246.
 5) 1-Keto-2-Phenyl-2,3-Dihydroinden. Sm. 78°; Sd. bei 344° u. Zers.

(B. **25**, 2096, 2124). — III, 248. C 80,3 — H 5,3 — O 14,3 — M. G. 224.

1) 3,10-Dioxy-1-Methylanthracen. Sm. 224° (B. 31, 2795).

2) α-Oxy-γ-Keto-αγ-Diphenylpropen (Dibenzoylmethan?). Sm. 81°; Sd. oberh. 200° (B. 16, 2134; 20, 655; 30, 958; Soc. 47, 250; A. 291, 52, 84; A. ch. [6] 22, 349; J. 1883, 984; C. 1897 [2] 261). — III, 297. $C_{15}H_{12}O_2$

 $C_{15}H_{12}O_3$

- 3) γ-Keto-γ-Phenyl-α-[2-Oxyphenyl]propen. Sm. 153—155° u. Zers. (B. **29**, 233, 378). — III, *24*7.
- 4) γ -Keto- γ -Phenyl- α -[3-Oxyphenyl]propen. Sm. 159—160° (B. 29, 235). - III, 247.
- 5) γ -Keto- γ -Phenyl- α -[4-Oxyphenyl]propen. Sm. 182—183,5° (B. 29, 236). III, 247.
- 6) γ -Keto- γ -[2-Oxyphenyl]- α -Phenylpropen. Sm. 88-89° (B. 31, 715).
- 7) αγ-Diketo-αγ-Diphenylpropan (Dibenzoylmethan). Sm. 77.5—78° (C. **1897** [2] 261).
- 8) ε-Keto-α-Furanyl-ε-Phenyl-α γ-Pentadiën (Furfurakroleïnacetophenon). Sm. 52—53° (B. 31, 283).
- 9) γ -Keto- δ -[2-Furanyl]- α -Phenyl- $\alpha\delta$ -Pentadiën (Furalbenzalaceton). Sm. 55-56° (A. 223, 147). III, 728.
- 10) 4-Phenyl-3, 4-Dihydro-1, 2-Benzpyron (Phenylhydrocumarin). Sm. 82°; Sd. 237°₃₀ (B. **24**, 2582). — II, 1700. 11) **10-Oxy-9-Keto-?-Methyl-9,10-Dihydroanthracen.** Sm. 98° (B. **21**,
- 1175). III, 243.
- 12) 10 Oxy-9-Keto-?-Methyl-9,10-Dihydroanthracen. Sm. 187° (A. **212**, 75; B. **14**, 456). — **III**, 243.
- 13) Aethyläther d. 1-Oxy-9-Ketofluoren. Sm. 99-100° (B. 31, 3034).
- 14) 2-Oxy-1-Keto-2-Phenyl-2, 3-Dihydroinden? Sm. 129° (B. 25, 2098). - III, 248.

- 15) **2,7-Dimethylxanthon.** Sm. 143° (B. 18, 1998). III, 232. 16) **3,6-Dimethylxanthon.** Sm. 166° (B. 25, 1745). III, 234. 17) **4,5-Dimethylxanthon.** Sm. 171—172°; Sd. 350—360° (B. 25, 3644).
- 18) Pyrokresoloxyd. α-Modif. erstarrt bei 168°; β-Modif. erstarrt bei 95°; γ-Modif. erstarrt bei 77° (M. 3, 733; B. 15, 2204; 16, 2144). III, 646.
- 19) 9,10-Dihydroanthracen-1-Carbonsäure. Sm. 203° (B. 16, 2612). -II, 1475.
- 20) 9,10-Dihydroanthracen-?-Carbonsäure. Sm. 209° (A. 242, 256). II, 1475.
- 21) α β-Diphenylakrylsäure (α-Phenylzimmtsäure). Sm. 172° (169--170°). $Ba + 4H_2O$, Pb, Ag (J. 1878, 820; B. 26, 659; G. 27 [2] 49). II, 1473.
- 22) Allo- $\alpha\beta$ -Diphenylakrylsäure. Sm. 136—137°. Ba + 3(5)H₂O, Anilinsalz (G. 27 [2] 51).
- 23) $\alpha\beta$ -Diphenyläthen-2-Carbonsäure. Sm. 158-160° (B. 27, 2506). II, 1475.
- 24) Lakton d. α -Oxy- $\alpha\beta$ -Diphenyläthan- α ²-Carbonsäure. Sm. 60—61° (B. **27**, 2505). — **II**, 1699.
- 25) Lakton d. α -Oxy- $\alpha\beta$ -Diphenyläthan- β -Carbonsäure. Sm. 89—90° (B. 18, 2448). — II, 1699.
- 26) Lakton d. 6-Oxy-2[oder 4]-Methyldiphenylessigsäure. Sm. 1220 (B. **30**, 130).
- 27) Lakton d. 6-Oxy-3-Methyldiphenylessigsäure. Sm. 106° (B. 28, 990; **30**, 129). — II, 1700.
- 28) Lakton d. α -Oxy- α '-Phenyl- α ²-[4-Methylphenyl]methan- α '2-Carbonsäure (p-Tolylphtalid). Sm. 129° (A. 234, 235). — II, 1700.
- 29) Lakton d. Ditolylcarbolaktonsäure. Sm. 1430 (B. 18, 1988). II, 1700.
- 30) Aldehyd d. β -Keto- $\alpha\beta$ -Diphenyläthan- α -Carbonsäure (A. d. Benzoylphenylessigsäure). Sm. 110⁵ (B. 22, 3278). — III, 96. 31) Methylester d. Fluoren-4-Carbonsäure. Sm. 64⁶ (A. 247, 283). —
- II, 1473.
- 32) Phenylester d. β-Phenylakrylsäure. Sm. 72,5°; Sd. 205-207°₁₅ (B. **18**, 1945). — **II**, 1406.
- 33) Acetat d. Cyklophenylenbenzylidenoxyd. Sm. 190° (M. 16, 281).
- 34) Acetat d. 9-Oxyfluoren (A. d. Fluorenalkohol). Sm. 75° (A. ch. [5] 7, 506). — II, 1082.
- 35) Benzoat d. 3-Oxy-l-Aethenylbenzol. Sm. 62,5-63,5° (B. 26 [2] 677). **- II**, *1148*.
 - C 75.0 H 5.0 O 20.0 M. G. 240.
- 1) 2,4,6-Trimethyl-1,3,5-Benztrifuran. Sm. 115-120° (B. 19, 2936). **— III**, 737.

- Sm. 160° (B. 26, 74). III, 233. 2) 1-Oxy-2,4-Dimethylxanthon. C15H12O3
 - 3) 1-Oxy-3,5-Dimethylxanthon. Sm. 145° (B. 27, 1990). — III, 233. Sm. 139° (B. 27, 1990). — III, 234. 4) 1-0xy-3, 6-Dimethylxanthon.
 - Sm. 169° (B. 27, 1990). III, 233. 5) 1-Oxy-3, 7-Dimethylxanthon.
 - 6) Anhydrooxylapachol. Sm. 110-111° (Soc. 67, 793; 69, 1377). III, 402.
 - 7) Chrysophanhydroanthron. Sm. 196° (A. 284, 194; 291, 307; B. 21, 436). — III, 452.
 - 8) Phenyloxyhydrocumarin (aus Zimmtsäure). Sm. 133° (B. 25, 958). II, 1882.
 - 9) isom. Phenyloxyhydrocumarin (aus Allozimmtsäure). Sm. 135 ° (B. 25, 958). — II, 1882.
 - 10) Phenyloxyhydrocumarin? (Phenylhydroumbelliferon). Sm. 137° (B. 24, 2585; **25**, 958, 2130). — II, 1882.
 - 11) 2-Keto-1, 3-Di[2-Fural]-R-Pentamethylen (Pyroxanthin). Sm. 1630 (A. 21, 143; B. 10, 938; 11, 456; 29, 1839; J. 1847/48, 669; 1880, 702; J. pr. [1] 7, 94; Am. 3, 322). — III, 736.

 - 12) Isopropylfuran- α -Naphtochinon. Sm. 110° (Soc. **69**, 1370). 13) Isopropylfuran- β -Naphtochinon. Sm. 94—95° (Soc. **69**, 1376). 14) Formaldehydoxytolufluoron (B. **27**, 2890).

 - 15) α -Phenyl- β -[3-Oxyphenyl]akrylsäure. Sm. 142°. Ca + 2H₂O, Ba + 3 H₂O, Ag (B. 28, 1998).
 - 16) α-Öxy-β-Phenylakrylphenyläthersäure. Sm. 179—180° (121°?). Ba, Ag, Anilinsalz (J. 1880, 876; G. 10, 481; C. 1897 [1] 1120). II, 1637.
 - 17) α-Benzoyl-α-Phenylessigsäure (A. 266, 20; J. pr. [2] 55, 317). II, 1707.
 - 18) α -Keto $\alpha\beta$ -Diphenyläthan α^2 -Carbonsäure (o-Desoxybenzoïncarbonsäure). Sm. 74-75°. Ag (B. 11, 1019). - II, 1707.
 - 19) α-Keto-αβ-Diphenyläthan-β²-Carbonsäure (β-o-Desoxybenzoïncarbonsäure). Sm. 162—163° (169—170°). Ag (B. 18, 2445; 25, 2101; 31, 376). - II, 1711.
 - 20) 2-[4-Methylbenzoyl]benzol-1-Carbonsäure + H₂O. Sm. 146° (wasserfrei) (138–139°). Na, Ba + 4H₂O, Cd + $\frac{1}{2}$ H₂O, Zn, Ni, Pb, Cu + 4H₂O (A. ch. [6] 14, 447; Bl. 35, 505; B. 28, 1134; A. 299, 300). — II, 1712.
 - 21) 4-[4-Methylbenzoyl]benzol-1-Carbonsäure. Sm. 228° (222°). K, Ag B. 7, 1184, 1195; 10, 2175). — II, 1712.
 - 22) δ-Furanyl-α-Phenyl-αγ-Butadiën-α-Carbonsäure (Furfurakroleïn-phenylessigsäure). Sm. 212—213° (B. 31, 285).
 - 23) Säure (aus β-Bromäthylbenzol). Sm. 184—186° (B. 15, 1985). II, 1713.
 - 24) α, 6-Lakton d. 4, 6-Dioxy-2-Methyldiphenylmethan-α-Carbonsäure? Sm. 155° (B. 31, 2829).
 - 25) α, 2-Lakton d. 2, 6-Dioxy-4-Methyldiphenylmethan-α-Carbonsäure. Sm. 172° (B. 31, 2829).
 - 26) $\alpha, 2'$ -Lakton d. $\alpha, 4$ -Dioxy-2-Methyldiphenylmethan-2'-Carbonsäure (m-Kresolphtalid). Sm. 169-170° (B. 27, 2637; 31, 2792). — II, 1882.
 - 27) α , 21-Lakton d. α Oxy-4-Methoxyldiphenylmethan-21-Carbonsäure (4-Methoxylphenylphtalid). Sm. 116-117° (Bl. 46, 206; B. 31, 2791). II, 1881.
 - 28) Methylester d. 2-Benzoylbenzol-1-Carbonsäure. Sm. 52° (B. 7, 987). **– II**, 1704.
 - 29) Methylester d. 3-Benzoylbenzol-1-Carbonsäure. Sm. 62° (A. 220, 241). — II, 1705.
 - 30) Methylester d. 4-Benzoylbenzol-1-Carbonsäure. Sm. 1070 (B. 7, 988).
 - 31) Carbonat d. $\alpha\beta$ -Dioxy- $\alpha\beta$ -Diphenyläthan. Sm. 126° (A. 226, 81). II, 1101.
 - 32) Carbonat d. Isohydrobenzoïn. Sm. 110° (J. pr. [2] 25, 262; A. 226, 80). — II, 1102.
 - 33) Acetat d. 4-Oxydiphenylketon. Sm. 81° (B. 10, 1970; A. 210, 251). - III, 194.
 - 34) Benzoat d. Oxymethylphenylketon. Sm. 117—117,5° (B. 10, 1488, 2010; A. 216, 308). III, 133.
 - 35) Benzoat d. Piceol. Sm. 134° (Bl. [3] 11, 949). III, 601.

- 36) Verbindung (aus Essigsäurephenylester). Sm. 48° (Soc. 37, 481). C15H19O2 II, 661. C 70,3 — H 4,7 — O 25,0 — M. G. 256. $C_{15}H_{12}O_4$
 - 1) Protophyscihydron. Sm. 210° (A. 284, 188; 286, 376; J. pr. [2] 57. 437). — III. 642.
 - 2) α-Monäthyläther d. 1,7-Dioxyxanthon. Sm. 144—145° (M. 12, 163). - III. 206.
 - 3) β -Monäthyläther d. 1,7-Dioxyxanthon. Sm. 223—225° (M. 12, 167). - III, 206.
 - 4) Dimethyläther d. 1,7-Dioxyxanthon (D. d. Euxanthon). Sm. 130° (B. 15, 1677). — III, 2*06*.
 - 5) $\beta\beta$ -Dioxy- $\alpha\gamma$ -Diketo- $\alpha\gamma$ -Diphenylpropan (Diphenylketonhydrat). 90° (B. **23**, 3379). — **III**, $3\overline{16}$.
 - 6) Diphenylmethan 2, 4 Dicarbonsäure? (1 Benzylbenzol 2, 4 Dicarbonsäure). Sm. 242-243°. Ca + H₂O, Ba (B. 9, 1765). - II, 1888.
 - 7) Diphenylmethan 2, 5 Dicarbonsäure (1-Benzylbenzol 2,5-Dicarbonsäure). Ca $+ 3 H_2 O$, Ba (J. 1878, 403). — II, 1888.
 - 8) Diphenylmethan-2,2'-Dicarbonsäure. Sm. 254,5°. Ba + 6H₂O (A. **242**, 253). — II, 1887
 - 9) Diphenylmethan 3, 3'-Dicarbonsäure. Sm. 220 225° (254°) (B. 27, 2324, 3315). — II, 1888.
 - 10) Diphenylmethan-4,4'-Dicarbonsäure. Sm. 290° (B. 27, 2325). II, 1888.
 - 11) 2-[4-Methoxylbenzoyl]benzol-1-Carbonsäure. Sm. 142-143°. NH₄, Na, K, Ca $+ 2H_2O$, Ba $+ 4H_2O$, Cu, Ag (B. 19, 2103; Bl. 46, 204). II, 1887.
 - 12) 2-Oxyacetylbenzolphenyläther-1-Carbonsäure. Sm. 110-110,5°. Ag (B. 14, 923). — II, 1779.
 - 13) 2-[4-Oxy-3-Methylbenzoyl]benzol-1-Carbonsäure. Sm. 230° u. Zers. (B. 26, 2263). — II, 1888
 - 14) α , 2'-Lakton d. α -Oxy- α -[3,5-Dioxy-1-Methylphenyl]- α -Phenylmethan-2'-Carbonsäure (Orcylphtalid). Sm. 241-242° u. Zers. (B. 27, 2638). **– II**, 1971.
 - 15) Aldehyd d. 3-Methoxyl-4-Benzoxylbenzol-1-Carbonsäure. Sm. 75°
 - (B. 29, 144). III, 104. 16) Methylester d. 6-Oxy-3-Benzoylbenzol-1-Carbonsäure. Sm. 92° (A. **290**, 166).
 - 17) Methylester d. 2-Benzoxylbenzol-1-Carbonsäure (A. ch. [3] 45, 104; A. 89, 362). — II, 1497.
 - 18) Methylester d. 4-Benzoxylbenzol-1-Carbonsäure. Sm. 135° (J. pr. [2] 49, 502).
 - 19) Monomethylester d. Biphenyl-2,2'-Dicarbonsäure. Sm. 110° (A.
 - 247, 267). II, 1884. 20) Phenylester d. 2-Acetoxylbenzol-1-Carbonsäure. Sm. 97°; Sd. 197 bis 198°_{11} (J. pr. [2] 43, 378; A. 273, 83). — II, 1496.
 - 21) Phenylester d. 4-Acetoxylbenzol-1-Carbonsäure. Sm. 84° (J. pr. [2]
 - 28, 215). II, 1527. 22) Monobenzylester d. Benzol-1,2-Dicarbonsäure. Sm. 102—104° (B.
 - 23) 2-Oxybenzoat d. α -Keto- β -Oxy- α -Phenyläthan. Sm. 113—114° (C. 1896 [1] 764).
 - 24) Carbonat d. 3,5-Dioxy-1-Methylbenzol. Sm. 195° u. Zers. (B. 13, 700). **– II**, 961.
 - 25) Benzoat d. 1,2,3-Trioxybenzoläthylenäther. Sm. 109° (B. 12, 1862). **— II**, 1152.
- C 66,2 H 4,4 O 29,4 M. G. 272. $C_{15}H_{12}O_5$
 - 1) 3,4,5-Trioxy-1,2-Dibenzoylbenzol (Gallacetobenzophenon) (J. r. 25, 115). — III, 297.
 - 2) 3,5-Dimethyläther d. 3,5-Dioxy-2-Keto-I-Fural-1,2-Dihydrobenzfuran. Sm. 177—179° (B. 30, 2155).
 - 3) 3,7-Dimethyläther d. 1,3,7-Trioxyxanthon. Sm. 167 (M. 12, 318; **16**, 922). — **III**, 210.
 - 4) Naringenin. Sm. 248° u. Zers. (B. 18, 1322; 20, 297). III, 594.

1510 15 II. 5) 3-Oxy-4-Benzoxylbenzol-3-Methyläther-1-Carbonsäure (Benzovl-C, H, O, vanillinsäure). Sm. 178° (B. 15, 2068). — II, 1744. 6) 2-[2,4-Dioxybenzoyl] benzol-2 [oder 4]-Methyläther-l-Carbonsäure. Sm. 164—165°. Ba, Ag (G. 20, 128). — II, 1972. 7) P-Dioxybenzoylbenzolmonomethyläther-1-Carbonsäure. Sm. 86-870 (B. 28, 1427). - II, 1972.8) α-Oxy-α α-Diphenylmethan-α, 2-Dicarbonsäure. Sm. 80—90° u. Zers. K_2+2H_2O (B. 21, 2004). — II, 1973. 9) α -Oxy- $\alpha\alpha$ -Diphenylmethan-2, 2'-Dicarbonsäure (Benzhydroldicarbonsäure). Ba + H_2O (A. 242, 238). - II, 1973. 10) 2-Oxybenzolbenzyläther-1, 4-Dicarbonsäure. Sm. 230-240° (B. 22, 2188). — II, 1938. 11) γ -Kéto- α ε -Di[2-Furanyl]- α δ -Pentadiën- β -Methylcarbonsäure (β δ -Difurallävulinsäure). Sm. 148°. Ca + 3H₂O, Cd + 3H₂O, Pb + H₂O, Ag (B. **26**, 349; **28**, 918). — III, 719. C 62,5 — H 4,2 — O 33,3 — M. G. 288. C15 H12 O6 1) Cyanomaklurin (oder C₁₈H₁₆O₇). Zers. bei 250° (Soc. 67, 939). — III, 684. 2) Datiscetin. Sm. 237°. Pb (A. 98, 167; 277, 268; 278, 346). — III, 580. 3) 3,4-Di[Acetoxyl]naphtalin-2-Carbonsäure. Sm. 206,5-207° u. Zers. (B. 28, 3094). 4) 3,5-Di[Acetoxyl]naphtalin-2-Carbonsäure. Sm. 1880 (B. 26, 673). - II, 1875. 5) Di[4-Oxyphenyl]methan-3,3'-Dicarbonsäure (Methylendisalicylsäure). Sm. 242° (B. 31, 148). 6) Dioxymalondiphenyläthersäure. Sm. 173° u. Zers. (B. 24, 3005). — II, 667. 7) 1,3,4-Trimethyl-p- β -Benzdifuran-2,5-Dicarbonsäure (4. 283, 265). - III, 736. 8) Diacetat d. Chinon $C_{11}H_8O_4$. Sm. 238—240° (B. 11, 534). — III, 616. 9) Diacetat d. Verb. $C_{11}H_8O_4$. Sm. 109-110° (Soc. 63, 1088). — III, 661. C 59,2 — H 3,9 — O 36,8 — M. G. 304. $C_{15}H_{12}O_7$ 1) Anhydro- $\alpha\alpha$ -Di[2,3,4(?)-Trioxyphenyl] propionsäure (B. 16, 2410). **– II**, 2078. · II, 2078. 3) Gerbsäure (Fr. 14, 127). — III, 682.

2) Lakton d. $\alpha \alpha$ -Di[2,3,4(?)-Trioxyphenyl]propionsäure (B. 16, 2406).

4) Monacetat d. 3,4,2',4',6'-Pentaoxydiphenylketon (M. d. Maklurin). Fl. (J. **1864**, 560). — III, 207. C 56,2 — H 3,7 — O 40,0 — M. G. 320.

C15H12O8

 $C_{15}H_{12}O_{9}$

 $\mathbf{C}_{15}\mathbf{H}_{12}\mathbf{O}_{10}$

 $C_{15}H_{12}N_2$

1) Di[?-Dioxyphenyl|methan-??-Dicarbonsäure (aus 2,4-Dioxybenzol-1-Carbonsäure). Sm. 236° u. Zers. (B. 25, 944). — II, 2079.

C 53,6 — H 3,6 — O 42,8 — M. G. 336.

1) Quercinsäure (Quercin) + 2H₂O (A. 238, 366). — III, 589.

2) Säure (aus Ketongerbsäure C₁₆H₁₄O₆) (M. 10, 662). — II, 2091.

3) Verbindung (aus Sordidin). Sm. 180—181° (G. 24 [2] 332). — II, 2059. C 51,1 — H 3,4 — O 45,5 — M. G. 352.

Methylendigallussäure (kryst. schwer löslich) (Di-4,5,6-Trioxyphenylmethan-2,2'-Dicarbonsäure) (B. 25, 946; 31, 260). — II, 2099.
 isom. Methylendigallussäure (kryst. leicht löslich) (B. 31, 261).
 isom. Methylendigallussäure (amorph, schwer löslich) (B. 5, 1096; 31, 200).

263; A. 263, 285).

4) isom. Methylendigallussäure (amorph, leicht löslich) (B. 31, 262). C 81,8 — H 5,4 — N 12,7 — M. G. 220.

1) Phenylhydrazon d. Truxon = $(C_{15}H_{12}N_2)_x$. Sm. 270° (B. 22, 785). -2) 1,3-Diphenylpyrazol. Sm. $84-85^{\circ}$; Sd. $341-342^{\circ}_{270}$ (B. 26, 114). —

IV, 905. 3) 1,5-Diphenylpyrazol. Sm. 55° (53-54°); Sd. 340°. (2HCl, PtCl₄) (B.

20, 2187; 21, 1139; 22, 176; 25, 3145; 26, 109). — IV, 907. 4) 3,5-Diphenylpyrazol. Sm. bei 200°; Sd. 347°₁₇₅ (B. 26, 115). — IV, 1028. 5) 2,5-Diphenylimidazol. Sm. 162°. HCl (B. 29, 2103). — IV, 1028. 6) 4,5-Diphenylimidazol. Sm. 227°. (2HCl, PtCl₄) (Soc. 57, 558). —

IV, 1028.

C₁₅H₁₂N₂

 $C_{15}H_{12}N_4$

 $C_{15}H_{12}N_6$

- 7) 2-Amido-3-Phenylchinolin. Sm. 155-156°; Sd. oberh. 360°. Pikrat (B. 31, 1293). — IV, 1025.
- 8) 4-Amido-3-Phenylisochinolin. Sm. oberh. 100°. HJ (B. 19, 834). IV, 1026.
- 9) 6-Amido-4-Phenylchinolin. Sm. 205°. (2HCl, PtCl₄ + H₂O), Pikrat (B. 28, 1044). — IV, 1026.
- 10) ?-Amido-4-Phenylchinolin. Sm. 150° (B. 20, 627). — IV, 1025.
- 11) P-Amido-4-Phenylchinolin. Sm. 198° (B. 20, 628). IV, 1025. 12) 2-Phenylamidochinolin. Sm. 98°; Sd. oberh. 360° (B. 18, 1532; 23, 277). — IV, 908.
- 13) 4-Phenylamidochinolin. Sm. 198°. HCl (B. 26, 2229). IV, 909.
- 14) 2-[3-Amidophenyl]chinolin. Sm. 120°. (2 \dot{H} Cl, \dot{H} Cl₄), \dot{H} ₂SO₄ + \dot{H} 2 \dot{H} ₂O
- (B. 18, 1904). IV, 1024. 15) 2-[4-Amidophenyl]chinolin. Sm. 138° (136,5°). 2HCl, (2HCl, PtCl₄) (B. 14, 1940; M. 7, 351; 8, 123). IV, 1024. 16) 6-[4-Amidophenyl]chinolin. Sm. 182°. HCl + 2H₂O (M. 9, 139). —
- IV, 1025.
- 17) **2-Benzyl-1, 3-Benzdiazin.** Sm. 59—60°; Sd. 350—355° (B. **28**, 289). IV, 1026.
- 18) 4-Methyl-2-Phenyl-1, 3-Benzdiazin. Sm. 90°. Pikrat (B. 26, 1391). **- IV**, 1026.
- 19) 6-Methyl-2-Phenyl-1, 3-Benzdiazin. Sm. 133°; Sd. oberh. 360° (B. 28, 738). **— IV**, *1026*.
- 20) 2-Methyl-4-Phenyl-1,3-Benzdiazin. Sm. 47—48°; Sd. 349—353°. HCl, $(HCl, HgCl_2 + H_2O), (2HCl, PtCl_4), Pikrat (B. 25, 3082). - IV, 1026.$
- 21) 6-Methyl-2-Phenyl-1,4-Benzdiazin. Sm. 135° (A. 237, 370; B. 20, 2905). — IV, 1027.
- 22) 7-Methyl-2-Phenyl-1,4-Benzdiazin. Sm. 79°. + HgCl₂ (B. 23, 170). **— IV**, 1027.
- 23) Benzoylazotid (Hydrocyanbenzid). Sm. 202° u. Zers. (Berz. J. 18, 353; J. 1850, 488; A. 28, 267; 81, 127; 136, 174; B. 14, 1142; Soc. 71, 529).
- III, 36. 24) Nitril d. β -Phenylamido- α -Phenylakrylsäure. Sm. 155—156° (J. pr. [2] **55**, 339).
- 25) Nitril d. β -Imido- $\alpha\beta$ -Diphenylpropionsäure. Sm. 146° (J. pr. [2] 52, 115; [2] **55**, 320).
- 26) Nitril d. Benzylidenamidophenylessigsäure? (J. pr. [2] 53, 344). C 72,6 — H 4,8 — N 22,6 — M. G. 248.
- 1) **4-Phenylazo-1-Phenylpyrazol** (früher $C_{28}H_{20}N_6$). Sm. 123—124° (126°) (B. **21**, 2993; **22**, 1479; **23**, 3385; **24**, 3259; **27**, 222; A. **252**, 343). 1487.
- 2) 3-Benzylidenamido-1-Phenyl-1, 2, 4-Triazol. Sm. 155° (G. 29 [1] 23).
- 3) 3-Amido-5, 6-Diphenyl-1, 2, 4-Triazin. Sm. 1750 (A. 302, 309). -IV, 1294.
- 4) 6-Amido-2,4-Diphenyl-1,3,5-Triazin. Sm. 1720 (B. 26, 2227). IV, 1293.
- 5) Azimid d. 5- oder 6-Methyl-2-[2-Amido-4-Methylphenyl]benz-
- imidazol. Sm. 197° (B. 31, 318). IV, 1294.

 6) Nitril d. Phenylhydrazonbenzylidenamidoessigsäure. Sm. 129 bis 129,5° (B. 22, 796). IV, 751.

 7) Verbindung (aus Phenylhydrazin u. s-Tetrachloraceton). Sm. 126 bis 127° (A. 252, 345). IV, 766.
- 8) Verbindung (aus Diisonitrosoaceton u. essigs. Phenylhydrazin). Sm. 126° (B. 21, 2993; 22, 1479). IV, 762. C 65,2 H 4,3 N 30,4 M. G. 276.
- Tetroleyanamid (polym. 1-Cyanpyrrol). Sm. 210° (B. 16, 65). IV, 67.
 Dithiënylphenylmethan. Sm. 74 75° (B. 29, 2205; 30, 2033, 2043). $C_{15}H_{12}S_2$ **- III**, 769.
- 1) Verbindung = $(C_{15}H_{18}O_2)_x$ (aus dem Anhydrid d. $\alpha\beta$ -Diphenyl- $\alpha\beta$ -Dioxy-athan). Sm. 144—145° (A. 198, 174). II, 1101. C 87,0 H 6,3 N 6,6 M. G. 207. $\mathbf{C}_{15}\mathbf{H}_{13}\mathbf{O}_{2}$
- $\mathbf{C}_{15}\mathbf{H}_{13}\mathbf{N}$ 1) γ-Phenylimido-α-Phenylpropen (Zimmtanilid). Sm. 109°. HCl, (2HCl, PtCl₄), H_2SO_4 (B. 16, 1665; 17, 2117). — III, 61. 2) 1-Benzylindol. Sm. 44,5°. Pikrat (A. 227, 363). — IV, 219.

 $C_{15}H_{13}N$

- 3) 1-Methyl-2-Phenylindol. Sm. 100—101° (B. 21, 2197, 2596; A. 236, 155; **253**, 39). — **IV**, 413.
- 4) 3-Methyl-2-Phenylindol. Sm. 91—92°; Sd. 280—290°₁₂₀ (Bl. [3] 17, 74). - IV, 417.
- 5) 5-Methyl-2-Phenylindol. Sm. 213°. Pikrat (B. 25, 2874). IV, 417. 6) 7-Methyl-2-Phenylindol. Sm. 118—119°; Sd. 250°₁₀. Pikrat (B. 25,
- 2870). IV, 417.
 7) 1-Methyl-3-Phenylindol. Sm. 64—65°. Pikrat (A. 253, 38). IV, 414. 8) 2-Methyl-3-Phenylindol. Sm. 59-60°. Pikrat (A. 248, 111). -
- IV, 417. 9) 1-Phenyl-3,4-Dihydroisochinolin. $(2 \text{HCl}, \text{PtCl}_4) (B. 26, 1907).$ —
- IV, 417. 10) 2,4-Dimethyl- α -Naphtochinolin. Sm. 43-44°. Pikrat (J. pr. [2] 35,
- 312). IV, 418. 11) P-Dimethyl-α-Naphtochinolin. Sm. 44°; Sd. 360 – 362° (2 HCl, PtCl₄)
- $(B. \ 21 \ [2] \ 532). IV, 419.$
- 12) 3-Aethyl-β-Naphtochinolin. Sm. 63° (B. 27, 2022). IV, 418.
- 13) 1,3-Dimethyl-β-Naphtochinolin. Sm. 126-1276; Sd. oberh. 3000. (2) HCl, PtCl₄ + $2^{1}/_{2}$ H₂O), HBr + 2 H₂O, HNO₃, H₂SO₄, H₂Cr₂O₇, Pikrat (J. pr. [2] 35, 299). — IV, 419.
- 14) P-Dimethyl- β -Naphtochinolin. Sm. $66-67^{\circ}$; Sd. 380° . (2HCl,PtCl₄) (B. 21 [2] 532). - IV, 419.
- 15) 5-Aethylakridin. Sm. 116°. HCl, (2 HCl, PtCl₄), (HCl, AuCl₃), H₂SO₄ (G. 21 [2] 229). IV, 418.
- 16) 1,3-Dimethylakridin. Sm. 71°. (2HCl, PtCl₄), Pikrat (A. 279, 286). —
- IV, 418. 17) 3,5-Dimethylakridin. Sm. 122-123°. HCl, HJ, Pikrat (A. 239, 63).
- **IV**, 418. 18) 9 - Aethylphenanthridin. Sm. $54-55^{\circ}$. HCl, $(2HCl, PtCl_4 + 2H_2O)$,
- Pikrat (B. **29**, 1186). **IV**, *41*7.
- 19) Nitril d. $\alpha\beta$ -Diphenylpropionsäure. Sm. 58°; Sd. 335° (A. 250, 129). **– II**, 1467.
- 20) Nitril d. 4-Methyldiphenylessigsäure. Sm. 61° (59°); Sd. 240°₄₀ (A.
- 250, 149; B. 25, 1616). II, 1469. 21) Nitril d. 1-[P-Methylbenzyl]benzol-2-Carbonsäure. Sd. 325—326°₇₅₀ (B. **25**, 3025). — II, 1469. C 76,6 — H 5,5 — N 17,9 — M. G. **235**.

 $C_{15}H_{13}N_3$

- 1) 5-Imido-1, 3-Diphenyl-4, 5-Dihydropyrazol. Sm. 129,5° (121°). (2 HCl, $PtCl_4$) (J. pr. [2] 47, 132; [2] 58, 137). — IV, 771.
- 2) 5-Methyl-3-[2-Pyridyl]-1-Phenylpyrazol. Sd. 215° (M. 17, 448). IV, 1160.
- 3) 2-Phenyl-5-[4-Methylphenyl]-1,3,4-Triazol. Sm. 170° (B. 27, 3279;
- A. **298**, 6). IV, 1188.
- 4) 3-Phenylazo-2-Methylindol. Sm. 115—116° (A. 242, 384). IV, 1485. 5) 2-Phenylhydrazidochinolin. Sm. 191° (B. 24, 2818). IV, 800. 6) 4-Phenylhydrazon-1, 4-Dihydrochinolin. Sm. 168° (B. 21, 1378). —
- IV, 269. 7) 4-[4-Methylphenyl]-1,2-Benzdiazin. Sm. 215°. HCl (B. 25, 2852). —
- IV, 1156.
- 8) Nitril d. β -Phenylhydrazon- β -Phenylpropionsäure (Cyanacetophenonphenylhydrazon). Sm. 147° (J. pr. [2] 58, 135).
- 9) Nitril d. 2, 6-Dimethyl-4-Phenyl-1, 4-Dihydropyridin-3, 5-Dicarbonsäure. Sm. 205—206° (J. pr. [2] **52**, 101; [2] **56**, 127). — III, 37. C 68,4 — H 4,9 — N 26,6 — M. G. 263.

 $C_{15}H_{13}N_{5}$

- 1) Cyanid d. Diphenylguanidin. Sm. 154° (A. 67, 160; 74, 1; B. 2, 688). II, 348.
- 2) 3-Phenylhydrazonmethyl-1-Phenyl-1,2,4-Triazol. Sm. 118—140° (A. **262**, 295). — IV, 1119.
- 3) 4-Phenylazo-3-Methyl-1-Phenyl-1, 2, 5-Triazol. Sm. 122° (B. 25, 3543; 28, 1285). — IV, 1230, 1491.
- 4) 3-[a-Phenylhydrazonäthyl]-1,2,4-Benztriazin. Sm. 2020 (B. 25, 3540).
- IV, 1165. 5) Nitril d. $\alpha\beta$ -Di[Phenylhydrazon]propionsäure. Sm. 161° u. Zers. (B. 21, 3000). — IV, 756.

 $C_{15}H_{13}N_5$

6) Verbindung (aus Glyoxylylcyanidphenylhydrazoxim). Sm. 165° (B. 21, 3002). — IV, 756.

 $C_{15}H_{13}Cl$

 $\mathbf{C}_{15}\mathbf{H}_{13}\mathbf{Cl}_{3}$

 $C_{15}H_{14}O$

 $C_{15}H_{14}O_{2}$

1) α-Chlor-αβ-Diphenylpropen. α-Modif. Fl. Sd. 316°; β-Modif. Sm. 117 bis 118°; Sd. 311° (B. 25, 2237). — II, 251.

2) isom. α -Chlor- $\alpha\beta$ -Diphenylpropen. Sm. 124°; Sd. 311°,₇₈₀ (Soc. 71, 224). 1) $\alpha\alpha\beta$ -Trichlor- $\alpha\beta$ -Diphenylpropen. Sm. 130° (Soc. 71, 225).

C 85,7 — H 6,6 — O 7,6 — M. G. 210.

1) Methyläther d. α -Phenyl- β -[4-Oxyphenyl] äthen. Sm. 136° (J. 1879) 732). — II, *900*.

2) Aethyläther d. Cyklophenylenbenzylidenoxyd. Sm. 168-170° (M.

3) Pyrokresol. α -Modif. Sm. 195°; β -Modif. erstarrt bei 124°; γ -Modif. erstarrt bei 104—105° (B. 15, 2203; 16, 2141; M. 3, 729). — III, 645.

4) α-Keto-αβ-Diphenylpropan (Methyldesoxybenzoïn). Sm. 58°; Sd. 317,5 bis $318,5^{\circ}$ (B. 21, 1297). — III, 230.

- 5) α -Keto- $\alpha\gamma$ -Diphenylpropan (Benzylacetophenon). Sm. 72 73°; Sd. oberh. 3606 (B. 21, 1325; Soc. 59, 1007). — III, 227.
- 6) β-Keto-αγ-Diphenylpropan (Dibenzylketon). Sm. 33,9°; Sd. 330,6° (B. 6, 560; 7, 1627; 26, 1438; Soc. 59, 623; J. pr. [2] 55, 350). III, 229.
- 7) α -Keto- α -[4-Methylphenyl]- β -Phenyläthan (Benzyl-4-Tolylketon). Sm. 109° (107,5°); Sd. oberh. 360° (B. 14, 1646; 22, 1229). III, 229.
- 8) α-Keto-β-[4-Methylphenyl]-α-Phenyläthan (Phenyl-4-Methylhenzylketon).
 94° (84-85°) (B. 22, 1231; Bl. [3] 17, 507). III, 230.
 9) 4-Aethyldiphenylketon.
 9d. oberh. 300° (B. 15, 1682). III, 231.
- 10) Di[4-Methylphenyl]keton. Sm. 92°; Sd. 333—333,5°₇₂₅ (B. 6, 1255; 7, 1183, 1195, 1414; **10**, 2174; **12**, 2303; J. pr. [2] **35**, 466). III, 233. 11) **2,4**-Dimethyldiphenylketon. Sd. 321°₇₄₄ (B. **15**, 1682; J. pr. [2] **35**,
- 469). III, 231.
- 12) 2,5-Dimethyldiphenylketon. Sm. 36°; Sd. 317,2°₇₄₄ (B. 17, 2847; J. pr. [2] 35, 472). — III, 232.

13) 3,4-Dimethyldiphenylketon. Sm. 47—48°; Sd. 340,2°, 44 (J. pr. [2] 35, 467). — III, 233.

14) 2-Phenyl-3,4-Dihydro-1,2-Cumaran. Sd. 44-45° (B. 29, 380).

- 15) Verbindung (aus Aluminium-2-Methylphenylat) (Soc. 49, 29). II, 737. 16) Verbindung (aus Aluminium-3-Methylphenylat). Sm. 200° (Soc. 41, 11).
- **II**, 744. 17) Verbindung (aus Aluminium-4-Methylphenylat). Sm. 168° (Soc. 41, 9).

C 79.6 - H 6.2 - O 14.2 - M. G. 226.

- 1) γ -Keto- γ -Phenyl- α -[2-Oxyphenyl]propan. Sm. 91—92° (B. 31, 718).
- 2) Methyläther d. β -Oxy- α -Keto- $\alpha\beta$ -Diphenyläthan (M. d. Benzoïn). Sm. 49-50° (B. 26, 2413). III, 222.
- 3) Methyläther d. α -Keto- β -[4-Oxyphenyl]- α -Phenyläthan. Sm. 76°; Sd. 360° (B. **21**, 2450). — III, 227
- 4) Methyläther d. ?-Oxy-3-Methyldiphenylketon. Sm. 80° (B. 24, 3897). - III, 212.
- 5) Aethyläther d. 4-Oxydiphenylketon. Sm. 38-39°; Sd. oberh. 300° (242°_{40}) (B. 23, 1206; 31, 1001). — III, 194.
- 6) 3-Methylphenyläther d. Oxymethylphenylketon. Sm. 84° (B. 30, 577). 7) 4-Methylphenyläther d. Oxymethylphenylketon. Sm. 68° (B. 30, 577).
- 8) Tetrahydroanthracen-1-Carbonsäure. Sm. 164-165° (B. 16, 2612). **— II**, 1469.
- 9) $\alpha \alpha$ -Diphenylpropionsäure. Sm. 173°; Sd. oberh. 300°. Ca $+ 1^{1/2}$ H₂O, $Ba + 2H_2O$, Zn (B. 11, 1993; 14, 1595). — II, 1468.
- 10) αβ-Diphenylpropionsäure. α-Form. Sm. 88—89°; β-Form. Sm. 95 bis 96°; γ-Form. Sm. 82°; Sd. 330—340°. Ca + H₂O, Ba, Zn, Pb, Ag (A. Spl. 100°) 8, 51; J. 1878, 821; A. 250, 133; B. 21, 1311; 25, 2018; 28, 818). — II, 1466.
- 11) isom. ?-αβ-Diphenylpropionsäure. Sm. 120°. Ca (Soc. 37, 485). II, 1468.
- 12) $\beta\beta$ -Diphenylpropionsäure. Sm. 149° (151°). Na + 4H₂O, Ca, Ag (Soc. 59, 734; B. 25, 960, 2124). — II, 1468.

13) 4-Methyldiphenylessigsäure. Sm. 115°. Na + 6H₂O, K + 4H₂O, Ca + 2H₂O (B. 10, 996; 25, 1617). — II, 1468. C15H14O9

14) αβ-Diphenyläthan-2-Carbonsäure. Sm. 129-132°. Ag (B. 11, 1020;

18, 2444, 2446; **27**, 2506). — II, 1468. 15) 1-[4-Methylbenzyl]benzol-2-Carbonsäure. Sm. 133,5—134°. (A. 234, 236). — II, 1469.

16) Methylester d. Diphenylessigsäure. Sm. 59-60° (B. 21, 1317). -

II, 1464. 17) Methylester d. 1-Benzylbenzol-2-Carbonsäure. Fl. (J. 1875, 598). - II, 1465.

18) Aethylester d. 1-Phenylbenzol-2-Carbonsäure. Sd. 314° (300-305°) (A. 193, 123; 279, 260). — II, 1461.

19) Aethylester d. 1-Phenylbenzol-3-Carbonsäure. Fl. (M. 3, 809). -II, 1462.

20) Aethylester d. 1-Phenylbenzol-4-Carbonsäure. Sm. 46° (A. 172, 114). **-- II**, 1463.

21) Benzylester d. Phenylessigsäure. Sd. 317-3190 (B. 7, 1056; Soc. 37, 483). — II, 1310.

22) Benzylester d. 1-Methylbenzol-2-Carbonsäure. Sd. 315° (B. 25 [2] 748). **— II**, *1329*.

23) 2,3-Dimethylphenylester d. Benzolcarbonsäure. Sm. 57°; Sd. 326 bis 327° (Bl. [3] 11, 603; J. pr. [2] 36, 8). — II, 1147.

24) 2,4-Dimethylphenylester d. Benzolcarbonsäure. Sm. 38,5°; Sd. 321° (Bl. [3] 11, 603). — II, 1147.

25) 2,5-Dimethylphenylester d. Benzolcarbonsäure. Sm. 61°; Sd. 318 bis 319° (Bl. [3] 11, 603). — II, 1147. 26) 3,4-Dimethylphenylester d. Benzolcarbonsäure. Sm. 58,5°; Sd. 333°

(Bl. [3] 11, 603). — II, 1147. 27) 3,5-Dimethylphenylester d. Benzolcarbonsäure. Sm. 24°; Sd. 326°

(Bl. [3] 11, 603). — II, 1147.

28) 2-Aethylphenylester d. Benzolcarbonsäure. Sm. 38-39°; Sd. 314 bis 315° (\$\bar{B}l.\$ [3] 11, 210). — II, 1147.
29) 3-Aethylphenylester d. Benzolcarbonsäure. Sm. 52°; Sd. 322—323°

(Bl. [3] 11, 212). — II, 1147. 30) 4-Aethylphenylester d. Benzolcarbonsäure. Sm. 59—60°; Sd. 328°

(Bl. [3] 11, 209). — II, 1147.

31) Acetat d. a-Oxydiphenylmethan. Sm. 41,5°; Sd. 301—302°₇₈₁ (A. 133, 20; Bl. 33, 340; 35, 304; [3] 21, 290). — II, 1078

32) Acetat d. 4-Oxydiphenylmethan. Sd. 3176 (J. 1873, 440; Soc. 37, 721). **— II**, 897.

33) Acetat d. 2-Oxymethylbiphenyl. Sd. 182⁹₂₀ (M. 19, 591).
34) Benzoat d. α-Oxyäthylbenzol. Sd. 189⁹₂₁ (B. 31, 1003).
35) Benzoat d. Dracoresinotannol (C. 1896 [2] 713).
C 74,4 — H 5,8 — O 19,8 — M. G. 242.

C15 H14 O3

- 1) 3-Methyläther d. 3,4-Dioxy-?-Benzoyl-1-Methylbenzol. Sm. 1500 (G. 28 [2] 286).
- 2) Di[3-Oxy-4-Methylphenyl]keton. subl. (A. 271, 10). III, 234.

3) Di[?-Oxy-4-Methylphenyl]keton. Sm. 104-105° (A. 212, 344). III, 234.

4) Di[P-Oxy-4-Methylphenyl]keton. Sm. 138° (A. 257, 74). — III, 234. 5) Monomethyläther d. ?-Dioxy-?-Methyldiphenylketon (M. d. Benzo-

methylresorcin). Sm. 125° (B. 28, 2306 Anm.). — III, 216. 6) Dimethyläther d. 1,2-Dioxydiphenylketon. Sm. 101—102° (G. 27

7) Dimethyläther d. 2, 2'-Dioxydiphenylketon. Sm. 104° (98°) (J. pr. [2]

28, 287; B. 19, 2610). — III, 195. 8) Dimethyläther d. 3,4[?]-Dioxydiphenylketon (Benzoylveratrol). Sm.

99° (J. pr. [2] **53**, 253). -**- III**, *199*. 9) Dimethyläther d. 4,4'-Dioxydiphenylketon. Sm. 144° (B. 14, 328;

28, 2870). — III, 198. 10) Monäthyläther d. 4,4'-Dioxydiphenylketon. Sm. 146-147° (A. 194,

337). — III, 198. 11) Lapachol (3-Oxy-2-Amylen-1,4-Naphtochinon; Grönhartin; Taigusäure). Sm. $139.5 - 140.5^{\circ}$. NH₄, Na + 5H₂O, K, Ca + $1^{1}/_{2}$ H₂O, Sr + $1^{1}/_{2}$ H₂O,

- Ba + 7H₂O, Pb, Ag, Anilinsalz, o- und p-Toluidinsalz (Z. 1867, 92; J. 1858, 264; 1879, 908; 1880, 831; G. 10, 80; 12, 337; 21, 381; Am. 11, 267). — III, 398.
- $C_{15}H_{14}O_{8}$
- 12) Iso- β -Lapachol. Sm. 120° (Soc. 69, 1362). III, 403. 13) α -Lapachol. Sm. 117° (Soc. 61, 635). III, 400. 14) β -Lapachol. Sm. 155—156° (G. 12, 372; Soc. 61, 634). III, 400.
 - 15) α -Oxy- $\alpha\beta$ -Diphenylpropionsäure? Sm. 160—161° (B. 25, 1276). II, 1698.
 - 16) α -Oxy- $\beta\beta$ -Diphenylpropionsäure. Sm. 150—159°. Pb. Ag (A. 248, 43). — II, 1699.
 - 17) α -Phenyl- β -[2-Oxyphenyl] propionsäure. Sm. 120°. Ag (G. 13, 273). **– II**, 1699.
 - 18) α -Phenyl- β -[4-Oxyphenyl] propionsäure. Sm. 179—180° (G. 25 [1] 186). — II, *1699*.
 - 19) β -Phenyl- β -[2-Oxyphenyl]propionsäure? Sm. 151°. Ba (B. 24, 2582). **— II**, 1700.
 - 20) 6-Oxy-3-Methyldiphenylessigsäure (Phenyl-p-Kresylessigsäure). Sm. 118°. Ba $+ 4 H_2 O$ (B. 28, 991; 30, 129). — II, 1700.
 - 21) α -Oxy- $\alpha\beta$ -Diphenyläthan- α^2 -Carbonsäure (α -o-Toluylenhydratcarbonsäure). Sm. 94-96° (B. 11, 1020; 18, 3480). — II, 1698.
 - 22) α -Oxy- $\alpha\beta$ -Diphenyläthan- β^2 -Carbonsäure. Sm. 130° (125—127°). Ag (B. 18, 2447; 25, 2101). — II, 1699.
 - 23) 4'-Oxy-2'-Methyldiphenylmethan-22-Carbonsäure. Sm. 168-169°. Ba (B. 31, 2794).
 - 24) 4'-Methoxyldiphenylmethan-22-Carbonsäure (1-[4-Methoxylbenzyl]benzol-2-Carbonsäure). Sm. 110—111°. Na + ½ H₂O (Bl. 46, 206). — II. 1698.
 - 25) 4-Oxy-?-Benzyl-1-Methylbenzol-?-Carbonsäure (Benzylkresotinsäure). Sm. 164—166° (B. 11, 2030). — II, 1700.
 - 26) α -Oxy- β -Phenylpropionphenyläthersäure. Sm. 81° (C. 1897 [1] 1120).
 - 27) Oxyessig-4-Benzylphenyläthersäure. Sm. 100° (G. 11, 437). II, 897.
 - 28) 3-Oxy-1-Phenylbenzoläthyläther-2-Carbonsäure. Fl. Ag (B. 31, 3035).
 - 29) Methylester d. α-Oxydiphenylessigsäure. Sm. 74—75° (B. 22, 1212, 1539). II, 1696.
 - 30) Methylester d. α-Oxydiphenylmethan-4-Carbonsäure. Sm. 109—110° (J. **1875**, 599). — II, 1698.
 - 31) Methylester d. 2-Oxybenzolbenzyläther-1-Carbonsäure. Sd. oberh. 320° (A. 148, 27). — II, 1496.
 - 32) Aethylester d. 3-Oxy-l-Phenylbenzol-2-Carbonsäure. Sm. 46-47° (B. 31, 3035).
 - 33) Aethylester d. 6-Oxy-1-Phenylbenzol-2-Carbonsäure. Sm. 1110
 - (A. 284, 322). II, 1695. 34) Aethylester d. 2-Oxybenzolphenyläther-1-Carbonsäure. Sd. oberh. 360° (A. **257**, 79). — II, 1495.
 - 35) Di[2-Methylphenylester] d. Kohlensäure. Sm. 60° (A. 301, 115).
 - 36) Di [4-Methylphenylester] d. Kohlensäure. Sm. 115° (B. 19, 2268). —
 - 37) 2-Aethoxylphenylester d. Benzolcarbonsäure. Sm. 31° (C. 1899) [1] 706).
 - 38) Monobenzoat d. 1,4-Di[Oxymethyl] benzol. Sm. 73-74° (A. 155, 341). — II, 1144.
- C 69.8 H 5.4 O 24.8 M. G. 258.C15H14O4
 - 1) Alkannin. 5 + 2 BaO (A. 6, 27; 62, 141; B. 10, 2428; 13, 1514). III, 650.
 - 2) α-Oxylapachol (Lomatiol). Sm. 127°. Ca + H₂O, Ba+H₂O, Ag + H₂O (Soc. 67, 787; 69, 1381). — III, 402.
 - 3) β-Oxylapachol (Isolomatiol). Sm. 109-110° (Soc. 67, 793; 69, 1382). - III, 402.
 - 4) Oxyisolapachol. Sm. 133,5—134° (Soc. 69, 1375).
 - 5) Anhydrodioxyhydrolapachol. Sm. 190,5—191° (Soc. 69, 1378).

 - 6) Oxy-α-Lapachon. Sm. 187° (Soc. 69, 1374).
 7) Oxy-β-Lapachon. Sm. 201,5° (Soc. 61, 649; 67, 792). III, 402.

 $C_{15}H_{14}O_5$

 $C_{15}H_{14}O_{7}$

 $C_{15}H_{14}O_{8}$

 $C_{15}H_{14}N_2$

8) Dimethyläther d. **2,3,4** oder **3,4,5**]-Trioxydiphenylketon. Sm. 131° (A. **269**, 302; G. **26** [2] 437; **27** [2] 19). — III, 202. $C_{15}H_{14}O_4$

(A. 269, 502; G. 26 [2] 437; Z7 [2] 19). — 11., 202.

9) 2,4-Dimethyläther d. 2,4,6-Trioxydiphenylketon (Hydrocotoïn).
Sm. 98° (93—95°) (A. 199, 57; B. 27, 1500; M. 18, 741). — III, 203.

10) Monomethyläther d. Oreoselin (Peucedanin). Sm. 104—105° (109°);
Sd. 276—281°₁₇ (M. 19, 272; C. 1899 [1] 431).

11) αα-Di[?-Oxyphenyl]propionsäure. Zers. oberh. 280°. Ca, Ba (B. 16, 2071).

2071). — II, 1881. 12) 4-Oxybenzol- β -Phenoxyläthyläther-l-Carbonsäure. Sm. 196°. Na (J. pr. [2] **27**, 227). — **II**, 1527.

13) Aethylester d. 2-Oxynaphtalinmethyläther - 1 - Ketocarbonsäure.

Sm. 75°; Sd. 235—237°₁₀. Pikrat (Bl. [3] 17, 309).

14) Aethylester d. 4-Oxynaphtalinmethyläther-1-Ketocarbonsäure. Sm. 70°; Sd. 239—242°₁₀. Pikrat (Bl. [3] 17, 305).

15) Aethylester d. 6-Methyl-4-Phenyl-1, 2-Pyron-5-Carbonsäure. Sm. 104° (Soc. 75, 251).

16) 2-Aethoxylphenylester d. 2-Oxybenzol-l-Carbonsäure. Sm. 40-41°

(C. 1899 [1] 706). 17) Benzoat d. 1,2,3-Trioxybenzol-?-Dimethyläther. Sm. 118° (B. 12,

1373; G. 26 [2] 440). — II, 1152.

18) Benzoat d. 1,3,5-Trioxybenzoldimethyläther. Sm. 41—43° (M. 18, 738). C 65,7 — H 5,1 — O 29,2 — M. G. 274.

1) Phloretin. Sm. 253—255° u. Zers. Ag, +3NH₃, 2 + 5PbO (A. 30, 201; 172, 356; 229, 374; B. 27, 1631, 2686; 28, 1393; Soc. 49, 860). - III, 230.

2) Isophloretin (Z. 1868, 711). — III, 231.

3) Santalin (Santalsäure) oder C₁₇H₁₆O₆. Sm. 104°. Ba, PbO (J. 1847/48, 784; A. 74, 226; B. 12, 14; Z. 1870; 84). — III, 672.
 4) Solorinsäure. Sm. 199—201° (A. 284, 111). — II, 1971.

5) Methylester d. ε -Keto- α -[3,4-Dioxyphenyl]hexan-3,4-Methylenäther-7-Carbonsäure (Kawaïn; Methylsticin). Sm. 137° (J. 1860, 550, 551; 1874, 912; M. 10, 784; J. r. 19, 522). — II, 1968.

6) Monäthylester d. 1-Keto-4-Phenyl-2, 3-Dihydro-R-Pentamethen-3,5-Dicarbonsäure (M. d. Phenythronsäure). Sm. 112,5°. Ca + 3H₂O, Ba₂ + H₂O, Ag (A. 250, 213). — II, 1970.
7) Di[2-Methoxylphenylester] d. Kohlensäure. Sm. 86° (Bl. [3] 11, 704).

– II, 910.

8) Verbindung (aus d. Farbstoff Tesu). Sm. 217° (B. 29 [2] 658). C 62,1 — H 4,8 — O 33,1 — M. G. 290. C15H14O6

1) Trimethyläther d. Tetraoxybiphenylchinon (A. 169, 248). — II, 1042.

2) Pikropodophyllin (oder C₂₃H₂₄O₉). Sm. 227° (Soc. 73, 213).

3) Podophyllotoxin $+2 H_2 O$ (oder $C_{28}H_{24}O_9$). Sm. 117° (157° wasserfrei) (Soc. 73, 212).

4) α ,2-Lakton d. α -Oxy- α -Phenyläthen- β_1 , β_1 2-Tricarbonsäure- β β -Diäthylester (Diäthylester d. Phtalylmalonsäure). Sm. 74,5°. Na (A. 242, 26). - II, 2047.

5) Dimethylester d. δ -Benzoxyl- $\alpha\gamma$ -Butadiën- $\alpha\gamma$ -Dicarbonsäure (D. d. Benzoxylmethylenglutakonsäure). Sm. 90° (A. 273, 176). — II, 1154.

6) Diäthylester d. 1, 3-Diketo-2, 3-Dihydroinden-2, 4-Dicarbonsäure +

1) Vitexin (oder $C_{17}H_{16}O_8$) (Soc. **73**, 1021). C 55,9 — H 4,3 — O 39,7 — M. G. 322.

1) αα-Di[2, 3, 4 [?]-Trioxyphenyl] propionsäure (Dipyrogallolpropionsäure). Sm. 162°. Ba (B. 16, 2404). — II, 2078. C 81,1 — H 6,3 — N 12,6 — M. G. 222.

1) Di[2-Methylphenylimido]methan (o-Carboditolylimid). Sd. oberh. 300° (B. 15, 1317; 27, 2696). — II, 459.

2) Di[4-Methylphenylimido]methan (p-Carboditolylimid). Sm. 60° (49 bis 50°); Sd. 222—224° (B. 14, 1488; 15, 1310; 25, 2892; 27, 2696).

3) isom. Di[4-Methylphenylimido]methan. Sm. 148-149°; Sd. 276 bis 279°_{60-70} (B. **25**, 2893). — II, 512.

4) Dibenzylcyanamid. Sm. 53-54° (A. 144, 318). — II, 532.

 $C_{15}H_{14}N_{2}$

 $C_{15}H_{14}N_{6}$

C15H14Cl2

 $C_{15}H_{15}N$

- 5) γ-Phenylhydrazon-α-Phenylpropen. Sm. 1680 (B. 17, 575; 29, 2138). - IV, 754.
- 6) γ-Phenylhydrazon-γ-Phenylpropen. Sm. 130° (A. ch. [7] 2, 201). IV, 774.
- 7) s-Benzyliden-α-Phenyläthylidenhydrazin. Sm. 59° (J. pr. [2] 44, 542). - III, 130.
- 8)1-Phenylhydrazon-2, 3-Dihydroinden. Sm. 130-131° u. Zers. (B. 22) 2021; Soc. 65, 493; A. 275, 345). — IV, 773.
- 9) 1,3-Diphenyl-4,5-Dihydropyrazol. Sm. 104° (B. 26, 114). IV, 884.
- 10) 1,5-Diphenyl-4,5-Dihydropyrazol. Sm. 136—137° (B. 21, 1213; 22, 176; **26**, 112). — IV, 884.
- 11) 2,4[oder 2,5]-Diphenyl-4,5-Dihydroimidazol. Sm. 78° (B. 28, 3172). - IV, 1017.
- 12) 1-Aethyl-2-Phenylbenzimidazol. Sm. 80—81°. HCl + 3 H₂O, (2 HCl, PtCl₄), HNO₃ + H₂O, H₂SO₄ (B. 9, 776; Am. 5, 421). IV, 1006. 13) 1,5-Dimethyl-2-Phenylbenzimidazol. Sm. 126—127°. (2 HCl, PtCl₄)
- (B. **26**, 197). IV, 1013. 14) **5,7-Dimethyl-2-Phenylbenzimidazol.** Sm. 195°. HCl, HNO₃, H₂SO₄, Oxalat (A. 208, 320; B. 10, 1711). — IV, 1017.
- 15) P-Dimethyl-2-Phenylbenzimidazol. Sm. $214-215^{\circ}$. $HCl+3H_{\circ}O$ (A. 208, 323). — IV, 1017.
- 16) 5-Methyl-2-[4-Methylphenyl] benzimidazol. HCl, HNO, HoSO (A. **210**, 331). — IV, 1017.
- 17) 2-Methyl-3-Phenyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 80-82°; Sd. 345—346°. HCl + 2H₂O, (HCl, SnCl₂), (2HCl, PtCl₄), H₂SO₄ + H₂O (B. 23, 2638; 24, 3051; J. pr. [2] 47, 360). — IV, 884.

 18) 3-[2-Methylphenyl]-3,4-Dihydro-1,3-Benzdiazin. Fl. (2HCl, PtCl₄)
- Fl. (2HCl, PtCl₄) (B. 22, 2701). - IV, 874.
- 19) 3-[4-Methylphenyl]-3,4-Dihydro-1,3-Benzdiazin. Sm. 120°. HCl+ $2H_2O$, (HCl, SnCl₂), (2HCl, PtCl₄) (B. 22, 2695). — IV, 875.
- 20) Nitril d. α-Phenylamido-α-Phenylpropionsäure. Sm. 152° (B. 19, 1515). — II, *1371*.
- 21) Nitril d. α -Phenylamido- α -[3-Methylphenyl]essigsäure. Sm. 95° (B. 17, 1470). — II, 1374.
- C 72,0 H 5,6 N 22,4 M. G. 250. C15H14N4
 - 1) ?-Phenylazo-1-Phenyl-4,5-Dihydropyrazol. Sm. 156°. HCl (J. pr. [2] **50**, 551). — **IV**, 1487.
 - 2) 5-Methyl-2, 3-Diphenyl-2, 3-Dihydro-1, 2, 3, 4-Tetrazin. Sm. 106 bis
 - 107° u. Zers. (B. 21, 2756). IV, 1307. 3) 3-Phenylazo-5, 7-Dimethylindazol. Sm. 206,5—207,5° (A. 305, 318).
 - 4) Base (aus d. Verb. $C_{15}H_{12}N_4$). Sm. 75-77°. HCl, H_2SO_4 (B. 22, 1481). **— IV**, 763.
 - 5) Base (aus d. Verb. $C_{15}H_{12}N_4$). Sm. 192—193° (B. 22, 1482). IV, 763. C 64,7 - H 5,0 - N 30,2 - M. G. 278.
 - 1) Diphenylmelamin. Sm. 202—204°. HCl, (2HCl, PtCl₄) (B. 21, 871). II, 353.
 - 2) α-Benzylidenbenzyltetrazylhydrazin. Sm. 160-161°. HCl (A. 287, 262). — IV, 1328.
 - 3) β -Benzylidenbenzyltetrazylhydrazin. Sm. 199° (A. 287, 263). IV, 1328.
 - 4) Verbindung (aus Acetylamidrazonphenylhydrazon) (B. 28, 1284). -IV, 1229.
 - 1) Di[P-Chlormethylphenyl] methan. Sm. $106-108^{\circ}$ (B. 7, 1187). II, 238.
- 1) Di[P-Brommethylphenyl]methan. Sm. 115° (B. 7, 1182). II, 238. C15 H14 Br9 1) Aethylenäther d. αα-Dimerkaptodiphenylmethan. Sm. 106° (B. 21, C15H14S2
 - 1477). III, 180. C 86.1 - H 7.2 - N 6.7 - M. G. 209.
 - 1) α -Benzylidenamidoäthylbenzol. Sm. 273—275 $^{\circ}_{14}$ (B. 27, 2308). III, 30.
 - 2) 2-Benzylidenamido-1,4-Dimethylbenzol. Sm. 101-102° (96°) (A. 255, 169; **274**, 237). — III, 30.
 - 3) 2,4-Dimethylbenzylidenamidobenzol. Sd. 190°₁₀ (Bl. [3] 17, 369).

C, 5H, 5N

4) 2,5-Dimethylbenzylidenamidobenzol. Sm. 44°; Sd. 197°, (Bl. [3]

5) α -Benzylimidoäthylbenzol. Sm. 43-44° (B. 30, 3006).

6) 5-Amido-1-Methyldihydroanthracen. Sm. 78-79°; subl. bei 130 bis 140° u. Zers. HCl (B. 16, 1633). — II, 639.

7) ?-Amido-2-Methyl-9,10-Dihydroanthracen. Sm. 78-79°. HCl (B. 16,

1633). — IV, 401.
8) 5-Aethyl-2-[β-Phenyläthenyl]pyridin. Sm. 58,5°; Sd. 356,5°, sec. HCl, (HCl, HgCl₂), (HCl, SnCl₂ + 3 H₂O), (2 HCl, PtCl₄ + 2 H₂O), (HCl, AuCl₈), Pikrat (B. 21, 3087; 22, 1057). — IV, 398.

9) 6-[β-Phenyläthenyl]-2,4-Dimethylpyridin. Sd. 188—189%. HCl + 2H₂O, $(2HCl, PtCl_4 + 2H_2O)$, $(HCl, AuCl_3)$, $(HCl, HgCl_2 + H_2O)$, $HBr + 2H_2O$, $HNO_3 + 2H_2O$, Pikrat (B. 27, 80). — IV, 398.

10) 2-Benzyl-1, 3-Dihydroisoindol. Sm. 41° (B. 31, 424).

11) 2-[3-Methylphenyl]-1,3-Dihydroisoindol. Sm. 115° (B. 31, 422). 12) 2-[4-Methylphenyl]-1,3-Dihydroisoindol. Sm. 195° (B. 31, 422).

- 13) 2-Phenyl-1, 2, 3, 4-Tetrahydrochinolin. Sd. 341-344° (B. 19, 1198). · IV, 399.
- 14) 4-Phenyl-1, 2, 3, 4-Tetrahydrochinolin. Sm. 74°. HCl + H₂O, (2HCl, $PtCl_4$), H_2SO_4 , Pikrat (B. **28**, 1042). — **IV**, 400.

15) 6-Phenyl-1,2,3,4-Tetrahydrochinolin. HCl + 11/2 H2O, Pikrat (A. 230, 21). — IV, 400.

16) 2-Phenyl-1, 2, 3, 4-Tetrahydroisochinolin. Sm. 45-48° (B. 18, 3479). **– IV**, 401.

17) 1,2-Dimethyl-3,4-Dihydro-β-Naphtochinolin. Sm. 115°. HJ (A. 242, 364). **— IV**, 399.

18) 1,3-Dimethyl-5,10-Dihydroakridin. Sm. 80° (A. **279**, 287). — IV, 399. C 76,0 — H 6,3 — N 17,7 — M. G. 237.

 $\mathbf{C}_{15}\mathbf{H}_{15}\mathbf{N}_{3}$

- α-Amido-α-Benzylidenhydrazon-α-[4-Methylphenyl]methan (Benzyliden-p-Tolenylhydrazidin). Sm. 154° (B. 27, 3277; A. 298, 3). IV, 1139.
- 2) α -Methylen- β -Phenyl- β -[2-Methylenamidobenzyl]hydrazin. $+C_2H_6O$ (Sm. 84°) (J. pr. [2] 53, 426). — IV, 1130.

3) 4-Benzylidenamidoazobenzol. Sm. 128° (B. 17, 1403). — IV, 1357. 4) 1-Phenylazo-2-Methyl-2, 3-Dihydroindol. Sm. 51,5° (B. 26, 1287).

IV, 1581.

5) 5,7-Dimethyl-2-[4-Amidophenyl]benzimidazol. Sm. 183°. $H_2SO_4 +$ $6 H_2 O$ (B. **26**, 2763). — IV, 1185.

6) 5-Methyl-2-[2-Amido-4-Methylphenyl]benzimidazol. Sm. 188°. HCl

(B. 30, 3069). — IV, 1185.
7) 2-[4-Methylphenyl]imido-5-Methyl-2,3-Dihydrobenzimidazol (4-Tolyltoluylenguanidin). Sm. 197—198°. $HCl, (2HCl, PtCl_4 + 5H_2O), H_2SO_4$ $+5 \text{ H}_2\text{O} \text{ (B. 24, 2518)}. - \text{IV, } 623.$

8) 2-Phenylazo-1, 2, 3, 4-Tetrahydroisochinolin. Sm. 61,5° (B. 26, 1210). IV, 1581.

9) 7-Methyl-2-[4-Methylphenyl]-2,3-Dihydro-1,2,4-Benztriazin. Sm. 178°. HCl, (2HCl, PtCl₄) (B. 24, 1008). — IV, 1151.

10) 7-Dimethylamido-2-Methyl-5,10-Naphtdiazin. Sm. 170—171° (A. **236**, 340). — IV, 1181.

11) N-Aethyltoluaposafranin. HCl (B. 31, 1187). — IV, 1182.

12) Nitril d. $\beta\beta$ -Di[Phenylamido]propionsäure (Cyanäthylidendiphenyldiamin). Sm. 1130 (A. ch. [6] 16, 181). — II, 443.

13) Nitril d. α-[ββ-Diphenylhydrazido] propionsäure. Sm. 65° (B. 25, 2064). — IV, 740.
 C 67,9 — H 5,7 — N 26,4 — M. G. 265.

 $\mathbf{C}_{15}\mathbf{H}_{15}\mathbf{N}_{5}$

 $C_{15}H_{16}O$

1) Di[Phenylazo] allylamin. Sm. 74° (B. 22, 941). — IV, 1568.

2) 5-Benzylamido-1-Benzyl-1,2,3,4-Tetrazol. Sm. 88,5%. HCl, HNO₂, HNO₈, H₂SO₄ (A. 287, 255).

3) isom. Dibenzyl-5-Amido-1,2,3,4-Tetrazol. Sm. 169-170° (A. 287, 258). C 84,9 - H 7,5 - O 7,5 - M. G. 212

1) γ -Oxy- $\alpha\beta$ -Diphenylpropan. Sd. 300—302° (B. 23, 2863). — II, 1080. 2) α -Oxy- $\alpha\gamma$ -Diphenylpropan. Sd. 240 $^{\circ}_{70}$ (330—332 $^{\circ}$) (Soc. **59**, 1008; A. 296, 325). — II, 1080.

C15H18O

 $C_{15}H_{16}O_{2}$

- 3) β -Oxy- $\alpha \gamma$ -Diphenylpropan. Sd. 327° (B. 25, 1272; Am. 14, 229). II, 1080.
- 4) 2-Oxy-1-Methyl-αα-Diphenyläthan. Fl. (B. 24, 3895). II, 899.
- 5) 3-Oxy-1-Methyl-αα-Diphenyläthan. Sm. 124° (B. 24, 3898). II, 899. 6) α -Oxy- β -Phenyl- α -[4-Methylphenyl]äthan. Sm. 66°; Sd. oberh. 360° (B. 14, 1646). — II, 1080.
- 7) α Oxydi [? Methylphenyl] methan. Sm. 61—61,5° (69°) (B. 7, 1184; 10, 2175). — II, 1080.
- 8) α-Oxy-2, 4-Dimethyldiphenylmethan. Sm. 57°; Sd. 330,8°,44 (J. pr. [2] **35**, 472). — **II**, 1080.
- 9) α -Oxy-2,5-Dimethyldiphenylmethan. Sm. 88° (J. pr. [2] 35, 475). II, 1081.
- 10) α -Oxy-3,4-Dimethyldiphenylmethan. Sm. 68°; Sd. 336°₇₄₄ (J. pr. [2] **35**, 469). — **II**, 1080.
- 11) Methyläther d. 4-Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 61° (B. 23, 2865). II, 899.
- 12) Aethyläther d. α -Oxydiphenylmethan. Sd. 288° (A. 133, 17; 296, 252; Bl. 33, 339; B. 29, 2082). — II, 1077.
- 13) Aethyläther d. 4-Oxydiphenylmethan. Sd. 317° (B. 31, 1001).
- 14) Aethyläther d. 3-Phenyl-1-Oxymethylbenzol. Fl. (A. ch. [6] 15, 243). **- II**, 1079.
- 15) Aethyläther d. α-[4-Oxy-1-Naphtyl]propen. Sd. 177—178°. Pikrat (Bl. [3] 17, 815).
- 16) 4-Keto-6-Methyl-2- $[\beta$ -Phenyläthenyl]-1,2,3,4-Tetrahydrobenzol. Sm. 56° ; Sd. 243°_{10} (A. **281**, 92). — III, 177.
- 17) 4-Keto-3-Benzyliden-2, 6-Dimethyl-1, 2, 3, 4-Tetrahydrobenzol. Sm.
- 102° (G. 23 [1] 572; A. 281, 118). III, 177. 18) Isobutyl-1-Naphtylketon. Sd. 319—321° (Bl. [3] 15, 69). III, 176. 19) Isobutyl-2-Naphtylketon. Sm. 36°. Pikrat (Bl. [3] 15, 70; [3] 17,
 - 313). **III**, *177*.

20) α-Lapachan. Sm. 112 - 113,5°. Pikrat (Soc. 69, 1367).
21) β-Lapachan. Fl. Pikrat (Soc. 69, 1366).
C 78,9 — H 7,0 — O 14,0 — M. G. 228.

- 1) $\beta\beta$ -Di[4-Oxyphenyl]propan. Sm. 151—152° (J. r. 23, 493). II, 996. 2) α -Oxy- γ -[2-Oxyphenyl]- α -Phenylpropan (Phenyldihydrocumaralalkohol). Sm. 96—97° (B. 29, 379).
- 3) Di 4-Oxy-3-Methylphenyl methan. Sm. 126° (B. 27, 1814).
- 4) Dimethyläther d. αα-Dioxydiphenylmethan. Sm. 106,5-107°; Sd.
- 288—290° (Soc. 69, 987).
 5) Dimethyläther d. Di[4-Oxyphenyl]methan. Sm. 48—49°; Sd. 330 bis 340° (A. 194, 323). II, 993.
- 6) Dimethyläther d. Di[P-Oxyphenyl]methan. Sm. 52°; Sd. oberh. 360° (B. **7**, 1200). — II, 992.
- 7) Diphenyläther d. αγ-Dioxypropan. Sm. 61° (57°); Sd. 338—340° (B. **24**, 2632; J. r. **26** [1] 3; Bl. [3] **15**, 1224; C. **1899** [1] 248). - II, 655.
- 8) Phenyl-[4-Methylphenyl] äther d. αβ-Dioxyäthan. Sm. 99° (B. 24, 196). — II, 749.
- 9) Di[2-Methylphenyl]äther d. Dioxymethan. Sm. 32,5° (A. 240, 202). - II, 737.
- 10) Di[3-Methylphenyl]äther d. Dioxymethan. Sm. 45°; Sd. oberh. 360° A. 240, 202). — II, 744.
- 11) Di[4-Methylphenyl]äther d. Dioxymethan. Sm. 40,2°; Sd. oberh. 360° (A. 240, 202). - II, 748.
- 12) Dibenzyläther d. Dioxymethan. Sd. oberh. 360° (A. 240, 201). -II, 1048.
- 13) Methyläther d. 4-Oxy-l-Butyrylnaphtalin. Sm. 49—50°; Sd. 205°. Pikrat (Bl. [3] 15, 632; [3] 17, 308).
- 14) Methyläther d. 1-Oxy-?-Butyrylnaphtalin. Sm. 33-34°; Sd. 222 bis 226°. Pikrat (Bl. [3] 15, 635). 15) Methyläther d. 1-Oxy-?-Butyrylnaphtalin. Sd. 212—217°₁₈ (Bl. [3]
- 16) Hexahydroanthracen-1-Carbonsäure. Sm. 232° (B. 16, 2612). -II, 1460.

17) α -[1,4-Dimethyl-7-Naphtyl] propionsäure (Santinsäure). Sm. 132 bis $C_{15}H_{16}O_2$

132,5°. Ag (G. 22 [2] 35). — II, 1461. 18) Isosantinsäure. Sm. 132,5—133°. Ag (G. 22 [2] 39). — II, 1461. 19) 2-Naphtylester d. Isovaleriansäure. Sd. 180—184°₂₀ (A. 301, 113).

 $\mathbf{C}_{15}\mathbf{H}_{16}\mathbf{O}_{3}$

C 73,8 - H 6,5 - O 19,7 - M G 244. 1) α -Phenyläther- β -[2-Methoxylphenyl] äther d. $\alpha\beta$ -Dioxyäthan. Sm. 75° (C. **1897** [2] 481).

2) Diphenyläther d. αβγ-Trioxypropan. Sm. 82° (80-81°). Na (B. 19, 64; 24, 2147). — II, 656.
 3) Acetat d. Pyroguajacin. Sm. 122° (122-124°) (M. 1, 598; 19, 98). —

III, 645.

4) Hydrolapachon (G. 19, 611). — II, 1028.

5) Hydrolapachosäure (G. 19, 604). — II, 1028.

6) Aethylester d. ε-Keto-α-Phenyl-αγ-Hexadiën-δ-Carbonsäure. Sd. $213-214^{\circ}_{17}$ (B. 31, 734). C 69,2 — H 6,1 — O 24,6 — M. G. 260.

C15H16O4

1) Di[?-Dioxy-?-Methylphenyl]methan (Methylendiorcin) (B. 27, 2890). 2) Di [2-Methoxylphenyläther] d. Dioxymethan. Sm. 79°; Sd. 217°₁₀ (C. 1896 [1] 543; Bl. [3] 17, 950).
3) Oxydihydrolapachol. Sm. 125°. Ca, Ba + 2H₂O, Ag + H₂O (Soc.

61, 628). — III, 403. 4) α -[3,4-Dioxyphenyl]- ε -Methyl- $\alpha\gamma$ -Hexadiën-3,4-Methylenätherδ-Carbonsäure (α-Isopropylpiperinsäure). Zers. bei 240° (B. 28, 1189). - II, 1871.

5) β -Methyl- ε -Phenyl- $\beta\delta$ -Hexadiën- $\gamma\delta$ -Dicarbonsäure (α -Isopropylen- γ -methylphenylitakonsäure). Sm. 223° u. Zers. (B. 30, 97).

6) 2,6-Diketo-1,3-Dimethyl-4-Phenylhexahydrobenzol-5-Carbonsäure. Sm. 124° u. Zers. (A. **294**, 297; B. **30**, 2265).

7) Methylester d. 6-Oxy-4-Keto-2-Phenyl-1,2,3,4-Tetrahydrobenzol-methyläther-3-Carbonsäure. Sm. 110-111° (A. 294, 277).

8) Aethylester d. γε-Diketo-α-Phenyl-α-Hexen-δ-Carbonsäure (Ae. d. Cinnamylacetessigsäure). Sm. 40° (B. 16, 166). — II, 1877.

9) Asthylester d. 6-Oxy-4-Keto-2-Phenyl-1, 2, 3, 4-Tetrahydrobenzol-3-Carbonsäure. Sm. 144—145° (140°). Na, Ag (Am. 9, 117; B. 27, 2053, 2127, 2343; J. pr. [2] 43, 391; A. 294, 275). — II, 1877.

10) Verbindung (aus Aceton u. 1, 3-Dioxybenzol) + H₂O. Sm. 212—213°

(Bl. [3] 7, 564). — II, 919. C 65,1 — H 5,8 — O 29,0 — M. G. 276. 1) Osthin. Sm. 199—200° (C. 1896 [1] 561). 2) Dioxydihydrolapachol. Sm. 181—182° (Soc. 61, 647; 67, 792). —

C15 H16 O5

 $C_{15}H_{16}O_{6}$

 $\mathbf{C}_{15}\mathbf{H}_{16}\mathbf{O}_7$

III, 403.

3) Decarbousninsäure. Sm. 198-199 (G. 12, 236). — II, 2057.

 γ -Keto- $\alpha \varepsilon$ -Di[2-Furanyl]pentan- β -Methylcarbonsäure ($\beta \delta$ -Difuryllävulinsäure). Sm. 71-720 (B. 26, 351). - III, 719.

5) Aethylester d. α-Benzoyl-β-Acetoxylcrotonsäure (Aethylester d. Di-

acetylbenzoylessigsäure). Fl. (A. 282, 165). 6) Aethylester d. 4 [oder 5]-Acetoxyl-1,6 [oder 1,3]-Dimethylbenzfuran-2-Carbonsäure. Sm. 96° (A. 283, 256). — III, 732. C 61,6 — H 5,5 — O 32,9 — M. G. 292.

1) Pikrotoxin (oder $C_{30}H_{34}O_{13}$; $C_{36}H_{40}O_{16}$). Sm. 201°. Lit. bedeutend. — III, 642.

2) Pikrotoxinin + H₂O. Sm. 200—201° (wasserfrei) (A. 10, 18; 222, 340; M. 1, 99; 2, 801; C. 1897 [1] 500; B. 31, 2964). — III, 643.
3) Pikrotoxid. Sm. oberh. 310° (B. 10, 83, 1100; M. 1, 177; A. 222, 333).

- III, 643.

4) Trimethyläther d. α -Hexaoxybiphenyl. $K_2 + 2H_2O$, Ba (B. 8, 160). II, 1041.

Hydroquercinsäure + H₂O. Ba, Pb, Ag (A. 263, 110). — III, 589.
 Trimethylester d. 1-Phenyl-R-Trimethylen-2,3,3-Tricarbonsäure. Sm. 47°; Sd. 209—210°₂₀ (B. 25, 1153). — II, 2018.
 Diäthylester d. α-[3,4-Dioxyphenyl]äthen-3,4-Methylenäther-ββ-Dicarbonsäure. Sm. 63°; Sd. 216—219°₁₁ (B. 31, 2594).
 C 58,4 — H 5,2 — O 36,4 — M. G. 308.
 Scatterlein (L 1865, 572, 1874, 200).

1) Socotraloin (J. 1865, 572; 1874, 899). — III, 618.

2) Aloëresinsäure (J. 1863, 597). — III, 618. $C_{15}H_{16}O_7$

 $C_{15}H_{16}O_8$

3) Podophyllsäure (oder C₂₀H₂₄O₂). Cu, Ag (Soc. 73, 214). 4) Verbindung (aus Xanthophansäure). Sm. 118—120° (A. 297, 54). C 55,5 — H 4,9 — O 39,5 — M. G. 324.

1) Leukodrin. Sm. 211—213° (C. 1896 [1] 561). 2) Skimmin. Sm. 210° (R. 3, 206). — III, 611.

3) Aethylester d. 3, 4,5-Triacetoxylbenzol-1-Carbonsäure (A. 163, 216).

C15H16O9

- II, 1922. C 52,9 — H 4,7 — O 42,3 — M. G. 340. 1) Aeskulin + 1½, H₂O. Sm. 160° u. Zers. (wasserfrei) (Berx. J. 12, 274; J. 1856, 678; 1872, 788; A. 15, 266; 87, 186; 88, 356; 90, 65; B. 9, 1184; 13, 1590, 1950; 14, 200, 303; 15, 2633; Fr. 22, 153). — III, 566. 2) Daphnin + 2 H₂O. Sm. bei 200° u. Zers. (wasserfrei) (A. 115, 1; B.

12, 110; *J.* **1863**, 591). — **III**, *580*. C 48,4 — H 4,3 — O 47,3 — M. G. 372.

 $C_{15}H_{16}O_{11}$

1) Gerbstoff (aus Eichenholz) (C. 1897 [2] 1151). $\mathbf{C}_{15}\mathbf{H}_{16}\mathbf{N}_{2}$

C 80,4 — H 7,1 — N 12,5 — M. G. 224. 1) α-Phenylamido-α-[4-Methylphenyl]imidoäthan. Sm. 82-83° (76°). (2 HCl, PtCl₄), Pikrat (A. 214, 206; B. 28, 873). — II, 488.

2) β -[4-Methylphenyl]imido- β -Amido - α -Phenyläthan. Sm. 118—119°.

(2HCl, PtCl₄) (A. 184, 346). — IV, 850.

3) 2-Methylphenylamido-2-Methylphenylimidomethan. Sm. 151°. (2 HCl, PtCl₄) (B. 10, 1261; 18, 2294; A. 270, 312; J. pr. [2] 52, 430; [2] 53, 473). — II, 459.

4) 3-Methylphenylamido-3-Methylphenylimidomethan. Sm. 123°. HCl, (2HCl, PtCl₄) (B. 20, 1893). — II, 478.

5) 4-Methylphenylamido-4-Methylphenylimidomethan. Sm. 141°. (2 HCl. PtCl₄), Pikrat (B. 18, 2296; Am. 16, 379; J. pr. [2] 52, 430; [2] 53, 474; [2] 57, 226). — II, 488.

6) α -Imido- α -[2,4-Dimethylphenyl]amido- α -Phenylmethan (Benzenyl-2,4-Dimethylphenylamidin). Sm. 107—108° (106°) (J. pr. [2] 54, 127; Am.

20, 575). — **IV**, 845.

- 1 [α Methylimido α Methylphenylamidomethyl]benzol (Benzenylphenylmethylamidmethylamidin). Sm. 56°. HJ, Pikrat (B. 28, 2371). - IV, 842.
- 8) 1-[\alpha-Phenylimido-\alpha-Dimethylamidomethyl]benzol (Benzenyldimethylamidphenylimidin). Sm. 73—74°. HJ, Pikrat (B. 28, 2372). — IV, 842. 9) 4-Dimethylamido-1-Phenylimidomethylbenzol (B. 31, 2252).
- 10) 4-Benzylidenamido-1-Dimethylamidobenzol. Sm. 101 ° (90°; 93°). 2 HCl (B. 17, 2940; 25, 636; 31, 2252; A. 241, 361). — IV, 596.
- 11) γ -[α -Phenylhydrazido]- α -Phenylpropen (uns-Phenylstyrylhydrazin). Sm. 54°. HCl (B. 22, 2239). — IV, 814.
- 12) β -Benzyliden- α -Aethyl- α -Phenylhydrazin. Sm. 49° (A. 252, 272). IV, 749.
- 13) 4-Isopropylidenhydrazidobiphenyl (Acetonhydrazonbiphenyl). Sm. 86 bis 87° (B. 27, 3107). — IV, 970.
- 14) α -Phenylhydrazon- α -Phenylpropan. Fl. (B. 19, 2897). IV, 772. 15) β -Phenylhydrazon- α -Phenylpropan. Sm. 83° (85°) (A. 248, 110; B.
- 31, 3163). IV, 773. 16) α -Methylphenylhydrazon- α -Phenyläthan. Sm. 49—50° (A. 236, 154). **- IV**, 770.
- 17) α -Phenylhydrazon- α -[4-Methylphenyl]äthan. Sm. 97° (95°) (B. 19, 588; J. pr. [2] 41, 403). — IV, 773.
- 18) 4-Phenylhydrazonmethyl-1,2-Dimethylbenzol. Sm. 90,5° (C. 1898) [2] 952).
- 19) 4-Phenylhydrazonmethyl-1,3-Dimethylbenzol. Sm. 114° (C. 1896)
- [2] 378). 20) 2-Phenylhydrazonmethyl-1,4-Dimethylbenzol. Sm. 86° (C. 1898)
- 21) 2,4,5-Trimethylazobenzol. Fl. (B. 31, 994). IV, 1388.
- 22) **2,4,4'-Trimethylazobenzol.** Sm. 62° (B. **31**, 994). **IV**, 1388. 23) **1,3-Diphenyltetrahydroimidazol.** Sm. 124° (B. **31**, 3255).
- 24) 2-[3-Amidophenyl]-1,2,3,4-Tetrahydrochinolin. Fl. 2HCl (B. 18, 1907). — IV, 399.

 $C_{15}H_{16}N_4$

 $C_{15}H_{16}N_6$

 $C_{15}H_{16}S$

25) 2-Methyl-3-Phenyl-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 94-95° $C_{15}H_{16}N_2$ (B. 24, 3057). - IV, 853.

26) 3-[2-Methylphenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 140°

(J. pr. [2] 53, 422). — IV, 637. 27) 3-[4-Methylphenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 127° (J. pr. [2] 53, 421; B. 22, 2700; 25, 2859). — IV, 637. 28) Verbindung (Base aus Anilin u. Dichlorhydrin) (A. 177, 227). — II, 427. C 71,4 — H 6,3 — N 22,2 — M. G. 252.

1) αβ-Di[Phenylhydrazon]propan (Phenylosazon d. Methylglyoxal). Sm. 145° (148°) (B. 20, 2543; 21, 2755, 2996; 26, 2203; 30, 2059; 31, 35; J. pr. [2] 49, 405; A. 243, 248; 247, 207). — IV, 757. 2) Benzenyl-4-Methylbenzenylhydrazidin. Sm. 170° (A. 298, 9). —

IV, 1288.

3) Benzylidenamido-4-Methylphenylguanidin. HNO3, Pikrat (G. 26 [2] 189). — IV, 810. 4) 1-14-Dimethylamidophenyl]-6-Methyl-1,2,3-Benztriazol. Sm. 88 bis

89° (Soc. 65, 887). — IV, 612.

5) 7-Dimethylamido-3-Amido-1-Methyl-5,10-Naphtdiazin (B. 25, 3009). - IV, 1286.

6) N-Aethyltolusafranin. HCl (B. 31, 1180). — IV, 1286.

7) Toluylenroth $+4H_2O$ (B. 12, 937). - IV, 608.

8) Nitril d. αα'-Benzylidendi[-β-Amidocrotonsäure]. Sm. 190° (J. pr. [2] **56**, 125).

9) Verbindung (aus Formaldehyd u. Phenylhydrazin). Sm. 183° (Bl. [3] 13, 493; Soc. 69, 1280; B. 18, 3300). — IV, 744.

10) isom. Verbindung (aus Formaldehyd u. Phenylhydrazin). Sm. 112°

(B. **29**, 1361; Soc. **69**, 1280). — **IV**, 745. C 64,3 — H 5,7 — N 30,0 — M. G. 280.

1) Verbindung (Base aus Acetamid u. Phenylcyanamid). Sm. 212-213°.

HCl (M. 5, 467). — II, 450.

 Phenyläther d. 2-Merkapto-1,3,5-Trimethylbenzol. Sd. 230° u. ger. Zers. (B. 28, 2324). 2) 4-Methylphenyläther d. 4-Merkapto-1, 2-Dimethylbenzol. Sm. 28,6°;

Sd. 193,7°₁₁ (B. **28**, 2325).

3) 4-Methylphenyläther d. 4-Merkapto-1, 3-Dimethylbenzol. Sd. 1880, 118 (B. 28, 2326).

4) 4-Methylphenyläther d. 2-Merkapto-1,4-Dimethylbenzol. Sm. 6°;

Sd. 185°_{11} (B. 28, 2326). 1) Diphenyläther d. $\beta\beta$ -Dimerkaptopropan. Sm. 56° (B. 19, 2804). — $C_{15}H_{16}S_{0}$ C15H17N

C 85,3 - H 8,1 - N 6,6 - M. G. 211.1) γ -Amido- $\alpha\beta$ -Diphenylpropan. Sd. 315—317°. HCl, (2HCl, PtCl₄),

(HCl, AuCl₃) (B. 23, 2859). — II, 637.

β-Amido-αγ-Diphenylpropan. Sm. 47°; Sd. 330°. HCl, (2HCl, PtCl₄) (Am. 14, 226). — II, 638.

3) β -Benzylamido - α -Phenyläthan. Sd. 327 — 328 $^{\circ}_{750}$. HCl, HJ, H₂SO₄ (B. 29, 211).

4) α -Dimethylamidodiphenylmethan. Sd. 330—340° (A. 206, 113).

5) α-Amidodi[4-Methylphenyl]methan (p-Tolylhydrylamin). Sm. 93°. HCl (B. 24, 2798; 31, 1773). — II, 638.

6) Aethylphenylbenzylamin. Sd. 285—286 on unter ger. Zers. (2 HCl, PtCl₄) (B. **22**, 588). — II, 518.

7) Methyldi [4-Methylphenyl] amin. Sd. 235—240° (Bl. 24, 120).

8) Methylbenzyl-2-Methylphenylamin. Sd. 210—215°_{15,2} (Bl. [3] 6, 137). - II, 518.

9) Methylbenzyl-4-Methylphenylamin. Sd. 210—220°₃₀ (Bl. [3] 6, 137). - II, 518.

10) Benzyl-2,4-Dimethylphenylamin. Sd. 200—201° (Bl. [3] 6, 21). — II, 543.

11) Benzyl-2,5-Dimethylphenylamin. Sd. 320—325° (A. **255**, 169). — II, 546.

12) ?-Methylphenyl-[?-Dimethylphenyl]amin (Tolylxylidin). Sm. 70°; Sd. $298 - 302^{\circ}_{487}$ (Bl. 18, 69). — II, 548.

- $C_{15}H_{17}N$
- 13) α -Phenyl- β -[5-Aethyl-2-Pyridyl]äthan (Aethyldihydrostilbazol). Sd. 316.3 $^{\circ}_{761}$. (HCl, HgCl₂), (2HCl, PtCl₄), (HCl, AuCl₃ + H₂O) (B. 21, 3093). · IV, 380.
- 14) 1-[1-Naphtyl]hexahydropyridin. Sd. 215°₃₅. HCl, (2HCl, PtCl₄ + 2H₂O), (HCl, AuCl₃ + H₂O), Pikrat (B. 23, 1383; 28, 3106). IV, 10.
 15) 1-[2-Naphtyl]hexahydropyridin. Sm. 57—58° (56°). HCl, (2HCl,
- PtCl₄ + 6H₂O), (HCl, AuCl₈ + 4H₂O), H₂SO₄ + 3H₂O, Pikrat (B. 23, 1384; 29, 1175). IV, 10.

 16) ?-[4-Isopropylbenzyl]pyridin. Sd. 240—250°₁₁₀. (2HCl, PtCl₄) (A.
- **280**, 71). **IV**, 380. C 75,3 H 7,1 N 17,6 M. G. 239.

 $C_{15}H_{17}N_3$

 $\mathbf{C}_{15}\mathbf{H}_{17}\mathbf{N}_{5}$

C15H18O

 $C_{15}H_{18}O_2$

 $\mathbf{C}_{15}\mathbf{H}_{18}\mathbf{O}_{3}$

- 1) 4-[4-Amidobenzyliden] amido-1-Dimethylamidobenzol. Sml. 191 bis $19\dot{2}^{\circ}$ (B. **31**, 2252).
- 2) Aethyldiphenylguanidin. (2HCl, PtCl₄) (B. 8, 1532). II, 349.
 3) Di[2-Methylphenyl]guanidin. Sm. 179°. (2HCl, PtCl₄) (B. 12, 1855). **- II**, 459.
- 4) Di[4-Methylphenyl]guanidin. Sm. 168°. (2HCl, PtCl₄) (A. 77, 218; B. 7, 1739; 8, 520; Soc. 37, 696). II, 488.
 5) Dibenzylguanidin. Sm. 100°. (HCl. Sm. 176°) (B. 5, 695). II, 523.
- 6) α-Aethyl-α-Phenyl-β-[α-Imidobenzyl]hydrazin (Aethylphenylbenzenylhydrazidin). Sm. 105°. (2 HCl, PtCl₄) (J. pr. [2] 54, 170). — IV, 1136.
- 7) 4-Dimethylamidobenzylidenphenylhydrazin. Sm. 148° (B. 20, 3195). **- IV**, 753.
- 8) 1-Aethylphenylamido-4-Methyldiazobenzol. Fl. (B. 20, 3010). IV, *1570*.
- 9) 1-[Aethyl-4-Methylphenyl]amidodiazobenzol. Sm. 38-39° (B. 20, 3011). — IV, *1570*.
- 10) 4'-Dimethylamido-4-Methylazobenzol. Sm. 168-168,5° (B. 17, 1492; Soc. **65**, 880). — **IV**, 1383
- 11) 3- $[\alpha$ -Phenylhydrazonbutyl]pyridin. Sm. 182° (B. 24, 2541). IV, 800. 12) 3-[2-Amidobenzyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 88-89°.

HČl, $(2 \text{HCl}, \text{PtCl}_4)$ (J. pr. [2] **55**, 365). — IV, 636. C 67,4 — H 6,4 — N 26,2 — M. G. 267.

- 1) $\alpha\beta$ -Di[Phenylhydrazon]- α -Amidopropan. Sm. 224°. HNO₂ (B. 26, 2785; **28**, 1283). — IV, 1229.
- 2) Di[4-Methylphenylazo]methylamin. Sm. 146-147° (B. 22, 935; 28, 172). **— IV**, *1569*.
- 3) Verbindung (aus salpetrigs. Acetylamidrazonphenylhydrazon) (B. 28, 1284). IV, 1229.
 C 84,1 H 8,4 O 7,5 M. G. 214.
- 1) Methyläther d. 2-Oxy-1-Isobutylnaphtalin? Sm. 66°; Sd. 188°, (Bl. [3] **19**, 1007).
- 2) Isoamyläther d. 1-Oxynaphtalin. Sd. 317—319°₇₄₂ (G. 19, 496). II, 857.
- 3) Isoamyläther d. 2-Oxynaphtalin. Sm. 26,5°; Sd. 323—326° u. Zers. $(315-316^{\circ})$ (G. 19, 496; Bl. [3] 19, 367). — $\acute{\Pi}$, 877. C 78,3 — \acute{H} 7,8 — O 13,9 — M. G. 230.
- 5,8-Dimethyl-1, 2-Dihydronaphtalin-3-[Aethyl-α-Carbonsäure] (Dihydrosantinsäure). Sm. 120—121° (G. 22 [2] 24). II, 1444.
 Isodihydrosantinsäure. Sm. 96—97° (G. 22 [2] 24). II, 1444.
- 3) 1,2a-Lakton d. 1-Oxy-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Aethyl- α -Carbonsäure (Hyposantonin). Sm. 152—153°; subl. (G. 19,
- 378; **22** [1] 13; **22** [2] 14). II, 1672. 4) Lakton d. Isohyposantoninsäure (Isohyposantonin). Sm. 168,5°; subl. (G. **22** [2] 18). — **II**, 1672.
- 5) Lakton d. α-Oxy-γ-Isoamyl-α-Phenylpropen-γ-Carbonsäure. Sd. 310 bis 320° (B. **23**, 1505). — II, 1670. C 73,2 — H 7,3 — O 19,5 — M. G. 246.
- 1) Santonin (Lakton d. Santoninsäure). Sm. 169-170°. Lit. bedeutend. - II, 1785.
- 2) Isosantonin (Metasantonin). Sm. 137—138° (J. 1880, 894; G. 25 [2] 464). — II, 1788.
- Sm. 160,5°; Sd. 238—240° (J. 1878, 828; 1880, 894; 3) α -Metasantonin. B. 7, 1105; 13, 2210). — II, 1787.

 $C_{15}H_{18}O_3$

- 4) β -Metasantonin. Sm. 136° (B. 13, 2210; J. 1878, 828; 1880, 894). —
- 5) Desmotroposantonin. Sm. 260° (G. 23 [2] 469; C. 1897 [1] 169). -II, 1790.
- 6) l-Desmotroposantonin. Sm. 194° (B. 31, 3131; G. 28 [2] 533). 7) rac. Desmotroposantonin. Sm. 198° (B. 31, 3132; G. 28 [2] 539). 8) Iso-Desmotroposantonin. Sm. 187—188° u. Zers. (G. 23 [2] 484; 25
- [1] 477). II, 1790. 9) Santonid. Sm. 127° (J. 1878, 826; B. 13, 2210; G. 13, 149; 25 [2] 471). **— II**, 1788.
- 10) Parasantonid. Sm. 110° (J. 1878, 826; B. 13, 2210; 14, 1512; G. 13, 145; **25** [2] 473). — II, 1788.
- 11) 7-Oxy-5,8-Dimethyl-1,2[P]-Dihydronaphtalin-2-Aethyl-α-Carbon-säure. Sm. 170° (B. 28 [2] 394).
- 12) Aethylester d. γ -Keto- α -Phenyl- α -Hexen- δ -Carbonsäure (Ae. d. Aethylcinnamylessigsäure). Sd. 205-220°₂₂ (A. 218, 183). — II, 1684.
- 13) Aethylester d. δ-Benzoyl-α-Penten-δ-Carbonsäure (Ae. d. Methyl-

allylbenzoylessigsäure). Sd. 243—245°₂₂₅ (Soc. **59**, 999). — **II**, 1684. 14) Perezinon. Sm. 143—144°. Na (B. **18**, 944). — **II**, 1674. C 68,7 — H 6,9 — O 24,4 — M. G. 262. 1) Artesemin (Oxysantonin). Sm. 200° (C. **1895** [1] 436).

 $C_{15}H_{18}O_4$

 $C_{15}H_{18}O_5$

 $C_{15}H_{18}O_7$

- 2) α-Oxysantonin (Santogenin). Sm. 2860 u. Zers. (H. 22, 539; J. Th. 1890, 72; G. 27 [2] 87). — Π, 1786. 3) β-Oxysantonin. Sm. 128—131° (H. 22, 553).
- 4) Pikrotoxinsäure. Sm. 134°. Ag (G. 21 [2] 213). III, 644.
- 5) Diäthylester d. α-Phenylpropen-βγ-Dicarbonsäure (D. d. Phenylitakonsäure).
 Sd. 315° (A. 256, 70). II, 1866.
- 6) Diathylester d. β -Phenylpropen- $\alpha \gamma$ -Dicarbonsäure. Sd. 186—1870, (Soc. 75, 248).
- 7) Diäthylester d. 1-Phenyl-R-Trimethylen-2, 3-Dicarbonsäure. Sd.
- 256—257°₁₂₀ (B. **21**, 2645; **25**, 1147; **26**, 259). II, 1868. 8) Verbindung (Harz aus Kamala). Sm. 80° (J. 1860, 562). III, 671. C 64,7 H 6,5 O 28,8 M. G. 278.
- 1) Aethylester d. γ -Oxy- α -Acetoxyl- α -Phenyl- β -Buten- β -Carbonsäure. Sm. 150—151° (B. 31, 606).
- 2) Diäthylester d. α -Keto- α -Phenylpropan- $\beta\gamma$ -Dicarbonsäure (D. d. Benzoylbernsteinsäure). Sd. 260—265°₁₆₀. Na (Soc. 47, 273; 71, 333). II, 1963.
- 3) Diäthylester d. β -Keto- α -Phenylpropan- $\gamma\gamma$ -Dicarbonsäure. Fl. Na (B. **29**, 1988; A. **298**, 376).
- 4) Diäthylester d. γ -Keto- α -Phenylpropan- $\beta\gamma$ -Dicarbonsäure (D. d. Benzyloxalessigsäure). Fl. Cu (B. 31, 554).
- 5) Diäthylester d. α -[2-Methoxylphenyl]äthen- $\beta\beta$ -Dicarbonsäure. Sd. $193-195^{\circ}_{14}$ (B. 31, 2594).
- 6) Diäthylester d. α -[4-Methoxylphenyl]äthen- $\beta\beta$ -Dicarbonsäure. Sm. $38-40^{\circ};$ Sd. $200-217^{\circ}_{14}$ (B. 31, 2594). C 61,2 H 6,1 O 32,7 M. G. 294.

 $C_{15}H_{18}O_6$

- 1) Diacetat d. 2,3,4,5-Tetraoxy-1-Allylbenzoldimethyläther. Sm. 125 bis 126° (G. 22 [1] 559; B. 29, 1802). — II, 1034.
- 2) Triacetat d. 2,4,6-Trioxy-1,3,5-Trimethylbenzol. Sm. 162° (M. 19, 261).
- 3) Benzoat d. Rhamnitdimethylenäther. Sm. 136—137° (A. 299, 323).
- 4) Trimethylester d. β -Phenylpropan- β , 2, 4-Tricarbonsäure (Tr. d. Joniregentricarbonsäure). Sm. 93° (B. 26, 2686). — II, 2015.
- 5) $\beta\beta$ -Diäthylester d. α -Phenyläthan- $\beta\beta$ 2-Tricarbonsäure. Sm. 86°.
- Na, Ag (A. 242, 34). II, 2014. 6) Triäthylester d. Benzol-1,2,3-Tricarbonsäure. Sm. 39° (B. 31, 2084). 7) Triäthylester d. Benzol-1,3,5-Tricarbonsäure. Sm. 133° (133,5 bis
- $134,5^{\circ}$) (A. 147, 309; J. pr. [2] 15, 314; C. 1898 [2] 473). Π , 2011. C 58,1 H 5,8 O 36,1 M. G. 310.
- 1) Pikrotin $+ \frac{3^{1}}{2}H_{2}O$ (oder $C_{25}H_{30}O_{19}$). Sm. 245° ($248-250^{\circ}$) (M. 1, 125; 2, 797; B. 10, 1100; 12, 685; 14, 818, 1243; 31, 2970; A. 222, 344; C. 1897 [1] 500). — III, 643.
- 2) Pikrotoxininsäure. Sm. 229—230° (B. 31, 2968).

C15H18O7

C, 5H, 8O8

 $\mathbf{C}_{15}\mathbf{H}_{18}\mathbf{N}_{4}$

 $C_{15}H_{19}N$

- 3) Glyko-o-Cumaraldehyd + H₂O. Sm. 199 (wasserfrei) (B. 18, 1958). - III, 93.
- 4) Diäthylester d. d-Monobenzoylweinsäure. Sm. 64° (66-66,5°) (A. Spl. 5, 276; Bl. [3] 13, 200; Soc. 73, 310). — II, 1154.
- 5) Diäthylester d. Monobenzoyltraubensäure. Sm. 57º (A. Spl. 5, 278). - II, 1155.
- 6) Triäthylester d. 2-Oxybenzol-1, 3, 5-Tricarbonsäure. Sm. 83°. Na (J. pr. [2] 14, 117; B. 31, 1684). II, 2047. C 55, 2 H 5, 5 O 39, 3 M. G. 326.
- - 1) Kaffeegerbsäure, siehe auch C₂₁H₂₈O₁₄. Ba, Pb, Pb₂, Pb₃ (A. 59, 303; 60, 39; 66, 35; 142, 220; J. 1850, 387; 1851, 410; 1857, 311; 1877, 938; C. 1897 [2] 351). II, 2071. C 52.6 - H 5.3 - O 42.1 - M. G. 342.
- $C_{15}H_{18}O_9$ 1) Triäthylester d. 2,4,6-Trioxybenzol-1,3,5-Tricarbonsäure. Sm. 1040 (B. 18, 3457; 19, 2038; 21, 1767). — II, 2089.
 - 2) Trikohlensäureäthylester d. 1,2,3-Trioxybenzol. Sm. 58-60° (A. **301**, 108).
- C15H18N2 C 79.6 - H 8.0 - N 12.4 - M. G. 226.
 - 1) 4-Amido-4'-Dimethylamidodiphenylmethan? Sm. 93° (C. 1898 [2] 158).
 - 2) Di[5-Amido-2-Methylphenyl]methan. Sm. 98-100° (B. 27, 3315).
 - IV, 984.
 3) Di[4-Amido-3-Methylphenyl]methan. 2HCl (Sm. 278° u. Zers.) (B. 27, 1811). - IV, 984.
 - 4) Di[6-Amido-3-Methylphenyl]methan. Sm. 92° (B. 27, 1812). IV, 984.
 - 5) $\alpha\beta$ -Di[Phenylamido] propan. Sd. 265 $^{\circ}_{60}$. (2HCl, PtCl₄) (B. 25, 3271).
 - II, 344.
 6) αγ-Di[Phenylamido]propan. Sd. über 360°. H₂SO₄ (B. 20, 781). -
 - 11, 345.

 7) Di[Benzylamido]methan. Sm. 45—46°; Sd. 225—230° u. Zers. HCl, (2HCl, PtCl₄), (2HCl, AuCl₃), HBr, HJ, H₂SO₄ + 2H₂O, H₃PO₄, Oxalat (A. 256, 220; B. 28 [2] 852). II, 531.
 - 8) Di[2-Methylphenylamido] methan. Sm. 52° (B. 27, 1808; A. 302, 349).
 - 9) isom. ?-Di[2-Methylphenylamido]methan. Sm. 135°. 2HCl, 2HBr,
 - H₂SO₄, H₃PO₄, Oxalat (A. **256**, 307). II, 473. 10) isom. ?-Di[2-Methylphenylamido] methan. Sd. oberh. 350° u. Zers. $(2 \text{HCl}, \text{PtCl}_4)$ (A. **256**, 303). — II, 473.
 - 11) Di[4-Methylphenylamido]methan. Sm. 86° (89°) (B. 27, 1808; A. **302**, 350).
 - 12) isom. ?-Di[4-Methylphenylamido] methan. Sm. 156°; Sd. über 350° u. Zers. 2 HCl, (2 HCl, PtCl₄), (HCl, AuCl₃), Oxalat (A. 256, 286). — II. 510.
 - 13) isom. ?-Di[4-Methylphenylamido]methan. Sd. oberh. 350° u. Zers. $HCl, (2HCl, PtCl_4), (HCl, AuCl_3) (A. 256, 286). - II, 510.$
 - 14) 4-Benzylamido-1-Dimethylamidobenzol. Sm. 48° (A. 241, 361). IV, 586.
 - C 70,9 H 7,1 N 22,0 M. G. 254. 1) 4'-Dimethylamido-5-Amido-2-Methylazobenzol. Sm. 145° (A. 234,
 - 356). IV, 1383. 2) 4'-Dimethylamido-3-Amido-4-Methylazobenzol. Sm. 215° (A. 234, 362). — IV, 1383.
 - 3) Toluylenblau (Dimethylamidophenamidotolazin). HCl + H₂O (B. 12, 933). **- IV**, 608.
 - C 84,5 H 8,9 N 6,6 M. G. 213.
- 1) Ettidin. Fl. (Z. 1867, 429). IV, 343. C 74,7 H 7,9 N 17,4 M. G. 241. $C_{15}H_{19}N_3$ 1) Methyldi[2-Amidobenzyl]amin. Sm. 96° (B. 26, 2585). — IV, 628.
 - 2) 4-Amido-3-[4-Dimethylamidophenyl]amido-1-Methylbenzol. Sm.
 - 69-70° (Soc. 65, 881). IV, 612. 3) 6-Phenylamido-5-Methyl-2,4-Diäthyl-1,3-Diazin. Sm. 99°. (2HCl, PtCl₄) (J. pr. [2] 39, 274). — IV, 1133. C 83,3 — H 9,2 — O 7,4 — M. G. 216.
- C15H20O 1) 3-Keto-1,3-Di[-R-Pentamethylenylen]-R-Pentamethylen (Tricyklo-Di-Penten-Pentanon). Sm. 76-77°; Sd. 190°₁₂ (B. 29, 2964).

 $C_{15}H_{20}O_2$

C 77,6 — H 8,6 — O 13,8 — M. G. 232.

1) 2, 4-Dipropionyl-1, 3, 5-Trimethylbenzol. Sm. 101-102°; Sd. 327° (B. **30**, 1285).

2) Hyposantonigesäure (5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Aethylα-Carbonsäure). Sm. 95,5°. Ba $+ 2H_2O$, Ag (G. 26 [2] 456).

3) Lakton d. γ-Oxy-γ-Phenyl-α-Isoamylbuttersäure. Sd. 240% (B. 23, 1504). — II, *1594*.

4) Lakton d. Alantolsäure (Helenin). Sm. 76°; Sd. 192°₁₀ (A. 15, 349; 34, 192; 52, 389; 285, 356; B. 6, 1507; 9, 155). — II, 1594.

5) Acetat d. 5-Oxy-1-Methyl-3-Phenylhexahydrobenzol. Sd. 294 bis 297° (A. 303, 263).

 6) Benzoat d. δ-Oxy-ζ-Methyl-α-Hepten. Sd. 274—277° (Bl. [3] 15, 888).
 7) Verbindung (aus Camphersäureanhydrid). Sm. 135—137°; Sd. 320°. Ba $+9 H_2 O$, Ag (*Bl.* [3] **13**, 902; [3] **19**, 216). — III, 167. C 72,6 — H 8,0 — O 19,4 — M. G. 248.

 $C_{15}H_{20}O_{3}$

1) Hydrosantonid. Sm. 155-156° (J. 1878, 827; G. 8, 344). — II, 1770.

2) Dihydrometasantonin. Sm. 181-1820 (G. 25 [2] 466).

3) γ -Keto- ε -Phenyl- $\beta\beta$ -Dimethylhexan- ζ -Carbonsäure. Sm. 124° (B. 30, 2271).

4) ζ-Benzoyl-β-Methylhexan-ε-Carbonsäure (β-Benzoyl-α-Isoamylpropionsäure). Sm. 103° (B. 23, 1504). — II, 1670.

5) β -Pentamethylbenzoylpropionsäure. Sm. 104° (B. 28, 3217).

6) 1-Oxy-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Aethyl-α-Carbonsäure (Hyposantoninsäure) (G. 22 [1] 15). — II, 1672.

7) d-7-Oxy-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Aethyl-α-Carbonsäure (d-Santonige Säure). Sm. 178—179°. Na, Ba (B. 12, 1574; 13, 1516; 16, 427; J. 1880, 895; G. 12, 393; 13, 385; 28 [2] 535). — II, 1670.

8) 1-7-0xy-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Aethyl-\(\alpha\)-Carbonsäure (1-Santonige Säure). Sm. 176-177° (G. 23 [2] 488). — II, 1671.

9) i-7-Oxy-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Aethyl-α-Carbonsäure (i-Santonige Säure; Isosantonige Säure). Sm. 153—155° (J. 1880, 895; G. 12, 400; 23 [2] 489; B. 12, 1575; 16, 428). — II, 1671. 10) isom. 7-Oxy-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Aethyl-

α-Carbonsäure (Desmotroposantonige Säure). Sm. 175° (G. 23 [2] 477). **– II**, 1671.

11) Isohyposantoninsäure (G. 22 [2] 20). — II, 1672.

12) Hyposantonsäure. Sm. 135—136° (G. 22 [1] 192). — II, 1673. 13) Pipitzahoïnsäure (Perezon). Sm. 103—104°. Pb, Cu, Ag (A. 95, 188; 237, 96; J. 1855, 492). — II, 1673.

14) Aethylester d. β -Keto- γ -Benzylpentan- γ -Carbonsäure (Ae. d. Aethylbenzylacetessigsäure). Sd. 295-298° (B. 11, 1057). - II, 1669.

15) Aethylester d. δ -Benzoyl- β -Methylbutan- δ -Carbonsäure (Ae. d. Benzoylisocapronsäure). Sd. $246-247^{\circ}_{225}$ (Soc. 49, 165). — II, 1669. C 68,2 — H 7,5 — O 24,2 — M. G. 264.

C15 H20 O4

1) Methylenbismethyldihydroresorcin. Sm. 152-153° (A. 289, 171; B. 30, 1802).

2) Absinthin. Sm. 68° (Bl. [3] 19, 538). 3) α-Oxydihydrosantonin? (H. 22, 551).

4) Santonsäure. Sm. 171° (161—163°). Na, Ba, 13, 2210; 18, 2748; G. 13, 164; 25 [2] 461). – 5) Isosantonsäure. Sm. 152° (G. 25 [2] 471). Na, Ba, Ag (B. 6, 1201; 7, 1103; - II, *1*788.

6) Metasantonsäure. Sm. 161-167°. Ag (J. 1873, 620; 1880, 894; G. 8, 336; **25** [2] 463, 468). — II, 1789.

7) Parasantonsäure. Sm. 170°. Na, Ba (J. 1878, 825; B. 13, 2210; G. 8, 340; 25 [2] 473). — II, 1789.

8) inakt. Dehydrophotosantonsäure. Sm. 132-133°. Ba (B. 18, 2862; G. 23 [1] 289). — II, 1932.

9) aktive Dehydrophotosantonsäure. Sm. 138,5-139 (G. 23 [1] 289). II, 1932.

10) Santoninsäure. Na $+ 3\frac{1}{2}$ H₂O, Ca, Ba + H₂O, Pb (*J.* 1876, 618; 1878, 821; A. 63, 10; 176, 126; B. 6, 1280; J. pr. [2] 35, 334; G. 25 [1] 468). - II, 1785.

11) Desmotroposantoninsäure. Ba (G. 23 [2] 476). — II, 1790.

12) Iso-Desmotroposantoninsäure. Ba (G. 23 [2] 484). — II, 1790. 13) Oxypipitzahoïnsäure (Oxyperezon). Sm. 133—134° (129°) (A. 237, 119; $C_{15}H_{20}O_4$ B. 18, 942). — II, 1674.

> 14) γ -Keto- ε -[4-Methoxylphenyl]- β -Methylhexan- ζ -Carbonsäure (Anisylisobutyrylbuttersäure). Sm. 1186 (A. 294, 334).

> 15) β -Oxy- β -Phenyl- $\alpha\alpha$ -Dimethylpropionisobutyläthersäure. Sm. 65°. $Ca + 2H_2O$, $Ba + H_2O$, Ag (A. 227, 62). — II, 1591.

16) Aethylester d. 1-α-Isovaleroxylphenylessigsäure (B. 31, 1421).

- 17) Aethylester d. ε-Oxy-β-Keto-γ-Methylpentanphenyläther-γ-Carbonsäure. Sd. 185° 40 (Soc. 69, 173).
 18) Diäthylester d. α-Phenylpropan-ββ-Dicarbonsäure. Sd. 300° (A.
- 204, 177). II, 1855.
 19) Diäthylester d. 1-Methylbenzol-3-[Aethyl-ββ-Dicarbonsäure]. 320° (B. **23**, 109). — **II**, 1855.

20) Diäthylester d. Benzol-1-Methylcarbonsäure-2-[Aethyl-β-Carbon-

- säure]. Sd. 210—212°₄₀ (A. **286**, 274). II, 1856. 21) Isobutylester d. d-α-Benzoxylbuttersäure. Sd. 327° (Bl. [3] **15**, 492). 22) Diacetat d. αγ-Dioxy-α-Phenyl-ββ-Dimethylpropan. Sm. 55°; Sd. 295—297° (M. 11, 390; 18, 599). — II, 1099.
 23) Dibutyrat d. 3,5-Dioxy-1-Methylbenzol. Fl. (A. ch. [4] 6, 197). —
- II, 961.
- $C_{15}H_{20}O_5$ C'64.3 - H 7.1 - O 28.6 - M. G. 280.1) α -Oxyheptanphenyläther- $\delta\delta$ -Dicarbonsäure. Sm. 104—106,5%; Zers. bei 150°. Ca (B. 28, 1201).
 - 2) α -[2,3,4-Trioxyphenyltriäthyläther]äthen- β -Carbonsäure (Daphnetin-
 - triäthyläthersäure). Sm. 193° (B. 17, 1086). II, 1950. 3) α -Aeskuletintriäthyläthersäure. Sm. 102 103° (B. 16, 2110). II. 1950.
 - 4) β-Aeskuletintriäthyläthersäure. Sm. 144° (B. 16, 2109). II, 1950.
 - 5) α-Oxysantoninsäure. Ba (*H.* **22**, 544).

 $\mathbf{C}_{15}\mathbf{H}_{20}\mathbf{O}_6$

- 6) Isoamylester d. 3,4-Dioxybenzoldimethyläther-1-Ketocarbonsäure. Sd. 220—225°₁₀ (Bl. [3] 17, 945).
 7) Verbindung (aus Dimethyläthylcarbinol u. Opiansäure). Sm. 81° (C.
- **1898** [2] 527). C 60,8 H 6,7 O 32,4 M. G. 296.
- Methylester d. β-[P-Tetraoxyphenyl] propentetramethyläther-α-Carbonsäure. α-Form. Sm. 77,5-78°; β-Form. Sm. 68° (G. 23 [2] 617). II, 2007.
- 2) Diäthylester d. Oxyessig-[1-Methyl-3, 5-Phenylen] äthersäure. Sm. $107^{\circ} (J. pr. [2] 21, 167). - II, 961.$
- 3) $\alpha\beta$ -Diacetat d. 3,4-Dioxy-1-[$\alpha\beta$ -Dioxypropyl]benzol-3,4-Dimethyläther. Sd. 208—209°14 (C. 1897 [1] 915).
- 4) $\beta \gamma$ -Diacetat d. 3,4-Dioxy-1-[$\beta \gamma$ -Dioxypropyl] benzol-3,4-Dimethyläther. Sd. 248°₁₁₁ (B. **24**, 3490). II, 1117. C 57,7 H 6,4 O 35,9 M. G. 312.
- $\mathbf{C}_{15}\mathbf{H}_{20}\mathbf{O}_{7}$ 1) Kohlensäurediäthylester d. 2,4,6-Trioxy-1,3,5-Trimethylbenzol. Sd. 230—232°₁₄ (M. 19, 263). C 54,9 — H 6,1 — O 39,0 — M. G. 328. 1) Globularin (J. 1860, 560; B. 16, 573; A. ch. [5] 28, 72). — III, 591. 2) Leditannsäure (J. 1883, 1402). — III, 688.
- C₁₅H₂₀O₈
 - 3) Tetraäthylester d. Propadiëntetracarbonsäure. Sm. 93-95°; +2H₂O (flüssig) (B. 27, 3375).
- $C_{15}H_{20}O_{9}$ C 52,3 - H 5,8 - O 41,9 - M. G. 344.1) Aldehyd d. Glykosyringasäure. Sm. 162° (G. 18, 215). — II, 1117. C 50,0 — H 5,6 — O 44,4 — M. G. 360. 1) Buchweizengelb. Pb (J. 1857, 489; 1859, 527, 528). — III, 634. 2) Oxypentinsäure. Sm. 193° (2 Ba, 3 Ba) (A. ch. [5] 20, 485). 3) Glykosyringasäure + 2 H₂O. Sm. 208° (214° wasserfrei) (G. 18, 214). $\mathbf{C}_{15}\mathbf{H}_{20}\mathbf{O}_{10}$

 - **II**, 1117.
 - 4) Tetracetylchinasäure. Sm. 130—136°. Ag (B. 22, 1461). I, 805.
 5) Verbindung (aus Saccharin u. Formaldehyd). Sm. 139—140° (A. 299, 333).
- C 45,9 H 5,1 O 49,0 M. G. 392. 1) Hexamethylester d. Propan- $\alpha \alpha \beta \beta \gamma \gamma$ -Hexacarbonsäure. Sm. 136°; Sd. 250—255°₂₆ (B. **29**, 1279, 1281, 1508, 1746). $\mathbf{C}_{15}\mathbf{H}_{20}\mathbf{O}_{12}$

 $C_{15}H_{22}O$

 $C_{15}H_{22}O_2$

 $C_{15}H_{22}O_4$

 $\mathbf{C}_{15}\mathbf{H}_{22}\mathbf{O}_{5}$

C 78.9 — H 8.8 — N 12.3 — M. G. 228. $C_{15}H_{20}N_2$

1) 5-Methyl-6-[α-Phenylhydrazonäthyl]-1,2,3,4-Tetrahydrobenzol. Fl. (Soc. 57, 20). — IV, 770.

2) Phenylhydrazon d. Campherphoron (B. 26, 811). — IV, 770. 3) Phenylhydrazon d. Isophoron. Sm. 68—69° (A. 289, 10 Anm.; 297, 189; 299, 168). — IV, 770. 4) 5-Hexyl-1-Phenylpyrazol. Sd. 318—320° (B. 21, 1149). — IV, 531.

5) Verbindung (aus Mesidin). Sm. 114—115°. — 11, 555. C 70,3 — H 7,8 — N 21,9 — M. G. 256.

 $C_{15}H_{20}N_4$ 1) 6-Amido-?-Phenylamido-5-Methyl-2, 4-Diäthyl-1, 3-Diazin (Anilido-

kyanäthin). Sm. 125° (*J. pr.* [2] **30**, 157). — **IV**, *1133*. 2) Leukotoluylenblau. (HCl, SnCl₂) (*B.* **12**, 936). — **IV**, 608. 1) αα-Dithiënylheptan. Sd. 200—203° i. V. (*B.* **30**, 2039). C 83,7 — H 9,8 — N 6,5 — M. G. 215. $\mathbf{C}_{15}\mathbf{H}_{20}\mathbf{S}_{2}$ $C_{15}H_{21}N$

1) 1-[1,2,3,4-Tetrahydro-5-Naphtyl]hexahydropyridin. HCl, (2HCl, PtCl₄), (HCl, AuCl₃) (B. 28, 3109). — IV, 9.
 2) 1-[1,2,3,4-Tetrahydro-6-Naphtyl]hexahydropyridin.

Sd. 274 bis 276°₇₄₉. HCl, (2HCl, PtCl₄ + 3H₂O), (HCl, AuCl₃), Pikrat (B. 29, 1178). - IV, 9.

3) 2-Methylen-1, 3, 3-Triäthyl-2, 3-Dihydroindol (?-Triäthyl-1, 2-Dihydrochinolin). Sd. 265°₇₆₀. HJ, Pikrat (B. 29, 2481; G. 28 [2] 90, 344). -IV, 230.

4) Nitril d. α-Phenyloktan-α-Carbonsäure. Sd. 327° (B. 22, 1237).

II, 1400. C 74,1 — H 8,6 — N 17,3 — M. G. 243. $C_{15}H_{21}N_3$

1) 1-Phenylazodekahydrochinolin. Sm. 78,6° (B. 23, 1153). — IV, 1581.
 C 82,6 — H 10,1 — O 7,3 — M. G. 218.
 1) Phenyläther d. ι-Oxy-β-Nonen (C. 1899 [1] 26).

2) Isobutyl-5-Isopropyl-2-Methylphenylketon. Sd. 270-2720 (J. pr. [2] 46, 488). — III, 157.

3) Verbindung (aus Sylvan). Sd. 235—245° (B. 13, 882). — III, 692. C 76,9 — H 9,4 — O 13,7 — M. G. 234.

1) Cyclamiretin. Sm. 1980 (A. 185, 218; J. 1887, 2305). — III, 579. 2) Acetat d. Lactucol. Sm. 198-200° (A. 238, 225). - III, 635.

3) Acetat d. 3-Oxy-?-Dipropyl-1-Methylbenzol. Sd. 255-260° (G. 12, 510). — II, 776.

4) Acetat d. 3-Oxy-?-Diisopropyl-1-Methylbenzol. Sd. 255-260° (J. r. **12**, 508). — **II**, 776.

5) Methylisoamyläther d. 3,4-Dioxy-l-Allylbenzol. Sd. 300,6-301,70,46

u. Zers. (J. 1877, 581; G. 19, 496). — II, 974. 6) 1-Oktylbenzol-4-Carbonsäure. Sm. 139°. Ag (B. 18, 138). — II, 1401.

7) Lakton d. Dihydroalantolsäure. Sm. 123°; Sd. 195°₁₃ (A. 285, 371). - II, 1595.

8) Oktylester d. Benzolcarbonsäure. Sd. 305-306° (A. 152, 7). II, 1141. C 72,0 — H 8,8 — O 19,2 — M. G. 250.

 $\mathbf{C}_{15}\mathbf{H}_{22}\mathbf{O}_{3}$

1) Monacetat d. 3,5-Dioxy-2,4,6-Triäthyl-1-Methylbenzol. Sm. 71-730 (M. 11, 321). — II, 961.

2) Alantsäure (Alantolsäure). Sm. 94° u. Zers. K, Ca+6H₂O, Ba+5H₂O, Ag (B. 9, 155; A. 285, 358). — II, 1594. C 67,7 — H 8,3 — O 24,0 — M. G. 266.

1) Laserpitin (oder $C_{24}H_{36}O_7$). Sm. 118°. Acetat (J. 1883, 1361). — III, 635.

2) Hydrosantonsäure. Sm. 170° u. Zers. Na $+ 3 H_2 O$, K $+ 2 H_2 O$ (J. 1876, 619). — II, *1770*.

3) Aethylester d. $\beta\beta$ -Dioxy- β -Phenylpropionäthyläthersäure. Sd. 130 bis 135% (Am. 20, 141). C 63,8 — H 7,8 — O 28,4 — M. G. 282.

1) Photosantonsäure. Sm. $154-155^{\circ}$. (NH₄)₂ + 6H₂O, Ca + 3H₂O, Ca + xH₂O, Ba + H₂O, Ag₂ + 3H₂O (J. 1876, 622; 1879, 664; G. 12, 82; 13, 378; B. 18, 2859). — II, 1931.

2) Isophotosantonsäure. Ba + H₂O (B. 19, 2260). — II, 1932.

3) β -[?-Trioxyphenyl] propiontriäthyläthersäure. Sm. 77° (B. 16, 2111). - II, 1929.

C15H2005 4) α-Diterpodilakton (Anhydrid d. α-Diterpoxylsäure). Sm. 153-154° (A. 256, 118). — I, 844. 5) β-Diterpodilakton. Sm. 134—135° (A. 256, 122). — I, 844.

6) Aethylester d. 2,3,4-Trioxybenzoltriäthyläther-1-Carbonsäure. Fl. (B. 17, 2101). — II, 1918.

7) Aethylester d. 3,4,5-Trioxybenzoltriäthyläther-1-Carbonsäure. Sm. 51° (B. 17, 2099). — II, 1921.

8) Diäthylester d. ε -Keto- α ϑ -Nonadiën- $\delta\zeta$ -Dicarbonsäure (D. d. Diallylacetondicarbonsäure). Sd. $185-186^{\circ}_{10}$ (Å. 267, 86). — I, 781. C 60.4 — H 7.4 — O 32.2 — M. G. 298.

1) Diäthylester d. 2,5-Diketo-l-Propylhexahydrobenzol-1.4-Dicarbonsäure (D. d. Propylsuccinylbernsteinsäure). Sd. 2000 (B. 26, 232).

2) Diäthylester d. 2,5-Diketo-1-Isopropylhexahydrobenzol-1,4-Dicarbonsäure (D. d. Isopropylsuccinylbernsteinsäure). Sd. 200° (B. 26, 232). C 57,3 — H 7,0 — O 35,7 — M. G. 314.

1) Triäthylester d. ε -Keto- β -Hexen- $\gamma \delta \zeta$ -Tricarbonsäure. Sd. 196—1970 (Soc. 71, 328).

C 54,5 - H 6,6 - O 38,8 - M. G. 330. $C_{15}H_{22}O_8$

 $C_{15}H_{22}O_6$

 $C_{15}H_{22}O_{7}$

 $\mathbf{C}_{15}\mathbf{H}_{23}\mathbf{N}$

C15H24O

- 1) Triäthylester d. $\delta\delta$ -Dioxy- $\alpha\gamma$ -Butadiënmonoäthyläther- $\alpha\alpha\gamma$ -Tricarbonsäure (Tetraäthylester d. Dicarboxyglutakonsäure). Sd. 270—280° u. Zers. Na, Ca, Cu, CuOH (B. 15, 2842; 22, 1414; 27, 3061; 29, 1017; 30, 962; 31, 140, 2757; A. 222, 250; 297, 88; J. pr. [2] 54, 359). — I, 863.
- 2) Tetraäthylester d. Propen-ααβγ-Tetracarbonsäure. Sd. 198—1990 Soc. 73, 1009).

3) Tetraäthylester d. Propen-ααγγ-Tetracarbonsäure. Sm. 101-1020 (B. 31, 2757).

4) Tetraäthylester d. R-Trimethylen-1,1,2,2-Tetracarbonsäure. 43°; Sd. 187°_{12} (B. 19, 1056; 256, 194). — I, 865.

5) Tetraäthylester d. R-Trimethylen-1,1,2,3-Tetracarbonsäure. Sd. $245-247^{\circ}_{85}$ (B. 17, 1652; Soc. 47, 823). — I, 864.

6) Tetraäthylester d. isom. R-Trimethylen-1,1,2,3-Tetracarbonsäure (T. d. Propargylentetracarbonsäure). Sd. 220—2300₄₀ (A. 229, 91). I, 865. C 52,0 — H 6,4 — O 41,6 — M. G. 346.

 $C_{15}H_{22}O_9$

1) Polystichocitrin. Anilinsalz (C. 1898 [2] 1103). C 49,7 - H 6,1 - O 44,2 - M.G. 362. $\mathbf{C}_{15}\mathbf{H}_{22}\mathbf{O}_{10}$

1) Triäthylester d. $\alpha\beta$ -Diacetoxyläthan- $\alpha\alpha\beta$ -Tricarbonsäure (Tr. d. Diacetyldesoxalsäure). Fl. (B. 12, 543). — I, 857. C 35,6 — H 4,3 — O 60,1 — M. G. 506.

 $\mathbf{C}_{15}\mathbf{H}_{22}\mathbf{O}_{19}$ 1) Glycerintriweinsäure (J. 1859, 501). — I, 795, C 78.3 - H 9.6 - N 12.1 - M. G. 230. $\mathbf{C}_{15}\mathbf{H}_{22}\mathbf{N}_{2}$

1) $\alpha \gamma$ -Di[2,5-Dimethyl-1-Pyrryl] propan. Sm. 76-77° (B. 19, 3157). —

2) 5-Methyl-2-Isopropyl-1-Isobutylbenzimidazol. Fl. HCl (B. 20, 1590). **- IV**, 888.

3) Base (aus Oxysparteïn). Fl. (2HCl, 2AuCl₃) (B. 25, 3609). — III, 933. C 82,9 - H 10,6 - N 6,4 - M. G. 217.

1) Dehydropentacetonamin. HCl (A. 181, 83). - I, 983.

2) 5-Aethyl-2-[β -Phenyläthyl] hexahydropyridin. Sd. 314,2 $^{\circ}_{761}$. (2HCl, PtCl₄) (B. 21, 3096; 22, 1058). — IV, 211.

3) 6- $[\beta$ -Phenyläthyl]-2,4-Dimethylhexahydropyridin. Fl. HCl (B. 27, 83). **— IV**, 211.

4) ?-Triäthyl-1,2,3,4-Tetrahydrochinolin. Fl. Pikrat (B. 29, 2482). — IV, 210. C 81,8 — H 10,9 — O 7,3 — M. G. 220.

1) Phasol. Sm. 189—190° (H. 15, 433). — II, 1075.

2) 3-Oxy-6-Isoamyl-4-Isopropyl-1-Methylbenzol. Sm. 76,5°; Sd. 275°₇₁₆ (B. **24**, 3892). — **II**, 777.

3) Isoamyläther d. 3-Oxy-4-Isopropyl-1-Methylbenzol. Sd. 242-2430, 74615 (Z. 1869, 43; G. 19, 496). - II, 770.

4) norm. Oktyläther d. 2-Oxy-1-Methylbenzol. Sd. 292,9° (A. 243, 40). - II, 737.

C15H24O3

 $\mathbf{C}_{15}\mathbf{H}_{24}\mathbf{O}_7$

C15 H24 O8

5) norm. Oktyläther d. 3-Oxy-1-Methylbenzol. Sd. 298,90 (A. 243, 43). C15H24O - II, 744.

6) norm. Oktyläther d. 4-Oxy-1-Methylbenzol. Sd. 298° (A. 243, 46). — II, 748.

7) Cedron. Sd. 147—151°_{7,5} (Bl. [3] 17, 487). 8) Cynanchol (besteht aus Cynanchin Sm. 148—149° und Cynanchocerin Sm. 145—146°) (A. 180, 352; 182, 163; 192, 182). — II, 777. 9) Euphorbon. Sm. 113—114° (J. 1868, 809; 1886, 1821; A. 192, 193;

G. 24 [2] 444). — III, 631.

10) Laktucon (oder C₂₈H₄₄O₂). Sm. 150—200° (210°) (A. 60, 83; 238, 220). - III, 634.

11) \(\alpha\)-Paracotol. Sd. 220—222° (A. 199, 79; 271, 306). — II, 777. 12) Santalal. Sd. 301—306° (B. 15, 1197; C. 1896 [2] 668). — III, 549. 13) Keton (aus Natriumacetat und Natriumäthylat). Sd. 280—300° (A. 202, 312). — I, 1014.

14) Verbindung (aus Phoron). Sd. 137—139°_{8—10} (A. 296, 324).
 15) Verbindung (aus Polyporus officinalis). Sm. 75° (J. 1886, 1823).

 $C_{15}H_{24}O_{2}$ C 76,3 — H 10,2 — O 13,5 — M. G. 236.

1) Monäthyläther d. 3,5-Dioxy-2,4,6-Triäthyl-1-Methylbenzol. Sd. 175 bis 180°_{20} (M. 11, 318). — II, 961.

Verbindung (aus Santelöl). Sm. 101—103° (J. r. 24, 688). — III, 549.
C 71,4 — H 9,5 — O 19,1 — M. G. 252.
Digitogenin. Sm. bei 250° (B. 23, 1555; 25 [2] 680; 32, 341). —

III, 581. 2) $\alpha \alpha'$ -Diäthyläther - β -[2,4,5-Trimethylphenyl]äther d. $\alpha \alpha \beta$ -Trioxy-

äthan. Sd. 290° (B. 30, 1710).
3) Dihydroalantolsäure. Ba, Ag (A. 285, 374). — II, 1595.

4) Aethylester d. Digitosäure. Sm. 160° (B. 27 [2] 882).

5) Aethylester d. Aethylcamphocarbonsäure. Sd. 164-165° (J. pr. [2] 50, 137, 142).

6) Verbindung (aus Santoninphenylhydrazid). Sm. 152-1530 (G. 19, 390). - II, 1673.

C 67,1 - H 8,9 - O 23,9 - M. G. 268. $C_{15}H_{24}O_4$

1) 5-Methyläther d. 2,4-Diketo-5,6-Dioxy-1,1,3,3-Tetraäthyl-1,2,3,4-Tetrahydrobenzol. Sm. 168-169° (B. 26, 2036). - II, 1032.

2) βx -Dimethyl- $\delta \eta$ -Undekadiën- $\varepsilon \eta$ -Dicarbonsäure (Diisovaleralglutarsäure). Sm. 220°. Ca, Ba, Ag₂ (A. **282**, 357). C 63,4 — H 8,4 — O 28,2 — M. G. 284.

 $C_{15}H_{24}O_{5}$

1) Diäthylester d. δ -Aethanoyl- α -Hepten- $\delta \varepsilon$ -Dicarbonsäure. Sd. 245 bis 250° (B. **29**, 981). C 60,0 — H 8,0 — O 32,0 — M. G. 300.

 $\mathbf{C}_{15}\mathbf{H}_{24}\mathbf{O}_{6}$

1) α-Diterpolaktonsäure (Anhydrid d. α-Diterpoxylsäure). Sm. 158—160° (A. 256, 117). — I, 844. 2) β-Diterpolaktonsäure. Sm. 186—187° (A. 256, 119). — I, 844.

3) Monoathylester d. Hydrocampherylmalonsäure. Sm. $136-138^{\circ}$ (A. **257**, 302). — I, 822.

4) Diäthylester d. $\beta\eta$ -Diketo- δ -Methyloktan- $\gamma\zeta$ -Dicarbonsäure (D. d. Diacetylmethyladipinsäure). Fl. (Soc. 61, 74). - I, 822.

5) Triäthylester d. α-Hexen-δδε-Tricarbonsäure. Sd. 283—285° (B. 25,

490; 29, 977, 1868). — I, 821.
 6) norm. Tripropylester d. Propen-αβγ-Tricarbonsäure (Tr. d. Akonitsäure). Sd. 195°₁₃ (B. 18, 1954). — I, 817.
 7) norm. Tripropylester d. Propen-αγγ-Tricarbonsäure? (Tr. d. Isoakonitsäure). Sd. 195°₁₃ (B. 18, 1954). — I, 818.
 C 56,9 — H 7,6 — O 35,4 — M. G. 316.
 D Trijäthylester d. Säure C. H. O. (one Citropopsäure). Sm. 173, 1748.

1) Triäthylester d. Säure C₉H₁₂O₇ (aus Citronensäure). Sm. 173—174°₂₈ (J. pr. [2] **53**, 354). — **I**, 846. C 54.2 — H 7.2 — O 38.6 — M. G. 332.

Tetraäthylester d. Propan-ααβγ-Tetracarbonsäure. Sd. 203—204°₁₈
 23, 3759; Soc. 73, 1007). — 1, 859.

2) Tetraäthylester d. Propan-ααγγ-Tetracarbonsäure (T. d. Dicarboxy-glutarsäure). Sd. 300—310° u. Zers. Na₂ (B. 19, 1054; 21, 2234; 27, 2346; 30, 961; 31, 2585; A. 246, 109; Soc. 59, 992). — I, 859.

3) Tetraäthylester d. Propan- $\alpha\beta\beta\gamma$ -Tetracarbonsäure (T. d. Isoallylentetracarbonsäure). Sd. 295° u. Zers. (B. 13, 2164; 29, 969; 30, 960; A. 214, 62). — I, 859. C15 H24 O8

4) Tetraäthylester d. Propan-?-Tetracarbonsäure. Sd. 202 – 2030 16-17

 $\mathbf{C}_{15}\mathbf{H}_{24}\mathbf{N}_{2}$

(J. pr. [2] 45, 57). — I, 859. C 77,6 — H 10,3 — N 12,1 — M. G. 232. 1) Dehydrosparteïn. Sd. 314 — 316°. 2HCl + 2½H₂O, (2HCl, PtCl₄ + 2H₂O, (2HCl, AuCl₃), 2HBr + H₂O, 2HJ + H₂O (B. 26, 3037; 30, 196). - ÏIÍ. `933.

2) Base (aus p-Tetrolditolyl). 2 HBr (B. 14, 936). — IV, 1035.

1) Digitaliretin = $(C_{15}H_{25}O_5)_x$ (J. 1875, 777). — III, 581. C15H25O5

C 82,2 - H 11,4 - N 6,4 - M. G. 219. $C_{15}H_{25}N$

1) 2-Amido-?-Oktyl-1-Methylbenzol. Sd. 324-326°. HCl, H₂SO₄, Oxalat (B. 18, 145). - II, 566.

C 72.9 - H 10.1 - N 17.0 - M. G. 247. $C_{15}H_{25}N_3$

1) α -Dipropylamido- β -Phenylhydrazonpropan. Fl. (B. 29, 868). — IV, 767.

 $C_{15}H_{25}Cl$ 1) Ledenhydrochlorid (B. 28, 3088).

 $C_{15}H_{26}O_2$

 $C_{15}H_{26}O_3$

2) Chlorid d. Caryophyllenhydrat. 289). — III, 513. Sm. 63°: Sd. 293 — 294° (A. 271.

 Alkoholchlorid (aus Baldrianöl) (Bl. [3] 13, 917). — III, 545.
 Bromid d. Caryophyllenhydrat. Sm. 61—62° (A. 271, 290). — III, 513. C15H25Br Jodsanton. Sd. 143-145° (B. 7, 1104). — I, 139.
 Jodid d. Caryophyllenhydrat. Sm. 61° (A. 271, 290). — III, 513. $C_{15}H_{25}J$

 $C_{15}H_{26}O$

- C 81,1 H 11,7 O 7,2 M. G. 222. 1) Caparrapiol. Sd. 260°₇₅₇ (Bl. [3] 19, 642). 2) Caryophyllenhydrat. Sm. 95°; Sd. 287—289° (A. 271, 288; 279, 391). - III, 513.

- III, 513.
 3) Cederncampher. Sm. 74°; Sd. 282° (A. 39, 247; 48, 35). III, 513.
 4) Cedrol. Sm. 84°; Sd. 149—155°₈ (Bl. [3] 17, 488).
 5) Isocedrol. Sd. 148—151°₇ (Bl. [3] 17, 487).
 6) Cubebencampher. Sm. 68,7—70° (65°); Sd. 148° (A. 6, 294; 8, 203; J. 1875, 497; Z. 1870, 190; B. 10, 189). III, 513.
 7) Guajol (Champakol). Sm. 91°; Sd. 288° (A. 279, 395). III, 513.
 8) Ledumcampher. Sm. 104—105°; Sd. 282—283° (B. 8, 542; 15, 2501; 28, 3087; J. 1879, 909; J. r. 19, 318). III, 514.
 9) Patschoulicampher. Sm. 56° (54—55°); Sd. 296° (Bl. 28, 414; A. 279, 394; Z. 1869, 220). III, 514.

- 394; Z. 1869, 220). III, 514.

 10) Isoamylcampher. Sd. 277,5°₇₃₆ (Z. 1868, 299). III, 513.

 11) Santalol. Sd. 310° (Bl. 37, 303; C. 1895 [2] 605; 1898 [2] 137). III, 549.
- 12) Alkohol (aus Baldrianöl). Sd. 190 195° (i. V.) (Bl. [3] 13, 917). —

13) Alkohol (aus Cochenille) (M. 6, 893). — I, 258.
14) Verbindung (aus Majoranöl). Sd. 200—220° (B. 15, 2855). — III, 543.
C 75,6 — H 10,9 — O 13,4 — M. G. 238.

C 73,0 — H 10,9 — O 13,4 — M. G. 235.

1 Alkohol (aus Baldrianwurzelöl). Fl. (Bl. [3] 13, 925).

2) Diamenylvaleriansäure. Sd. 300—306° (A. 202, 304). — I, 534.

3) Valerianat d. l-Borneol. Sd. 139°₁₅ (B. 31, 1775).

4) Isovalerianat d. d-Borneol. Sd. 255—260° (B. 11, 456). — III, 470.

5) Valerianat d. Geraniol. Sd. 130—132°₃₀ (Bl. [3] 19, 638).

6) Isovalerianat d. Geraniol (I. d. Rhodinol). Sd. 137—138°₇ (B. 31, 357).

C 70,9 — H 10,2 — O 18,9 — M. G. 254. 1) Caparrapinsäure. Sm. 84,5°. Ca + 5H₂O, Ag (Bl. [3] 19, 640). 2) Verbindung (aus Pentaäthylphloroglucin). Sd. 275—285° (M. 13, 251). C 66,7 - H 9,6 - O 23,7 - M. G. 270. $C_{15}H_{26}O_4$

1) Diäthylester d. Oxycamphocarbonsäure. Sd. $208-218^{\circ}_{65}$ (B. 22 [2] 576). — I, 728.

2) Ortho-Monamylester d. Camphersäure. Sd. oberh. 250° (i. V.) (B. 26 [2] 87).

C 62,9 - H 9,1 - O 28,0 - M. G. 286. $C_{15}H_{26}O_{5}$ 1) Dimethylester d. δ -Keto- $\beta\beta\zeta\zeta$ -Dimethylheptan- $\alpha\eta$ -Dicarbonsäure. Sd. 183—184°₂₅ (A. 304, 11).

2) Diäthylester d. δ-Keto-γ-Aethylheptan-γε-Dicarbonsäure (D. d. Tri- $C_{15}H_{26}O_5$ äthylacetondicarbonsäure). Sd. 223-224° (A. 261, 179). - II, 772. 3) Diäthylester d. β-Keto-γ-Propylhexan-γδ-Dicarbonsäure. Sd. 275

bis 280° (B. 29, 979).

4) Diäthylester d. β -Keto- γ -Isopropylhexan- γ δ -Dicarbonsäure. Sd. 270

5) Diäthylester d. β-Keto-γ-Isobutylpentan-γδ-Dicarbonsäure. Sd. 265
 bis 270° (B. 29, 981).

6) Diäthylester d. Phoronsäure. Sm. 125° (B. 14, 1079). + I, 772.

C 59,6 - H 8,6 - O 31,8 - M. G. 302. $C_{15}H_{26}O_{6}$

1) Triacetonmannit (Triisopropylidenäther d. Mannit). Sm. 68-70° (B. 28, 1168; C. **1898** [2] 1081).

2) Triacetonsorbit. Sm. 36-45°; Sd. 170-175°₂₅ (B. 28, 2533).

3) Aethylester d. Isocamphoronsäure. Sd. 195-200₃₆ (B. 29, 3020). 4) Triäthylester d. Hexan-αδδ-Tricarbonsäure. Sd. 205-2080 (B. 28

[2] 985; G. 26 [2] 284; Soc. 71, 1065). 5) Triäthylester d. Hexan- $\beta\gamma\gamma$ -Tricarbonsäure. Sd. 280 — 285° (B.

29, 976).

6) Triäthylester d. Hexan-γγδ-Tricarbonsäure. Sd. 280—282° (285,3°)
 (B. 21, 2089; 23, 650). — I, 813.

7) Triäthylester d. β-Methylpentan-βγγ-Tricarbonsäure. Sd. 282,3 bis 294.3° (B. 23, 651). — I, 813.

8) Triäthylester d. β-Methylpentan-γγδ-Tricarbonsäure. Sd. 285-290° (B. **29**, 976). 9) Triäthylester d. β -Methylpentan- $\gamma\gamma\varepsilon$ -Tricarbonsäure. Sd. 1970

(A. 292, 217; Soc. 69, 1507).

10) Triäthylester d. β -Methylpentan - $\gamma \delta \delta$ - Tricarbonsäure. 210% (Soc. 69, 274). Sd. 200 bis

11) Triäthylester d. β-Methylpentan-γεε-Tricarbonsäure. (C. 1896 [2] 703; Soc. 69, 1491). Sd. 209°₄₅

12) Triäthylester d. β -Methylpentan- $\delta \delta \varepsilon$ -Tricarbonsäure. Sd. 170 bis 180°₂₅ (Soc. **73**, 63).

13) Triäthylester d. β -Aethylbutan- $\alpha \alpha \beta$ -Tricarbonsäure. Sd. 289,3°

(B. **23**, 651). — **I**, 813.

14) Triäthylester d. Camphoronsäure. Sd. 301° (295-300°) (A. 226, 256;

B. 28, 2688; A. 282, 100). — I, 814. 15) Oktylester d. $\alpha\beta$ -Di[Acetoxyl]propionsäure. Sd. 185—186 $^{0}_{11,5}$ (Soc.

C15 H26 O7

 $C_{15}H_{26}N_2$

C₁₅H₂₇N₃

16) Tributyrat d. αβγ-Trioxypropan (Glycerintributyrin). Sd. 285° (A. ch. [3] **41**, 267; H. **6**, 150). — **1**, 424.

C 56,6 — H 8,2 — O 35,2 — M. G. 318.

1) α -Diterpoxylsäure. Ca + 6 H₂O, Ba + 6 H₂O, Ag₂ (A. 256, 115). — I, 844.

2) β -Diterpoxylsäure. Ca, Ba $+ \frac{31}{2}$ H₂O, Ag₂ (A. **256**, 119). — I, 844.

3) Tripropylester d. β -Oxypropan- $\alpha\beta\gamma$ -Tricarbonsäure (Tr. d. Citronensäure). Sd. 1980₁₃ (B. **18**, 1953). — **1**, 839. C 76,9 - H 11,1 - N 12,0 - M. G. 234.

1) Sparteïn. Sd. 311—311,5⁰723 (im H-Strom). (2HCl, HgCl₂), (2HCl, PtCl₄ + 2H₂O), (2HCl, AuCl₃), HJ, (2HJ, ZnJ₂), (HJ, J₂), H₂SO₄, Pikrat (A. 78, 20; 125, 71; 235, 368; G. 13, 451; 22 [1] 568; B. 20, 2219; 21, 828; 26, 3040; M. 16, 601). — II, 932.

 $\mathbf{C}_{15}\mathbf{H}_{26}\mathbf{Cl}_{2}$ 1) Cadinendihydrochlorid. Sm. 117-1180 (G. 5, 469; A. 238, 83, 85; **252**, 150). — III, 537.

C15 H26 Br2 1) Cadinendihydrobromid. Sm. 124-125° (A. 238, 85; 252, 151). -III, 537.

 $\mathbf{C}_{15}\mathbf{H}_{26}\mathbf{J}_{2}$ 1) Cadinendihydrojodid. Sm. 105-106° u. Zers. (A. 238, 86; 252, 151). III, 537. $C_{15}H_{27}N$

C 81,4 — H 12,2 — N 6,3 — M. G. 221. 1) Valeritrin. Sd. 250—260°. HCl, (2 HCl, PtCl₄), (HCl, HgCl₂), Pikrat $(J. \ r. \ 5, 99, 339; B. \ 5, 1101; 6, 565). - I, 951.$

C 72,3 - H 10,8 - N 16,9 - M. G. 249.1) 6-Amido-5-Isopropyl-2,4-Diisobutyl-1,3-Diazin (Kyanbutin). HCl, $(2 \text{HCl}, \text{PtCl}_4)$ (J. pr. [2] 37, 407). — IV, 1135.

C15H28O C 80,4 - H 12,5 - O 7,1 - M. G. 224. Aldehyd d. Cimicinsäure. Sm. 71—72° (G. 12, 557). — I, 962.
 C 75,0 — H 11,7 — O 13,3 — M. G. 240. $\mathbf{C}_{15}\mathbf{H}_{28}\mathbf{O}_{2}$ 1) Cimicinsäure. Sm. 4 G. 12, 557). — I, 524. Sm. 43,8-44,2°. Na, Ca, Ba, Mg, Pb (A. 114, 151; 2) Säure (aus Petroleum). Sm. 300—310° (B. 20, 598). — I, 524.
3) Amylester d. Campholsäure. Sd. 263—265° (Bl. [3] 11, 495).
4) Amylester d. Isocampholsäure. Sd. 167—168°₂₅ (Bl. [3] 13, 774).
5) Acetat d. 5-Oxy-3-Hexyl-1-Methylhexahydrobenzol. Sd. 154—156°₂₂ (A. 289, 152). 6) Valerianat d. d-Citronellol. Sd. 194—196°₈₁ (Bl. [3] 19, 638).
7) Verbindung (aus Isovaleraldehyd). Sd. 234—240° (B. 8, 373). — I, 950. C 70,3 — H 10,9 — O 18,7 — M. G. 256. $C_{15}H_{28}O_{3}$ 1) Aristolin. Sm. 265° (*B.* 29 [2] 38). — III, 780. C 66,2 — H 10,3 — O 23,5 — M. G. 272. C15 H28 O4 1) βz -Dimethylundekan- $\delta \vartheta$ -Dicarbonsäure (Diisobutylpimelinsäure). Sm. 82-84° (Soc. 59, 842). - I, 689. 2) Dimethylester d. Undekan-αλ-Dicarbonsäure (Dimethylester d. Brassvlsäure). Sm. 36°; Sd. 326—328° (J. pr. [2] 48, 73). Diäthylester d. Nonan-γη-Dicarbonsäure (D. d. Diäthylpimelinsäure).
 Sd. 209—211°₁₀₀ (Soc. 59, 838). — I, 688. 4) Diäthylester d. $\beta\zeta$ -Dimethylheptan- $\delta\delta$ -Dicarbonsäure. Sd. 245 bis 255° (Soc. 73, 61). 5) Diisobutylester d. β -Methylbutan- $\alpha \delta$ -Dicarbonsäure. Sd. 195—196 $_{31}$ Bl. [3] **13**, 824). 6) Monoisoamylester d. Oktan-α θ-Dicarbonsäure (M. d. Sebacinsäure). Fl. Zers. bei 325°. Na (J. 1876, 577). 7) Diacetat d. βθ-Dioxy-γη-Dimethylnonan. Sd. 217—219° 110 (Soc. **63**, 120). C 56,3 — H 8,7 — O 35,0 — M. G. 320. C15H28O7 Cardolsäure. Sm. 120°. Ag₂ (C. 1896 [1] 112).
 C 76,3 — H 11,8 — N 11,8 — M. G. 236.
 Hydrosparteïn. Sd. 281—284°. (2 HCl, PtCl₄), Pikrat (B. 20, 2218). — $\mathbf{C}_{15}\mathbf{H}_{28}\mathbf{N}_{2}$ III, 932. Benylenbromid (A. 147, 255). — I, 137.
 Tetrathiopenton. Sm. 171° (B. 22, 1044). — I, 994.
 C 80,7 — H 13,0 — N 6,3 — M. G. 223. $\substack{\mathbf{C}_{15}\mathbf{H}_{28}\mathbf{Br}_{2}\\\mathbf{C}_{15}\mathbf{H}_{28}\mathbf{S}_{4}}$ $\mathbf{C}_{15}^{\mathsf{T}}\mathbf{H}_{29}^{\mathsf{T}}\mathbf{N}$ 1) Hydrovaleritrin. Fl. HCl (J. r. 5, 340; B. 5, 1101). — I, 951. C 71,7 — H 11,6 — N 16,7 — M. G. 251. $C_{15}H_{29}N_3$ 1) Verbindung (aus Propionaldehydammoniak). Sm. 74° (M. 3, 694; 4, 712). · I, 941. C 79,6 — H 13,2 — O 7,1 — M. G. 226.

1) Alkohol (aus Wachs). Sm. 73° (B. 11, 2114). — I, 256. C₁₅H₃₀O 2) β-Ketopentadekan (Methyltridekylketon). Sm. 39°; Sd. 294° (B. 12, 1669; 15, 1708, 1724). — **1**, 1005. 3) 9-Ketopentadekan (Diheptylketon; Caprylon). Sm. 40°; Sd. 178° (A. 69, 201; Soc. **63**, 453). — **I**, 1005. 4) Keton (aus Isovaleriansäure). Sd. 163—168° (A. 202, 327). — I, 1005. C 74,4 — H 12,4 — O 13,2 — M. G. 242. C15H30O9 1) Laktarsäure. Sm. 69,5-70°. NH₄, Na, K, Ba, Pb (B. 12, 1636; Bl. [3] 2, 153). — I, 442. 2) Isocetinsäure. Sm. 55° (J. 1854, 463). — I, 442.
 3) Tetradekan-?-Carbonsäure. Sm. 51°; Sd. 257°₁₀₀. Ba, Ag (B. 12, 1671; M. 15, 14). — I, 442. 4) isom. Tetradekan-?-Carbonsäure. Sm. 59—60°. Ca, Ba (B. 20, 964). **I**, 442. 5) γ-Methyltridekan-ν-Carbonsäure. Sm. 48°; Sd. 206°₁₄. Ag (R. 13, 209).
 6) Methylester d. Myristinsäure. Sm. unter 10°; Sd. 295°₇₅₁ (B. 26, 2677).

7) Isoamylester d. Caprinsäure. Sd. 275—290° u. Zers. (A. 157, 269). -

8) norm. Heptylester d. norm. Caprylsäure. Sm. -6°; Sd. 289,8° (A.

9) norm. Oktylester d. norm. Heptylsäure. Sd. 290,4° (A. 233, 285).

I, 439.

— I, 435.

233, 288). — **I**, 437.

 $\mathbf{C}_{15}\mathbf{H}_{33}\mathbf{S}\mathbf{b}$ $C_{15}H_{34}O_{2}$

10) Lycostearon. Sm. 75—76° (A. 100, 302). — III, 637. C 69,8 — H 11,6 — O 18,6 — M. G. 258. $C_{15}H_{30}O_2$ C15H30O3 1) ?-Oxytetradekan-?-Carbonsäure. Sm. 84°. Ba (B. 29, 1814). 2) δ -Oxy- γ -Methyltridekan- ν -Carbonsäure. Sm. 50,5° (R. 13, 202). 3) Convolvulinolsäure (siehe auch $C_{13}H_{24}O_3$). Sm. 51,5° (C. 1897 [1] 419). 1) $\alpha\gamma$ -Di[1-Methylpiperidyl]methan. (2HCl, 2AuCl₃) (B. 21, 3102). $C_{15}H_{30}N_2$ IV, 493. C 61,2 - H 10,2 - N 28,6 - M. G. 294.C,5H,90 N6 1) Hexaäthylmelamin. Fl. (2HCl, PtCl₄), (2HCl, 2AuCl₃) (B. 18, 2778). **— I**, 1445. 1) Dibrompentadekan (Triamylenbromid) (A. 137, 249; 147, 254). — I, 124. C15H30Br2 1) Chlorpentadekan (Pentadekylchlorid) (J. 1863, 530). $\mathbf{C}_{15}\mathbf{H}_{31}\mathbf{Cl}$ 1) Brompentadekan (Pentadekylbromid. Sm. 14—15° (M. 15, 12). $\mathbf{C}_{15}\mathbf{H}_{31}\mathbf{Br}$ C 79,0 — H 14,0 — O 7,0 — M. G. 228. $C_{15}H_{32}O$ 1) α-Oxypentadekan (Pentadekylalkohol). Sm. 43-44° (45-46°) (M. 14, 85; 15, 11). 2) Diheptylcarbinol (Dicaprylcarbinol). Sm. 49,5-50° (Soc. 63, 455). 3) norm. Heptyläther d. α-Oxyoktan (norm. Heptyl-norm. Oktyläther). Sd. 278,8° (A. **243**, 10). — **I**, 300. C 73,8 — H 13,1 — O 13,1 — M. G. 244. 1) Diisoamyläther d. $\delta\delta$ -Dioxy- β -Methylbutan (Amylidendiisoamyläther). Sd. $240-255^{\circ}$ (137—141 $^{\circ}_{20}$) (J. 1864, 486; Bl. [3] 15, 973). — I, 952. C 65,1 — H 11,6 — O 23,2 — M. G. 276. $C_{15}H_{32}O_2$ $C_{15}H_{32}O_4$ 1) Triamylenglykol? (J. 1861, 661). C 79,3 — H 14,5 — N 6,2 — M. G. 227. $C_{15}H_{33}N$ 1) α-Amidopentadekan. Sm. 36,5°; Sd. 298-301°. HCl, (2HCl, PtCl₄) (B. 30, 901). 2) Triisoamylamin. Sd. 233—236° (257°; 205°). HCl, (2HCl, PtCl₄) (A. 79, 22; Z. 1867, 458; A. ch. [6] 13, 504). — I, 1135.
3) inact. Triisoamylamin. Sd. 237°. HCl (Soc. 39, 332). — I, 1135.
4) act. Triisoamylamin. Sd. 230—237°. HCl (Soc. 39, 332; C. r. 92, 882). C 70.6 - H 12.9 - N 16.4 - M. G. 255.C15H38N3 C 70,0 — H 12,9 — N 10,4 — M. 9. 255.

1) Isoamylidenamin. +AgNO₃ (J. 1878, 438).

1) Triisoamylphosphin. Sd. 300° (B. 6, 298). — I, 1505.

1) Aluminiumtriisoamyl. Sd. 250°_{80—100} (Bl. 50, 515). — I, 1527.

1) Wismuthtriisoamyl. Sd. 190—200°₇₀ (in CO₂) (B. 21, 2041). — I, 1517.

1) Antimontriisoamyl. Fl. (A. 97, 316; J. 1855, 590). — I, 1516.

C 73,2 — H 13,8 — O 13,0 — M. G. 246. $\mathbf{C}_{15}\mathbf{H}_{33}\mathbf{P}$ $C_{15}H_{33}A1$ $C_{15}H_{33}Bi$

C₁₅-Gruppe mit drei Elementen.

1) Verbindung (aus Cardol). Sm. 59° (C. 1896 [1] 112).

 $C_{15}H_6O_2Cl_4$ 1) Lakton d. $1-[\alpha-Oxy-\beta-Phenyläthenyl]$ benzol-2-Carbonsäure. Sm. oberh. 360° (B. 20, 2871). — II, 1711. $C_{15}H_{6}O_{2}Br_{4}$ 1) Methyläther d. Tetrabrommorphenol. Sm. 290° (B. 29, 68; 30, 2439). **– III**, 443. 1) Tetrabromchrysophansäure (J. 1874, 899). — III, 452. $\mathbf{C}_{15}\mathbf{H}_{8}\mathbf{O}_{4}\mathbf{Br}_{4}$ Tetrabrommorin + 2¹/₂ H₂O. Sm. 258° (M. 5, 667; 18, 707; Soc. 69, 794; J. 1864, 557). — III, 683.
 Verbindung (aus Eichenroth) (A. 240, 345). — III, 589.
 Tetrabrommyricetin. Sm. 235—240° u. Zers. (Soc. 69, 1293). — III, 606. Sm. 258° (M. 5, 667; 18, 707; Soc. 69, $\mathbf{C}_{15}\mathbf{H}_{6}\mathbf{O}_{7}\mathbf{Br}_{4}$ $\mathbf{C}_{15}\mathbf{H}_{6}\mathbf{O}_{8}\mathbf{Br}_{4}$ C 41,5 - H 1,4 - O 44,2 - N 12,9 - M. G. 434. $\mathbf{C}_{15}\mathbf{H}_{6}\mathbf{O}_{12}\mathbf{N}_{4}$ 1) Tetranitrochrysophansäure. $K_s + xH_2O$, $Mg + xH_2O$, $Ca + xH_2O$ (A. 183, 175; 212, 40). — III, 452. C 40,0 — H 1,3 — O 46,2 — N 12,4 — M. G. 450. 1) Verbindung (aus Vitexin). +Nitrobenzol (Soc. 73, 1025). C 69,0 — H 2,7 — O 12,2 — N 16,1 — M. G. 261. $C_{15}H_6O_{13}N_4$ $C_{15}H_7O_2N_3$ 1) 7,8-Diketo-7,8-Dihydrochinolin-5,6-Phenazin + H_2O . Zers. oberh. 270° (A. 290, 381). — IV, 558. C 72,3 — H 2,8 — O 19,3 — N 5,6 — M. G. 249. C15 H7 O3 N 1) Imid der Pyrensäure (A. 240, 175). — II, 1980.

- 1) Chlorid d. 9,10-Anthrachinon-2-Carbonsäure (β-Säure). Sm. 147° $C_{15}H_7O_3C1$ (B. 17, 889). — II, 1904. C 60,6 — H 2,4 — O 32,3 — N 4,7 — M. G. 297.
- $\mathbf{C}_{15}\mathbf{H}_7\mathbf{O}_6\mathbf{N}$ 1) ?-Nitro-9,10-Anthrachinon-2-Carbonsäure (β-Säure). Sm. oberh. 300°
- (B. 17, 891). II, 1904. C 55,4 H 2,1 O 29,5 N 12,9 M. G. 325. $\mathbf{C}_{15}\mathbf{H}_7\mathbf{O}_6\mathbf{N}_3$
- 1) Trinitroidryl (A. 193, 148). II, 279. C 51,0 H 2,0 O 27,2 N 19,8 M. G. 353. $\mathbf{C}_{15}\mathbf{H}_7\mathbf{O}_6\mathbf{N}_5$
- 1) Verbindung (aus 1,2,3,4,5-Pentaamido-R-Penten). Zers. bei 100° (B. 22,
- 922). IV, 1315. C 54,7 H 2,1 O 38,9 N 4,3 $\mathbf{C}_{15}\mathbf{H}_7\mathbf{O}_8\mathbf{N}$ - M. G. 329.
 - 1) ?-Nitro-1,2-Dioxy-9,10-Diketo-9,10-Dihydroanthracen-?-Carbonsäure (Nitroalizarin-β-Carbonsäure). Sm. 288° (Soc. 65, 848). — II, 2027. 1) 7,8-Dichlorchinolin-5,6-Phenazin. Sm. 239—240° (A. 290, 379). —
- $C_{15}H_7N_3Cl_2$ IV, 557. C 77,6 — H 3,4 — O 6,9 — N 12,1 — M. G. 232.
- $\mathbf{C}_{15}\mathbf{H}_{8}\mathbf{ON}_{2}$
 - 1) Nitril d. Diphenylketon-4,4'-Dicarbonsäure. Sm. 204,5° (B. 20, 521). — III, 180.
- 1) Lakton d. ?-Dichlor-1-[α -Oxy- β -Phenyläthenyl]benzol-2-Carbon- $\mathbf{C}_{15}\mathbf{H}_{8}\mathbf{O}_{2}\mathbf{Cl}_{2}$
- säure (Benzaldichlorphtalid). Sm. 210° (B. 20, 2872). II, 1710. 1) P-Dibrom-2-Methyl-9,10-Anthrachinon (B. 11, 1606). III, 450. $\mathbf{C}_{15}\mathbf{H}_{8}\mathbf{O}_{2}\mathbf{Br}_{2}$ 1) Chlorid d. Diphenylketon-2,4'-Dicarbonsäure. Sm. 110° (B. 28,
- $\mathbf{C}_{15}\mathbf{H}_{8}\mathbf{O}_{3}\mathbf{Cl}_{2}$ 1135). — II, 1976.
- 1) $\alpha [3, 4, 5, 6 \text{Tetrachlorphenyl}] \beta \text{Phenyl} \alpha \text{Ketoäthan} \alpha, 2 \text{Carbon}$ $C_{15}H_8O_8Cl_4$ säure + xH₂O (Tetrachlordesoxybenzoïncarbonsäure). Sm. 175° (wasserfrei). Ba (B. 20, 2871). — II, 1711.
 - 2) Methylester d. 3,4,5,6-Tetrachlor-2-Benzoylbenzol-1-Carbonsäure. Sm. 92° (A. 238, 341). — II, 1704.
- 1) 7,8-Dioxy-2-[?-Dichlorphenyl]-1,4-Benzpyron. Sm. 210° u. Zers. $C_{15}H_8O_4Cl_2$ (B. 29, 2434).
- 1) Monobenzylester d. 3,4,5,6-Tetrachlorbenzol-1,2-Dicarbonsäure. $\mathbf{C}_{15}\mathbf{H}_{8}\mathbf{O}_{4}\mathbf{Cl}_{4}$ Sm. 130—131° (B. 30, 785).
- 1) Dibromchrysin (B. 6, 886). III, 628. $\mathbf{C}_{15}\mathbf{H}_8\mathbf{O}_4\mathbf{Br}_2$
- $\mathbf{C}_{15}\mathbf{H}_{8}\mathbf{O}_{4}\mathbf{J}_{2}$ 1) Dijodchrysin (B. 6, 887). — III, 628. 1) Dibromapigenin. Sm. oberh. 290° (Soc. 71, 808).
- $\mathbf{C}_{15}\mathbf{H}_{8}\mathbf{O}_{5}\mathbf{Br}_{2}$ 2) Dibromemodin. Sm. 246-248° (B. 21 [2] 842). — III, 454.
- 3) Dibromgalangin (B. 14, 2809). III, 632. C 57,7 H 2,5 O 30,8 N 9,0 M. G. 312. 1) P-Dinitro-1,3-Diketo-2-Phenyl-2,3-Dihydroinden. Sm. 128—131°
- $\mathbf{C}_{15}\mathbf{H}_{8}\mathbf{O}_{6}\mathbf{N}_{2}$
- (B. **26**, 2581). III, 302. C 52,9 H 2,3 O 28,2 N 16,5 M. G. 340. $\mathbf{C}_{15}\mathbf{H}_8\mathbf{O}_6\mathbf{N}_4$
 - Dinitroanthrachinonmonoureïn (G. 27 [1] 244).
 Dinitrophenanthrenchinonmonoureïn (G. 27 [1] 231).
- 1) Dibromluteolin. Sm. 303° (Soc. 69, 209). III, 585. C 50,6 H 2,2 O 31,5 N 15,7 M. G. 356. $\mathbf{C}_{15}\mathbf{H}_8\mathbf{O}_6\mathbf{Br}_2$
- $\mathbf{C}_{15}\mathbf{H}_8\mathbf{O}_7\mathbf{N}_4$ 1) 2,4,5-Triketo-1,3-Di[?-Nitrophenyl]tetrahydroimidazol (Oxalyldini-
- trodiphenylharnstoff) (J. pr. [2] 32, 11). II, 411. 1) Dibromquercetin. Sm. 233—235° (M. 6, 866; 15, 685; B. 17, 1683). $\mathbf{C}_{15}\mathbf{H}_{8}\mathbf{O}_{7}\mathbf{Br}_{9}$ III, 605.
- 1) 9.10 Anthrachinon-2-Carbonsäure-?-Sulfonsäure. Na., Ba, Anilin-C15H8O7S salz (Soc. 65, 844). — II, 1904. C 52,3 — H 2,3 — O 37,2 — N 8,1 — M. G. 344.
- $\mathbf{C}_{15}\mathbf{H}_8\mathbf{O}_8\mathbf{N}_2$ 1) Dinitrochrysin. Sm. 272° . $K_2 + 2H_2O$, Ca (B. 27, 22, 1045). —
 - III, 628. 2) α , 2-Lakton d. α -Oxy- $\alpha\alpha$ -Di[?-Nitrophenyl] methan-2, 2'-Dicarbonsäure (L. d. Dinitrobenzhydroldicarbonsäure). Sm. 270-280° (A. 242,
- 242). II, 1973. C 44,5 H 2,0 O 39,6 N 13,8 M. G. 404. $C_{15}H_8O_{10}N_4$
 - Tetranitropyrokresoloxyd (3-Modif.) (B. 16, 2142). III, 646.
 C 82,2 H 4,1 O 7,3 N 6,4 M. G. 219.
- $\mathbf{C}_{15}\mathbf{H}_{9}\mathbf{ON}$ 1) Verbindung (aus d. Phenanthrenchinondihydrocyanid). Sm. 241° (Soc. **51**, 33). — III, 444.
- 1) Chlorid d. Anthracen-2-Carbonsäure (γ-Säure) (B. 16, 2611). $C_{15}H_9OCl$ II, 1478.

 $C_{76.6} - H_{3.8} - O_{13.6} - N_{6.0} - M_{6.235}$ $C_{15}H_9O_2N$ Acetylcarbazoakridon. Sm. 152° (G. 23 [1] 4). —
 C 68,4 — H 3,4 — O 12,2 — N 16,0 — M. G. 263. $C_{15}H_9O_2N_3$ 1) Nitrochinindolin. Sm. noch nicht bei 290° (B. 30, 3021). — IV, 1037. 1) 2-Chlor-1, 3-Diketo-2-Phenyl-2, 3-Dihydroinden. Sm. 114-116° (B. $\mathbf{C}_{15}\mathbf{H}_{9}\mathbf{O}_{2}\mathbf{C}\mathbf{1}$ **26**, 2580). — III, 302. 2) 10-Chloranthracen-9-Carbonsäure. Sm. 258-259° u. Zers. K, Ba, Ag (B. 20, 704). — II, 1477. 1) 2-Brom-1, 3-Diketo-2-Phenyl-2, 3-Dihydroinden. Sm. 105° (B. 26, $C_{15}H_9O_2Br$ 2579). **— III**, *302*. 2) 4-Brom-1-Benzoylbenzfuran (Brom-α-Cumarylphenylketon). Sm. 136 bis 138° (B. 29, 248). — III, 248. 3) 6-Brom-2-Phenyl-1, 4-Benzpyron. Sm. 189-190° (B. 31, 2952) 4) Methyläther d. Brommorphenol (Brommorphol). Sm. 1230 (B. 15, 1485, 2179; **30**, 2440). — **III**, 443. 5) 10-Bromanthracen-9-Carbonsäure. Sm. bei 266° u. Zers. K, Ba, Ag (B. 20, 704). — II, 1478.
6) Lakton d. 1-[β-Brom-α-Oxy-β-Phenyläthenyl] benzol-2-Carbonsäure (Brombenzylidenphtalid). Sm. bei 160° (B. 18, 2444). — II, 1708. C 71,7 — H 3,6 — O 19,1 — N 5,6 — M. G. 251. $C_{15}H_9O_3N$ 1) 1-Benzoyl-2, 3-Diketo-2, 3-Dihydroindol (Benzoylpseudoisatin). Sm. 206° u. Zers. (B. 24, 774). — II, 1604. 2) Amid d. 9,10-Anthrachinon-1-Carbonsäure. Sm. bei 280° (B. 30, 1116). 3) Amid d. 9,10-Anthrachinon-2-Carbonsäure (β -Säure). Sm. 2 $\acute{8}0^{\circ}$ (\acute{B} . 17, 890). — II, 1904. 4) Verbindung (aus Diphenylketomethan-2,2'-Dicarbonsäure). Sm. 251 bis 252° (A. 242, 248). — Π, 1976. C 64,5 — H 3,2 — O 17,2 — N 15,0° — M. G. 279. 1) Verbindung (aus d. Nitril d. αβ-Di[2-Nitrophenyl]propionsäure). Sm. 235—236° (B. 19, 2640). — Π, 1318. C15HOO3N3 1) 4-Brom-3-Oxy-2-Methyl-9,10-Anthrachinon. Sm. 205° (A. 202, $\mathbf{C}_{15}\mathbf{H}_{9}\mathbf{O}_{3}\mathbf{Br}$ 165). — III, 451. C 67.4 - H 3.4 - O 24.0 - N 5.2 - M. G. 267. $\mathbf{C}_{15}\mathbf{H}_{9}\mathbf{O}_{4}\mathbf{N}$ 1) ?-Nitro-2-Methyl-9,10-Anthrachinon. Sm. 269—270° (B. 16, 696). — III, 450. 2) 3-[3-Nitrophenyl]-1, 2-Isobenzpyron (3-m-Nitrophenylisocumarin). Sm. 232—233° (B. **29**, 2544). 3) 2-[1,2-Phtalyl]amidobenzol-1-Carbonsäure. Sm. 217° (241—242° u. Zers.). Ag (B. 11, 2261; 29, 2679). — II, 1813. 4) 3-[1,2-Phtalyl]amidobenzol-1-Carbonsaure. Sm. 282-284° (275,5 bis 276°). Ag (B. 11, 2262; 16, 1320; A. 218, 194). — II, 1813. 5) α-Naphtochinolin-2,4-Dicarbonsäure. Sm. 278° u. Zers. Cu + 2H₂O, Ag, (B. 23, 1234). - IV, 423. 6) β -Naphtochinolin-1,3-Dicarbonsäure. Sm. 288°. Ba + H₂0, Ag₂ (B. **23**, 1240). — IV, 424. 7) Lakton d. 1- $[\beta$ -Nitro- α -Oxyäthenyl]benzol-2-Carbonsäure. Sm. 195° u. Zers. (B. 18, 1256, 3471; 20, 2867). — II, 1708. 8) α , 2-Lakton d. α -Oximido- $\alpha\alpha$ -Diphenylmethan-2, 2'-Dicarbonsäure. Sm. 213—214°. Ca (A. 242, 250). — II, 1976. C 61,0 — H 3,0 — O 21,7 — N 14,2 — M. G. 295. 1) P-Dinitro-6-Phenylchinolin. Sm. 208° (A. 230, 30). — IV, 430. $\mathbf{C}_{15}\mathbf{H}_{9}\mathbf{O}_{4}\mathbf{N}_{8}$ 2) Nitril d. α -[2-Nitrophenyl]- β -[4-Nitrophenyl]akrylsäure. Sm. 184 bis 185° (B. 23, 3134). — II, 1475. 3) Nitril d. α -[3-Nitrophenyl]- β -[4-Nitrophenyl]akrylsäure. Sm. 1950 (B. **23**, 3135). — II, 1475. 1) 4-Bromphenylester d. 3,5-Dibrom-2-Acetoxylbenzol-1-Carbonsäure. $C_{15}H_9O_4Br_9$ Sm. 108—109° (C. **1898** [1] 1251). C 63,6 — H 3,2 — O 28,3 — N 4,9 — M. G. 283. $\mathbf{C}_{15}\mathbf{H}_{9}\mathbf{O}_{5}\mathbf{N}$ 1) 3-Formylamido-1,2-Dioxy-9,10-Anthrachinon (Bl. [3] 9, 132). — III, 424. 2) 9-Oximidofluoren-1,4-Dicarbonsäure (A. 229, 155). — II, 1980. C 53,1 - H 2,7 - O 23,6 - N 20,6 - M. G. 339. $\mathbf{C}_{15}\mathbf{H}_{9}\mathbf{O}_{5}\mathbf{N}_{5}$

1) 6-Oxy-2,4-Di[3-Nitrophenyl]-1,3,5-Triazin. Sm. 238—240° (B. 28,

483). — IV, 1190.

1) Bromemodin. Sm. 274—275° (B. 21 [2] 842). — III, 455. C 60,2 — H 3,0 — O 32,1 — N 4,7 — M. G. 299. $\mathbf{C}_{15}\mathbf{H}_{9}\mathbf{O}_{5}\mathbf{Br}$ $\mathbf{C}_{15}\mathbf{H}_{9}\mathbf{O}_{6}\mathbf{N}$

1) 7,8-Dioxy-2-[3-Nitrophenyl]-1,4-Benzpyron. Sm. 219—221° (B. 29, 2434).

 $\mathbf{C}_{15}\mathbf{H}_{9}\mathbf{O}_{7}\mathbf{Br}_{3}$ $C_{15}H_9O_8N$

 Säure (aus Anhydrodipyrogallussäure) (B. 16, 2411).
 C 54,4 — H 2,7 — O 38,7 — N 4,2 — M. G. 331.
 4-Phenylpyridin-2,3,5,6-Tetracarbonsäure + 3 H₂O. Sm. 205-207° (wasserfrei). $K_3 + H_2O$, $(NH_4)_2Ba_3 + 6H_2O$, $Cu_2 + 7H_2O$ (B. 17, 1515). — IV, 387.

1) ?-Pentabrom- $\alpha\alpha$ -Di[2,3,4(?)-Trioxyphenyl] propionsäure (B. 16, $\mathbf{C}_{15}\mathbf{H}_{9}\mathbf{O}_{8}\mathbf{Br}_{5}$ 2409). — II, 2078.

C 48,0 - H 2,4 - O 38,4 - N 11,2 - M. G. 375. $C_{15}H_9O_9N_3$

1) ?-Trinitro-2-[4-Methylbenzoyl]benzol-1-Carbonsäure. Ba + 3 H₀O (A. **299**, 314).

 \dot{C} 46,0 - H 2,3 - O 40,9 - N 10,7 - M. G. 391. $\mathbf{C}_{15}\mathbf{H}_{9}\mathbf{O}_{10}\mathbf{N}_{3}$

1) 4-Nitrophenylester d. 3,5-Dinitro-2-Acetoxybenzol-1-Carbonsäure. Sm. 156° (J. pr. [2] **43**, 388). — II, 1511.

C₁₅H₉NCl₂ 1) 1,4-Dichlor-3-Phenylisochinolin. Sm. 162—163° (B. 18, 2450, 3473). → IV, 431. C 76,9 — H 4,3 — O 6,8 — N 12,0 — M. G. 234.

 $\mathbf{C}_{15}\mathbf{H}_{10}\mathbf{ON}_{2}$

1) 1,22-Anhydrid d. 5 oder 6-Methyl-2-Phenylbenzimidazol-22-Carbonsäure (Toluylenphtalamidon). Sm. 188°. + C₂H₈O (B. 25, 1985). -

 $\mathbf{C}_{15}\mathbf{H}_{10}\mathbf{ON}_{4}$

C 68,7 — H 3,8 — O 6,1 — N 21,4 — M. G. 262. 1) Nitril d. 3-[4-Oxyphenyl]-1-Phenyl-1,2,4-Triazol-5-Carbonsäure (C. 1897 [2] 568).

 $C_{15}H_{10}OBr_4$ 1) $\alpha\alpha\gamma\gamma$ -Tetrabrom- β -Keto- $\alpha\gamma$ -Diphenylpropan. Sm. 84—85° (B. 22, 1369). — III, 229.

1) β -Thiocarbonyl- α -Keto- $\alpha\beta$ -Diphenyläthan (Desaurin; Thiocarbonyl-C₁₅H₁₀OS desoxybenzoin). Sm. 285—286° (B. 21, 350; 24, 3536; 25, 1728). III, *Ž21*.

C 72.0 - H 4.0 - O 12.8 - N 11.2 - M. G. 250. $\mathbf{C}_{15}\mathbf{H}_{10}\mathbf{O}_{2}\mathbf{N}_{2}$

1) 2-Phenylhydrazon-1,3-Diketo-2,3-Dihydroinden. Sm. 190°. Na (A. **277**, 363). — IV, 788.

2) Anthrachinonmonourein. Sm. oberh. 320° u. Zers. (G. 27 [1] 242). 3) Phenanthrenchinonmonoureïn. Sm. 2990 (B. 27 [2] 270; G. 27

4) 2-[3-Nitrophenyl]chinolin. Sm. 124°. (2HCl, PtCl₄) (B. 18, 1902). — IV, 425.

5) ?-[4-Nitrophenyl]chinolin. Sm. 158—160° (B. 29, 168). — IV, 429.
6) ?-Nitro-4-Phenylchinolin. Sm. 187° (B. 20, 625). — IV, 429.
7) ?-Nitro-4-Phenylchinolin. Sm. 135°. Sulfat (B. 20, 626). — IV, 429.

8) ?-Nitro-4-Phenylchinolin. Sm. 117-118°. Nitrat, Sulfat (B. 20, 626). **- IV**, 429.

9) P-Nitro-6-Phenylchinolin. Sm. 173°. (2 HCl, PtCl₄) (A. 230, 28). — IV, 430.

10) ?-Phenylamido-5,8-Diketo-5,8-Dihydrochinolin. Sm. oberh. 190° (B. 17, 1644). — IV, 291.

11) 7-[2-Pyridyl]chinolin-75-Carbonsäure. Sm. 271—2730 u. Zers. Ag

(B. 19, 2474). — IV, 1035. 12) 4-Phenyl-1, 3-Benzdiazin-2-Carbonsäure. Zers. bei 102° (B. 25, 3092).

— IV, 1035. 13) Nitril d. α -Phenyl- β -[2-Nitrophenyl]akrylsäure. Sm. 127—128° (A. **250**, 160). — II, 1474.

14) Nitril d. α-Phenyl-β-[3-Nitrophenyl]akrylsäure. Sm. 133—134° (A. **250**, 160). — II, 1474.

15) Nitril d. α-Phenyl-β-[4-Nitrophenyl] akrylsäure. Sm. 117—118° (A. **250**, 161). — II, 1475.

16) Nitril d. α -[4-Nitrophenyl]- β -Phenylakrylsäure. Sm. 175—176° (B. 23, 3184). — II, 1475.

17) Benzylidenamidoisoimid d. Benzol-1,2-Dicarbonsäure. Sm. noch nicht bei 250° (B. 27, 691). — III, 41. 18) Verbindung (aus d. Verb. $C_{15}H_9O_3N$). Sm. 284—286° (A. 242, 249).

— II, 1976.

C 64.7 - H 3.6 - O 11.5 - N 20.1 - M. G. 278. $C_{15}H_{10}O_2N_4$ 1) Methylnaphtalloxazin (B. 24, 3031). — IV, 919.

 $C_{16}H_{10}O_2Br_2$ 1) $\beta\beta$ -Dibrom- $\alpha\gamma$ -Diketo- $\alpha\gamma$ -Diphenylpropan. Sm. 95° (B. 23, 3378). - III, 297.

2) Lakton d. 1- $[\alpha \beta$ -Dibrom- α -Oxy- β -Phenyläthyl]benzol-2-Carbonsäure (B. 17, 2527; 18, 2444). - 11, 1708.

 $C_{15}H_{10}O_{2}Br_{4}$ 1) $\beta\gamma$ -Dibrom- α -Keto- γ -[P-Dibrom-2-Oxyphenyl]- α -Phenylpropan. Sm. $167-168^{\circ}$ (B. 29, 379). — III, 229.

C 67,7 - H 3,8 - O 18,0 - N 10,5 - M. G. 266. $\mathbf{C}_{15}\mathbf{H}_{10}\mathbf{O}_{3}\mathbf{N}_{2}$

1) P-Nitro-2,5-Diphenyloxazol. Sm. 185° u. Zers. (B. 29, 2106). — IV, 433.
2) 2,4,5-Triketo-1,3-Diphenyltetrahydroimidazol (Oxalyldiphenylharn-

stoff; Diphenylparabansäure). Sm. 204° (J. 1861, 529; B. 2, 688; 3, 764; **20**, 785; **31**, 138; *J. pr.* [2] **32**, 9; [2] **41**, 81). — II, 411. 3) 3-Keto-2-[4-Nitrobenzyliden]-2, 3-Dihydroindol (4-Nitrobenzaldehyd-

indogenid). Sm. 273° (B. 16, 2199). — II, 1615.

4) 3-Keto-1-[a-Nitrobenzyliden]-1,3-Dihydroisoindol (Nitrobenzalphtalamidin). Sm. 199° (B. 18, 2439; 29, 2743). — II, 1709. 5) ?-Nitro-2-[4-Oxyphenyl]chinolin. Sm. 151° (M. 8, 138). — IV, 426.

6) 2-Keto-3-[4-Nitrophenyl]-1,2-Dihydrochinolin. Sm. 326° (cor.) (B.

31, 1293).

7) 4-Nitro-1-Oxy-3-Phenylisochinolin. Sm. 245° u. Zers. (B. 19, 831). · II, 1711.

8) 1-Keto-3-[3-Nitrophenyl]-1,2-Dihydroisochinolin (3-m-Nitrophenylisocarbostyril). Sm. 298—300° (B. **29**, 2545). — **IV**, 432. 9) Isatamidobenzol - 3 - Carbonsäure (3 - Imido-2-Keto - 2, 3 - Dihydroindol-3-

Phenyl-3³-Carbonsäure). Sm. 251—253⁰ (A. 210, 121). — II, 1605. 10) 3,5-Diphenyl-1,2,4-Oxdiazol-3³-Carbonsäure. Sm. 218⁰ (B. 19, 1497).

II. 1229.

11) 3,5-Diphenyl-1,2,4-Oxdiazol-52-Carbonsäure. Sm. 1516. Ca, Ba+ 4H₂O, PbOH, Cu, Ag (B. 18, 2463). — II, 1815.

12) 6-Oxy-2-[2-Naphtyl]-1,3-Diazin-4-Carbonsäure. Sm. 167-168° u. Zers. (B. 25, 1423). — IV, 1036.

13) 4-Keto-3-Phenyl-3, 4-Dihydro-1, 3-Benzdiazin-34-Carbonsäure. Sm. oberh. 320° (B. 22, 2697). — IV, 875.

14) 1 - Keto - 2 - Phenyl - 1,2 - Dihydro - 2, 3 - Benzdiazin - 4 - Carbonsäure (Phenylphtalazoncarbonsäure). Sm. 221—222° (214—215°) (B. **21**, 1610; 26, 1124; 31, 1165). — IV, 717.

15) Amid d. 3-[1,2-Phtalyl]amidobenzol-1-Carbonsäure. Sm. 240—241°

(A. **218**, 194). — II, 1813.

16) Carbanilidoisatin. Sm. 180—185° u. Zers. (J. pr. [2] 32, 283). — II, 1604.

C₁₅H₁₀O₃Cl₂ 1) ?-Dichlor-2-[4-Methylbenzoyl]benzol-1-Carbonsäure. Sm. 156° (A. **238**, 357). — II, 1712.

2) α -Keto- α -[?-Dichlorphenyl]- β -Phenyläthan- α , 2-Carbonsäure $+ xH_2O$ (α-Dichlor-o-Desoxybenzoïncarbonsäure). Sm. 117° (wasserfrei) (B. 20, 2872). — II, 1710.

 $C_{15}H_{10}O_3Br_2$ 1) 2-Keto-1, 3-Di[Bromfural]-R-Pentamethylen (Dibrompyroxanthin). Sm. 180° u. Zers. (B. 11, 458; 29, 1839). — III, 736.

2) α, 6 - Lakton d. ? - Dibrom - 4, 6 - Dioxy - 2- Methyldiphenylessigsäure. Sm. 205° (B. 31, 2830).

 $C_{1s}H_{10}O_{2}Br_{s}$ 1) 1, 3 - Dibrom - 2 - Keto - 1, 3 - Di[Bromfuranylbrommethyl] - R - Pentamethylen (Dibrompyroxanthintetrabromid). Sm. 150° u. Zers. (B. 11, 457; **29**, 1839; J. **1880**, 703; Am. **3**, 332). — III, 736.

C 63,8 - H 3,5 - O 22,7 - N 9,9 - M. G. 282. $C_{15}H_{10}O_4N_2$

1) 2-Nitrobenzylimid d. Benzol-1, 2-Dicarbonsäure. Sm. 217,5-219° (B. 20, 2227; 25, 3031; J. pr. [2] 47, 398). — II, 1805.

2) 3-Nitrobenzylimid d. Benzol-1, 2-Dicarbonsäure. Sm. 155° (B. 20, 2869). — II, 1805.

3) 4-Nitrobenzylimid d. Benzol-1, 2-Dicarbonsäure. Sm. 174—175° (B. **22**, 2142). — **II**, 1805.

 $C_{15}H_{10}O_4Br_2$ 1) Monäthyläther d. ?-Dibrom-1,7-Dioxyxanthon. Sm. 205—2070 (M. **16**, 319). — **III**, 206.

- C 60.4 H 3.4 O 26.8 N 9.4 M. G. 298. $C_{15}H_{10}O_5N_2$
 - 1) Methyläther d. ?-Nitro-9-Nitroso-10-Keto-2-Oxy-9,10-Dihydroanthracen (B. 15, 1430). — II, 901. C 50,8 — H 2,8 — O 22,6 — N 23,7 — M. G. 354.
- $\mathbf{C}_{15}\mathbf{H}_{10}\mathbf{O}_{5}\mathbf{N}_{6}$
 - 1) Verbindung (aus d. Verb. $C_{15}H_{12}N_4$). Sm. $234-235^{\circ}$ u. Zers. (A. 252, 348). IV, 766.
- $C_{15}H_{10}O_5Br_4$ 1) Tetrabromphloretin. Sm. 205-210° u. Zers. (A. 119, 104). III, 230.
- $\mathbf{C}_{15}\mathbf{H}_{10}\mathbf{O}_{5}\mathbf{S}$ 1) Anthracen-9-Carbonsäure-?-Sulfonsäure. Ba (B. 20, 706). — II, 1478. 2) 3-Phenyl-1,2-Benzpyron-?-Sulfonsäure $+2^{1}/_{2}H_{2}O$ (Phenylcumarinsulfonsäure). Sm. $262-263^{\circ}$ u. Zers. Ba, Pb + $4H_2O$ (G. 14, 257). -II, 1707.
 - 3) Methylester d. 9,10-Anthrachinon-2-Sulfonsäure. Sm. 123° (B. 28, 2261). **— III**, 415.
- C 57,3 H 3,2 O 30,6 N 8,9 M. G. 314. $C_{15}H_{10}O_6N_2$
 - 1) α-Dinitropyrokresoloxyd. Sm. bei 235° u. ger. Zers. (Soc. 55, 53). III, 646.
 - 2) Lakton d. 1- $[\alpha \beta$ -Dinitro- α -Oxy- β -Phenyläthyl]benzol-2-Carbonsäure. Sm. 110—113° (B. 18, 1251, 3471). — II, 1708.
 - 3) Verbindung (Base aus Harn) (B. 25 [2] 755).
- C 52,6 H 2,9 O 28,1 N 16,4 M. G. 342. $C_{15}H_{10}O_6N_4$
 - 1) Methylester d. 6,? Dinitro-1-Phenylisoindazol-3-Carbonsäure. Sm. 281° (B. 23, 716). IV, 1465.
- C₁₅H₁₀O₆Br₂ 1) 3,5-Dibrom-1,2-Di[Acetoxyl]naphtalin-7-Carbonsäure. Sm. 239° (A. **293**, 136).
- $\mathbf{C}_{15}\mathbf{H}_{10}\mathbf{O}_{6}\mathbf{S}_{2}$ 1) Idryldisulfonsäure. $K_2 + H_2O$, $Ca + 4H_2O$, $Ba + 2^{1/2}H_2O$, $Cd + 2^{1/2}H_2O$ (M. 1, 227). — II, 279.
- C 54,5 H 3,9 O 33,9 N 8,5 M. G. 330. $C_{15}H_{10}O_7N_2$
- 1) 2-[2-Pyridoyl]amidobenzol-1, 2⁵, 2⁶-Tricarbonsäure (Pyridanthrilsäure). Sm. 265-266° u. Zers. (M. 7, 289). — IV, 997. C 52,0 — H 2,9 — O 37,0 — N 8,0 — M. G. 346. 1) Phenylester d. 3,5-Dinitro-2-Acetoxylbenzol-1-Carbonsäure. Sm.
- $\mathbf{C}_{15}\mathbf{H}_{10}\mathbf{O}_{8}\mathbf{N}_{2}$
 - 118° (J. pr. [2] 43, 384). II, 1511.
- 1) Anthracen-9-Carbonsäure-9-Disulfonsäure. Ba₃ (B. 20, 707). $C_{15}H_{10}O_8S_2$ II, 1478.
 - 2) 2-Methyl-9,10-Anthrachinon-?-Disulfonsäure. Ca, Ba (B. 8, 676). - III, 450.
 - 3) 3-Phenyl-1, 2-Benzpyron -?-Disulfonsäure + 6 H₂O (Phenylcumarindisulfonsäure). Sm. $88-89^{\circ}$. Ba $+4H_2O$, Pb $+5H_2O$ (G. 14, 260). -II, 1707.
- 1) Fisetinsulfonsäure. Sm. noch nicht bei 300° (M. 17, 425). III, 584. $\mathbf{C}_{15}\mathbf{H}_{10}\mathbf{O}_{9}\mathbf{S}$
- 1) Morinsulfonsäure + $2 H_2 O$. $K_2 + \frac{1}{2} H_2 O$, Ba (M. 5, 670). III, 684. C 35.3 H 2.0 O 40.8 N 21.9 M. G. 510. $\mathbf{C}_{15}\mathbf{H}_{10}\mathbf{O}_{10}\mathbf{S}$
- $\mathbf{C}_{15}\mathbf{H}_{10}\mathbf{O}_{13}\mathbf{N}_{8}$ 3,5,3',5'-Tetranitro-4,4'-Di[Methylnitramido] diphenylketon. Zers. bei 210° (R. 6, 367; 7, 231; B. 20, 1734, 3296). — III, 185.
- $\mathbf{C}_{15}\mathbf{H}_{10}\mathbf{NCl}$
 - 1) 4-Chlor-2-Phenylchinolin. Sm. 63-64° (B. 30, 938). IV, 425. 2) 1-Chlor-3-Phenylisochinolin. Sm. 77-78° (B. 18, 3473). IV, 431. 3) 4-Chlor-3-Phenylisochinolin. Sm. 68-70°. HCl, (2HCl, PtCl₄) (B. 18, 3475). — IV, 431.
- 1) Nitril d. α -[4-Bromphenyl]- β -Phenylakrylsäure. Sm. 111—112° (A. $\mathbf{C}_{15}\mathbf{H}_{10}\mathbf{NBr}$ **250**, 161). — II, 1474.
- $C_{15}H_{10}N_3Cl$ 1) 6-Chlor-2,4-Diphenyl-1,3,5-Triazin. Sm. 138—139° (B. 26, 2226). - IV, 1190.
- $\mathbf{C}_{15}\mathbf{H}_{10}\mathbf{N}_{3}\mathbf{Cl}_{3}$ 1) ?-Trichlor-4-Phenylamido-2-Methyl-1, 3-Benzdiazin. $+\mathbf{C}_{2}\mathbf{H}_{0}\mathbf{0}$ (Sm.
- 151—153°) (J. pr. [2] 42, 357). IV, 1161. 1) αβ-Di[2-Cyanphenyl]thioharnstoff. Sm. noch nicht bei 300° (B. 29, 632). $\mathbf{C}_{15}\mathbf{H}_{10}\mathbf{N}_{4}\mathbf{S}$
- 1) Di[2-Jodthiënyl]phenylmethan. Sm. 89° (B. 30, 2037). $\mathbf{C}_{15}\mathbf{H}_{10}\mathbf{J}_{2}\mathbf{S}_{2}$
- $\mathbf{C}_{15}\mathbf{H}_{11}\mathbf{ON}$
- C 81,4 H 5,0 O 7,2 N 6,3 M. G. 221.

 1) P-Formylamidoanthracen. Sm. 242° (B. 16, 1640). II, 640.

 2) Phenanthrenchinonmethylimid (B. 12, 1644). III, 445.
 - 3) 2-[2-Fural]amidonaphtalin (Furfurol-β-Naphtylamin). Sm. 85°.
 - (A. 239, 350). III, 724. 4) 2,4-Diphenyloxazol. Sm. 102,5—103,5°; Sd. 338—340°. HCl (B. 17, 2580; **20**, 2579). — **IV**, 432.

C15H11ON

- 5) 2,5-Diphenyloxazol. Sm. 74°; Sd. oberh. 360°. HCl (B. 29, 207, 213). · IV, 432.
- 6) 4,5-Diphenyloxazol. Sm. 44°. (2HCl, PtCl₄) (Soc. 63, 470). IV, 432. 7) 3,5-Diphenylisoxazol. Sm. 141° (B. 28, 2540; J. pr. [2] 54, 411). -
- III. 229. 8) 2-Benzyliden-3-Keto-2, 3-Dihydroindol (Benzaldehydindogenid). Sm.
- 175—176° (B. 16, 2197). II, 1615.
- 9) 3-Keto-2-Phenyl-1-Methylen-1, 3-Dihydroisoindol (Methylenphtalphenylimidin). Sm. 100° (B. 19, 2373). — II, 1873.
- 10) 3-Keto-1-Benzyliden-1, 3-Dihydroisoindol (Benzalphtalimidin). Sm. 182—183° (B. 11, 1682; 18, 1257, 2435). — II, 1709.
- 11) 4-0xy-2-Phenylchinolin. Sm. 253° (250°). HCl + ½H₂O (B. 19, 1464; 21, 521; 27, 1396; A. 245, 376). IV, 426.
- 12) 6-Oxy-2-Phenylchinolin. Sm. 218°. (2 HCl, PtCl₄), Pikrat (A. 281, 14). **-** IV, 427.
- 13) 8-Oxy-2-Phenylchinolin. Sm. 59°. HCl, (2HCl, PtCl₄), Pikrat (A. 281, 8). — IV, 427.
- 14) 2-[2-Oxyphenyl] chinolin. Sm. 115°; Sd. oberh. 360°. (2HCl, PtCl₄), Pikrat (A. 249, 101). - IV, 426.
- 15) 2-[3-Oxyphenyl]chinolin. Sm. 156°. HCl + 11/2 H20 (B. 18, 1908; M. 13, 67). — IV, 426.
- 16) 2-[4-Oxyphenyl|chinolin. Sm. 237-238°. HCl + 2H₂O, (2HCl, PtCl₄)

- (M. 8, 127; 13, 63). IV, 426.

 17) 4-[2-Oxyphenyl]chinolin. Sm. 208° (B. 26, 719; 27, 3040). IV, 429.
 18) 4-[3-Oxyphenyl]chinolin. Sm. 235° (B. 20, 630; 27, 3041). IV, 429.
 19) 4-[4-Oxyphenyl]chinolin. Sm. 243° (B. 20, 629; 27, 913). IV, 429.
 20) Phenyläther d. 2-Oxychinolin. Sm. 68—69° (B. 15, 336). IV, 269.
 21) 2-Keto-3-Phenyl-1, 2-Dihydrochinolin. Sm. 234—235° (B. 28, 292;
- 31, 1294). IV, 428.
- 22) 1-Keto-2-Phenyl-1, 2-Dihydroisochinolin. Sm. 117,5° (B. 27, 203). - IV, 303.
- 23) 1-Keto-3-Phenyl-1,2-Dihydroisochinolin (Isobenzalphtalimidin). Sm. 197° (B. 18, 2449, 3472). — II, 1711.
- 24) 2-Furalmethylchinolin. HCl, (2HCl, PtCl₄ + 2H₂O), HNO₃, H₂SO₄ + H₂O, Pikrat (B. **20**, 2044). — IV, 432.
- 25) Amid d. Anthracen-l-Carbonsäure. Sm. 260° (B. 30, 1119).
- 26) Amid d. Anthracen-2-Carbonsäure (γ-Säure). Sm. 293—295° (B. 16, 2611). — II, 1478.
- 27) Phenylamid d. Phenylpropiolsäure. Sm. 125-126° (B. 25, 3538). - II, 1439.
- 28) Nitril d. Benzoylphenylessigsäure. Sm. 87—90° (J. pr. [2] 52, 115; [2] **55**, 308).
- 29) Verbindung (aus 2-Acetylbenzol-1-Carbonsäurephenylamid). Sm. 265° (B. 19, 2373). — II, 1873.
- Verbindung (aus Chloressigsäure u. Diazobenzolchlorid). Sm. 177—1780 B. 30, 2996). — IV, 1516.
- 31) Verbindung (aus Bromessigsäure u. Diazobenzolchlorid). Sm. 198-200° (B. 30, 2996). — IV, 1516. C 72,3 — H 4,4 — O 6,4 — N 16,9 — M. G. 249.

 $C_{15}H_{11}ON_3$

- 1) 4-Keto-3-Benzyliden-1-Phenyl-3, 4-Dihydro-1,2,5-Triazol (Cinnamylphenylazimid). Sm. 172° (Soc. 61, 282). — IV, 671.
- 2) Methyläther d. 3-Oxy-1,5-2,3-Diphenylen-2,3-Dihydro-1,2,4-Triazol. Sm. 214° (B. **28**, 154). — IV, 1292. 3) 3-Oxy-5,6-Diphenyl-1,2,4-Triazin. Sm. 218° (A. **283**, 27; 302, 310).
- IV, 1190. 4) 6-Oxy-2,4-Diphenyl-1,3,5-Triazin. Sm. 289° (B. 23, 163, 2920). IV, 1190.
- 5) P-Phenylazo-6-Oxychinolin (B. 21, 1642). IV, 1486.
- 6) ?-Phenylazo-8-Oxychinolin (B. 21, 1644). IV, 1486.
- 7) Nitril d. Phenylazobenzoylessigsäure. Sm. 135,7° (J. 1890, 1435; J. pr. [2] **52**, 107). — IV, 1478. C 65,0 — H 4,0 — O 5,7 — N 25,3 — M. G. 277.

C15H11ON5 1) Benzolazoglyoxylylcyanidhydrazon. Sm. 162-163° (B. 21, 3000). IV, 1475.

- $\mathbf{C}_{15}\mathbf{H}_{11}\mathbf{OCl}_{3}$ 1) Trichlor-α-Pyrokresol. Sm. bei 225° (Soc. 55, 52). — III, 646.
- C15H11OBr 1) $\alpha \alpha \gamma$ -Tribrom- β -Keto- $\alpha \gamma$ -Diphenylpropan. Sm. 81° (B. 22, 1369). —
- $C_{15}H_{11}O_{2}N$
- C 75,9 H 4,6 O 13,5 N 5,9 M. G. 237. 1) P-Amido-2-Methyl-9,10-Anthrachinon. Sm. 2020. HCl (B. 16, 698). - III, 450.
- 2) Methyläther d. 9-Oximido-10-Keto-9,10-Dihydroanthracen. Sm. 147° (Soc. 69, 73). — III, 409.
- 3) 1-[α -Oximidobenzyl] benzfuran. Sm. 125—128° (G. 25 [2] 288). III, 733.
- 4) 2, 3-Diketo-1-Benzyl-2, 3-Dihydroindol (Benzylpseudoisatin). Sm. 131°
- (A. 227, 364). II, 1604. 5) 6-Oxy-2-[4-Oxypheny]chinolin. Sm. 247° (M. 9, 150). IV, 427. 6) ?-Oxy-2-[4-Oxypheny]chinolin. Sm. 114° (M. 8, 127). IV, 427.
- 7) P-Oxy-4-[P-Oxyphenyl]chinolin (β-Phenoloxychinolin). Sm. 305° (B. 20, 632). - IV, 429.
- 8) Acetat d. 9-Oximidofluoren. Sm. 76° (A. 252, 36). III, 240. 9) 1-Phenylindol-2-Carbonsäure. Sm. 173—176° (B. 17, 567). IV, 236.
- 10) 3-Methyl- β -Naphtochinolin-l-Carbonsäure + H_2O . Sm. 310° (290°) u. Zers.). Ca (B. 27, 353, 2020; M. 17, 115). — IV, 422. 11) Säure (aus Phenanthrenchinondihydrocyanid). Sm. 183° (Soc. 51, 34). —
- III, 444.
- 12) Säure (aus d. Verb. $C_{15}H_9ON$). Na + $4H_2O$, Ba + $7H_2O$ (Soc. 51, 33). - III, 444.
- 13) Lakton d. 1- $[\alpha$ -Oximido- β -Phenyläthyl] benzol-2-Carbonsäure. Sm. 116—117° (B. 18, 1260). — II, 1710.
- 14) Lakton d. β -Oximido- $\alpha\beta$ -Diphenylpropionsäure. Sm. 159,5° (A. 266, 22). **— II**, *1*707.
- 15) Inn. Anhydrid d. α -Oximido $\alpha\beta$ -Diphenyläthan β^2 -Carbonsäure. Sm. $137-139^{\circ}$ (B. 18, 2448). — II, $171\overline{2}$.
- 16) Inn. Anhydrid d. Benzoylamidoessigsäurephenylester. Sm. 42° (B. **26**, 1700; H. **20**, 413). — II, 1184.
- 17) Methylimid d. Biphenyl-2,2'-Dicarbonsäure. Fl. (A. 252, 19). II, 1884.
- 18) **2-Methylphenylimid d. Benzol-1,2-Dicarbonsäure.** (B. 17, 2679; A. 227, 206; Am. 9, 52). II, 1805. Sm. 1820 (1790)
- 19) 3-Methylphenylimid d. Benzol-1, 2-Dicarbonsäure. Sm. 153° (B. 17, 2679). **— II**, *1805*.
- 20) 4-Methylphenylimid d. Benzol-1, 2-Dicarbonsäure. Sm. 204° (201
- bis 202°) (B. 10, 579; 16, 1320; 17, 2679). II, 1805. 21) Benzylimid d. Benzol-1,2-Dicarbonsäure. Sm. 115—116° (B. 20, 2227). — II, 1805.
- 22) Benzylisoimid d. Benzol-1,2-Dicarbonsäure. Sm. 81—82,5° (R. 13, 99). — II, 1805.
- 23) 1-Naphtylimid d. Citrakonsäure. Sm. 142-143°; Sd. oberh. 360° (M. 9, 287). — II, 612.
- 24) 2-Naphtylimid d. Citrakonsäure. Sm. 110° (M. 9, 289). II, 620.
- 25) Nitril d. 1-Benzoxylmethylbenzol-4-Carbonsäure. Sm. 1230 (B. 27, 2171). — II, *1561*.
- 26) Verbindung (aus d. Lakton d. 1-[β-Nitro-α-Oxy-β-Phenyläthenyl]benzol-2-Carbonsäure). Sm. 255—257° (262—263°) (B. 20, 2867; 29, 2746). · II, 1708.
- $C_{15}H_{11}O_2N_3$
- C 67,9 H 4,1 O 12,1 N 15,9 M. G. 265.1) Oxim d. Anthrachinonmonoureïn (G. 27 [1] 243).
- 2) Oxim d. Phenanthrenchinonmonourein. Sm. 200-2020 (G. 27 [1] 230).
- 3) 4-Phenylazo-5-Keto-3-Phenyl-4,5-Dihydroisoxazol. Sm. 1660 (B. 24, 142). — IV, 1486.
- 4) 4-Oximido-5-Keto-1, 3-Diphenyl-4, 5-Dihydropyrazol. Sm. 197 bis 200°. Ag (B. 20, 2547; 27, 784). — IV, 906.
- 5) 4-Benzoyl-5-Keto-1-Phenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 183°. **- IV**, 1101.
- 6) 6-Benzoyl-2-Phenyl-1,2,3,5-Oxtriazin. Sm. 205° (R. 11, 261; 16, 339). III, 298; IV, 1119.
- 7) 5-Benzoyl-2-Phenyl-1,2,3,6-Oxtriazin. Zers. bei 97° (R. 16, 314).

 $C_{15}H_{11}O_2N_3$ 8) 3-Benzoylhydrazon-2-Oxypseudoindol (Isatinbenzoylhydrazin). Sm. 279° (J. pr. [2] 50, 307). — II, 1611. 9) 2-Amido-3-[4-Nitrophenyl]chinolin. Sm. 258°. HCl (B. 31, 1292). —

IV, 1025.

10) Melanoximid (A. 74, 4, 6; B. 2, 688). — II, 349.

11) 1,5-Diphenyl-1,2,3-Triazol-4-Carbonsäure. Sm. 183°. Cu, Ag (Am.

20, 394). — IV, 1165. 12) 1,5-Diphenyl-1,2,4-Triazol-3-Carbonsäure. Sm. 176° (172—182° u. Zers.). + C₂H₆O, Cu, Ag (Soc. 67, 1069; B. 22, 798). — IV, 1164. 13) Amid d. 3,5-Diphenyl-1,2,4-Oxdiazol-5²-Carbonsäure. Sm. 160°

(B. 18, 2467). — II, 1815.

14) Amid d. Isatamidobenzol-3-Carbonsäure. Sm. 280° u. Zers. (A. 218, 192). — II, 1605.

15) Phenylazohomophtalimid. Sm. 258—260° (B. **20**, 1205). — IV, 1578. C 61,4 — H 3,7 — O 10,9 — N 23,9 — M. G. 293. $\mathbf{C}_{15}\mathbf{H}_{11}\mathbf{O}_{2}\mathbf{N}_{5}$ 1) 4-Phenylazo-1-Phenyl-1, 2, 5-Triazol-3-Carbonsäure. Sm. 195-196°.

Ag (B. 27, 153). — IV, 1491.

1) Methylester d. 2-[4-Methylbenzoylbenzol]-1-Carbonsäure. Sm. 66° (A. 299, 306).

C₁₅H₁₁O₂Br 1) γ -Keto- γ -Phenyl- α -[5-Brom-2-Oxyphenyl] propen. Sm. 168° u. Zers. (B. 29, 245). — III, 247. γ-Keto-γ-[5-Brom-2-Oxyphenyl]-α-Phenylpropen. Sm. 107—108° (B. 31, 717).

3) β -Brom- $\alpha \gamma$ -Diketo- $\alpha \gamma$ -Diphenylpropan. Sm. 93 (B. 23, 3377). —

III, 297.

4) 4-[?-Bromphenyl]-3,4-Dihydro-1,2-Benzpyron (Bromphenylhydro-cumarin). Sm. 1176 (B. 25, 958). — II, 1700.

5) Lakton d. α-Brom-6-Oxy-3-Methyldiphenylessigsäure. Sm. 94-96° (B. **30**, 130; **31**, 2818).

6) Lakton d. α-Brom-2-Oxy-4-Methyldiphenylessigsäure. Sm. 96—97° (B. 31, 2820).

C₁₅H₁₁O₂Br₃ 1) Benzoat d. 3,5,6-Tribrom-2-Oxy-1,4-Dimethylbenzol. Sm. 126 bis 127° (A. 302, 115; B. 32, 21).

C 71,2 - H 4,3 - O 19,0 - N 5,5 - M. G. 253. $C_{15}H_{11}O_{3}N$

1) γ -Keto- γ -[2-Nitrophenyl]- α -Phenylpropen. Sm. 124° (B. 28, 2498). - III, 246.

2) β -Oximido- $\alpha \gamma$ -Diketo- $\alpha \gamma$ -Diphenylpropan. Sm. 146° (B. 23, 3378). — III, 297.

3) 2,4-Diketo-3,5-Diphenyltetrahydrooxazol. Sm. 121° (Bl. [3] 19, 784). 4) 4-Benzoyl-3-Keto-3, 4-Dihydro-1, 4-Benzoxazin. Sm. 93° (Am.

20, 565). 5) Amidochrysophansäure (A. 183, 218). — III, 452.

6) α, 2-Lakton d. α-Oxy-αα-Diphenylmethan-2, 2'-Dicarbonsäure-2'-Amid (L. d. Benzhydroldicarbonsäuremonamid). Sm. 158—160° (A. 242, 241). — II, *1973*.

7) Benzoat d. 5-Oxy-3-Methylbenzoxazol (M. 19, 516).

8) 2-Oxyphenylimid d. 1-Methylbenzol-3,4-Dicarbonsäure. Sm. 205° (M. **12**, 631). — II, 1846.

9) Benzoylamid d. Benzolketocarbonsäure. Sm. 146° (cor.) (B. 29, 209,

Verbindung (aus 2-Nitrobenzol-1-Carbonsäureäthylester u. Benzylcyanid).
 Sm. 225-230° u. Zers. (J. pr. [2] 55, 326).
 C 64,0 — H 3,9 — O 17,1 — N 14,9 — M. G. 281.

 $\mathbf{C}_{15}\mathbf{H}_{11}\mathbf{O}_{3}\mathbf{N}_{3}$

1) 8-Nitro-4-Keto-3-Methyl-2-Phenyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 138° (J. pr. [2] 43, 445). — II, 1282.

2) 2-Phenylamido-4-Keto-1,4-Dihydro-1,3-Benzdiazin-2²-Carbonsäure. Ba + 10 H₂O, Ag (B. 18, 2420). — II, 1255. 3) Diphenyl-o-Isocyanursäure. Sm. 261°. Ag (B. 18, 3230). — II, 375.

 $\mathbf{C}_{15}\mathbf{H}_{11}\mathbf{O}_{3}\mathbf{Br} \ \ 1) \ \alpha, 6\textbf{-Lakton} \ \ \mathbf{d.} \ \ \textbf{?-Brom-4,6-Dioxy-2-Methyldiphenylessigs\"{a}ure?} \ \ \mathbf{Sm.}$ 185° (B. **31**, 2829).

C₁₅H₁₁O₃Br₃ 1) Aethylester d. ?-Tribrom-2-Oxybenzolphenyläther-1-Carbonsäure. Sm. 67° (A. **257**, 86). — II, 1495. C 66,9 — H 4,1 — O 23,8 — N 5,2 — M. G. 269. $C_{15}H_{11}O_4N$

1) N-Benzoat d. Benzoylformhydroxamsäure. Sm. 109—111° (Am. 20, 32).

- $C_{15}H_{11}O_4N$ 2) α -Phenyl- β -[2-Nitrophenyl]akrylsäure. Sm. 195—196°. Na + 5H₂O, $Ba + 5H_2O$, Ag (G. 20, 396; 25 [1] 138, 310; B. 29, 497). — II, 1474.
 - 3) Allo- α -Phenyl- β -[2-Nitrophenyl]akrylsäure. Sm. 146—147°. salz, p-Toluidinsalz (G. 25 [1] 138, 311; 27 [2] 41). — II, 1474.
 - 4) α -Phenyl- β -[3-Nitrophenyl]akrylsäure. Sm. 181—182°. Na + 6 H₂O,
 - Ba + 2H₂O, Ag (G. 25 [1] 142, 313). II, 1474. 5) Allo-α-Phenyl-β-[3-Nitrophenyl]akrylsäure. Sm. 195—196°. Ba + $4^{1/2}$ H₂O, Anilinsalz, p-Toluidinsalz (G. 25 [1] 145, 315; 27 [2] 41). II, 1474.
 - 6) α -Phenyl- β -[4-Nitrophenyl]akrylsäure. Sm. 213—214°. Na + 4 H₂O,
 - Ba + H₂O, Ag + H₂O (G. **25** [1] 146, 321). Π, 1475. 7) Allo-α-Phenyl-β-[4-Nitrophenyl]akrylsäure + H₂O. Sm. 138—142° (wasserfrei). Na + $\frac{31}{2}$ H₂O, Ba + 2 H₂O, Ag, Anilinsalz, p-Toluidinsalz (G. **25** [1] 149, 326; **27** [2] 42). Π, 1475.
 - 8) 2 Benzoylamidobenzol 1 Ketocarbonsäure (Benzoylisatinsäure). Sm. 188°. Ba + 3(4) H₂O (B. **24**, 773). — II, 1601. C 60.6 — H 3.7 — O 21.6 — N 14.1 — M. G.
- $\mathbf{C}_{15}\mathbf{H}_{11}\mathbf{O}_{4}\mathbf{N}_{3}$
 - 1) Nitrosofurfurin. Sm. 112° (B. 11, 1250). III, 723.
 - 2) Nitril d. $\alpha\beta$ -Di[2-Nitrophenyl] propionsäure. Sm. 110,5° (B. 19, 2637; **30**, 3018). — II, *1318*.
 - 3) Methylester d. 6-Nitro-1-Phenylisoindazol-3-Carbonsäure. Sm. 191 bis 192° (B. 22, 320; 23, 716). — IV, 1465.
- $\mathbf{C}_{15}\mathbf{H}_{11}\mathbf{O}_{4}\mathbf{Br}$ 1) **2**-[P-Brom-4-Oxy-3-Methylbenzoyl]benzol-1-Carbonsäure. Sm. 228°. Ba (A. 202, 160). — II, 1888. 2) P-Brom-2-[4-Methoxylbenzoyl] benzol-1-Carbonsäure. Sm. 194—196°
 - (Bl. 46, 205). II, 1887. C 63,2 H 3,8 O 28,1 N 4,9 M. G. 285.
- $\mathbf{C}_{15}\mathbf{H}_{11}\mathbf{O}_{5}\mathbf{N}$
 - 1) 5-[3-Nitrobenzoyl]-1-Methylbenzol-2-Carbonsäure. Sm. 191°. Ba. Ag (A. **286**, 340). — II, 1712.
 - 2) 6-[3-Nitrobenzoyl]-1-Methylbenzol-3-Carbonsäure. Sm. 152-1530 (A. **286**, 336). — II, 1712.
 - 3) isom. 6-[3-Nitrobenzoyl]-1-Methylbenzol-3-Carbonsäure. Sm. 173°.
 - Ba, Ag (A. 286, 336). II, 1712. 4) 6-[3-Nitrobenzoyl]-1-Methylbenzol-4-Carbonsäure. Sm. 189°. Ba,
 - Ag (A. 286, 342). II, 1713. 5) 2-[3-Nitro-4-Methylbenzoyl] benzol-1-Carbonsäure + H₂O. Sm. 205°
 - (wasserfrei). Ba $+ H_2O$ (A. 299, 309). 6) 4-[2-Carboxylbenzoyl]amidobenzol-1-Carbonsäure. Sm. 275—277°
 - u. Zers. (B. 10, 579). II, 1813. 7) Lakton d. 1- $[\beta$ -Nitro- $\alpha\beta$ -Dioxy- β -Phenyläthyl]benzol-2-Carbonsäure.
- $\begin{array}{c} \mathbf{N}\mathbf{a}_2 + 2^{1/2}\mathbf{H}_2\mathbf{O}, \ \mathbf{A}\mathbf{g}_2 \ (B. \ \mathbf{18}, \ 1252). \mathbf{\Pi}, \ 1708. \\ \mathbf{O} \ 57.5 \ \mathbf{H} \ 3.5 \ \ \mathbf{O} \ 25.6 \ \mathbf{N} \ 13.4 \ \mathbf{M}. \ \mathbf{G}. \ 313. \end{array}$ $\mathbf{C}_{15}\mathbf{H}_{11}\mathbf{O}_{5}\mathbf{N}_{3}$
 - 1) 7-Methyläther d. 5-Nitro-7,8-Dioxy-1-Keto-2-Phenyl-1,2-Dihydro-2,3-Benzdiazin. Sm. 191° (B. 19, 2277, 2309). — IV, 717. 2) 2-Nitrophenylazobenzoylessigsäure. Sm. 177° (B. 18, 2565). —
 - IV, 1472. C 59,8 H 3,6 O 31,9 N 4,6 M. G. 301.
- $C_{15}H_{11}O_6N$ 1) Phenylester d. 3-Nitro-2-Acetoxylbenzol-1-Carbonsäure. Sm. 950 (J. pr. [2] **43**, 382). — II, 1508.
 - 2) Phenylester d. 5-Nitro-2-Acetoxylbenzol-1-Carbonsäure. Sm. 118° (*J. pr.* [2] **43**, 382). — II, 1509. C 54,7 — H 3,3 — O 29,2 — N 12,8 — M. G. 329.
- $\mathbf{C}_{15}\mathbf{H}_{11}\mathbf{O}_{6}\mathbf{N}_{3}$ 1) 3'-Nitro-4-Acetoxylazobenzol-3-Carbonsäure. Sm. 186° (A. 251, 190).
- IV, 1469. C 50,4 H 3,1 O 26,9 N 19,6 M. G. 357. $\mathbf{C}_{15}\mathbf{H}_{11}\mathbf{O}_{6}\mathbf{N}_{5}$ 1) s-Cinnamyliden-2,4,6-Trinitrophenylhydrazin. Sm. 200° (G. 24 [1] 578). — IV, 754. C 56,8 — H 3,5 — O 35,3 — N 4,4 — M. G. 317.
- $C_{15}H_{11}O_7N$ 1) Aristolsäure (oder $C_{15}H_{13}O_7N$). Sm. 260—270° (*B.* **29** [2] 38). — III, 780. C 52,2 — H 3,2 — O 32,5 — N 12,1 — M. G. 345.
- $C_{15}H_{11}O_7N_3$ 1) ?-Dinitro-3-Nitrophenyl-2,4-Dimethylphenylketon. Sm. 138—139° (A. 286, 334). — III, 231.
- $\mathbf{C}_{15}\mathbf{H}_{11}\mathbf{O}_{8}\mathbf{Br}_{3}$ 1) ?-Tribrom- $\alpha\alpha$ -Di[2,3,4[?]-Trioxyphenyl]propionsäure (B. 16, 2409). **— II**, 2078.

- $C_{15}H_{11}NCl_{2}$ 1) Nitril d. $\alpha\beta$ -Dichlor- $\alpha\beta$ -Diphenylpropionsäure. Sm. 167—168° (B. 26, 661). — II, 1467.
- $C_{15}H_{11}NBr_2$ 1) Nitril d. $\alpha\beta$ -Dibrom- $\alpha\beta$ -Diphenylpropionsäure. Sm. 129-130° (A. 250, 158). — II, 1467.
- 1) 2,4-Diphenylthiazol. Sm. 92-93°; Sd. oberh. 360° (A. 259, 237). $\mathbf{C}_{15}\mathbf{H}_{11}\mathbf{NS}$ IV, 433.
- 2) 1-[β -Phenyläthenyl]benzthiazol. Sm. 111° (B. 13, 1235). II, 1408. 1) 2,4-Diphenylselenazol. Sm. 99°. (2 HCl, PtCl₄) (A. 250, 317). C15H1, NSe IV, 433.
- 1) 4-Chlor-1-Benzyl-2, 3-Benzdíazin. Sm. 152° (B. 26, 713). IV, 1027. $\mathbf{C}_{15}\mathbf{H}_{11}\mathbf{N}_{2}\mathbf{C}\mathbf{l}$ $C_{15}H_{11}N_{2}Br$ 1) 2-[4-Bromphenyl]amidochinolin. Sm. 146° (B. 18, 1533). — IV, 909. 1) 5-Benzylidenhydrosulfamin-2-Thiocarbonyl-3-Phenyl-2,3-Dihydro-
- $\mathbf{C}_{15}\mathbf{H}_{11}\mathbf{N}_{3}\mathbf{S}_{3}$ 1,3,4-Thiodiazol. Sm. 155° (B. 29, 2135). — IV, 684. $C_{15}H_{11}N_4Cl$ 1) 4-Phenylazo-1-[4-Chlorphenyl]pyrazol. Sm. 152° (B. 27, 224).
- IV. 1488. C₁₅H₁₁N₄Br 1) Azimid d. ?-Brom-5- oder 6-Methyl-2-[2-Amido-4-Methylphenylbenzimidazol. Sm. 254° (B. 31, 322).
- C₁, H₁, N₄Br₅ 1) Azimid d. ?-Brom-5 oder 6-Methyl-2-[2-Amido-4-Methylphenyl]benzimidazoltetrabromid. Sm. 155° u. Zers. (B. 31, 321). C 76,3 — H 5,1 — O 6,8 — N 11,8 — M. G. 236.
- C₁₅H₁₂ON₂ 1) 3-Phenylhydrazon-1-Keto-2, 3-Dihydroinden. Sm. 162-1630 (A. 246. 353). — IV, 784.
 - 2) 2-Phenylhydrazon-1, 2-Benzpyron (Cumarinphenylhydrazon). Sm. 143 bis 144° (B. 19, 1666). — IV, 696.
 - 3) 3-Keto-1, 5-Diphenyl-2, 3-Dihydropyrazol. Sm. 251° (B. 20, 1108). **– IV**, 907.
 - 4) 5-Keto-1, 3-Diphenyl-4, 5-Dihydropyrazol. Sm. 137°. HCl, HoSO.
 - (B. 20, 2546; 27, 784). IV, 905. 5) 5-Keto-1,4-Diphenyl-4,5-Dihydropyrazol. Sm. 195—196° (B. 20, 2932). — IV, 906.
 - 6) 2-Keto-4,5-Diphenyl-2,3-Dihydroimidazol. Sm. noch nicht bei 310° (G. 19, 566). — III, 285.
 - 7) 2-Amido-4, 5-Diphenyloxazol (Tolanureïn; αβ-Diphenylacetylenureïn). Sm. 202—203° (A. 261, 135; 284, 21). — III, 223.
 - 8) 5-Imido-3,4-Diphenyl-4,5-Dihydroisoxazol? Sm. 160-1620 (J. pr. [2] **55**, 312).
 - 9) 3-Phenyl-5-Benzyl-1, 2, 4-Oxdiazol. Sm. 118° (B. 22, 3142). III, 52.
 - 10) 5-Phenyl-3-Benzyl-1, 2, 4-Oxdiazol. Sm. 82° (B. 18, 1071). II, 1315.
 - 11) 5-Phenyl-3-[2-Methylphenyl]-1,2,4-Oxdiazol. Sm. 80° (B. 22, 2440). - II, 1331
 - 12) 5-Phenyl-3-[4-Methylphenyl]-1,2,4-Oxdiazol. Sm. 103^o (B. 19, 1490). - II, 1344.
 - 13) 6-Oxy-4-Methyl-2-[2-Naphtyl]-1, 3-Diazin. Sm. 210° (B. 25, 1427). **- IV**, 1029.
 - 14) 1-Nitroso-5-Methyl-2-Phenylindol. Sm. 262° (B. 25, 2874). IV, 417.
 - 15) 1-Nitroso-7-Methyl-2-Phenylindol. Sm. 232° u. Zers. (B. 25, 2871). **- IV**, 417.
 - 16) 3-Phenylimido-2-Keto-5-Methyl-2, 3-Dihydroindol (p-Methylisatin-
 - phenylimid). Sm. 239—240° (B. 16, 2267). II, 1652. 17) 2-Acetyl-3-Phenylindazol. Sm. 69—70° (B. 29, 1271). IV, 1011. 18) 1-Acetyl-3-Phenylisoindazol. Sm. 185°. Acetat (B. 24, 2383; 29, 1263). — IV, 1012.
 - 19) 6-Oxy-2-[4-Amidophenyl]chinolin. Sm. 294° u. Zers. $HCl + \frac{1}{2}H_2O$, $H_2SO_4 + \frac{1}{2}H_2O$ (M. 9, 146). IV, 1024.
 - 20) 4-Amido-1-Keto-3-Phenyl-1, 2-Dihydroisochinolin. Sm. 190° (B. 19, 833). — II, 1712.
 - 21) 4-Oxy-2-Benzyl-1,3-Benzdiazin. Sm. 177° (B. 28, 290). IV, 1027. 22) 2-Keto-4-[4-Methylphenyl]-1,2-Dihydro-1,3-Benzdiazin. Sm. 286°. (HCl, $AuCl_3 + H_2O$) (B. 30, 1135).
 - 23) 4-Keto-2-Methyl-3-Phenyl-3, 4-Dihydro-1, 3-Benzdiazin. Sm. 1430 (B. 24, 3055). — IV, 901.
 - 24) isom. ?-4-Keto-2-Methyl-3-Phenyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 146—147° (J. pr. [2] 36, 163). — IV, 902.

 $\mathbf{C}_{15}\mathbf{H}_{12}\mathbf{ON}_2$ 25) isom. ?-4-Keto-2-Methyl-3-Phenyl-3,4-Dihydro-1,3-Benzdiazin? (Aethenylimidobenzanilid). Sm. 118° (B. 19, 2342). — II, 347.

26) 4-Keto-3-Methyl-2-Phenyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 130 bis

131° (J. pr. [2] 36, 161). — II, 1254. 27) 4-Keto-3-[4-Methylphenyl]-3,4-Dihydro-1,3-Benzdiazin. Sm. 146°. HCl, (2HCl, $PtCl_4)$ (B. 22, 2697). — IV, 875.

28) 3-Oxy-6-Methyl-2-Phenyl-1, 4-Benzdiazin. Sm. 198^o (A. 237, 352). - IV, 1027.

29) 2-Keto-3-Methyl-1-Phenyl-1,2-Dihydro-1,4-Benzdiazin. Sm. 195° (B. **25**, 1628). — IV, 903.

30) 1-Keto-2-Methyl-4-Phenyl-1,2-Dihydro-2,3-Benzdiazin. Sm. 1530 (J. pr. [2] 51, 152). — IV, 1023.

31) 1-Keto-4-[4-Methylphenyl]-1,2-Dihydro-2,3-Benzdiazin. Sm. 2460 J. pr. [2] **51**, 153). — **IV**, 1028.

32) 1-Keto-4-Benzyl-1, 2-Dihydro-2, 3-Benzdiazin (Benzylphtalazon). Sm. 196° (B. **26**, 712; **29**, 1434). — II, 1710.

33) Diphenylamid d. Cyanessigsäure. Sm. 153—154°. — II, 368.
 C 68,2 — H 4,5 — O 6,1 — N 21,2 — M. G. 264.

 $\mathbf{C}_{15}\mathbf{H}_{12}\mathbf{ON}_{4}$ 1) Cykloformazylmethylketon (A. 300, 249). — IV, 1230.

- 2) 5-Keto-4-Phenylhydrazon-1-Phenyl-4, 5-Dihydropyrazol. Sm. 147° $(149-150^{\circ})$. Ag (B. 21, 1204; 24, 400, 3831; 28, 630). — IV, 705, 1488.
- 3) 5-Keto-4-Phenylhydrazon-3-Phenyl-4,5-Dihydropyrazol. Sm. 208° (207,5°) (B. 27, 783, 791; J. pr. [2] 51, 62; [2] 52, 32). IV, 1490.

4) 5-Nitrosimido-1, 3-Diphenyl-4, 5-Dihydropyrazol. Sm. 2070 (J. pr. 2| 58, 141).

5) 4-Benzylidenamido-3-Oxy-1-Phenyl-1, 2, 5-Triazol. Sm. 173° (A. 295, 159). **— IV**, *1235*.

6) Amid d. 1,5-Diphenyl-1,2,4-Triazol-3-Carbonsäure. Sm. 195—196° (B. 22, 801). — IV, 1164.

1) $\beta \gamma$ -Dichlor- α -Keto- $\alpha \gamma$ -Diphenylpropan. Sm. 113° (B. 28, 2540). — $\mathbf{C}_{15}\mathbf{H}_{19}\mathbf{OCl}_{2}$ III, 228.

 $C_{15}H_{12}OBr_2$ 1) $\beta\gamma$ -Dibrom- α -Keto- $\alpha\gamma$ -Diphenylpropan. Sm. 156—157° (B. 14, 2464). III, 228.

2) isom. $\beta \gamma$ -Dibrom- α -Keto- $\alpha \gamma$ -Diphenylpropan. Sm. 88° (C. 1897) [2] 576).

3) $\alpha \gamma$ [?]-Dibrom- β -Keto- $\alpha \gamma$ -Diphenylpropan. Sm. 110—111° (B. 22, 1368). III, 229.

4) Dibrompyrokresol. Sm. 215° (B. 15, 2206; 16, 2143; M. 3, 738). — C 71.4 - H 4.8 - O 12.7 - N 11.1 - M. G. 252.

 $\mathbf{C}_{15}\mathbf{H}_{12}\mathbf{O}_{2}\mathbf{N}_{2}$

γ-Phenylimido-α-[4-Nitrophenyl] propen. Sm. 132—133° (A. 253, 349). — III, 61.

2) 1,3-Dioximido - 2-Phenyl-2,3-Dihydroinden. Sm. 193—196° (B. 26, 2579). — III, 302.

3) 2,4-Diketo-1,3-Diphenyltetrahydroimidazol (Diphenylhydantoïn). Sm. 139° (B. **25**, 2274; **31**, 509). — **II**, 402.

4) 5-Phenyl-3-[2-Oxy-3-Methylphenyl]-1,2,4-Oxdiazol. Sm. 150° (B. 24, 3671). — II, *1546*.

5) 5-Phenyl-3-[6-Oxy-3-Methylphenyl]-1, 2, 4-Oxdiazol. Sm. 151° (B. 24, 3663). **— II**, *1547.*

6) 5-Keto-3-Phenyl-4-[4-Methylphenyl]-4, 5-Dihydro-1, 2, 4-Oxdiazol. Sm. 163° (B. **22**, $240\overline{7}$). — II, 1205.

7) 2-Keto-5-Phenyl-3-[2-Methylphenyl]-2, 3-Dihydro-1, 3, 4-Oxdiazol. Sm. 120° (B. 26, 2876). — IV, 802.

8) 32-Methyläther d. 5-Phenyl-3-[2-Oxyphenyl]-1,2,4-Oxdiazol. Sm.

117° (B. 22, 2801). — II, 1503.
9) 3'-Methyläther d. 5-Phenyl-3-[4-Oxyphenyl]-1,2,4-Oxdiazol. Sm. 102,5° (B. 22, 2795). — II, 1532. 10) 5-Acetonyl-3-[2·Naphtyl]-1,2,4-Oxdiazol. Sm. $108-109^{\circ}$ (B. 22, 2457).

- II, 1455.

11) **2-Nitroso-3-Keto-1-Benzyl-1, 3-Dihydroisoindol.** Sm. 92—93° (B. 18, 1263). — II, 1710.

12) 2,4-Diketo-1-Methyl-3-Phenyl-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 233° (223°) (J. pr. [2] 55, 130; Am. 21, 160).

 $C_{15}H_{12}O_2N_2$ 13) 2, 4-Diketo-1-Benzyl-1,2,3,4-Tetrahydro-1, 3-Benzdiazin. Zers. oberh. 360° (J. pr. [2] 49, 319). 14) 2,4-Diketo-3-[2-Methylphenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin.

Sm. $241-242^{\circ}$ (J. pr. [2] 51, 275). — IV, 897. 15) 3-Oxy-2-Keto-1-Benzyl-1, 2-Dihydro-1, 4-Benzdiazin. Sm. 265° (A.

292, 256). — IV, 899. 16) 1,4-Diketo-3-Methyl-2-Phenyl-1,2,3,4-Tetrahydro-2,3-Benzdiazin.

Sm. 125° (G. 17, 279). — IV, 711.

17) Methyläther d. 2-Oxy-4-Keto-3-Phenyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 134° (Am. 21, 161).

18) Acetophenoncarbonsäurephenylhydrazon. Sm. 1020 (B. 18, 803). -IV, 697. 19) 5 oder 6-Methyl-2-Phenylbenzimidazol-22-Carbonsäure. Sm. 2580

u. Zers. (B. 23, 1043). — IV, 617.

20) Diamidochrysophansäure (A. 183, 221). — III, 452.

21) Aldehyd d. Phenylazobenzoylessigsäure. Sm. 1030 (B. 21, 1704). -IV, 1476.

22) Acetat d. ?-Oxy-3-Phenylindazol. Sm. 90-910 (B. 29, 1268). -IV, 1012.

23) Dibenzoylformamidin (Benzoylamidobenzoylimidomethan). Sm. 2360 (A. **287**, 339).

24) Nitril d. α-Phenylamidoformoxylphenylessigsäure (Phenylglykolsäurenitrilphenylurethan). Sm. 105° (Bl. [3] 19, 776).

25) Phenylamidomethylimid d. Benzol-1, 2-Dicarbonsäure. Sm. 257º (B. 31, 3235).

26) 4-Methyl-1, 2-Phenylenamid d. Benzol-1, 2-Dicarbonsäure. Zers. bei 170° (G. 24 [1] 149). — IV, 618.

27) isom. 4-Methyl-1,2-Phenylenamid d. Benzol-1,2-Dicarbonsäure.

Sm. 104° (B. 10, 1165). — IV, 618. 28) 4-Methyl-1, 3-Phenylenamid d. Benzol-1, 2-Dicarbonsäure (2, 4-Phtalyldiamido-1-Methylbenzol). Sm. 1920 (B. 10, 1161). — IV, 606.

29) Verbindung (aus Carbonyltriphenylguanidin) $+ \frac{1}{2} H_2 O$ (J. pr. [2] 32, 28).

7— II, 351. 30) isom. Verbindung (aus Carbonyltriphenylguanidin) + $^{1}/_{2}$ H₂O (J. pr. [2] 32, 29). — II, 351.

C 64.3 - H 4.3 - O 11.4 - N 20.0 - M. G. 280. $\mathbf{C}_{15}\mathbf{H}_{12}\mathbf{O}_{2}\mathbf{N}_{4}$

1) 5-Benzoyl-2-Phenylamido-1, 2, 3, 6-Oxtriazin. Zers. bei 265°. Acetat (R. 16, 318). — IV, 764.

2) 4-Phenylazo-3, 5-Diketo-1-Phenyltetrahydropyrazol. Sm. 232° (B. 25, 1510). — IV, 1488.

3) Hexahydrobenzo-4, 4'-Benzyliden-5, 5'-Diketo-3, 4-Dipyrazol (B. 27, 472). — IV, 1294. C 58,4 — H 3,9 — O 10,4 — H 27,3 — M. G. 308.

 $C_{15}H_{12}O_2N_6$

1) Benzoat d. 4-Oximidoamidomethyl-1-Phenyl-1, 2, 3, 5-Tetrazol. Sm. 205—206° u. Zers. (B. 22, 1756). — IV, 1239.

 $C_{15}H_{12}O_2Br_2$ 1) Benzoat d. 3,6-Dibrom-2-Oxy-1,4-Dimethylbenzol. Sm. 133,5° (B. 29, 2345).

2) Phenylester d. $\alpha\beta$ -Dibrom- β -Phenylpropionsäure. Sm. 127° (B. 25, 958). — II, *1359*.

 $C_{15}H_{12}O_3N_2$ C 67,2 - H 4,5 - O 17,9 - H 10,4 - M. G. 268.

1) s-Dibenzoylharnstoff. Sm. 197° (202—203°) (B. 7, 1739; J. pr. [2] 5, 60; [2] 42, 95; R. 10, 70; A. 284, 19). — II, 1172.
2) Fucusamid (A. 74, 287).

3) Fucusin. (2HCl, PtCl₄), HNO₈, Oxalat (A. **74**, 289). 4) Furfuramid (Trifuraldiamin). Sm. 117° (A. **54**, 56; B. **10**, 1188; Bl. [3] 19, 174; Soc. 73, 599). — III, 721.

5) Furfurin. Sm. 116°. Salze meist bekannt (A. 54, 59; 71, 63; 74, 283; 88, 127; J. pr. [2] 27, 311; B. 10, 1188; 22, 2305; J. 1855, 560; Bl. [3] **19**, 174). — III, 722.

6) Acetyloreirufamin (B. 23, 725). — II, 965.

7) Phenylazobenzoylessigsäure. Sm. 141° (B. 18, 2563; 21, 2120). — IV, 1472.

8) Phenylamid d. Benzoylnitrosoessigsäure? Sm. 190° (A. 245, 375). - II, 1644.

- C₁₅H₁₂O₃N₂ 9) Diphenylamid d. Ketomethandicarbonsäure (Mesoxanilid). Sm. bei 190° (A. 270, 288). — II, 421. C 60,8 — H 4,0 — O 16,2 — N 18,9 — M. G. 296.
- $C_{15}H_{12}O_3N_4$
 - 1) Formazylglyoxalsäure + 2H₂O. Sm. 166°. Cu, Ag (B. 27, 149).
 - 2) Isoformazylglyoxalsäure. Sm. 158-163°. Ag (B. 27, 151; 28, 1285 Anm.). - IV, 1228.
- C₁₅H₁₂O₃Cl₂ 1) Dimethyläther d. Di[?-Chlor-?-Oxyphenyl]keton. Sm. 183-1840 (B. 28, 2873). - III, 200.
- $C_{15}H_{12}O_8Br_2$ 1) Dibrom- β -Lapachon (Soc. 63, 426; 65, 17). III, 401.
 - 2) Dimethyläther d. ?-Dibrom-4,4'-Dioxydiphenylketon. Sm. 181° (B. **14**, 329). — **III**, 198.
 - 3) Dimethyläther d. Di[?-Brom-?-Oxyphenyl]keton. Sm. 180-1810 (B. 28, 2873). - III, 200.
- 1) Methylester d. Anthracen-2-Sulfonsäure. Sm. 157º (B. 28, 2261). $C_{15}H_{12}O_3S$
- 1) α -Trithiofurfurol. Sm. 128° (B. 24, 3592). III, 724. 2) β -Trithiofurfurol. Sm. 229° u. Zers. (B. 24, 3593). $C_{15}H_{12}O_3S_3$
- $\mathbf{C}_{15}\mathbf{H}_{12}\mathbf{O}_{4}\mathbf{N}_{2}$ C 63,4 - H 4,2 - O 22,5 - N 9,9 - M. G. 284.
 - 1) 3-Keto-1-Oxy-1-[α-Nitrobenzyl]-1, 3-Dihydroisoindol (Oxynitrobenzylphtalimidin) (B. 18, 2439, 2442). — II, 1709.
 - 2) α -Phenylhydrazon-3,4-Dioxyphenylessig-3,4-Methylenäthersäure. Sm. 149° (G. 20, 696). — IV, 717.
 - 3) 1- $[\beta$ -Nitro- α -Amido- β -Phenyläthenyl] benzol-2-Carbonsäure (Nitrobenzalphtalimidinsäure). Sm. 147-1500 u. Zers. Ba + 7H₂O, Ag (B. 18, 2440). — II, 1710.
 - 4) 1-Phenylhydrazonmethylbenzol-2,6-Dicarbonsäure. Sm. 86-90° (A. 290, 216). — IV, 718.
 - 5) Carbanilidoisatinsäure. Sm. 170-180° u. Zers. (J. pr. [2] 32, 285).
 - II, 1604. 6) Amid d. 6-[3-Nitrobenzoyl]-1-Methylbenzol-3-Carbonsäure. Sm.
 - 226° (A. 286, 339). II, 1712.
 7) Amid d. 2-[3-Nitro-4-Methylbenzoyl] benzol-1-Carbonsäure. Zers. bei 200° (A. 299, 312).
 - 8) 3-Phenylamid d. Benzol-l-Carbonsäure-3-Amidoketocarbonsäure. Sm. $300-305^{\circ}$ u. Zers. (A. 232, 135). — II, 1265.
- C 57,7 H 3,8 O 20,5 N 17,9 M. G. 312. $C_{15}H_{12}O_4N_4$
- 1) s Cinnamyliden 2,4 Dinitrophenylhydrazin (G. 24 [1] 568). IV, 754.
- C₁₅H₁₂O₄Br₂1) 2,4-Dimethyläther d. 3,5-Dibrom-2,4,6-Trioxydiphenylketon (Dibromhydrocotoïn). Sm. 95° (A. 199, 59). — III, 203.
- 2) ?-Dibrom- $\alpha\alpha$ -Di[?-Oxyphenyl] propionsäure (B. 16, 2073). II, 1882. C 60,0 - H 4,0 - O 26,7 - N 9,3 - M. G. 300. $\mathbf{C}_{15}\mathbf{H}_{12}\mathbf{O}_5\mathbf{N}_2$
 - 1) Di[3-Nitro-4-Methylphenyl]keton. Sm. 144° (A. 271, 6; G. 21, 99). **– III**, 233.
 - 2) Gallocyanin (B. 21, 1740). III, 677.
 - 3) s-Diphenylharnstoff-3,3'-Dicarbonsäure. Sm. noch nicht bei 270°. NH₄, Ba + 3H₂O, Pb, Ag (Z. 1868, 390, 650; A. 153, 94; 169, 103; 172, 170; 291, 323; B. 11, 701; 15, 44, 2117, 2122, 2128). — II, 1260.
 - 4) s-Diphenylharnstoff-4,4'-Dicarbonsäure. Sm. noch nicht bei 270°. Ba (J. pr. [2] 5, 370; A. 291, 331). — II, 1272.
 - 5) 3-[2-Nitrobenzylformyl]amidobenzol-l-Carbonsäure. Sm. 195° (B. **25**, 3594). — **II**, 1259.
- $\mathbf{C}_{15}\mathbf{H}_{12}\mathbf{O}_{5}\mathbf{N}_{4}$ 1) β -Oximido- α -Phenylazo- β -Phenylpropionsäure. Sm. 142° (B. 18, 2566). **- IV**, 1472.
- $\mathbf{C}_{15}\mathbf{H}_{12}\mathbf{O}_5\mathbf{Br}_4$ 1) Verbindung (aus Espartoharz) (Soc. 41, 94). I, 1080.
- C 57,0 H 3,8 O 30,4 N 8,8 M. G. 316. $\mathbf{C}_{15}\mathbf{H}_{12}\mathbf{O}_{6}\mathbf{N}_{2}$
 - 1) $\alpha \beta$ -Di[2-Nitrophenyl] propionsäure. Sm. 170° (B. 30, 3019).
- C 52,3 H 3,5 O 27,9 N 16.3 M. G. 344.

 1) Methylester d. Phenylhydrazon-2,4-Dinitrophenylessigsäure. Sm. $C_{15}H_{12}O_6N_4$
- 182—183° (B. 21, 1307; 22, 320). IV, 1465. C 54,2 H 3,6 O 33,7 N 8,4 M. G. 332. $\mathbf{C}_{15}\mathbf{H}_{12}\mathbf{O}_7\mathbf{N}_2$ 1) 5-Carboxamido-2-Oxybenzol-1-Carbonsäure (J. pr. [2] 1, 234). — II, 1513.

- $C_{15}H_{12}O_7N_2$ 2) Aethylester d. ?-Dinitro-2-Oxybenzolphenyläther-1-Carbonsäure. Sm. 76° (A. **257**, 76). — II, *1495*. C 46,4 — H 3,1 — O 28,9 — N 21,6 — M. G. 388.
- $C_{15}H_{12}O_7N_6$
 - 1) Verbindung (aus 4-Nitrophenyloximidoamidomethan). Sm. 2320 (B. 22, 2423). — II, *1237*. C 42,9 — H 2,8 — O 34,3 — N 20,0 — M. G. 420.
- $\mathbf{C}_{15}\mathbf{H}_{12}\mathbf{O}_{9}\mathbf{N}_{6}$
 - 1) 3,5,3',5'-Tetranitro-4,4'-Di[Methylamido]diphenylketon. Sm. 2250 u. Zers. (R. 6, 370). — III, 185.
- 1) Dithiënylphenylmethan-?-Trisulfonsäure. Ca₃ + 8H₂O, Ba₃ + 8H₂O $C_{15}H_{12}O_9S_5$
- $\mathbf{C}_{15}\mathbf{H}_{12}\mathbf{O}_{12}\mathbf{N}_{8}$
- (B. 30, 2033). C 36,3 H 2,4 O 38,7 N 22,5 M. G. 496. 1) 3, 3', 5, 5' Tetranitro 4, 4' Di [Methylnitramido] diphenylmethan. Zers. bei 217—220° (R. 7, 228). IV, 974. 1) 5-Chlor-1, 3-Dimethylakridin. Sm. 108°. (2HCl, PtCl₄) (A. 279, 287).
- $\mathbf{C}_{15}\mathbf{H}_{12}\mathbf{NCl}$ **— IV**, 418.
- 1) 2-Merkapto-4,5-Diphenylimidazol. Sm. noch nicht bei 220°. Na $C_{15}H_{12}N_2S$ (A. 261, 136; 284, 11). — III, 224.
 - 2) 2-Amido-4, 5-Diphenylthiazol. Sm. 185-186°. HBr (A. 259, 243). **— IV**, 1029.
- 1) Benzyläther d. 5-Merkapto-2-Phenyl-1,2,4-Thiodiazol. Sm. 790 $C_{15}H_{12}N_2S_2$ (B. 24, 390). - IV, 846.
- 1) Amid d. 1,5-Diphenyl-1,2,4-Triazol-3-Carbonsäure. Sm. 170,5 bis $\mathbf{C}_{15}\mathbf{H}_{12}\mathbf{N}_{4}\mathbf{S}$
- 171,5°. + C_6H_6 (B. 25, 178 Anm.). IV, 1164. 1) Chloroeyananilid (A. 60, 273). II, 452. C 80,7 H 5,8 O 7,2 N 6.3 M. G. 223. $\mathbf{C}_{15}\mathbf{H}_{12}\mathbf{N}_5\mathbf{Cl}$ $\mathbf{C}_{15}\mathbf{H}_{13}\mathbf{ON}$
- 1) γ -[2-Oxyphenyl]imido- α -Phenylpropen. Sm. 79° (B. 25, 2754). III, 61.
 - 2) γ -[4-Oxyphenyl]imido- α -Phenylpropen. Sm. 223° (B. 25, 2745). —
 - III, 61. 3) γ -Keto- γ -[2-Amidophenyl]- α -Phenylpropen. Sm. 147° (B. 28, 2500).
 - **III**, 246. 4) γ -Phenylimido- α -Keto- α -Phenylpropan. Sm. 140—141° (B. 20, 2192).
 - **III**, 95.
 - 5) β -Benzoylamido- α -Phenyläthen. Sm. 161° (B. 26 [2] 677). II, 1167.
 - 6) 3-Benzoylamido-1-Aethenylbenzol. Sm. 90-910 (B. 26 [2] 677). -II, 1167.
 - 7) γ -Oximido- $\alpha \gamma$ -Diphenylpropen. Sm. 107—108° (B. 28, 965; J. pr. [2] 54, 405). — III, 246.
 - 8) isom. γ-Oximido-αγ-Diphenylpropen. 2 isom. Formen? anti-Form Sm. 68°; syn-Form Sm. 140° (B. **28**, 986; J. pr. [2] **54**, 408). — III, 246. 9) ?-Amido-10-Oxy-?-Methylanthracen. Sm. 183°. HCl + H₂O (B. **16**,
 - 703). II, 903.

 - 10) 4-Acetylamidofluoren. Sm. 187—188° (B. 17, 108). II, 638.
 11) 3,5-Diphenyl-4,5-Dihydroisoxazol. Sm. 73° (B. 28, 965, 986; J. pr. [2] **54**, 408). — III, 246.
 - 12) 3-Keto-1-Benzyl-1,3-Dihydroisoindol (Benzylphtalimidin). Sm. 135 bis 137° (B. 18, 1262; 20, 2863; 29, 1435, 2525, 2744). II, 1710.
 13) 1-Oximido-2-Phenyl-2,3-Dihydroinden. Sm. 141° (B. 25, 2128). —
 - III, 248.
 - 14) 2-Keto-3-Phenyl-1,2,3,4-Tetrahydrochinolin. Sm. 173—1740 (1690) (G. 20, 400; 25 [1] 178; B. 29, 500). — II, 1467.
 - 15) 1-Acetyl-3-Methyl-α-Naphtindol. Sm. 228° (B. 25, 2700). IV, 395. 16) 5-Keto-10-Aethyl-5,10-Dihydroakridin (N-Aethylakridon). Sm. 159°
 - (A. 276, 47). IV, 407.17) 5-Keto-1,3-Dimethyl-5,10-Dihydroakridin. Sm. 294° (A. 279, 285).
 - **IV**, 418 18) 5-Keto-1,10-Dimethyl-5,10-Dihydroakridin. Sm. 183-184° (A. 279,
 - 279). IV, 415. 19) 9-Keto-10-Aethyl-9,10-Dihydrophenanthridin. Sm. 89° (88°) (B. 26,
 - 1967; A. 276, 253). IV, 408.
 - 20) 10 Acetyl 9,10 Dihydrophenanthridin. Sm. 108° (A. 266, 153). IV, 396.
 - 21) Phenylamid d. β -Phenylakrylsäure. Sm. 109° (A. 70, 43; B. 16, 1665; 31, 2617 Ann.). — II, 1407.

- 22) Nitril d. α -Oxy- $\beta\beta$ -Diphenylpropionsäure. Fl. (A. 248, 39). $C_{15}H_{18}ON$ II, 1699.
 - 23) Cupreïn (Farbstoff aus Curculio cupreus) (C. 1895 [2] 52). C 71.7 - H 5.2 - O 6.4 - N 16.7 - M. G. 251.
- $C_{15}H_{13}ON_{8}$
- 1) β -Imidoamidomethylimido α -Keto $\alpha\beta$ -Diphenyläthan (Benzilmonoguanyl). Sm. oberh. 300° (B. 19, 762; J. pr. [2] 49, 43). — III, 284.
- 2) 5-[4-Methylphenyl]amido-2-Phenyl-1, 2, 4-Oxdiazol. Sm. 1356 (B. 24, 398). **— IV**, *846*.
- 3) 2-Phenylimido-5-Methyl-3-Phenyl-2, 3-Dihydro-1, 3, 4-Oxdiazol. Sm. 75°. (2 HCl, PtCl₄) (B. 26, 2871).
- 4) 5-Phenylimido-2-Methyl-4-Phenyl-4, 5-Dihydro-1, 3, 4-Oxdiazol. Sm. 75°. (2 HCl, PtCl₄) (B. 26, 2871). — IV, 675.
- 5) 3-Oxy-5-Phenyl-1-[4-Methylphenyl]-1,2,4-Triazol, Sm. 242°. Ag
- (Soc. 73, 369). IV, 1158. 6) 3-Oxy-1-Phenyl-5-[3-Methylphenyl]-1,2,4-Triazol. Sm. 256°. Ag
- + H₂O (Soc. 71, 213). IV, 1161. 7) 3-Keto-2-Phenyl-1-Benzyl-2, 3-Dihydro-1, 2, 4-Triazol. Sm. 97—98°. **– IV**, 1101.
- 8) Methyläther d. 3-Oxy-1,5-Diphenyl-1,2,4-Triazol. Sm. 88°. HCl, (2 HCl, PtCl₄) (B. **29**, 2674). — **IV**, 1157
- 9) 1-Acetyl-2-Methyl-5-[2-Naphtyl]-1, 3, 4-Triazol. Sm. 135° (B. 30, 1881; A. **298**, 38). — **IV**, 1183.
- 10) 5-Keto-1,4-Diphenyl-1,4,5,6-Tetrahydro-1,2,4-Triazin. Sm. 204 bis 205° (B. 28, 1230). — IV, 1106.
- 11) 6-Keto-1,4-Diphenyl-1,4,5,6-Tetrahydro-1,2,4-Triazin. Sm. 173 bis 174° (B. 26, 2616). — IV, 665.

 12) 2[oder 3]-Phenylhydrazon-3[oder 2]-Keto-1-Methyl-2, 3-Dihydro-
- indol (Methylpseudoisatinphenylhydrazon). Sm. 145-146° (A. 248, 117). - II, 1603.
- 13) 3-Phenylhydrazon-2-Keto-5-Methyl-2,3-Dihydroindol (Phenylhydrazinmethylisatin). Sm. oberh. 300° (J. pr. [2] 33, 73). — II, 1652.
- 14) 3-Methylphenylhydrazon-2-Oxypseudoindol. Sm. 172-1730 (B. 28, 2526). — IV, 696.
- 15) 3-[2-Methylphenyl[hydrazon-2-Oxypseudoindol. Sm. 240-241° (B. 28, 544). — IV, 803.
- 16) 3-[4-Methylphenyl]hydrazon-2-Oxypseudoindol. Sm. 233° (B. 28,
- 544). IV, 809. 17) 1-Acetyl-2-Phenylimido-2, 3-Dihydrobenzimidazol. Sm. 160° (B. 24,
- 2502). IV, 566. 18) 1-Benzoyl-5,7-Dimethyl-1,2,3-Benztriazol. Sm. 111° (Am. 17, 453). **— IV**, 1150.
- 19) Nitril d. 2,6-Dimethyl-4-[2-Oxyphenyl]-1,4-Dihydropyridin-3,5-Dicarbonsäure. Sm. 265—270° u. Zers. (J. pr. [2] 56, 138). C 64,5 - H 4,6 - O 5,7 - N 25,1 - M. G. 279.
- $\mathbf{C}_{15}\mathbf{H}_{18}\mathbf{ON}_{5}$ 1) 3-Amidooximidomethyl-1,5-Diphenyl-1,2,4-Triazol $+ \frac{1}{2}$ H₂O. Sm. 213,5—214° u. Zers. HCl (B. **22**, 1752). — IV, 1164.
- γ-Chlor-α-Keto-αγ-Diphenylpropan. Sm. 119—120° (u. 110—112°)
 (B. 14, 2464; 28, 957; A. 284, 2). III, 228. $\mathbf{C}_{15}\mathbf{H}_{13}\mathbf{OCl}$
- 1) γ -Brom- α -Keto- $\alpha\gamma$ -Diphenylpropan. Sm. 111° (B. 28, 958). III, 228. $\mathbf{C}_{15}\mathbf{H}_{13}\mathbf{OBr}$ 2) α -Brom- β -Keto- $\alpha\gamma$ -Diphenylpropan. Sm. 43-44° (B. 22, 1368). -III, 229.
 - 3) 4- $[\alpha$ -Brompropionyl] biphenyl. Sm. 79-80° (C. 1897 [2] 576).
- C 75,3 H 5,4 O 13,4 N 5,9 M. G. 239. $C_{15}H_{13}O_2N$ 1) Methylenäther d. 3,4-Dioxy-1-Benzylimidomethylbenzol. Sm. 76° (G. **26** [1] 10).
 - 2) α -Oxy- α -Benzoyl- α -[4-Methylphenyl]imidomethan. Sm. 111—113° (Am. 16, 383).
 - 3) Methyl-2-Benzoylamidophenylketon. Sm. 98° (B. 26, 1391). -III, 124.
 - 4) 2-Acetylamidodiphenylketon. Sm. 88,5-890 (72°) (B. 24, 2384; 25, 3081; **29**, 1263). — III, 182.
 - 5) 4-Acetylamidodiphenylketon. Sm. 153° (A. 210, 270; B. 14, 1838). - III, 184.

6) β -Oximido- α -Keto- $\alpha\gamma$ -Diphenylpropan. Sm. 125—126° (B. 21, 1326). $C_{15}H_{13}O_2N$ **_ III**, 228.

7) Methyläther d. β-Oximido-α-Keto-αβ-Diphenyläthan (M. d. α-Benzil-

oxim). Sm. 62-63° (B. 23, 3591). — III, 289.

- 8) Methyläther d. isom. β -Oximido- α -Keto- $\alpha\beta$ -Diphenyläthan (M. d. y-Benziloxim). Sm. 64—65°; Sd. 219—220°₄₀ (B. **23**, 3593). — III, 289. 9) Acetat d. α-Oximidodiphenylmethan. Sm. 55° (M. 5, 205). — II, 189.
 10) N-Benzoylbenzimidomethyläther. Sd. 210—212°₁₂ (Am. 20, 69).
- 11) 1-Keto-2-[4-Oxymethylphenyl|-1,3-Dihydroisoindol (4-Oxybenzyl-
- phtalimidin). Sm. 187—188° (B. 23, 344). II, 1558. 12) 2-Keto-4, 5-Diphenyltetrahydrooxazol. Sm. 189—189,5° (B. 29, 1210). 13) Aethyläther d. 2-[4-Oxyphenyl]benzisoxazol. Sm. 59-61° (B. 27,

1455). — IV, 410. 14) 1-[4-Methylphenyl]imidomethylbenzol-2-Carbonsäure (B. 29, 2039).

15) α-Phenyl-β-[2-Amidophenyl]akrylsäure (2 Modif.). Sm. 185-186° (B. **29**, 498).

16) 2-Phenyl-1, 3-Dihydroisoindol-23-Carbonsäure. Sm. 246-2470 (B.

31, 631).

17) 2-Methyl- β -Naphtindol-1-Methylcarbonsäure. Sm. 210°. $+\frac{1}{2}$ Mol. Aceton. Ag (A. 242, 368). — IV, 403.
18) Lakton d. Methylphenylamidoxym Methylphenylamidooxymethylbenzol-2-Carbonsäure.

Sm. 150° (B. 29, 2039).

19) Lakton d. 1-[4-Methylphenyl]amidooxymethylbenzol-2-Carbonsäure. Sm. 149° (B. 29, 2039).

20) Aethylester d. α-Naphtindol-2-Carbonsäure. Sm. 170° (A. 239, 232). **— IV**, 403.

21) Amid d. Benzoylphenylessigsäure. Sm. 172—173° (J. pr. [2] 55, 314).

22) Amid d. α -Keto- $\alpha\beta$ -Diphenyläthan- α^2 -Carbonsäure (A. d. Desoxybenzoïncarbonsäure). Sm. 165—166° (B. 18, 2434). — II, 1709.

23) Amid d. 2-[4-Methylbenzoyl]benzol-l-Carbonsäure. Sm. 175-176° (B. **30**, 1132).

24) Phenylamid d. Benzoylessigsäure. Sm. 107-108°. HCl (A. 245,

374). — II, 1644. 25) Phenylamid d. 2-Acetylbenzol-1-Carbonsäure? Sm. 189—192° (B. 19, 2371). — II, 1873.

26) 2-Methylphenylamid d. Benzolketocarbonsäure. Sm. 1080 (A. 270, 318). — **II**, *1598*.

27) Phenylacetylamid d. Benzolcarbonsäure (Acetylbenzoylamidobenzol).

Sm. 68° (Am. 18, 546). 28) 2-Methylphenylformylamid d. Benzolcarbonsäure. Sm. 92° (Am. 18,

387; **19**, 136). 29) 4-Methylphenylformylamid d. Benzolcarbonsäure. Sm. 101° (Am.

16, 383; 18, 546; 19, 136). — II, 1170. 30) Benzylidenamid d. α-Oxyphenylessigsäure (B. d. Mandelsäure). 195° (Berz. J. 17, 288; 18, 362; Z. 1868, 710; B. 25, 1682; 29, 207).

- III, 36. 31) Benzoylamid d. Phenylessigsäure. Sm. 1710 (Am. 13, 6). — II, 1312. 32) 1-Naphtylimid d. Propan- $\alpha\beta$ -Dicarbonsäure (C. 1896 [1] 109).

33) 2-Naphtylimid d. Propan- $\alpha\beta$ -Dicarbonsäure. Sm. 158—159° (C. 1996)

C 67,4 - H 4,9 - O 12,0 - N 15,7 - M. G. 267. $C_{15}H_{13}O_2N_3$

1) γ -Phenylhydrazon- α -[2-Nitrophenyl] propen. Sm. 157,5° (B. 18, 2338). · IV, 754.

2) γ -Phenylhydrazon- α -[3-Nitrophenyl]propen. Sm. 106° (B. 18, 484). - IV, 754.

γ-Phenylhydrazon-α-[4-Nitrophenyl]propen. Sm. 180—181° (B. 18, 2337). — IV, 754.

4) 3,5-Diketo-1,4-Diphenylhexahydro-1,2,4-Triazin. Sm. 257-258° (A. 301, 69).

5) Methyläther d. 3-Phenylhydrazon-1-Oxy-2-Keto-2, 3-Dihydroindol. Sm. 128-129° (B. 29, 659). — IV, 696.

6) 1,5-Dimethyl-2-[2-Nitrophenyl] benzimidazol. Sm. 152-1530 (B. 26, 197). — IV, 1013.

- $\mathbf{C}_{15}\mathbf{H}_{13}\mathbf{O}_{2}\mathbf{N}_{3}$ 7) 1, 5 Dimethyl 2 [4 Nitrophenyl] benzimidazol (B. 26, 197). IV, 1013.
 - 8) 6-Phenylazo-5-Oxy-1, 3-Dimethylbenzoxazol. Sm. 116-1180 (M. 19, 512). - IV, 1448.
 - 9) Aethylester d. 1-Naphtylhydrazoncyanessigsäure. Sm. 1470 (J. pr. [2] **52**, 167). — IV, 1547.
 - 10) Aethylester d. 2-Naphtylhydrazoncyanessigsäure. Sm. 145° (J. pr.
 - [2] 52, 169). IV, 1457.
 11) Aethylester d. 1-Naphtalinazocyanessigsäure. Sm. 105° (J. pr. [2])
 - 52, 168). IV, 1457. 12) Aethylester d. 2-Naphtalinazocyanessigsäure. Sm. 124° (*J. pr.* [2] **52**, 169). — IV, 1457.
 - 13) Phenylhydrazidomethylimid d. Benzol-1, 2-Dicarbonsäure. Sm. 120 bis 121° (B. 31, 3235).
- $\mathbf{C}_{15}\mathbf{H}_{13}\mathbf{O}_{2}\mathbf{Br}$ 1) γ -Keto- γ -Phenyl- α -[5-Brom-2-Oxyphenyl] propan. Sm. 94—95° (B. 31, 719).
 - 2) Aethyläther d. 2-Brom-4'-Oxydiphenylketon. Sm. 79° (B. 27, 1454). **— III**, 195.
 - 3) $\alpha[\text{oder }\beta]$ -Brom- $\alpha\beta$ -Diphenylpropionsäure. Sm. 1850 (B. 26, 661). **II**, 1467.
 - 4) Aethylester d. ?-Brom-1-Phenylbenzol-4-Carbonsäure (B. 27, 3389). - II, 1462.
- 1) 1,4-Diacetat d. 3-Jod-1,2,4-Trioxynaphtalin-2-Methyläther. Sm. $\mathbf{C}_{15}\mathbf{H}_{13}\mathbf{O}_{9}\mathbf{J}$ 162—163° (B. 28, 347). C 70,6 - H 5,1 - O 18,8 - N 5,5 - M. G. 255. $C_{15}H_{18}O_{3}N$
- 1) 3,4-Methylenäther d. 2-[3,4-Dioxybenzyliden]amido-1-Oxymethylbenzol. Sm. 78° (B. 25, 2972). III, 103.
 - 2) 1-Methyläther-3,4-Methylenäther d. 4-[3,4-Dioxybenzyliden|amido-1-Oxybenzol. Sm. 121° (B. 31, 175).
 - 3) 3-Nitrophenyl-2,4-Dimethylphenylketon. Sm. 64° (A. 286, 333). - III, 231.
 - 4) 3-Nitrophenyl-2,5-Dimethylphenylketon. Sm. 97-98° (A. 286, 341). **– III**, 232.
 - 5) 3-Nitrophenyl-3,4-Dimethylphenylketon. Sm. 100° (A. 286, 339). **- III**, 233.
 - 6) Anthracenmethylnitrat. Sm. 183° (Soc. 59, 648; 61, 871). II, 260. 7) Benzoat d. anti-4-Methoxylbenzaldoxim. Sm. 109-1100 (G. 22 [2]
 - 169; 26 [1] 461). III, 88. 8) Benzoat d. anti-Methylbenzhydroxamsäure. Sm. 53—54° (A. 175, 341; **281**, 235, 237; *B.* **29**, 1151, 1155). — **II**, 1207.
 - 9) Benzoat d. syn-Methylbenzhydroxamsäure. Sm. 55° (B. 29, 1158). - II, 1207.
 - 10) Benzoat d. 4-Methylbenzhydroxamsäure. Sm. 156° (A. 281, 226). · II, 1344.
 - 11) 4-Methylbenzoat d. Benzhydroxamsäure. Sm. 155° (A. 281, 225). - II, 1344.
 - 12) 2-Benzylformylamidobenzol-1-Carbonsäure. Sm. 1960 (B. 16, 1285). · II, 1250.
 - 13) α -Benzoylamido α -Phenylessigsäure. Sm. 1740 (B. 24, 4151). II, 1326.
 - 14) Phenylbenzoylamidoessigsäure. Sm. 83°. Cu (G. 17, 232). II, 1186.
 - 15) 2-Benzoylmethylamidobenzol-1-Carbonsäure. Sm. 161° (J. pr. [2] **55**, 129).
 - 16) 2-[3-Amido-4-Methylbenzoyl]benzol-1-Carbonsäure. Sm. 163°. Ag, HČl (*A*. **299**, 314). /
 - 17) 6-Benzoylamido-1-Methylbenzol-3-Carbonsäure. Sm. unter 100° (A. **221**, 169). — II, 1339.
 - 18) Monomethylester d. Benzol-1, 2-Dicarbonsäurephenylmonamid. Sm. 111—113,5° (R. 15, 347). 19) Isomethylester d. Benzol-1,2-Dicarbonsäurephenylmonamid. Zers.
 - bei 123°. HCl, Ag (R. 15, 343).
 - 20) Aethylester d. β-Naphtylindoxylsäure. Sm. 158° (B. 31, 1817).
 21) Phenylester d. Benzoylamidoessigsäure. Sm. 104° (B. 26, 1700; H. **20**, 412). — **II**, 1184.

C₁₅H₁₃O₃N 22) Benzylmonamid d. Benzol-1,2-Dicarbonsäure. Sm. 154°. Ag (B. 31, 2740).

23) 2-Methylphenylmonamid d. Benzol-1, 2-Dicarbonsäure (o-Tolylphtalamidsaure). Ba, Pb, Ag, Ag₂ (Am. 9, 53; B. 17, 2679). — II, 1797. 24) 1-Naphtylamid d. Pseudoitakonsäure. Sm. 205—206° (A. 254, 151).

 $C_{15}H_{13}O_3N_3$

C 63.6 - H 4.6 - O 17.0 - N 14.8 - M. G. 283.1) $\alpha\beta\gamma$ -Trioximido- $\alpha\gamma$ -Diphenylpropan. Sm. 185—186° (B. 23, 3387). — III, 316. 2) α-Acetyl-α-Phenyl-β-[3-Nitrobenzyliden]hydrazin. Sm. 170° (J. pr.

[2] **53**, 457; B. **17**, 2097). — **IV**, 752.

3) α -Acetyl- α -Phenyl- β -[4-Nitrobenzyliden]hydrazin. Sm. $160-162^{\circ}$ (J. pr. [2] 53, 460). — IV, 752.

4) γ-Phenylhydrazon-α-[3-Nitro-2-Oxyphenyl]propen. Sm. 1570 (B. 20,

1934). **— IV**, 762. 5) γ -Phenylhydrazon- α -[5-Nitro-2-Oxyphenyl] propen. Sm. 235° (B. 20,

1933). — IV, 762.

6) β -[2-Nitro-4-Methylphenyl]azo- α -Keto- α -Phenyläthan (B. 18, 2566). IV, 1478.

7) 1-Nitroso-2-[3-Nitrophenyl]-1,2,3,4-Tetrahydrochinolin. Sm. 71° (B. 18, 1906). — IV, 399.

8) 7-Methyläther d. 5-Amido-7,8-Dioxy-1-Keto-2-Phenyl-1,2-Dihydro-2, 3-Benzdiazin (Normethylamidoopiansäurephenylhydrazid) (B. 19, 2310).

— IV, 717.
9) Benzol-1-Carbonsäurephenylamid - 3 - Amidoketocarbonsäureamid $(A. 232, 137). - II, 12\bar{6}5.$

10) Amid d. Carbanilidoisatinsäure. Sm. 229° u. Zers. (J. pr. [2] 32, 288). - II, 1604.

11) Phenylnitrosamid d. Benzoylamidoessigsäure. Sm. 195-197° (J. pr. [2] **52**, 258).

 $C_{57,9} - H_{4,2} - O_{15,4} - N_{22,5} - M_{6,311}$ $C_{15}H_{13}O_3N_5$

1) α-[4-Nitrophenyl]azo-α-Phenylhydrazon-β-Ketopropan. Sm. 180° (B. 25, 3546). - IV, 1230.

C₁₅H₁₃O₃Br 1) α-Bromlapachol. Sm. 170—171° (Soc. 65, 16). — III, 400. 2) β-Bromlapachol. Sm. 139—140° (G. 12, 353; 21, 374). — III, 400. 3) Brom-α-Lapachon. Sm. 172,5—173,5° (Soc. 65, 18). — III, 401. 4) Brom-β-Lapachon. Sm. bei 205° u. Zers. (Soc. 65, 18). — III, 401. C₁₅H₁₃O₃Br₃ 1) Tribromdihydrolapachol. $+ \frac{1}{2}$ HBr (Sm. 200°) u. Zers. (Soc. 63, 433).

· III, 402. $C_{15}H_{13}O_4N$ C 66.4 - H 4.8 - O 23.6 - N 5.2 - M. G. 271.

1) Dimethyläther d. 3-Nitrophenyl-[1, 3-Dioxyphenylen]methan. Zers. bei 158—160° (G. 22 [2] 299). — II, 997.

2) Dimethyläther d. 4-Nitrophenyl-[1,3-Dioxyphenylen]methan (G. 22

[2] 299). — II, *998*. 3) Oxyessig-4-Benzoylamidophenyläthersäure. Sm. 194-195° [J. pr.

[2] 55, 121). 4) ?-Diacetylamidonaphtalin - 2 - Carbonsäure. Sm. 181° (J. pr. [2] 42,

297). — II, 1459.

5) α -Benzoxyl- β -[2-Pyridyl] propionsäure. Sm. 145° u. Zers. (2 HCl, PtCl₄) (A. 265, 217). — IV, 154.

6) β-Benzoxyl-β-[2-Pyridyl]propionsäure. Sm. 135,5° (A. **265**, 234). — IV, 154.

7) 2,6-Dimethyl-4-Phenylpyridin-3,5-Dicarbonsäure+xH₂O (Phenyllutidindicarbonsäure). Sm. 280° u. Zers. HCl, Ba $+ 7 H_2 O$ (B. 16, 1608; 25, 2786). — IV, 386.

8) Dimethylphenylpyridindicarbonsäure. Fl. Ag₂ (J. pr. [2] 35, 311).

- IV, 386.

- 9) 1,2-Lakton d. 3,4-Dioxy-1-Phenylamidooxymethylbenzol-3[oder 4]-Methyläther-2-Carbonsäure. Sm. 199° u. Zers. Na + H_2O (B. 29, 2034).
- 10) Methylester d. 2-[Phenylamidoformyl]oxybenzol-1-Carbonsäure. Sm. 238° (B. 18, 2431). — II, 1496.

11) Methylester d. 5-Amido-2-Benzoxylbenzol-1-Carbonsäure. Sm. 1800 (C. 1897 [2] 672).

C₁₅H₁₃O₄N 12) Methylester d. 3-Amido-4-Benzoxylbenzol-1-Carbonsäure. Sm. 157 bis 158° (C. 1897 [2] 672).

13) Methylester d. 3-Benzoylamido-4-Oxybenzol-1-Carbonsäure. Sm. 241° (C. 1897 [2] 672).

14) Phenylester d. Benzoylamidooxyessigsäure. Sm. 170° (B. 26, 2644; H. **20**, 419). — **II**, 1192.

15) 1-Benzoat d. 4-Nitroso-1, 3-Dioxybenzol-3-Aethyläther. Sm. 1550 (M. 12, 374). — II, 1150.

16) β -[2-Oxybenzoat] d. α -Oximido- β -Oxy- α -Phenyläthan. Sm. 97° (C. 1896 [1] 764).

17) Benzoat d. 4-Methoxylbenzhydroxamsäure. Sm. 147-1480 (A. 175, 294). — II, *1533*.

18) 4-Methoxylbenzoat d. Benzhydroxamsäure. Sm. 131—1320 (A. 175, 288). **— II**, *1533*.

19) 3- oder 4-[2-Oxyphenylamid] d. 1-Methylbenzol-3,4-Dicarbonsäure. Sm. 200° u. Zers. (M. 12, 632). — II, 1846.

C 60,2 - H 4,3 - O 21,4 - N 14,0 - M.G. 299. $C_{15}H_{13}O_4N_3$

- 1) β -Acetyl- α -[2-Nitrobenzoyl]- α -Phenylhydrazin. Sm. 1340 (A. 301, 89). 2) α -Acetyl- β -Benzoyl- α -[3-Nitrophenyl] hydrazin. Sm. 147° (B. 22, 2813). **— IV**, 669.
- 3) β -Acetyl- α -Benzoyl- α -[3-Nitrophenyl]hydrazin. Sm. 173° (B. 22, 2812).
- IV, 669.
 4) Acetat d. Phenyl-3-Nitro-2-Oxybenzylidenhydrazin. Sm. 150° (A. 305, 190).

5) Acetat d. Phenyl-5-Nitro-2-Oxybenzylidenhydrazin. Sm. 165-166°. Ag (A. 305, 188).

6) Acetat d. 2-Nitro-?-Oxy-?-Methylazobenzol. Sm. 99-100° (B. 24, 2308). **— IV**, *1421*.

7) Acetat d. 3-Nitro-?-Oxy-?-Methylazobenzol. Sm. 143-1440 (Soc. 65, 838). **— IV**, *1421*.

8) s-Diphenylguanidin-3,3'-Dicarbonsäure. Ba, HCl, (2HCl, PtCl₄) (A. 172, 172; Z. 1867, 34; B. 11, 1987). — II, 1268.

9) α -Phenylhydrazon- β -[2-Nitrophenyl] propionsäure. Sm. 148—149° u. Zers. (B. 30, 1038). — IV, 697.

10) α-Phenylhydrazon-β-[4-Nitrophenyl] propionsäure. Sm. 168° u. Zers. (B. 30, 1049). — IV. 697.

11) α -Methylphenylhydrazon - 2 - Nitrophenylessigsäure. Sm. 141—142° (B. 23, 1583) — IV, 695.

12) Verbindung (aus Carbanilidoisatin). Sm. 225° (J. pr. [2] 32, 291). — II, 1604.

13) Verbindung (aus 4-Methylphenylcarbonimid u. anti-2-Nitrobenzaldoxim). Sm. 139° (B. 26, 2101). — III, 47.

14) Verbindung (aus 4-Methylphenylcarbonimid u. syn-2-Nitrobenzaldoxim). Sm. 93° u. Zers. (B. 26, 2102). — III, 47.

15) Verbindung (aus 2-Methylphenylcarbonimid u. anti-3-Nitrobenzaldoxim). Sm. 138° u. Zers. (B. 26, 2099). — III, 48.

16) Verbindung (aus 4-Methylphenylcarbonimid u. anti-3-Nitrobenzaldoxim). 2 isomere Formen. Sm. 96° u. 132° (B. 26, 2099). — III, 48.

17) Verbindung (aus 4-Methylphenylcarbonimid u. syn-3-Nitrobenzaldoxim). Sm. 181° u. Zers. (B. 26, 2099). — III, 48.

18) Verbindung (aus 2-Methylphenylcarbonimid u. anti-4-Nitrobenzaldoxim). Sm. bei 183° (B. 26, 2096). — III, 49.

19) Verbindung (aus 2-Methylphenylcarbonimid u. syn-4-Nitrobenzaldoxim). Sm. 185° (B. 26, 2096). — III, 50.

20) Verbindung (aus 4-Methylphenylcarbonimid u. anti-4-Nitrobenzaldoxim). Sm. 154° (B. 26, 2096). — III, 49. 21) Verbindung (aus 4-Methylphenylcarbonimid u. syn-4-Nitrobenzaldoxim). Sm. 176° (B. 26, 2096). — III, 50.

22) Verbindung (aus Phenylcarbonimid u. N-Methyl-syn-3-Nitrobenzaldoxim).
Sm. 139° (B. 24, 2816). — III, 48.
C₁₅H₁₃O₄Br 1) Bromoxy-β-Lapachon. Sm. 247° u. Zers. (Soc. 63, 430). — III, 402.

2) 2,4-Dimethyläther d. ?-Brom-2,4,6-Trioxydiphenylketon (Bromhydrocotoïn). Sm. 147° (A. 199, 59). — III, 203.

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 $C_{15}H_{13}O_5N_3$

 $C_{15}H_{13}O_6N$

 $C_{15}H_{13}O_4Br$ 3) Aethylester d. 3-Brom-1-Keto-2-[β -Ketopropyl]inden-2 α -Carbonsäure (D. d. Bromindonacetessigsäure). Sm. 80-820 (B. 31, 2083).

C 62,7 - H 4,5 - O 27,9 - N 4,9 - M. G. 287. $C_{15}H_{13}O_5N$

1) 4-Keto-2,6-Dimethyl-1-Phenyl-1,4-Dihydropyridin-3,5-Dicarbonsaure. Sm. 227°. Ba + H₂O (B. 20, 160). - II, 2005.

2) 2-[3,4-Dimethoxylbenzoyl]pyridin-4-Carbonsäure (Pyropapaverinsäure). Sm. 230°. Ca + $4H_2O$, Ba + $4H_2O$, $2HCl + H_2O$ (M. 6, 394; 10, 694). — 1∇ , 177.

3) Phenylamid d. Dehydracetcarbonsäure. Sm. 1850 (A. 273, 208). -

II, 424. 4) Benzoat d. β-Oxyäthyl-2-Nitrophenyläther. Sm. 76—77° (J. pr. [2]

24, 252). — II, $1\overline{154}$. C 57,1 — H 3,2 — O 25,4 — N 13,3 — M. G. 315.

1) β-Keto-α-[?-Dinitro-?-Phenylamidophenyl] propan. Sm. 131°. Na (Am. 12, 178). — III, 144,

2) ?-Dinitro-4-Methylphenylamidobenzoylmethan. Sm. 156° u. Zers. (B. 23, 169). — III, 127.

3) ?-Dinitro-?-Dimethylamidodiphenylketon. Sm. 1420 (A. 206, 90). III, 183.

4) 6-Nitro-2,4-Dimethylphenylamid d. 4-Nitrobenzol-1-Carbonsäure. Sm. 139—140° (B. 26, 2763). — II, 1236.

C 59,4 - H 4,3 - O 31,7 - N 4,6 - M. G. 303.1) 2-Oxybenzol-β-[2-Nitrophen]oxyläthyläther-1-Carbonsäure.

 $142-148^{\circ}$ (J. pr. [2] **27**, 214). — II, 1495. 2) 2-Oxybenzol-β-[4-Nitrophen]oxyläthyläther-1-Carbonsäure. Sin. 132° (J. pr. [2] 27, 220). — II, 1496.

3) 4-Oxybenzol- β -[2-Nitrophen]oxyläthyläther-1-Carbonsäure. Sm. 205-207° (J. pr. [2] 27, 222). — II, 1527.

4) 4-Oxybenzol- β -[4-Nitrophen] oxyläthyläther-1-Carbonsäure. Sm.

218°. Na + 3H₂O (*J. pr.* [2] **27**, 225). — II, *1527*.
5) β-[2-Nitrophenyl]äther d. 2-Oxybenzol-1-Carbonsäure-β-Oxyäthylester. Sm. 106° (*J. pr.* [2] **27**, 215). — II, *1493*.
6) β-[4-Nitrophenyl]äther d. 2-Oxybenzol-1-Carbonsäure-β-Oxyäthyl-

ester. Sm. 131° (*J. pr.* [2] **27**, 221). — II, *1493*. C 54.4 - H 3.9 - O 29.0 - N 12.7 - M. G. 331. $1) <math>\beta$ -Nitro- $\alpha\gamma$ -Di[2-Nitrophenyl] propan. Sm. 140—141,5° (*B.* **31**, 657).

 $C_{15}H_{13}O_6N_3$

2) 6-Nitro-3-Oxy-4-Methoxyl-1-Phenylhydrazonmethylbenzol-2-Car-

bonsäure. Sm. 178—179° u. Zers. (B. 19, 2308). — IV, 716.
3) Aethylester d. 3,5-Dinitro-4-Phenylamidobenzol-l-Carbonsäure. Sm. 154° (Am. 19, 21, 208).

4) Aethylester d. Di[2-Nitrophenyl]amidoameisensäure. Fl. (B. 18, 2574). — II, 374.

5) Aethylester d. Di [4-Nitrophenyl] amidoameisensäure. Sm. 133-1340 (B. 18, 2576). — II, 374.

6) 2,4-Dinitrophenyläther d. β -Aethylbenzhydroxamsäure. Sm. 150 bis 152° (B. 27, 1656). — II, 1198.

C 50,2 - H 3,6 - O 26,7 - N 19,5 - M. G. 359. $C_{15}H_{13}O_6N_5$

1) β -Phenylhydrazon- α -[2,4,6-Trinitrophenyl]propan. Sm. 125° u. Zers. (B. 23, 2724). - IV, 773.

C₁₅H₁₃O₀Br 1) Brompikropodophyllin. Sm. 138° (Soc. **73**, 217). 2) Brompodophyllotoxin. Sm. oberh. 250° (Soc. **73**, 217).

 $C_{15}H_{13}O_7N_5$

C 48,0 — H 3,4 — O 29,9 — N 18,7 — M. G. 375.

1) Aethyläther d. s-Benzyliden-2,4,6-Trinitro-3-Oxyphenylhydrazin. Sm. 228° (G. 25 [2] 503). — III, 39.

2) 1-Methyloxydhydrat d. 5-Nitro-2-Methyl-1-[2,4-Dinitrophenyl]

benzimidazol. Sm. 264° (B. 31, 1464).

C 46,0 - H 3,3 - O 32,7 - N 17,9 - M. G. 391. $C_{15}H_{13}O_8N_5$

1) 3-Aethyläther d. α -[2,4,6-Trinitro-3-Oxyphenyl]- β -[2-Oxybenzyliden]hydrazin. Sm. 217—218° (G. 25 [2] 503). — III, 76.

2) 3-Aethyläther d. α -[2,4,6-Trinitro-3-Oxyphenyl]- β -[4-Oxybenzyliden hydrazin. Sm. 231° (C. 25 [2] 504). — III, 86.

 $C_{15}H_{13}NBr_2$ 1) $\alpha\beta$ -Dibrom - γ -Phenylimido- α -Phenylpropan. Sm. bei 175° u. Zers. (A. 239, 384). — III, 54.

- $C_{15}H_{13}NBr_2$ 2) 1,3-Dimethyl- α -Naphtochinolindibromid. 2+HBr (J. pr. [2] 35, 305). - IV, 419.
- $C_{15}H_{13}NS$ 1) 3,5-Dimethyl-1-Phenylbenzthiazol. Fl. HCl, (2HCl, PtCl₄) (B. 21, 2552). — II, 1294.
 - 2) 3-[2-Methylphenyl]-2,4-Benzthiazin. Sm. 54,5-56° (B. 30, 1142). IV, 419.
 - 3) 3-[4-Methylphenyl]-2,4-Benzthiazin. Sm. 109—110°. Pikrat (B. 30, 1141). — IV, 420.
- $C_{15}H_{13}NS_{2}$ 1) Dithiënyl-2-Amidophenylmethan. Sm. 59-60°. HCl (B. 30, 2036). 2) Dithiënyl-3-Amidophenylmethan. Sm. 73-74°. HCl, (2HCl, PtCl₄) (B. **30**, 2034).
 - 3) Dithiënyl-4-Amidophenylmethan. Sm. 84-85°. HCl (B. 30, 2036).
 - 4) 4'-Aethyläther d. 1-[4-Merkaptophenyl] benzthiazol. Sm. 101-1020 (B. 27, 1740). — II, 1542.
- $C_{15}H_{13}N_2Cl$ 1) β -Chlor- γ -Phenylhydrazon- α -Phenylpropen. Sm. 160° (B. 24, 247). - IV, 754.
 - 2) 5-Chlor-1-Phenylhydrazon-2,3-Dihydroinden. Sm. 139 (B. 23, 1893). — IV, 774.
 - 3) 6-Chlor-1-Phenylhydrazon-2,3-Dihydroinden. Sm. 136,5-137,50
 - (B. 25, 2113). IV, 774. 4) Chlorbenzylat d. 2,3-Benzdiazin (Ch. d. Phtalazin). Sm. 97—99° (B. 28, 1835). - IV, 900.
- $C_{15}H_{13}N_2Br$ 1) β -Brom- γ -Phenylhydrazon- α -Phenylpropen. Sm. 129—130° (B. 17. 1815). — IV, 754.
 - 2) 4-Brom-1-Phenylhydrazon-2, 3-Dihydroinden. Sm. 146—147,5° (B. 25, 2110). - IV, 774.
 - 3) 6-Brom-1-Phenylhydrazon-2, 3-Dihydroinden. Sm. 158—159,5° (B.
 - 25, 2111). IV, 774.
 4) 2-Methyl-3-[4-Bromphenyl]-3, 4-Dihydro-4, 3-Benzdiazin. HCl (J. pr. [2] 47, 362). IV, 884.
 5) Verbindung (aus Anilin u. αβ-Dibromakrylsäure). Sm. 145° (B. 22, 3308).
 - **II**, 371.
- 1) Methyläther d. 5-Merkapto-1, 2-Diphenyl-1, 3, 4-Triazol. Sm. 164°. $C_{15}H_{13}N_3S$ HCl, (2 HCl, PtCl₄), HJ, Pikrat (B. 29, 2918). — IV, 1159.
 - 2) Benzyläther d. a-Cyanamido-a-Phenylimido-a-Merkaptomethan (Phenylpseudobenzylthioharnstoffcyanid). Sm. 190° (B. 28, 1304).
 - 3) Benzylcyanamid d. Phenylamidothioameisensäure. Sm. 1820 u. Zers. (B. **23**, 1666). — **II**, 529.
- α-Phenyl-c-Phenyldithioalduret. Sm. 227° (A. 275, 40). III, 34.
 4-Amido-3-Methylphenyläther d. 5-Merkapto-2-Thiocarbonyl- $\mathbf{C}_{15}\mathbf{H}_{13}\mathbf{N}_{3}\mathbf{S}_{2}$ C15 H12 N2 S2 3-Phenyl-2, 3-Dihydro-1, 3, 4-Thiodiazol. Sm. 128° (B. 29, 2142). IV, 683.
- $\mathbf{C}_{15}\mathbf{H}_{13}\mathbf{N}_{4}\mathbf{J}$ 1) Jodmethylat d. 3,6-Diphenyl-1,2-Dihydro-1,2,4,5-Tetrazin. Sm. 128° u. Zers. (B. **27**, 1004). — II, 1214.
 - 2) Jodmethylat d. 3,6-Diphenyl-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 150° u. Zers. (B. 27, 1006). — II, 1215.
- $\mathbf{C}_{15}\mathbf{H}_{18}\mathbf{ClBr}_{2}$ 1) α -Chlor- $\alpha\beta$ -Dibrom- $\alpha\beta$ -Diphenylpropan. Sm. 122—125° u. Zers. (Soc. **71**, 225). C 75,6 — H 5,9 — O 6,7 — N 11,8 — M. G. 238.
- $C_{15}H_{14}ON_{2}$ 1) α -Phenylimido- α -Acetylamidophenylmethan. Sm. 138,5° (Am. 20, 574).
 - 2) s-Aethylendiphenylharnstoff. Sm. 209° (B. 14, 2183; 20, 784). —
 - 3) 4-Amidobenzylphtalimidin. Sm. 187—188°. HCl, (HCl, SnCl₂), (2 HCl, PtCl₄), 3HBr, Pikrat (B. 23, 341). — IV, 640.
 - 4) α-Benzyliden-β-Acetyl-β-Phenylhydrazin. Sm. 122° (B. 17, 2097; 27, 2965; A. 252, 304; J. pr. [2] 53, 457). — IV, 750. 5) α -Acetyl- β -Diphenylmethylenhydrazin. Sm. 107° (J. pr. [2] 44, 197).
 - **III**, 187.
 - 6) γ-Phenylhydrazon-α-Keto-α-Phenylpropan. Sm. 118—120° (B. 21, 1139). **— IV**, 762.
 - 7) α-Phenylhydrazon-β-Keto-α-Phenylpropan? Sm. 144° (B. 22, 2129; A. 291, 287). — IV, 783.
 - 8) 1-Acetyl-2-[2-Naphtyl]-4, 5-Dihydroimidazol. Sm. 160-166° (B. 25, 2139). — IV, 956.

C₁₅H₁₄ON₂ 9) 2-Amido-4,5-Diphenyl-4,5-Dihydrooxazol. Sm. 153-154°. 2+ (2 HCl, PtCl₄) (B. 28, 1899). 10) 3-Phenyl-5-Benzyl-4,5-Dihydro-1,2,4-Oxdiazol. Sm. 136°. HCl

(B. **22**, 3141). — **III**, 52. 11) 1,5-Dimethyl-2-[2-Oxyphenyl]benzimidazol. Sm. 180° (B. 26, 197).

— IV, 1014. 12) Aethyläther d. 1-Phenyl-6-Oxybenzimidazol. Sm. 77-78° (B. 25,

1000). — II, 723. 13) Aethyläther d. 2-[4-Oxyphenyl]indazol. Sm. 118° (B. 24, 965). —

IV. 867. 14) 1-Phenylimido-2-Aethyl-1, 2-Dihydrobenzoxazol. Fl. (2HCl, PtCl₄) (J. pr. [2] 42, 450). - II, 708.

15) 1-Nitroso-2-Phenyl-1,2,3,4-Tetrahydrochinolin. Fl. (B. 19, 1198).

- IV, 399.

16) 1-Nitroso-4-Phenyl-1,2,3,4-Tetrahydrochinolin. Sm. 72° (B. 28, 1043). — IV, 400.

17) 6-Nitroso-4-Phenyl-1,2,3,4-Tetrahydrochinolin. Sm. 199,5° u. Zers. (B. 28, 1044). — IV, 400.

18) 1-Nitroso-6-Phenyl-1,2,3,4-Tetrahydrochinolin. Sm. 111-1120 (A. 230, 22). - IV, 400.

19) 2-Keto-3-[2-Methylphenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin.

Sm. $189-190^{\circ}$ (J. pr. [2] 51, 274). — IV, 632.

20) 2-Keto-3-[4-Methylphenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. $218-220^{\circ}$ (B. 25, 2858; 27, 47, 2425; J. pr. [2] 55, 247). — IV, 632.

21) 2-Keto-4-[4-Methylphenyl]-1, 2, 3, 4-Tetrahydro-1, 3-Benzdiazin.

Sm. 208-209° (B. 30, 1135).

- 22) Methyläther d. 3-[4-Oxyphenyl]-3,4-Dihydro-1,3-Benzdiazin. Sm. 115°. HCl, (HCl, ZnCl₂), (2HCl, PtCl₄), Pikrat (J. pr. [2] 54, 285). — IV, 873.
- 23) Methyläther d. 3-[2-Oxyphenyl]-3,4-Dihydro-1,3-Benzdiazin. Fl. HCl, (HCl, SnCl₂), Pikrat (J. pr. [2] 54, 281). — IV, 873.

24) 3-Keto-2-Benzyl-1, 2, 3, 4-Tetrahydro-1, 4-Benzdiazin. Sm. 216° (B. **25**, 953). — **IV**, 1017.

25) 3-Keto-2,6 oder 2,7-Dimethyl-1,2,3,4-Tetrahydro-1,4-Benzdiazin. Sm. 200—201° (B. 25, 952). — IV, 1017.

26) Methyl-2-Naphtooxymethylchinizin. Sm. 129° (B. 17, 551). — IV, 929.

27) N-Aethylapotolusafranon (B. 31, 1188). — IV, 1009.

28) Anhydro-7-[2-Naphtyl]hydrazonvaleriansäure. Sm. 119° (A. 242, 367). — IV. 930.

29) 1,2²-Anhydrid d. 5 oder 6-Methyl-2-Phenyl-?-Tetrahydrobenz-imidazol-2²-Carbonsäure. Sm. 186—187° (B. 25, 1990). — IV, 618.

30) Anhydrid d. Säure C₁₅H₁₆O₂N₂ (aus Hydrobenzamid). Sm. 164⁶. HCl (B. 14, 1139). — III, $3\tilde{6}$.

31) Anhydroverbindung d. 2-Amidophenyläther d. β -Oxyäthylamid d. Benzolcarbonsäure. Sm. 149-151° (J. pr. [2] 24, 250). - II, 1160.

32) Nitril d. α -Phenylamido - α [2 - Methoxylphenyl] essigsäure. Sm. 61° (B. 15, 2026). — II, 1543.

33) Nitril d. α-[4-Methoxylphenyl]amido-α-Phenylessigsäure. Sm. 85° (B. 31, 2706).

34) Benzylidenamid d. Phenylamidoessigsäure. Sm. 219° (B. 31, 2709). 35) isom. Benzylidenamid d. Phenylamidoessigsäure. Sm. 1690 (B. 31, 2710).

36) Phenylhydrazid d. β-Phenylakrylsäure. Sm. 1830 (B. 20, 1108). — IV, 670.

37) α-Phenyläthylidenhydrazid d. Benzolcarbonsäure. Sm. 153° (J. pr. [2] **50**, 306). — III, 130.

38) Verbindung (aus 4-Methylphenylazobenzoylessigsäureäthylester). Sm. 122 bis 123° (B. 21, 2124). — IV, 1473. C 67,7 — H 5,3 — O 6,0 — N 21,0 — M. G. 266.

 $\mathbf{C}_{15}\mathbf{H}_{14}\mathbf{ON}_{4}$

1) s-Di[Benzylidenamido]harnstoff. Sm. 1980 (J. pr. [2] 52, 471; [2] 58, 217; B. 27, 58). — III, 40.

2) s-Di[α-Imidobenzyl]harnstoff (Dibenzenylamidinharnstoff). Sm. 229° (B. 23, 2920). - IV, 846.

- 3) $\alpha \gamma$ -Di[Phenylhydrazon]- β -Ketopropan. Sm. 175—176° u. Zers. (B. $\mathbf{C}_{15}\mathbf{H}_{14}\mathbf{ON}_{4}$ **24**, 3257; **27**, 220). — **IV**, 762.
 - 4) α -Phenylazo- α -Phenylhydrazon- β -Ketopropan (Formazylmethylketon). Sm. 134-135°. Na, Ag (B. 24, 2794, 3262; 25, 747, 3210, 3539, 3544).
 - 5) α-Phenylazo-α-Acetylphenylhydrazonmethan (Acetylformazylwasserstoff). Sm. 188—189° (B. 25, 3187, 3204). — IV, 1226.
 - 6) 1 oder 3-Nitroso-2-[4-Methylphenyl]imido-5-Methyl-2, 3-Dihydrobenzimidazol. Sm. bei 140° u. Zers. (B. 24, 2521). — IV, 623.
 - 7) Benzyläther d. 5-Oxy-1-Benzyl-1,2,3,4-Tetrazol. Sm. 106° (A. **287**, 258).
- $C_{15}H_{14}ON_{6}$ C 61,2 - H 4,8 - O 5,4 - N 28,6 - M. G. 294.
 - 1) Dibenzyl-5-Nitrosamido-1, 2, 3, 4-Tetrazol. Sm. 97—98° (A. 287, 260). 2) 5-Benzylnitrosamido -1-Benzyl -1, 2, 3, 4-Tetrazol. Sm. 105° (\acute{A} .
- C15H14OS 1) Aethyläther d. 4-Merkaptodiphenylketon (Ae. d. 4-Merkaptobenzo-
- phenon). Sm. 82—83° (B. **27**, 1734). III, 210. 1) Di[**4-Methylphenylester**] d. Dithiokohlensäure. Sm. 90—91° (J. pr. $C_{15}H_{14}OS_2$ [2] **41**, 190). — II, 824.
- C 70,8 H 5,5 O 12,6 N 11,0 M. G. 254, $C_{15}H_{14}O_2N_2$
 - 1) 2-[3-Nitrobenzyliden]amido-1,4-Dimethylbenzol. Sm. 126° (A. 255, 170). — III, 30.
 - 2) anti-α-Oximido-2-Acetylamidodiphenylmethan. Sm. bei 180° (B. 29, 1264). — III, 190.
 - 3) α -Acetyl- $\alpha\beta$ -Diphenylharnstoff. Sm. 115° (B. 8, 1182; 17, 2882). II, 382.
 - 4) α-Phenacetyl-β-Phenylharnstoff. Sm. 168—169° (Soc. 69, 866).
 - 5) α -[2-Methylphenyl]- β -Benzoylharnstoff. Sm. 210° (B. 25, 1089). —
 - 6) s-Di[Benzoylamido]methan (Hipparaffin). Sm. 220,5-221° (218°) (A. 75, 201; **223**, 43; **258**, 109; *J.* **1878**, 775; *B.* **9**, 1427; **25**, 311; *J.* pr. [2] **44**, 570). — **II**, 1193.
 - 7) α-Phenylnitrosamidoäthylphenylketon. Sm. 75° (Bl. [3] 17, 73).
 - 8) ?-Nitroso-4-Dimethylamidodiphenylketon. Fl. (B. 22, 339). III, 183.
 - 9) Methyl-2-Benzylnitrosamidophenylketon. Sm. 54-55° (B. 17, 972). - III, 124.

 - 10) α-Diamidopyrokresoloxyd (Soc. 55, 54). III, 646.
 11) Carbanilidoacetophenonoxim. Sm. 126° (B. 22, 3103). III, 131.
 12) Carbo-p-Toluido-anti-Benzaldoxim. Sm. 121° (B. 25, 2586). III, 42.
 - 13) Carbo-p-Toluido-syn-Benzaldoxim, Sm. 74-76° (B. 25, 2586). -
 - III, 44.
 - 14) 4-Acetylhydrazidodiphenylketon. Sm. 154—155° (Soc. 55, 614). III, 186.
 - 15) $\alpha\beta$ -Dibenzoyl- α -Methylhydrazin. Sm. 143° (A. 253, 12). II, 1159.
 - 16) β -Acetyl- α -Benzoyl- α -Phenylhydrazin + H₂O. Sm. 95-97° (152 bis 153° wasserfrei) (B. 20, 1716). — IV, 669.
 - 17) Methylenäther d. Methylphenyl 3, 4 Dioxybenzylidenhydrazin. Sm. 85° (B. **29**, 2328). — **IV**, 764.
 - 18) Methylenäther d. α Phenylhydrazon- α [3, 4-Dioxyphenyl]äthan (Acetopiperonphenylhydrazon). Sm. 114° (B. 24, 2989). — IV, 772.
 - 19) 3,4-Aethylenäther d. 3,4-Dioxy-1-Phenylhydrazonmethylbenzol. Sm. 107—108° (Bl. [3] 19, 510).
 - 20) Dimethyläther d. 5,6-Dioxy-l-Phenylbenzimidazol. Sm. 106-1070 (B. **29**, 2689).
 - 21) 2-[3-Nitrophenyl]-1,2,3,4-Tetrahydrochinolin. Sm. 100-101° (B.
 - 18, 1905). IV, 399. 22) Methyläther d. 2-Keto-3-[2-Oxyphenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. $217-218^{\circ}$ (J. pr. [2] 52, 403). — IV, 632.
 - 23) 2-Oxy-1 [oder 4]-Methyläthylphenazon. Sm. 206° (A. 290, 304). IV, 1009.
 - 24) β -Phenylimido- β -Phenylamidopropionsäure. Anilinsalz (Sm. 223°) (B. **28**, 479).

- $C_{15}H_{14}O_2N_2$ 25) 1-Methylphenylhydrazonmethylbenzol-2-Carbonsäure. Sm. 176° (B. 24, 2352). — IV, 696.
 - 26) a-Diphenylhydrazonpropionsäure. Sm. 145° (B. 17, 567). IV, 689. 27) α-Phenylhydrazon-β-Phenylpropionsäure. Sm. 160—161° u. Zers. (B. **20**, 593). — **IV**, 697.

28) α-Methylphenylhydrazonphenylessigsäure. Sm. 116° u. Zers. (A.

227, 350). — IV, 694.

29) Aethylester d. Azobenzol-4-Carbonsäure. Sm. 85-86° (A. 303, 387). **– IV**, 1460.

30) Propionat d. β-Oxy-α-Cyan-α-[2-Cyanphenyl]-α-Buten (Dipropionylo-Cyanbenzylcyanid). Sm. 135,5° (B. 27, 2232). — II, 1966.

31) Acetat d. 4-Oxy-3-Methylazobenzol. Sm. 81—820 (B. 17, 364).

IV, 1420.

- 32) Acetat d. 6-Oxy-3-Methylazobenzol. Sm. 67-68° (B. 17, 353; 24,
- 2300). IV, 1420. 33) Acetat d. 4'-Oxy-4-Methylazobenzol. Sm. 95° (B. 24, 2410). IV, 1413.
- 34) Benzoat d. 2-[α-Oximidoäthyl]pyridin. Sm. 69° (B. 24, 2531). IV, 184.
- 35) Methylamid d. 2 Benzoylamidobenzol 1 Carbonsäure. Sm. 1810 (J. pr. [2] 36, 159). — II, 1254.
- 36) Phenylamid d. Benzoylamidoessigsäure. Sm. 208,5° (J. pr. [2] 52, 257). 37) Phenylamid d. 2-Acetylamidobenzol-1-Carbonsäure. Sm. 167-1680

(J. pr. [2] 36, 163). - II, 1250.38) Di[Phenylamid] d. Methan-αα-Dicarbonsäure. Sm. 224—225° (223°)

- (B. 17, 135, 235; 27, 2745; A. 285, 134, 135; J. pr. [2] 58, 413). II, 412.
- 39) 4-Nitrosophenyl-4-Methylphenylamid d. Essigsäure. Sm. 103° (A. 255, 164). — II, 486.
- 40) Aethyl-4-Nitrophenylamid d. Benzolcarbonsäure. Sm. 98° (Soc. 53, 779). — II, 1164.
- 41) Phenylmonohydrazid d. Phenylmethandicarbonsäuremonoaldehyd. Sm. 91—93° (B. 28, 774). — IV, 696.
- 42) Benzoat d. Phenyläthenylamidoxim. Sm. 144° (B. 18, 1069). -II, 1315.
- 43) Benzoat d. Aethenylphenylamidoxim. Sm. 110° (B. 22, 2409). -II, 1209.
- 44) Benzoat d. 2-Methylbenzenylamidoxim. Sm. 145° (B. 22, 2441). II, 1330.
- 45) Benzoat d. 4-Methylbenzenylamidoxim. Sm. 1730 (B. 19, 1489). -II, 1344.
- 46) Verbindung (aus Anilin u. Brompropiolsäure). Sm. 2200 (B. 22, 3305).

47) Verbindung (aus Benzaldehyd) (A. 168, 241). - III, 33.

- 48) Verbindung (aus Carbanilidoisatinsäure). Sm. 197º (J. pr. [2] 32, 285). - II, 1604.
- 49) Verbindung (aus N-Methyl-syn-Benzaldoxim u. Phenylcarbonimid). Sm. 119° (B. 28, 2815). — III, $4\tilde{3}$. C 63,8 — H 5,0 — O 11,3 — N 19,8 — M. G. 282.

 $\mathbf{C}_{15}\mathbf{H}_{14}\mathbf{O}_{2}\mathbf{N}_{4}$

- 1) $\alpha\beta$ -Di[Phenylhydrazon]propionsäure. Sm. 205° u. Zers. (201—203°). Na + H_2O , Ca (A. 248, 87; B. 24, 405). — IV, 705.
- 2) α -Phenylazo- α -[4-Methylphenyl]hydrazonessigsäure. Sm. 165-166° (B. 27, 1688). — IV, 1241.
- 3) α -[4-Methylphenyl] azo- α -Phenylhydrazonessigsäure. Sm. 164 bis 165° (B. 27, 1687). — IV, 1241.
- 4) Methylester d. Formazylcarbonsäure. Sm. 134-135° (B. 25, 3184). **– IV**, 1228.
- 5) Verbindung (aus d. α-Phenylhydrazid d. α-Phenylhydrazidoessigsäure). Sm. 209—210° (A. 301, 88).
- 1) Dimethyläther d. 4,4'-Dioxydiphenylthioketon. Sm. 115° (B. 28, C15H14O2S 2870). — III, *211*.
 - 2) Aethylester d. 2-Merkaptobenzolphenyläther-1-Carbonsäure. Sm. 151° (A. **263**, 6). — II, 1514.
 - 3) Di[4-Methylphenylester] d. Thiokohlensäure. Sm. 132° (B. 27, 3410).

- 1) αα-Dimerkaptopropiondiphenyläthersäure. Sm. 116-117°. Na, Ba $+2 H_2 O$ (B. 18, 264; 19, 1787). — II, 788.
- C 66,6 H 5,2 O 17,8 N 10,4 M. G. 270. $C_{15}H_{14}O_{8}N_{2}$
 - 1) 2-Nitro-4-Methylphenylamidobenzoylmethan. Sm. 163-165° (B. 23, 169). **— III**, *126*.
 - 2) 3-Nitro-4-Aethylamidodiphenylketon. Sm. 99 -100° (B. 24, 3772). **– III**, 183.
 - 3) α -Oximido- α -[3-Nitrophenyl]- α -[2,4-Dimethylphenyl]methan. Sm. 131—149°(?) (A. **286**, 336). — III, 231.
 - 4) 3-Nitrobenzphenylimidoäthyläther. Sm. 55-56° (A. 265, 151). II, 1235.
 - 5) Harnstoff (aus d. Dimethyläther d. 4,4'-Diamido-3,3'-Dioxybiphenyl) (B. **32**, 216).
 - 6) Benzoylmethyläther d. 4-Oxyphenylharnstoff. Sm. 1600 u. Zers. (C. 1897 [1] 595).
 - 7) N-Benzoat d. α-Oxy-α-Phenyläthenylamidoxim. Sm. 148—149° u.
 - Zers. (B. 18, 1078). II, 1554.

 8) N-Benzoat d. 6-Oxy-3-Methylbenzenylamidoxim. Sm. 181—182° (B. **24**, 3662). — **II**, 1547.
 - 9) Phenylamidoformiat d. anti-Methylbenzhydroxamsäure. Sm. 1150 (B. 29, 1157).
 - 10) Phenylamidoformiat d. syn-Methylbenzhydroxamsäure. Sm. 1170 (B. **29**, 1160).
 - 11) 4-Benzylidenhydrazidophenoxylessigsäure. Sm. 158° (B. 30, 2103). **- IV**, 815.
 - 12) 2-Phénylhydrazonmethylphenoxylessigsäure. Sm. 105° (B. 17, 2994). **- IV**, 760.
 - 13) 3-Phenylhydrazonmethylphenoxylessigsäure. Sm. bei 140° u. Zers. (B. 19, 3046). — IV, 760.
 - 14) 4-Phenylhydrazonmethylphenoxylessigsäure. Sm. 159° (B. 19, 3045). **– IV**, 761.
 - 15) α-Phenylhydrazon-α-[4-Methoxylphenyl]essigsäure (G. 20, 695). **- IV**, 709.
 - 16) 4-Oxy-1-[α-Phenylhydrazonäthyl]benzol-3-Carbonsäure. Sm. 2120 u. Zers. (B. 30, 1777). — IV, 709.
 - Sm. 154° (B. 24, 4153). 17) α -Phenylharnstoff- α -Phenylessigsäure. II, 1326.
 - 18) Methylester d. Diphenylallophansäure. Sm. 231° (B. 4, 248). II, 382.
 - 19) Aethylester d. ?-Nitrodiphenylamidoameisensäure (Nitrodiphenylurethan). Sm. 89° (A. 277, 103). — II, 374.
 - 20) Aethylester d. 4-Oxyazobenzol-3-Carbonsäure. Sm. 88-890 (1010) (Soc. 69, 1265; A. 263, 228). — IV, 1468.
 - 21) Aethylester d. 6-Oxyazobenzol-3-Carbonsäure. Sm. 105-106° (B. 30, 993). — IV, 1471.
 - 22) Benzylester d. Phenylallophansäure. Sm. 158° (B. 22, 1573). —
 - 23) 2-Acetylamidophenylester d. Phenylamidoameisensäure. Sm. 1620 (J. pr. [2] 41, 328). - II, 706.
 - 24) 2-Amid d. Benzol-1-Carbonsäure-2-Benzylamidoameisensäure (J. pr. [2] **49**, 319).
 - 25) Phenylmonamid d. Phenylamidomethan-αα-Dicarbonsäure (Anilidomalonanilsäure). Sm. 1570 u. Zers. Cu (B. 31, 385).
 - 26) 2-Nitrobenzylamid d. l-Methylbenzol-2-Carbonsäure. Sm. 134-135° (B. **25**, 3034). — II, 1330.
 - 27) 2-Nitrobenzylamid d. 1-Methylbenzol-4-Carbonsäure. Sm. 140—142° (B. **25**, 3036). — **II**, 1341.
 - 28) 2-Nitro-4-Methylphenylamid d. 1-Methylbenzol-4-Carbonsäure. Sm. 165—166° (A. **210**, 331). — II, 1341.
 - 29) 2,4-Dimethylphenylamid d. 4-Nitrobenzol-1-Carbonsäure. Sm. 166° (B. **26**, 2763). — II, 1236.
 - 30) ?-Nitro-2, 4-Dimethylphenylamid d. Benzolcarbonsäure. Sm. 184,5° (B. 10, 1710, 1711; A. 208, 320). — II, 1166.

C₁₅H₁₄O₃N₂ 31) ?-Nitro-?-Dimethylphenylamid d. Benzolcarbonsäure. Sm. 178° (B. 10, 1711; A. 208, 323). — II, 1166.

32) 3-Nitro-4-Methylbenzylamid d. Benzolcarbonsäure. Sm. 145-1470

(B. 28, 2989).

33) Phenyl-2-Nitrobenzylamid d. Essigsäure. Sm. 75° (B. 23, 2638). — II, 524. 34) 4-Nitrophenylbenzylamid d. Essigsäure. Sm. 108-109° (Soc. 53,

779). — II, *524*. 35) 2-Nitrobenzyl-2-Methylphenylamid d. Ameisensäure. Sm. 76° (R.

22, 2701). — II, 524. 36) 2-Nitrobenzyl-4-Methylphenylamid d. Ameisensäure. Sm. 79° (B.

22, 2695). — II, 524.

37) Benzoat d. 4-Methoxylbenzenylamidoxim. Sm. 148º (B. 22, 2795). - II, 1532.

38) Verbindung (aus Phenylcarbonimid u. 2-Methoxylbenzaldoxim). Sm. 1050 (B. 23, 2741). — III, 77.

39) Verbindung (aus Phenylcarbonimid u. anti-4-Methoxylbenzaldoxim). Sm. 103° (B. 22, 3102; 26, 2090). — III, 87. 40) Verbindung (aus Phenylcarbonimid u. syn-4-Methoxylbenzaldoxim). 2 Modif. Sm. 80° u. 82° u. Zers. (B. 23, 2165; 26, 2089). — III, 87. 41) Verbindung (aus d. 3-Methyläther d. 2-Amido-3,5-Dioxy-1-Methylbenzol). Sm. 253° (B. 30, 1107).

42) Verbindung (aus 3,4-Diamido-1-Methylbenzol u. Phtalsäureanhydrid). Zers. bei 90° (G. 24 [1] 148). — IV, 618. C 60,4 — H 4,7 — O 16,1 — N 18,7 — M. G. 298.

C15H14O3N4

1) β -[2-Nitro-4-Methylphenyl]azo- α -Oximido- α -Phenyläthan. Sm. 174° (B. 18, 2567). — IV, 1478.

2) 3 oder 4-Semicarbazon d. 6-Aethylphenoxazin-3,4-Chinon. Sm. 243° u. Zers. (B. **31**, 498).

3) Carbonat d. Benzenylamidoxim. Sm. 128-1290 (B. 18, 2471; 19, 1481). — II, *1201*.

4) Benzoat d. Anhydrodioximidotropinonoxim. Sm. 150-152° (B. 30, 2706).

5) Amid d. s-Diphenylharnstoff-3,3'-Dicarbonsäure. Zers. oberh. 270°

(A. **232**, 140). — II, 1260. 6) Phenylnitrosohydrazid d. Benzoylamidoessigsäure. Sm. 128-129°

(J. pr. [2] 52, 249). — IV, 670. C₁₅H₁₄O₃Br₂ 1) Dibromdihydrolapachol. Sm. 132°. $+ \frac{1}{3} C_2 H_6 O$ (Soc. 61, 643). — III, 402.

C15H14O4N2 C 62,9 - H 4,9 - O 22,4 - N 9,8 - M. G. 286.

1) Di[?-Nitro-?-Methylphenyl]methan. Sm. 164° (B. 7, 1183). — II, 238. 2) Methyläther d. 2-Oxyphenyl-2-Nitrobenzylformylamin. Sm. 820 (J. pr. [2] 54, 279).

3) Methyläther d. 4-Oxyphenyl-2-Nitrobenzylformylamin. Sm. 69° (J. pr. [2] 54, 284). 4) β-Phenylamido-β-[2-Nitrophenyl] propionsäure. Sm. 120—122°. NH. (B. 17, 1501). — II, 1367.

5) 5-Nitro-2-[2,4-Dimethylphenyl]amidobenzol-l-Carbonsäure. Sm. 241° u. Zers. K + H₂O, Ba + 5H₂O (A. 279, 1281). — II, 1283. 6) 2,6-Dimethyl-4-[3-Amidophenyl]pyridin-3,5-Dicarbonsäure.

Sm.

238° u. Zers. Ba + $3 \text{ H}_2\text{O}$ (\overline{G} . 17, 469; B. 20, 1340). — IV, 387.

7) Aethylester d. 5-Nitro-2-Phenylamidobenzol-1-Carbonsäure. Sm. 118° (121°) (B. 23, 3442; 24, 3810). — II, 1283.

8) Aethylester d. 3-Nitro-4-Phenylamidobenzol-1-Carbonsäure.

123° (B. 22, 3285; 23, 3450). — II, 1285.
9) 2-Nitrophenyläther d. β-Oxyäthylamid d. Benzolcarbonsäure. Sm. 94—95° (J. pr. [2] 24, 249). — II, 1160.

10) Phenylamid d. β-Oxy-β-[4-Nitrophenyl]propionsäure. Sm. 176°
 (B. 17, 1502). — II, 1575.

11) Di[4-Oxyphenylamid] d. Methandicarbonsäure. Sm. oberh. 235° u. Zers. (G. 25 [2] 537).

12) Mesoxanilidhydrat (A. 270, 291). — II, 421.

13) 4-Methoxylbenzylidenhydrazid d. 2-Oxyphenylkohlensäure. Sm. 192º (A. 300, 151).

C₁₅H₁₄O₄N₂14) Verbindung (aus 5-Keto-3-Methyl-4-Benzyliden-4,5-Dihydroisoxazol). Sm. 145° (B. 30, 1338).

C 57,3 — H 4,5 — O 20,4 — N 17,8 — M G 314. $\mathbf{C}_{15}\mathbf{H}_{14}\mathbf{O}_{4}\mathbf{N}_{4}$

1) Ricininsäure. Sm. 295°. Ba $+ 4 H_2 O$, Ag₂ $+ 4 H_2 O$ (C. 1895 [1] 853). C 52,6 - H 4,1 - O 18,7 - N 24,6 - M. G. 342. $C_{15}H_{14}O_4N_6$ 1) $\alpha \gamma$ -Dinitro- $\alpha \gamma$ -Di[Phenylazo] propan. Sm. 1730 (B. 25, 1712). —

IV, 1376.

1) Benzoat d. β -Oxyäthylphenylsulfon. Sm. 124—125° (*J. pr.* [2] 30, 191). — II, 1139. $C_{15}H_{14}O_4S$

2) Aethylester d. Diphenylketon-2-Sulfonsäure. Sm. 125,5-126,5° (Am. 17, 358). — III, 192. C 59,6 — H 4,6 — O 26,5 — N 9,3 — M. G. 302.

 $\mathbf{C}_{15}\mathbf{H}_{14}\mathbf{O}_{5}\mathbf{N}_{2}$

- 1) β -Phenylamido α -Oxy- β -[2-Nitrophenyl] propionsäure. (A. **284**, 139). — **II**, *1578*.
- 2) 2-[α-Oximido-3,4-Dimethoxylbenzyl]pyridin-4-Carbonsäure. Sm. 226°. $HCl + H_2O$ (M. 10, 699). — IV, 177.
- Aethylester d. 8-Nitro-5-Acetylamidonaphtalin-1-Carbonsäure. Sm. 173°. II, 1452.
- 4) Phenylhydrazid d. Dehydracetcarbonsäure. Sm. 190-1910 (A. 273,

211). — IV, 727. C 54,5 — H 4,2 — O 24,2 — N 17,0 — M. G. 330. $C_{15}H_{14}O_5N_4$

- 1) 4-[2,4-Dinitrophenyl]amido-2-Acetylamido-1-Methylbenzol. Sm. $163-164^{\circ}$ (B. 15, 1237). — IV, 602.
- 2) s-Di[4-Nitrobenzyl]harnstoff. Sm. 234° u. Zers. (B. 23, 340). II, 526.
- 3) s-Di[?-Nitro-4-Methylphenyl]harnstoff. Sm. 233° u. Zers. (Soc. 37, 698). — II, 495.

- 4) Antipyrinalloxan. Ag (4. 255, 237). IV, 548. C₁₅H₁₄O₅Cl₂ 1) Aethylester d. 3,5 [oder 4,6]-Dichlor-4-[oder 5]-Acetoxyl-1,6 [oder b]-1,6 [oder b]-1,7 1,3]-Dimethylbenzfuran-2-Carbonsäure. Sm. 138—139° (A. 283, 259). **— III**, 732.
 - 2) s-Diphenyldisulfonaceton. Sm. 149° (J. pr. [2] 36, 417; B. 22, 1967; **25**, 3423). — II, 791.
- $C_{15}H_{14}O_7S_2$ 1) 2,5-Dimethyldiphenylketon-?-Disulfonsäure. Ba + 2H₂O (B. 19, 2881; J. pr. [2] **35**, 478). — III, 232. C 44,3 — H 3,4 — O 31,5 — N 20,7 — M. G. 406.

 $C_{15}H_{14}O_8N_6$

- 1) 3,8',5,5'-Tetranitro-4,4'-Di[Methylamido]diphenylmethan. Sm. bei 250° u. Zers. (R. 7, 231). IV, 973.

 C₁₅H₁₄O₉Br₂ 1) Dibromäskulin. Sm. 193—195° u. Zers. (B. 13, 1594). III, 567.
- $C_{15}H_{14}NBr$ 1) Bromäthylat d. β -Naphtochinolin + xH₂O. Sm. 238 $^{\circ}$ (J. pr. [2] 57, 52). 1) Jodmethylat d. 3-Methyl-β-Naphtochinolin. Sm. 241-2470 u. Zers. $\mathbf{C}_{15}\mathbf{H}_{14}\mathbf{N}\mathbf{J}$
 - (B. 22, 256). IV, 412. 2) Jodmethylat d. 5-Methylakridin. Sm. 185° (A. 224, 36). — IV, 415. 3) Jodmethylat d. 1-Methylphenanthridin. Sm. 1870 u. Zers. (A. 266,
 - 162). **IV**, 416. 4) Jodmethylat d. 3-Methylphenanthridin. Sm. 180° u. Zers. (A. 266, 159). **— IV**, 416.
 - 5) Jodnethylat d. 9-Methylphenanthridin. Sm. 246—247° u. Zers. (B.

- 29, 1185). IV, 416.
 6) Jodäthylat d. Akridin (A. 158, 275). IV, 406.
 7) Jodäthylat d. Phenanthridin. Sm. 253° (B. 26, 1967). IV, 407.
 8) Jodäthylat d. β-Naphtochinolin. Sm. 206° u. Zers. (J. pr. [2] 57, 53).
- $C_{15}H_{14}N_2Br_2$ 1) α -Brom- α -[3-Methylphenyl]bromamido- α -[3-Methylphenyl]imidomethan. Zers. bei 150-262° (B. 20, 1894). - II, 478.
- 1) 2-Merkapto-4, 5-Diphenyl-4, 5-Dihydroimidazol. Sm. 183-184° (B. $\mathbf{C}_{15}\mathbf{H}_{14}\mathbf{N}_{2}\mathbf{S}$ **28**, 3178). — IV, 979.
 - 2) 2-Phenylimido-3-Phenyltetrahydrothiazol. Sm. 136°. HBr, H₂SO₄
 - (B. 14, 1490; 15, 343). II, 396. 3) 2-Thiocarbonyl-5-Methyl-1-[4-Methylphenyl]-2,3-Dihydrobenzimidazol (p-Tolyltoluylenthioharnstoff). Sm. 270° (B. 23, 3799). — IV, 615.
 - 4) 3-[4-Methylphenyl]imido-3,4-Dihydro-2,4-Benzthiazin (p-Tolylimidocumothiazon). Sm. 187º (B. 27, 2433). - IV, 878.
 - 5) 2-Thiocarbonyl-3-Phenyl-1-Methyl-1, 2, 3, 4-Tetrahydro-1, 3-Benzdiazin. Sm. 92° (J. pr. [2] 51, 267). IV, 635.

- $\hbox{ \it (6)} \ \ \hbox{ \it (2-Thiocarbonyl-3-[2-Methylphenyl]-1,2,3,4-Tetrahydro-1,3-Benz-1,2-1} \\$ C15H14N2S diazin. Sm. 206° (202°) (B. 27, 1869; J. pr. [2] 51, 275). — IV, 635.
 - 7) 2-Thiocarbonyl-3-[4-Methylphenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 242° (235°) (B. 25, 2859; 27, 1869, 2433). — IV, 635.
 - 8) 2-Thiocarbonyl-4-[4-Methylphenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 224° (B. 30, 1134).
 - 9) Thioharnstoff d. Di[4-Amidobenzyl]sulfid. Sm. 220° (B. 28, 1339).
- 1) Methyläther d. 5-Merkapto-2, 3-Diphenyl-2, 3-Dihydro-1, 3, 4-Thio- $C_{15}H_{14}N_2S_2$ diazol. Sm. 93-94° (B. 28, 2645, 2647). - IV, 750.
 - 2) Dithiocarbaminsaures Dibenzylidenammonium. Sm. bei 100° u. Zers. (A. 71, 13; 168, 238). — III, 34.
- 1) Base (aus α -Methylamido- β -Phenylthioharnstoff). Sm. 175°. (2 HCl, PtCl₄) C15H14N4S
- (B. 29, 2922). IV, 1235. $C_{15}H_{14}Br_{2}S_{2}$ 1) Di[4-Bromphenyläther] d. $\beta\beta$ -Dimerkaptopropan. Sm. 89-90° (B. 18, 888). — II, 793.
- $\mathbf{C}_{15}\mathbf{H}_{15}\mathbf{ON}$
- C 80,0 H 6,7 O 7,1 N 6,2 M. G. 225. 1) Methyläther d. 4-Oxy-1-[2-Methylphenylimido]methylbenzol. Sm. 32° (A. **241**, 340). — III, 85.
 - 2) Methyläther d. 4-Oxy-1-[4-Methylphenylimido] methylbenzol. 92° (A. **241**, 338). — III, 85.
 - 3) Aethyläther d. 4-Benzylidenamido-1-Oxybenzol. Sm. 76° (B. 25, 3249). - III, 32.
 - 4) Aethyläther d. 2-Oxy-1-Phenylimidomethylbenzol. Fl. (A. 150, 195).
 - **–** III, 73. 5) Aethyläther d. α -Oximidodiphenylmethan. Sd. $276-279^{\circ}$ u. Zers. (M. 5, 204). — III, 189.
 - 6) Methylphenylamidobenzoylmethan. Sm. 120° u. Zers. (2HCl,PtCl₄) (B. 13, 843; 14, 984; 16, 23, 25). - III, 126.
 - 7) 2-Methylphenylamidobenzoylmethan. Sm. 89°. HCl (B. 25, 2865).
 - III, 126. 8) 4-Methylphenylamidobenzoylmethan. Sm. 134° (127°) (B. 23, 167;
 - 25, 2866). III, 126. 9) Benzylamidobenzoylmethan. HCl, (2HCl, PtCl₄), HBr, H₂SO₄, Pikrat
 - (Soc. 63, 1360). III, 127. 10) α-Phenylamidoäthylphenylketon. Sm. 98° (Bl. [3] 15, 716; [3] 17, 72).
 - 11) β-Phenylamidoäthylphenylketon. Sm. 38° (111-112°) (B. 19, 2897; Bl. [3] **17**, 80). — **III**, 141.
 - 12) Phenylamidomethyl-4-Methylphenylketon. Sm. 118--120° (Bl. [3] 17, 508).
 - 13) 4-Dimethylamidodiphenylketon. Sm. 90° (92°) (A. 210, 270; 217, 257; B. 13, 2225; 14, 1837; Bl. [3] 19, 830). — III, 183.
 - 14) isom. P-Dimethylamidodiphenylketon. Sm. 38-39°; Sd. 330-340° (A. **206**, 88). — III, 183.
 - 15) Methyl-2-Benzylamidophenylketon. Sm. 79-81° (B. 17, 971). -III, 124.
 - 16) 3-Amidophenyl-2,4-Dimethylphenylketon. Sm. 118° (A. 286, 334). - III, 231.
 - 17) 3-Amidophenyl-2,5-Dimethylphenylketon. HCl, H₂SO₄ (A. 286, 341). — III, 232.
 - 18) 3-Amidophenyl-3,4-Dimethylphenylketon. HCl, H₂SO₄ (A. 286, 339). — III, 233.
 - 19) α -Oximido- $\alpha\beta$ -Diphenylpropan. Sm. 120° (B. 21, 1298). III, 230.
 - 20) α-Oximido-αγ-Diphenylpropan. Sm. 87° (82°) (B. 21, 1326; Soc. 59, 1007). — III, 228.
 - 21) β -Oximido- $\alpha \gamma$ -Diphenylpropan. Sm. 119,5° (B. 21, 1316). III, 229.
 - 22) α -Oximido- α -[4-Methylphenyl]- β -Phenyläthan. Sm. 1310 (B. 22, 1231). — III, 230.
 - 23) α -Oximido- β -[4-Methylphenyl]- α -Phenyläthan. Sm. 109° (B. 22, 1231). — III, 230.
 - 24) anti-α-Oximido-4-Aethyldiphenylmethan. Sm. 142° (B. 24, 4030). **— III**, 231.
 - 25) syn- α -Oximido-4-Aethyldiphenylmethan. Sm. 108° (B. 24, 4030). III, 231.

- C₁₅H₁₅ON 26) α-Oximidodi[4-Methylphenyl]methan. Sm. 163° (B. 23, 2747; G. 21, 98). **— III**, *233*.
 - 27) anti-α-Oximido-2,4-Dimethyldiphenylmethan. Sm. 126° (B. 24, 4048). — III, *231*.
 - 28) $syn-\alpha$ -Oximido-2,4-Dimethyldiphenylmethan. Sm. 152° (B. 24, 4048). — III, 231.
 - 29) N-[2,5-Dimethylphenyl]äther d. Benzaldoxim. Sm. 129-130° (B.
 - 30) Phenylbenzimidoäthyläther. Fl. (A. 265, 138). II, 1213.
 - 31) 4-Methyläther d. N-Benzyl-4-Oxybenzaldoxim. Sm. 128^o (B. 27, 1958). 32) 4-Methyläther d. N-[4-Oxybenzyl] benzaldoxim. Sm. 125° (B. 27,
 - 33) α-Benzoylamido-α-Phenyläthan. Sm. 120° (B. 27, 2308). II, 1166.
 34) β-Benzoylamido-α-Phenyläthan. Sm. 116° (113—114°) (B. 26, 1907,
 - 2167). II, *1166*.
 - 35) 2-Propionylamidobiphenyl. Sm. 65°; Sd. bei 350° (B. 29, 1186).
 - 36) 2-Acetylamidodiphenylmethan. Sm. 107° (B. 27, 2786).
 - 37) 4'-Acetylamido-4-Methylbiphenyl. Sm. 147° (B. 28, 405).
 - 38) γ -Keto- γ -[?-Aethylpyrryl]- α -Phenylpropen (Aethylpyrrylcinnamyl-
 - keton). Sn. 148°. Ag (B. 19, 2194; 23, 2564). IV, 101.

 39) γ-Keto-γ-[2,3-Dimethyl-?-Pyrryl]-α-Phenylpropen. Sm. 166° (B. 22, 1926). IV, 101.
 - 40) γ-Keto-γ-[2,4-Dimethyl-?-Pyrryl]-α-Phenylpropen. Sm. 188° (B. 22, 1921). IV, 101.
 41) γ-Keto-γ-[2,5-Dimethyl-3-Pyrryl]-α-Phenylpropen (2,5-Dimethyl-3-Pyrryl)
 - 3-Pyrrylcinnamylketon). Sm. 208,5° (G. 22 [1] 446; 23 [1] 467). -IV, 101.
 - 42) Aethyläther d. α -[2-Oxyphenyl]- β -[2-Pyridyl]äthen. Fl. (HCl, $HgCl_2$), (2 HCl, PtCl₄) (B. 23, 2699). — IV, 395.
 - 43) Methyläther d. 2-[4-Oxyphenyl]-1,3-Dihydroisoindol. Sm. 214° (B. 31, 423).
 - 44) 2-[3-Oxyphenyl]-1,2,3,4-Tetrahydrochinolin. Sm, 113-115. HCl (M. 13, 69). - IV, 400.
 - 45) 2-|4-Oxyphenyl]-1,2,3,4-Tetrahydrochinolin. HCl (M. 8, 135). IV, 399.
 - 46) 4-Acetyl-1,2,3,4-Tetrahydro- β -Naphtochinolin. Sm. 77° (B. 24, 2645). — IV, 379.
 - 47) Methyloxydhydrat d. 5-Methylakridin. Jodid (A. 224, 37). IV, 415.
 - 48) Methyloxydhydrat d. 3-Methylphenanthridin. Sm. 136°. Jodid (A. 266, 159). — IV, 416.
 - 49) Aethyloxydhydrat d. Phenanthridin. Sm. 95°. Jodid (B. 26, 1967). **– IV**, 407.
 - 50) Aethyloxydhydrat d. β -Naphtochinolin. Bromid + xH_2O , Jodid,
 - Bichromat + 2 H₂O (*J. pr.* [2] **57**, 52). 51) **Acetylderivat d. Base C₁₃H₁₃N** (aus Rohanilin). Sm. 114,2° (*B.* 8, 968). **— IV**, 379.
 - 52) Amid d. $\alpha\beta$ -Diphenylpropionsäure. Sm. 133—134° (B. 21, 1314). II, 1467.
 - 53) Amid d. 4-Methyldiphenylessigsäure. Sm. 151° (B. 10, 997). -II, 1469.
 - 54) Amid d. 1-[?-Methylbenzyl]benzol-2-Carbonsäure. Sm. 1230 (B. 25, 3025). **— II**, *1469*.
 - 55) Phenylamid d. β -Phenylpropionsäure. Sm. 92° (B. 25 [2] 747). II, 1357.
 - 56) Phenylamid d. 1-Aethylbenzol-4-Carbonsäure. Sm. 121° (B. 24, 4031). — II, *1373*.
 - 57) Phenylamid d. 1,2-Dimethylbenzol-4-Carbonsäure. Sm. 104° (J. pr. [2] **41**, 307). — **II**, 1375.
 - 58) Phenylamid d. 1,3-Dimethylbenzol-4-Carbonsäure. Sm. 1410 (138,50) (B. 12, 1971; J. pr. [2] 41, 307). — II, 1376. 59) Phenylamid d. 1,4-Dimethylbenzol-2-Carbonsäure. Sm. 140° (J. pr.
 - [2] **41**, 308). **II**, 1380.
 - 60) Benzylamid d. 1-Methylbenzol-4-Carbonsäure. Sm. 1330 (R. 16, 326).

61) Methylphenylamid d. 1-Methylbenzol-4-Carbonsäure. Sm. 70° (B. $\mathbf{C}_{15}\mathbf{H}_{15}\mathbf{ON}$ 24, 2114). — II, 1341.

62) 4-Methylphenylamid d. 1-Methylbenzol-4-Carbonsäure. Sm. 158 bis 159° (160°; 165°) (B. 23, 2747; J. pr. [2] 41, 311; R. 16, 322). — II, 1341.

63) 2-Methylphenylamid d. Phenylessigsäure. Sm. 159° (A. 279, 174).

64) 4-Methylphenylamid d. Phenylessigsäure. Sm. 132-1330 (135 bis 136°) (A. **279**, 128; G. **20**, 178). — II, 1312. 65) Aethylphenylamid d. Benzolcarbonsäure.

Sm. 60°; Sd. 260°₆₂₀ (B. **18**, 687). — **II**, *1164*.

- 66) 2-Aethylphenylamid d. Benzolcarbonsäure. Sm. 1470 (B. 17, 2802). **— II**, 1166.
- 67) 4-Aethylphenylamid d. Benzolcarbonsäure. Sm. 151° (B. 17, 2802). — II, 1166.
- 68) α-Phenyläthylamid d. Benzolcarbonsäure. Sm. 120° (B. 27, 2308). 69) 2,4-Dimethylphenylamid d. Benzolcarbonsäure. Sm. 1920 (A. 208,
- 319; B. 10, 1710). II, 1166. 70) 2,5-Dimethylphenylamid d. Benzolcarbonsäure. Sm. 140° (A. 255,
- 169). II, 1166. 71) 2,6-Dimethylphenylamid d. Benzolcarbonsäure. Sm. 1640 (M. 19, 639).
- 72) ?-Dimethylphenylamid d. Benzolcarbonsäure. Sm. 140° (B. 10, 1711; A. 208, 322). — II, 1166.
- 73) 2-Methylbenzylamid d. Benzolcarbonsäure. Sm. 88° (B. 23, 1027). **- II**, 1166.
- 74) 3-Methylbenzylamid d. Benzolcarbonsäure. Sm. 69° (B. 21, 2704). — II, 1166.
- 75) 4-Methylbenzylamid d. Benzolcarbonsäure. Sm. 125° (137°) (B. 23, 1031; **28**, 2988). — II, *1166*. 76) Phenylbenzylamid d. Essigsäure. Sd. 230—240% (B. **28**, 2354).
- 77) Phenyl-4-Methylphenylamid d. Essigsäure. Sm. 51° (A. 239, 57). - II, 493.
- 78) 2-Benzylphenylamid d. Essigsäure. Sm. 135° (B. **26**, 3086). — II, 634.
- 79) 3-Benzylphenylamid d. Essigsäure. Sm. 91° (B. 15, 2092). II, 634.
- 80) Dibenzylamid d. Ameisensäure. Sm. 52°; Sd. oberh. 360° (B. 18, 2341; **19**, 2128). — **II**, 524.
- 81) Verbindung (aus d. Dehydrodiacetyllävulinsäure). Sm. 208,5° (G. 22 [2] 446, 447).

 $\mathbf{C}_{15}\mathbf{H}_{15}\mathbf{ON}_{3}$ C 71,1 - H 5,9 - O 6,3 - N 16,6 - M. G. 253.

- 1) 4-Acetylamido-l-Phenylhydrazonmethylbenzol. Sm. 155° (J. pr. [2] **56**, 104). — IV, 753.
- 2) α -Benzoylamido- β -Phenylhydrazonäthan. Sm. 107—108° (B. 26, 466). - IV, 747.
- 3) α -Amido- α -Benzoylhydrazon- α -[4-Methylphenyl]methan (Benzoylp-Tolenylhydrazidin). Zers. bei 120° (B. 27, 3279; A. 298, 5). — IV, 1139.
- 4) β -Oximido- α -Phenylhydrazon- α -Phenylpropan. Sm. 205—206° (202°) (A. **291**, 288; B. **22**, 2129). — IV, 783.
- 5) α -Oximido- β -Phenylhydrazon- α -Phenylpropan. Sm. 154° (A. 291, 290). — IV, 783.
- 6) β -Oximido- α -Phenylhydrazon- α -[4-Methylphenyl]äthan. Sm. 165°. **- IV**, 762.
- 7) 1-[4-Methylphenylacetyl]amidodiazobenzol. Sm. 140° (B. 28, 875). - IV, 1570.
- 8) 3-Acetylamido-2-Methylazobenzol. Sm. 194° (Soc. 67, 932). — IV, 1382.
- 9) 3 Acetylamido 4 Methylazobenzol. Sm. 199° (Soc. 67, 931). — IV, *1382*.
- 10) 4-Methylacetylamidoazobenzol. Sm. 139° (B. 17, 1401). IV, 1357.
- 11) Azobenzyläthylamidophenol (B. 23, 1782). IV, 1414.
- 12) Aethyläther d. 6-Oxy-1-[3-Methylphenyl]-1,2,3-Benztriazol. Sm. 110—111° (A. 287, 171). IV, 1548.
- 13) Aethyläther d. 6-Oxy-1-[4-Methylphenyl]-1,2,3-Benztriazol? Sm. 117—118° (A. 287, 178).

- $C_{15}H_{15}ON_3$ 14) Aethyläther d. 6-Oxy-5-Methyl-1-Phenyl-1, 2, 3-Benztriazol. Sm. 118° (A. 287, 149). IV, 1550.
 - 15) Aethyläther d. 3-[4-Oxyphenyl]-3,4-Dihydro-1,2,3-Benztriazin. Sm. 144° u. Zers. HCl, (2HCl, PtCl₄), (2HCl, AuCl₃), HBr, Pikrat (J. pr. [2] **52**, 399). — **IV**, *1149*.
 - 16) Amid d. α-Methylphenylhydrazonphenylessigsäure. Sm. 156° (A. 227, 351). — IV, 694.
 - 17) Amid d. α-Phenyl-β-Benzylidenhydrazidoessigsäure. Sm. 225° (B. **29**, 622; **A**. **301**, 71).
 - 18) Phenylamid d. α-Phenylhydrazonpropionsäure + H₂O. Sm. 101 bis 105° (176° wasserfrei) (A. 270, 300). — IV, 689.
 - 19) Phenylamid d. β -Methylen- α -Phenylhydrazoessigsäure. Sm. 220° u. Zers. (A. 301, 60).
 - 20) Benzylidenhydrazid d. Phenylamidoessigsäure. Sm. 176° (J. pr. [2]
- **52**, 448). III, *39*. C 74,7 H 6,2 O 13,3 N 5,8 M. G. 241. $C_{15}H_{15}O_{9}N$
 - 1) α -Methyläther d. β -Oximido- α -Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 130 bis 132° (B. **26**, 2474). — III, 226.
 - 2) 4-Methyläther d. α -Oximido- β -[4-Oxyphenyl]- α -Phenyläthan. Sm. 111° (B. **21**, 2451). — III, 227.
 - 3) **2,4-Dimethoxylbenzylidenamidobenzol.** Sd. 245°₁₀ (C. 1896 [2] 378; Bl. [3] 17, 946).
 - 4) 3,4-Dimethoxylbenzylidenamidobenzol. Sd. 245% (C. 1896 [2] 378; Bl. [3] 17, 946).
 - 5) α-Oxy-2-Acetylamidodiphenylmethan. Sm. 118° (B. 29, 1305).
 - 6) Aethyläther d. 4-Benzoylamido-l-Oxybenzol. Sm. 1730 (B. 31, 3246).
 - 7) Benzyläther d. 4-Acetylamido-l-Oxybenzol. Sm. 139° (A. 287, 182). 8) Benzyläther d. anti-4-Methoxylbenzaldoxim. Sm. 46,5° (B. 23, 1687).
 - III, 87. 9) Benzyläther d. syn-4-Methoxylbenzaldoxim. Sm. 106-107°. HCl (B. 23, 1689). — III, 87.
 - 10) Acetylmethyl- β -Naphtomorpholin. Sm. 124° (B. 31, 760).
 - 11) 2,5-Diacetyl-1-Benzylpyrrol? Sm. 129—130° (B. 20, 1370). IV, 102.
 - 12) Methylcarbophenyllutidyliumdehydrid. Sm. 160-161° (B. 17, 2914). **— IV**, 383.
 - 13) α -Phenyl- β -[2-Amidophenyl] propionsäure. Sm. 147—149° (G. 25 [1] 180; B. 29, 500). — II, 1467.

 - 14) α-Phenyl-β-[3-Amidophenyl] propionsäure (G. 25 [1] 181). II, 1468.
 15) α-Phenyl-β-[4-Amidophenyl] propionsäure. Sm. 200—201°. HCl, H₂SO₄ (G. 25 [1] 183; 27 [2] 47). II, 1468.
 - 16) α-[2-Methylphenyl]amido-α-Phenylessigsäure. Sm. 142—143° u. Zers. (J. 1878, 781). - II, 1324.
 - 17) α -[4-Methylphenyl]amido- α -Phenylessigsäure. Sm. 178—182° u. Zers. (J. 1878, 780; B. 29, 1739). - II, 1324.
 - 18) α-Phenylamido-α-[3-Methylphenyl]essigsäure. Sm. 137—139° u. Zers. (B. 17, 1471). — II, 1374.
 - 19) Phenylbenzylamidoessigsäure. Sm. 121—123° (B. 31, 2675).
 - 20) 2-[2,4-Dimethylphenyl] amidobenzol-1-Carbonsäure. Sm. 182°. Ag (A. 279, 284). - II, 1248.
 - 21) 2-Methyl-1-Allyl-5-Phenylpyrrol-3-Carbonsäure. Sm. 158° (B. 18,
 - 2594). IV, 357. 22) Aethylester d. 2-Biphenylamidoameisensäure. Sm. 186° (B. 29, 1188).
 - 23) Aethylester d. 4-Biphenylamidoameisensäure. Sm. 110° (B. 13, 1965). - II, 634.
 - 24) Aethylester d. Diphenylamidoameisensäure (Diphenylurethan). Sm.
 - 72° (B. 5, 284; 18, 2574). II, 374. 25) **4-Methylphenylester d. Methylphenylamidoameisensäure.** Sm. 62° (B. **24**, 2110). — **II**, 750.
 - 26) 2-Methylphenylester d. 2-Methylphenylamidoameisensäure. Sm. 126° (B. 25, 1087). — II, 738.
 - 27) Benzylester d. 2-Methylphenylamidoameisensäure. Sm. 83-84° (B. **25**, 1087). — **II**, 1051.
 - 28) Formiat d. β -Amido- α -Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 182—183° (B. **29**, 1213).

- C₁₅H₁₅O₂N 29) Benzoat d. 3-Dimethylamido-1-Oxybenzol. Sm. 94°; Sd. 250°₅ (B. **29**, 508).
 - 30) Phenylamidoformiat d. α-Oxyäthylbenzol. Sm. 94° (B. 31, 1004).
 - 31) Phenylamidoformiat d. 2-Oxy-1,4-Dimethylbenzol. Sm. 160-1610 (B. **32**, 19).
 - 32) Nitril d. 6-Oxy-4-Keto-3-Methyl-2-Phenyl-1,2,3,4-Tetrahydrobenzolmethyläther-3-Carbonsäure. Sm. 136° (A. 294, 286).
 - 33) Isoamylimid d. Benzol-1,2-Dicarbonsäure. Sm. 307-308° (B. 23, 998). — II, 1804.
 - 34) Amid d. 6-Oxy-3-Methyldiphenylessigsäure. Sm. 139-140° (B. 31, 2817).
 - 35) Amid d. 2-Oxy-4-Methyldiphenylessigsäure. Sm. 163-166° (B. 31, 2820).
 - 36) Methylamid d. 2-Oxydiphenylessigsäure. Sm. 180-182° (B. 31, 2814).
 - 37) Phenylamid d. 4-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 96° (J. pr. 2] **41**, 315). — **II**, 1547.
 - 38) Phenylamid d. 6-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 147° (J. pr. [2] **41**, 314). — **II**, 1548.
 - 39) Phenylamid d. 4-Oxybenzoläthyläther-1-Carbonsäure. Sm. 170° (J. pr. [2] 41, 313). — II, 1530. 40) Phenylamid d. α -Oxypropionphenyläthersäure. Sm. 117° (Bl. [3]
 - **17**, 361).
 - 41) Phenylamid d. Oxyessig-2-Methylphenyläthersäure. Sm. 110° (G. **22** [2] 543). — **II**, 738.
 - 42) Phenylamid d. Oxyessig-3-Methylphenyläthersäure. Sm. 95° (G. **20**, 508). — **II**, 744.
 - 43) Phenylamid d. Oxyessig-4-Methylphenyläthersäure. Sm. 109° (G. **22** [2] 543). — **II**, 750.
 - 44) Benzylamid d. 4-Oxybenzolmethyläther-1-Carbonsäure. Sm. 1260 (R. 16, 328).
 - 45) 2-Methylphenylamid d. α-Oxyphenylessigsäure. Sm. 72° (A. 279, 125). — II, *1552*.
 - 46) 4-Methylphenylamid d. α-Oxyphenylessigsäure. Sm. 1720; Sd. oberh. 200°₁₀ (A. **279**, 126). — II, 1552.
 - 47) β-Phenoxyäthylamid d. Benzolcarbonsäure. Sm. 93° (B. 24, 189). - II, *1160*.
- C 66,9 H 5,6 O 11,9 N 15,6 M. G. 269. $C_{15}H_{15}O_2N_3$
 - 1) α -Phenylimido- α -Aethylamido- α -[3-Nitrophenyl]methan. HJ (A. 265, 154). — IV, 842.
 - 2) 2-Acetylamido-1-Phenylnitrosamidomethylbenzol. Sm. 112-1130 (J. pr. [2] 47, 358). - IV, 630.
 - 3) α -Acetylamido- $\alpha\beta$ -Diphenylharnstoff. Sm. 181° (175—176°) (B. 26, 2872; **27**, 1515). — **IV**, 675.
 - 4) α -Acetylphenylamido- β -Phenylharnstoff. Sm. 183° (B. 27, 1516). IV, 675.
 - 5) Benzoyl-4-Methylphenylamidoharnstoff. Sm. 218° (Soc. 73, 369).
 - 6) α -Phenyl- β -[α -Oximido- β -Phenyläthenyl]harnstoff. Sm. 1230 (B. 18, 1074). — II, 1315.
 - 7) α -Phenyl- β -[α -Oximido-4-Methylbenzyl]harnstoff. Sm. 155° (B. 22, 2436). — II, *1343*.
 - 8) α-Phenylhydrazon-α-[3-Nitro-4-Methylphenyl]äthan (G. 21 [1] 93). — IV, 773.
 - 9) β -Acetyl- α -[2-Amidobenzoyl]- α -Phenylhydrazin. Sm. 140° (A. 301, 90). 10) 5-Acetylamido-4'-Oxy-2-Methylazobenzol. Sm. 252-253 $^{\circ}$ (B. 15, 2827). - IV, 1414.
 - 11) 5-Keto-3-Phenyl-2, 5-Dihydroisoxazol + Phenylhydrazin. Sm. 1530 u. Zers. (A. 296, 44). - IV, 654.
 - 12) 4'-Dimethylamidoazobenzol-3-Carbonsäure (B. 10, 527; 31, 2205). IV, 1461.
 - 13) isom. ?-Dimethylamidoazobenzol-?-Carbonsäure (B. 10, 527). IV, 1461.
 - 14) Aethylester d. 1-Phenylamidodiazobenzol-13-Carbonsäure. (2HCl, PtCl₄) (A. 137, 64). — IV, 1578.

- C₁₅H₁₅O₂N₃15) Phenylamid d. 3-Amido-4-Methylphenyloxaminsäure. Sm. 185 bis 186° (A. 268, 333). IV, 605.
 16) Phenylhydrazid d. Benzoylamidoessigsäure. Sm. 182,5° (J. pr. [2]
 - **52**, 248). **IV**, *670*. C 60,6 H 5,0 O 10,8 N 23,6 M. G. 297.

 $C_{15}H_{15}O_2N_5$

- 1) Hippurylphenylbuzylen. Sm. S6° (B. 26, 1268). IV, 1578.
- 2) Nitril d. 3-Nitrobenzylidendi [β-Amidocrotonsäure]. Sm. 118-120°
- (J. pr. [2] 56, 133).
 3) Di[Phenylamid] d. Guanidindicarbonsäure. Sm. 174—175° (J. pr. [2] ${\bf 49}$, ${\bf 42}$). C 70,0 — H 5,8 — O 18,7 — N 5,4 — M. G. 257.

 $C_{15}H_{15}O_{3}N$

- 1) 2-[3-Methoxyl-4-Oxybenzyliden]amido-1-Oxymethylbenzol (Vanilliden-2-Amidobenzylalkohol). Sm. 119° (B. 25, 2972). — III, 101.
- 2) 1,43-Dimethyläther d. 4-[3,4-Dioxybenzyliden]amido-1-Oxybenzol. Sm. 137º (B. 31, 176).
- 3) 1-Aethyläther d. 4-[3,4-Dioxybenzyliden]amido-1-Oxybenzol (Protokatechualdehyd-p-Phenetidin). Sm. 218° (C. 1897 [1] 1121).
- 4) Dimethyläther d. 4-Benzoylamido-1, 2-Dioxybenzol. Sm. 1770 (Bl. 3] **15**, 338, 649).
- 5) Dimethyläther d. 4-Benzoylamido-1,3-Dioxybenzol. Sm. 173° (B. **22**, 2380). — II, 1180.
- 6) Dimethyläther d. α-Oximido-2, 2'-Dioxydiphenylmethan. Sm. 188° (B. 19, 2610). — III, 195.
- 7) Dimethyläther d. \(\alpha\)-Oximido-4,4'-Dioxydiphenylmethan. Sm. 133\(\gamma\) (B. 28, 2870).
- 8) Benzyläther d. 4-Methoxylbenzhydroxamsäure. Sm. 1130 (A. 281, 191). — II, 1533.
- 9) Phenylmethylamidomethyl-3,4-Dioxyphenylketon. Sm. 155°. HCl
- (J. r. 25, 280). III, 138. 10) Oxim d. Lapachol. Zers. oberh. 160° (G. 19, 612; Soc. 65, 720). III, 401.
- 11) Oxim d. α-Lapachon. Sm. 204° u. Zers. (Soc. 65, 723). III, 401. 12) Oxim d. β-Lapachon. Sm. 168,5—169,50 (G. 19, 613; Soc. 65, 724).
- III, 401. 13) β -Phenylamido - α -Oxy- α -Phenylpropionsäure. Sm. 144—145°. Na
- (A. **271**, 157). II, 436. 14) α-[2-Naphtyl]acetylamidopropionsäure. Sm. 199-200 (B. 25, 2313).
- 15) α-Amido-6-Oxy-3-Methyldiphenylessigsäure. Sm. 190-192°. HCl (B. 31, 2819).
- 16) α-[4-Methoxylphenyl]amido-α-Phenylessigsäure. Sm. 184° u. Zers. (B. 31, 2706).
- 17) Methylester d. 4-Keto-2,6-Dimethyl-1-Phenyl-1,4-Dihydropyridin-3-Carbonsäure. Sm. 152° (Soc. 51, 498). — II, 2006.
- 18) Benzoat d. β -Oxyäthyl-2-Amidophenyläther. Sm. 98—100° (J. pr.
- [2] **24**, 253). II, 1145. 19) Phenylamid d. **3**,**4**-Dioxybenzoldimethyläther-1-Carbonsäure. Sm. 154° (J. pr. [2] 53, 254).
- 20) 4-Aethoxylphenylamid d. 2-Oxybenzol-1-Carbonsäure. Sm. 142 bis 143° (G. 28 [2] 198).
- 21) 1-Naphtylmonamid d. Propan-αβ-Dicarbonsäure. Sm. 160-1610 (C. **1896** [1] 109, 997).
- 22) 2-Naphtylmonamid d. Propan-αβ-Dicarbonsäure. Sm. 158—159° (C. **1896** [1] 997).

C 63,2 - H 5,2 - O 16,8 - N 14,7 - M. G. 285. $\mathbf{C}_{15}\mathbf{H}_{15}\mathbf{O}_{3}\mathbf{N}_{3}$

- 1) α-Oxy-α-Phenyläthenylphenyluramidoxim. Sm. 155° (B. 18, 2478).
- 2) 2-Nitrophenyläther d. β-Phenylhydrazon-α-Oxypropan. Sm. 101° (B. 30, 1635). — IV, 767.
- 3) 4-Nitrophenyläther d. β -Phenylhydrazon- α -Oxypropan. Sm. 140° (B. 30, 1633). - IV, 768.4) ?-Nitroso-2', 4'-Dioxy-2, 4, 5-Trimethylazobenzol (Nitrosoresorcinazo-
- pseudocumol). Zers. oberh. 190° (B. 21, 3110). IV, 1445. 5) Verbindung (aus 4-Amidoazobenzol). Zers. oberh. 300° (B. 31, 2851).

1) Phenylmethylamidomethyl - ? - Trioxyphenylketon (Methylanilidoacetylpyrogallol). Sm. 168° (J. r. 25, 281). — III, 139.

2) 2-Oxybenzol-β-[2-Amidophen]oxyläthyläther-l-Carbonsäure. Sm. 110°. HCl (J. pr. [2] 27, 218). — II, 1496.
3) 4-Oxybenzol-β-[2-Amidophen]oxyläthyläther-l-Carbonsäure. Sm.

185° (*J. pr.* [2] **27**, 223). — II, 1527. 4) **2,5**-Dimethyl-1-[4-Methylphenyl]pyrrol-3,4-Dicarbonsäure. Zers. bei 250°. K₂, Ag (B. 18, 304). — IV, 92.

5) 4-Aethoxylphenylamid d. 2-Oxyphenylkohlensäure. Sm. 146° (A. 300, 143).

6) Verbindung (aus Anilin u. d. 2-Aldehyd d. Oxyessigphenyläthersäure-2 Carbonsäure). HCl, H₂SO₄ (Bl. 17, 2992). — III, 67. C 59,8 — H 5,0 — O 21,3 — N 13,9 — M. G. 301.

 $C_{15}H_{15}O_4N_3$

1) Methyldi [2-Nitrobenzyl] amin. Sm. 62-64° (B. 24, 3094; 25, 3040). - II, 520.

2) Methyldi [4-Nitrobenzyl] amin. Sm. 104° (B. 30, 63).

3) Aethyläther d. α -[4-Oxyphenyl]- α -[2-Nitrobenzyl]nitrosamin. Sm. 95° (B. 27, 2903).

4) Aethylester d. 5-Nitro-2-Phenylhydrazidobenzol-1-Carbonsäure. Sm. 129—130° (B. **30**, 1100). — IV, 741. C 54,7 — H 4,6 — O 19,4 — N 21,3 — M. G. 329.

 $C_{15}H_{15}O_4N_5$

1) Di[9-Nitro-4-Methylphenyl]guanidin. Sm. 1970 u. Zers. HNO₃ (Soc. 697). — II, 489

2) 3-Nitro-1-[Aethyl-5-Nitro-2-Methylphenyl]amidodiazobenzol. Sm. 88° (Soc. 67, 250). — IV, 1572.

1) Aethylester d. 6-Oxy-4-Keto-2-[2-Chlorphenyl]-1, 2, 3, 4-Tetrahydro- $C_{15}H_{15}O_4Cl$ benzol-3-Carbonsäure. Sm. 142°. Na (A. **294**, 292).

Sm. $164,5 - 165,5^{\circ}$ (Soc. **65**, 19). -C₁₅H₁₅O₄Br 1) Bromoxydihydrolapachol. III, 403.

C 62.3 - H 5.2 - O 27.7 - N 4.8 - M. G. 289. $\mathbf{C}_{15}\mathbf{H}_{15}\mathbf{O}_5\mathbf{N}$

1) Diäthylester d. β -Cyan- α -Keto- α -Phenyläthan- β , 2-Dicarbonsäure (D. d. Benzoyleyanessig-o-Carbonsäure). Ag (A. ch. [7] 1, 494). — II, 1962. C 56,8 — H 4,7 — O 25,2 — N 13,3 — M. G. 317.

 $C_{15}H_{15}O_5N_3$ 1) 2,4-Dinitro-l-Naphtylamid d. Isovaleriansäure. Sm. 218° (B. 27 [2] 593). — II, 607.

C₁₅H₁₅O₅Br 1) Bromdioxydihydrolapachol (Soc. 63, 428). — III, 403.

2) Aethylester d. 5[oder 4]-Brom-4[oder 5]-Acetoxyl-1,6[oder 1,3]-Dimethylbenzfuran-2-Carbonsäure. Sm. 137—138° (A. 283, 257). — III, 732.

C 59.0 - H 4.9 - O 31.5 - H 4.6 - M. G. 305. $C_{15}H_{15}O_6N$

1) Aethylester d. $\gamma \varepsilon$ -Diketo- α -[2-Nitrophenyl]- α -Hexen- δ -Carbonsäure. Sm. 120,5°. Na (B. 16, 33, 163). — II, 1877.

2) Aethylester d. 6-Oxy-4-Keto-2-[3-Nitrophenyl]-1,2,3,4-Tetrahydrobenzol-3-Carbonsäure. Sm. 1630 (A. 294, 294).

3) Aethylester d. 6-Oxy-4-Keto-2-[4-Nitrophenyl]-1, 2, 3, 4-Tetrahydrobenzol-3-Carbonsäure. $+ C_2H_6O$. Sm. 110° (A. **294**, 292). C 49.9 - H 4.1 - O 26.6 - N 19.4 - M. G. 361.

 $C_{15}H_{15}O_6N_5$ 1) α-Isopropyl-α-Phenyl-β-[2,4,6-Trinitrophenyl]hydrazin. Sm. 156°

 $\mathbf{C}_{15}\mathbf{H}_{15}\mathbf{O}_{6}\mathbf{C}\mathbf{I}$

(B. 30, 2819). — IV, 1498.

1) Chlorpikrotoxinin. Sm. 272° (B. 31, 2966).

1) Brompikrotoxinin. Sm. 250—255° u. Zers. (259—260°) (B. 10, 1100; 14, 819; 31, 2966; A. 222, 331, 341). — III, 643. $\mathbf{C}_{15}\mathbf{H}_{15}\mathbf{O}_{6}\mathbf{Br}$

1) Jodpikrotoxinin. Sm. 198—199° (B. 31, 2967). C 53,4 — H 4,4 — O 38,0 — N 4,2 — M. G. 337. $\mathbf{C}_{15}\mathbf{H}_{15}\mathbf{O}_{6}\mathbf{J}$ $C_{15}H_{15}O_8N$

1) Anhydronitropikrotin. Sm. 260° (B. 31, 2974).
2) Narceïnsäure + 3 H₂O(?). Sm. 184° u. Zers. Na + 4½, H₂O, Na₂ + 5H₂O, Na₃, Ba₃ + 5H₂O, Ag₃ (J. pr. [2] 37, 3). — II, 2081.
3) Acetylamid d. 3,4,5-Triacetoxylbenzol-1-Carbonsäure, Sm. 210°

(A. 263, 257). — II, 1922. $\mathbf{C}_{15}\mathbf{H}_{15}\mathbf{NBr}_{2}$ 1) 5-Aethyl-2-[$\alpha\beta$ -Dibrom- β -Phenyläthyl]pyridin. Sm. 127,5—128° (B. 21, 3098; 22, 1060). — IV, 398.

- $C_{15}H_{15}NBr_2$ 2) 2-[β -Phenyl- $\alpha\beta$ -Dibromäthyl]-4,6-Dimethylpyridin. Sm. 213—2140 u. Zers. (B. 27, 82).
- 1) 4-Methylphenylamid d. 1-Methylbenzol-4-Thiocarbonsäure. Sm. $C_{15}H_{15}NS$ $165-166^{\circ}$ (B. **25**, 3527). — II, 1354.

2) 2,4-Dimethylphenylamid d. Benzolthiocarbonsäure. Sm. 90° (B. 21, 2552). — II, *1294*.

 $\mathbf{C}_{15}\mathbf{H}_{15}\mathbf{NS}_{2}$ 1) Phenylester d. Aethylphenylamidodithioameisensäure. Sm. 127,80 (B. **21**, 105). — **II**, 785.

2) Phenylamid d. 4-Merkaptobenzoläthyläther-1-Thiocarbonsäure. Sm. 140—141° (B. 27, 1740). — II, 1541.

 $C_{15}H_{15}N_2Cl$ 1) α -Phenylhydrazon- α -[4-Chlorphenyl]propan. Sm. 94—96° (Bl. [3]) 19, 830).

2) Chlormethylat d. 1-Methyl-2-Phenylbenzimidazol + H₂O. 2+PtCl₄ (A. 210, 358). — IV, 1006.

3) Chlorathylat d. 9-Methylphenanthrolin. (HCl, PtCl₄) (B. 22, 249). **— IV**, 1011.

 $C_{15}H_{15}N_2Br$ 1) α -Phenylhydrazon - α -[4-Bromphenyl] propan. Sm. 99—101° (Bl. [3]) 19, 830).

1) Jodmethylat d. 1-Methyl-2-Phenylbenzimidazol. Sm. 280°. + J₂ $C_{15}H_{15}N_2J$ (A. **210**, 356). — IV, 1006. 2) Jodmethylat d. 3-Phenyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 170°

(B. 22, 2689). - IV, 872.

3) Jodäthylat d. 9 - Methylphenanthrolin $+ 2 H_2 O$ (B. 22, 249). -IV, 1011.

1) 5-Phenylamido-2-Methyl-3-Phenyl-2, 3-Dihydro-1, 3, 4-Thiodiazol. $C_{15}H_{15}N_{3}S$ HCl (B. 30, 854). — IV, 686. 2) 2-Thiocarbonyl-3-[2-Amidobenzyl]-1,2,3,4-Tetrahydro-1,3-Benz-

diazin. Sm. 212° (J. pr. [2] 55, 362). — IV, 635. 3) N-Dimethyl-o-Methylthionin. $HJ + \frac{1}{2}H_2O$ (A. 251, 92). — II, 811.

 $\mathbf{C}_{15}\mathbf{H}_{15}\mathbf{N}_{4}\mathbf{Cl}$ 1) Chlormethylat d. 1,4-Diphenyl-1,4-Dihydro-1,2,4,5-Tetrazin. Sm.

244°. 2 + PtCl₄ (Soc. 55, 245). — IV, 1233.

1) Jodmethylat d. 3,6-Diphenyl-1,2-Dihydro-1,2,4,5-Tetrazin. Sm. 128° u. Zers. (B. 27, 1004; A. 297, 259). — II, 1214.

2) Jodmethylat d. 1,4-Diphenyl-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 214° $\mathbf{C}_{15}\mathbf{H}_{15}\mathbf{N}_{4}\mathbf{J}$

(Soc. 55, 245). — IV, 1233.
3) Jodmethylat d. 3,6-Diphenyl-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 150° u. Zers. (B. 27, 1006; A. 297, 262).

1) Diphenyläther d. γ -Chlor- α β -Dimerkaptopropan. Fl. (A. 283, 205). C 75,0 — H 6,7 — O 6,7 — N 11,6 — M. G. 240. $\mathbf{C}_{15}\mathbf{H}_{15}\mathbf{ClS}_{2}$ $\mathbf{C}_{15}\mathbf{H}_{16}\mathbf{ON}_{2}$

1) Methylendi - p - Anhydroamidobenzylalkohol = $(C_{15}H_{18}ON_2)_{x_1}$ oberh. 290°. 2 HCl, (2 HCl, PtCl₄) (C. 1896 [1] 1104; 1898 [1] ⁹87). 2) αβ-Diphenyläthylharnstoff. Sm. 98—99° (B. 22, 1411). — II, 636.

- 3) 4-Methyldiphenylmethylharnstoff (p-Homobenzhydrylharnstoff). Sm. 158° (B. 24, 2802). — II, 637. 4) α -Aethyl- α β -Diphenylharnstoff. Sm. 91° (B. 17, 2093, 3036). — II, 380.

5) s-Dibenzylharnstoff. Sm. 167° (B. 4, 412; 5, 92; 27, 3379). — II, 526. 6) uns-Dibenzylharnstoff. Sm. 124—125° (B. 9, 81). — II, 526. 7) s-Di[2-Methylphenyl]harnstoff. Sm. 256° (250°; 243°; 219—220°) (B. 9, 414. 12, 1350

6, 444; **12**, 1350, 1859, 2325; **19**, 1769; *J. pr.* [2] **38**, 303; *C.* 1896 [1] 701; 1896 [2] 171). — II, 464.

8) s-Di[3-Methylphenyl]harnstoff. Sm. 2030 (2170) (B. 13, 1090; 25, 1089). **— II**, 479.

9) s-Di[4-Methylphenyl]harnstoff. Sm. 256° (263°; 244-245°) (J. 1869, 638; A. 126, 161; B. 9, 714, 821; 14, 2446; 19, 1768; 27, 2426; Am. 12, 502; C. 1896 [1] 701; 1896 [2] 171). — II, 495.

10) s-Benzyl-2-Methylphenylharnstoff. Sm. 188—188,5° (Soc. 67, 562). 11) s-Benzyl-3-Methylphenylharnstoff. Sm. 158,5—159° (Soc. 67, 563). 12) s-Benzyl-4-Methylphenylharnstoff. Sm. 180-181° (B. 21, 505). -

II, 526. 13) s-2-Methylphenyl-4-Methylphenylharnstoff. Sm. 263-2646 (Soc. **67**, 562).

14) s-Phenyl-3-Methylbenzylharnstoff. Sm. 131° (B. 21, 2703). — II, 545. 15) α -Methyl- α -Phenyl- β -Benzylharnstoff. Sm. 84° (B. 24, 3817). — II, 526.

- $C_{15}H_{16}ON_2$ 16) α -Methyl- β -Phenyl- β -Benzylharnstoff. Sm. 107,5—108,5° (Soc. 67, 563).
 - 17) $\alpha\beta$ -Dimethyl- $\alpha\beta$ -Diphenylharnstoff. Sm. 120—121°; Sd. 350° (B. 12, 1166; J. 1881, 335). — II, 380.
 - 18) 4-[2-Oxybenzyliden]amido-1-Dimethylamidobenzol. Sm. 134° (B. 18. 573). — IV, 597.
 - 19) 4-[4-Oxybenzyliden]amido-1-Dimethylamidobenzol (B. 18, 574). IV, 597.
 - 20) 2-Amido-1-Acetylphenylamidomethylbenzol. Sm. 80-81° (J. pr. [2]) **47**, 350). **— IV**, 630.
 - 21) 2-Acetylamido-l-Phenylamidomethylbenzol. Sm. 126—127°.
 (HCl, SnCl₂), H₂SO₄ (B. 24, 3051; J. pr. [2] 47, 357). IV, 630.
 - 22) 4 oder 3-Phenacetylamido-3 oder 4-Amido-1-Methylbenzol. Sm. 194° (B. **24**, 633). — **IV**, 617.
 - 23) α-Benzoylamido-β-Phenylamidoäthan. Sm. 127°. (2HCl, PtCl₄) (B. 28, 2934).
 - 24) 4-[4-Dimethylamidophenyl]imido-1-Keto-2-Methyl-1,4-Dihydrobenzol. Sm. 123° (Bl. [3], 11, 1133).
 - 25) 4-[4-Dimethylamidophenyl]imido-1-Keto-3-Methyl-1,4-Dihydrobenzol. Sm. 117-118° (Bl. [3] 11, 1138).
 - 26) Di[3-Amido-4-Methylphenyl]keton. Sm. 171-1720. 2HCl (A. 271, 7). - III, 233.
 - 27) Aethyläther d. Phenylimidophenylamidooxymethan (Aethylisocarb-
 - anilid). Sd. 200°_{20} (B. **27**, 927; **28**, 574; Am. **17**, 112). 28) Benzyläther d. β -Oximido- β -Amido- α -Phenyläthan. Sm. 55° (B. **18**, 1072). — II, 1314.
 - 29) 2-Methyl-1, 4-Benzochinon-4-Dimethylamidophenylimid. Sm. 1230 (Bl. [3] 11, 1133). — III, 357.
 - 30) 3-Methyl-1,4-Benzochinon-4-Dimethylamidophenylimid. Sm. 117 bis 118° (Bl. [3] 11, 1133). — III, 357.
 - 31) β -Benzoyl- $\alpha \dot{\beta}$ -Dimethyl- α -Phenylhydrazin. Sm. 103—104° (B. 27, 700). - IV, 669.
 - 32) β -Propionyl- $\alpha\alpha$ -Diphenylhydrazin. Sm. 178° (B. 25, 1077). — IV, 666.
 - 33) β -Acetyl- α -Phenyl- α -Benzylhydrazin. Sm. 121° (A. 252, 288). IV, 812.
 - 34) Acetyl-4-Methyl-s-Diphenylhydrazin. Sm. 140° (A. 303, 370). -IV, 1502.
 - 35) β -Formyl- $\alpha \alpha$ -Di[2-Methylphenyl]hydrazin. Sm. 139° (B. 25, 1078). **– IV**, 801.
 - 36) β -Formyl- $\alpha \alpha$ -Di[4-Methylphenyl]hydrazin. Sm. 146° (B. 25, 1079). - IV, 805.
 - 37) α -Phenylhydrazon α -[4-Oxyphenyl]propan. Sm. 80° (J. pr. [2] 43, 90). - IV, 772.
 - 38) Methyläther d. α-Phenylhydrazon-α-[2-Oxyphenyl]äthan. Sm. 860 (B. 25, 1308). — IV, 772.
 - 39) Phenyläther d. β -Phenylhydrazon- α -Oxypropan (B. 28, 1253). IV, 767.
 - 40) 3-Methylphenyläther d. β -Phenylhydrazon- α -Oxyäthan. Sm. 720 (B. 30, 1441). — IV, 755.
 - 41) 4-Methylphenyläther d. β -Phenylhydrazon- α -Oxyäthan. Sm. 1060 (111°) (B. 30, 1440, 1704). — IV, 755.
 - 42) 5-Oxy-1, 2, 4-Trimethyl-?-Azobenzol. Sm. 93-94° (B. 17, 886). -IV, 1424.
 - 43) 4'-Oxy-2,4,5-Trimethylazobenzol. Sm. 94° (B. 24, 2313). IV, 1414. 44) Aethyläther d. 4-Oxy-2-Methylazobenzol. Sm. 51,5° (A. 287, 147).
 - IV, 1420. 45) Aethyläther d. 4'-Oxy-2-Methylazobenzol. Sm. 53° (B. 22, 3258).
 - **IV**, 1413. 46) Aethyläther d. 4-Oxy-3-Methylazobenzol. Sm. 59° (B. 23, 3259). **IV**, 1419.
 - 47) Aethyläther d. 6-Oxy-3-Methylazobenzol. Sm. 48° (B. 23, 3262).
 - IV, 1420. 48) Aethyläther d. 4'-Oxy-3-Methylazobenzol. Sm. 65° (A. 287, 161). - IV, 1413.

 $\mathbf{C}_{15}\mathbf{H}_{16}\mathbf{ON}_2$ 49) Aethyläther d. $\mathbf{4}'$ -Oxy-4-Methylazobenzol. Sm. 121—122° (B. 23,

3258). — IV, 1413. 50) 2,6-Dimethyl-4-[3-Acetylamidophenyl]pyridin. Sm. 72—76° (G. 17, 472). — IV, 976.

51) 1-Methyloxydhydrat d. 1-Methyl-2-Phenylbenzimidazol. Sm. 152°. Chlorid + 2H₂O, 2 Chlorid + PtCl₄, Jodid, Trijodid, Nitrat, Sulfat + H₂O (A. 210, 357). - IV, 1006.

52) Methyläther d. 3-[2-Oxyphenyl]-1,2,3,4-Tetrahydro-1, 3-Benzdiazin.

Sm. 141—142° (96°) (J. pr. [2] 53, 423; [2] 54, 283). — IV, 636.

53) Methyläther d. 3-[4-Oxyphenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin.
Sm. 134° (J. pr. [2] 54, 288). — IV, 636.

54) Dimethylharmin. Chlorid, Jodid, Nitrat (B. 30, 2483).

55) Amid d. α-Phenylamido-α-Phenylpropionsäure. Sm. 119° (B. 19, 1516). — II, *1371*.

56) Amid d. α-Phenylamido-α-[3-Methylphenyl]essigsäure. Sm. 127 bis 128° (B. 17, 1471). — II, 1374.

57) Phenylamid d. α-Phenylamidopropionsäure. Sm. 126° (B. 22, 1794; 30, 2313, 2317, 2321). — II, 432.
58) Phenylamid d. 4-Methylphenylamidoessigsäure. Sm. 82—83° (B. 8,

1161). — II, 505.

59) 4-Methylphenylamid d. Phenylamidoessigsäure. Sm. 165° (171 bis 172°) (B. 8, 1158; 23, 2000). — II, 493.

60) 2-Amidobenzylamid d. 1-Methylbenzol-2-Carbonsäure. Sm. 114 bis 116°. HCl (B. 25, 3034). — IV, 631.

61) 3-Amido-4-Methylbenzylamid d. Benzolcarbonsäure. Sm. 113—115°. $HCl, H_2Cr_2O_7$, Pikrat (B. 28, 2990). — IV, 644.

62) 4-Dimethylamidophenylamid d. Benzolcarbonsäure. Sm. 228° (B. **29**, 1482). — IV, 594.

63) Nitril d. β-Oxy-α-[2-Cyanphenyl]-α-Pentenäthyläther-α-Carbonsäure. Sm. 80° (B. 29, 2394).
64) Nitril d. β-Oxy-α-[2-Cyanphenyl]-γ-Methyl-α-Butenäthyläther-α-

Carbonsäure. Sm. 91° (B. 30, 891). C 67,1 — H 6,0 — O 6,0 — N 20,9 — M. G. 268.

 $\mathbf{C}_{15}\mathbf{H}_{16}\mathbf{ON}_{4}$

1) $\beta \gamma$ -Diphenylhydrazon- α -Oxypropan. Sm. 131° (*B.* 20, 1089, 3386; 28, 1522; 30, 1662, 3165; *Soc.* 75, 5). — IV, 762.

2) Monacetylderivat d. α -Phenylhydrazon- α -Phenylhydrazidomethan. Sm. 163—164° (B. **25**, 3189). — IV, 1227.

3) Phenylhydrazid d. α-Phenylhydrazonpropionsäure. Sm. 1630 (1620)

 $\mathbf{C}_{15}\mathbf{H}_{16}\mathbf{ON}_{6}$

 $\mathbf{C}_{15}\mathbf{H}_{16}\mathbf{O}_{2}\mathbf{N}_{2}$

J. pr. [2] 42, 78; B. 21, 2922). — IV, 666.
C. 60,8 — H 5,4 — O 5,4 — N 28,4 — M. G. 296.
Base (aus d. Verb. C₁₅H₁₈N₆). Sm. 228° (M. 5, 470). — II, 450.
C. 70,3 — H 6,2 — O 12,5 — N 10,9 — M. G. 256.
P-Nitro-4-Benzylamido-1,3-Dimethylbenzol (Bl. [3] 7, 52). — II, 543.
β-Benzylnitrosamido-α-Oxy-α-Phenyläthan. Sm. 95° (cor.) (B. 29, 211)

3) Methyläther d. 4-Oxy-1-[4-Methylphenyl]nitrosamidomethylbenzol.

Sm. 108° (A. 241, 340). — II, 754. 4) Aethyläther d. 2-[4-Oxyphenyl]nitrosamido-l-Methylbenzol. Sm. 71—72° (A. **287**, 175).

5) [β-Oxy-αβ-Diphenyläthyl]harnstoff. Sm. 215° u. Zers. (B. 28, 1898). 6) Methyläther d. α-Oxy-β-Phenyl-α-Benzylharnstoff. Sm. 87° (J. pr.

[2] **56**, 76). 7) Methyläther d. s-Phenyl-2-Oxybenzylharnstoff. Sm. 145° (B. 23,

2743). — II, 743. 8) Aethyläther d. 2-Oxydiphenylharnstoff. Sm. 169-170° (J. pr. [2] 41,

327). — II, 709.

9) Methyläther d. 2-Oxyphenyl-2-Amidobenzylformylamin. Sm. 98°

(J. pr. [2] 54, 280). — IV, 629.

10) Dimethyläther d. 4-Oxyphenylimido-4-Oxyphenylamidomethan. Sm. 119° (C. 1898 [2] 523).

11) N-Benzyläther α-Oxy-α-Phenyläthenylamidoxim. Sm. 102—103° (B. 18, 1080). — II, 1553.

12) γ -Phenylhydrazon- $\alpha\beta$ -Dioxy- α -Phenylpropan. Sm. 170,5° (cor.) (B. 31, 1996).

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 $C_{15}H_{16}O_2N_2$ 13) α -Phenylhydrazon- α -[2,4 oder 3,5-Dioxyphenyl] propan. Sm. 1150 (J. pr. [2] 43, 92). - IV, 772.

14) α-Phenylhydrazon-α-[2, 5-Dioxyphenyl] propan. Sm. 100° (J. pr. [2]

43, 94). — IV, 773.

15) 4-Methyläther d. α-Phenylhydrazon-α-[2,4-Dioxyphenyl]äthan (Päonolphenylhydrazon). Sm. 107° (B. 24, 2854). — IV, 772.

16) 3-Methyläther d. α -Phenylhydrazon- α -[3,4-Dioxyphenyl]äthan (Acetovanillonphenylhydrazon). Sm. 125° (B. 24, 2867). — IV, 772. 17) 2-Oxyphenyläther d. β-Phenylhydrazon-α-Oxypropan. Sm. 113°

(Bl. [3] 21, 292).

18) α-Acetyl-α-Phenyl-β-[4-Oxy-3-Methylphenyl]hydrazin. Sm. 88—89° (B. 25, 1331). — IV, 1505.

19) Acetat d. 6-Oxy-3-Methyl-s-Diphenylhydrazin. Sm. 124-125° (B. 24, 2304). — IV, 1506.

20) α-Acetat d. 4'-Oxy-4-Methyl-s-Diphenylhydrazin. Sm. 106° (B. **24**, 2310). - IV, 1505.

21) β -Acetat d. 4'-Oxy-4-Methyl-s-Diphenylhydrazin. Sm. 141° (B. 24, 2311). — IV, 1505.

22) 2',4'-Dioxy-2,4,5-Trimethylazobenzol (Resorcinazopseudocumol). Sm.

199° u. Zers. (B. 17, 882). — IV, 1445. 23) Resorcinazocumol. Sm. oberh. 200° u. Zers. (B. 17, 132). — IV, 1445.

24) 4'-Methyläther d. 5,4'-Dioxy-2-Methylazobenzol? Sm. 103-104° (B. 17, 883). — IV, 1423.

25) 1-[4-Nitro-1-Naphtyl] hexahydropyridin. Sm. 77° (B. 23, 1387). — IV, 10.

26) Acetylharmalin. Sm. 204—205° (B. 30, 2483).

27) 2-[2,4-Dimethylphenyl]amido-5-Amidobenzol-1-Carbonsäure. Sm. 2420 u. Zers. HCl (A. 279, 282). — II, 1274.

28) γ -[2-Naphtyl] hydrazonvaleriansäure (A. 242, 367). — IV, 930. 29) Säure (aus Hydrobenzamid). Sm. 120° (B. 14, 1139). — III, 36.

30) Aethylester d. 3-Amido-4-Phenylamidobenzol-1-Carbonsäure. Sm. 76—77° (B. 22, 3288). — II, 1275.
31) Aethylester d. 4-Amidobiphenyl-4'-Amidoameisensäure (Benzidinsemiurethan). Sm. $90-91^{\circ}$. HCl, $(2 \text{HCl}, \text{PtCl}_4)$ (A. 258, 370).

IV, 964. 32) Aethylester d. α-[1-Naphtyl]hydrazonpropionsäure. Sm. 100° (A. **239**, 231). — IV, 927.

33) Aethylester d. α -[2-Naphtyl]hydrazonpropionsäure. Sm. 131° (A.

236, 177). — IV, 929. 34) Aethylester d. $\beta\beta$ -Diphenylhydrazidoameisensäure. Sm. 140° (B. 25, 1081). — IV, 738.

35) Amid d. α -[4-Methoxylphenyl]amido- α -Phenylessigsäure. Sm. 120° (B. 31, 2706).

36) Amid d. α-Amido-6-Oxy-3-Methyldiphenylessigsäure. Sm. 146—148° (B. 31, 2818).

37) Piperidid d. α -Cyan- β -Keto- α -Phenyläthan- β -Carbonsäure. Sm. 155 bis $156,5^{\circ}$ (A. 282, 81). — IV, 16.

38) Verbindung (aus Benzylidenacetophenonoxim). 2 isom. Formen. Sm. 150° u. 218° (J. pr. [2] 54, 410).
 C 63,4 — H 5,6 — O 11,3 — N 19,7 — M. G. 284.

 $C_{15}H_{16}O_2N_4$

1) αγ-Di[Phenylnitrosamido] propan. Sm. 87° (B. 20, 781). — II, 345. 2) ?-Dinitroso-4-Amido-4'-Dimethylamidodiphenylmethan. Sm. 101,50 (B. **27**, 3165). — IV, 973.

3) Phenylamidoacetylphenylamidoharnstoff. Sm. 202° (B. 29, 1948). - IV, 675.

4) α-Tetramidopyrokresoloxyd. Sm. oberh. 300° (Soc. 55, 54). — III, 646. 5) Dimethyläther d. α-[4-Oxyphenyl]azo-α-[4-Oxyphenyl]hydrazon-methan. Sm. 88° (B. 28, 1695). — IV, 1227.

6) 3-Nitro-l-[Aethyl-4-Methylphenylamido]diazobenzol. 20, 3018). — IV, 1571.

7) 4-Nitro-l-[Aethyl-4-Methylphenylamido]diazobenzol. Sm. 114 bis 115° (B. 20, 3018). — IV, 1572.

8) 4-Nitro-1-[2,4,6-Trimethylphenyl]amidodiazobenzol. Sm. 135 bis 136° u. Zers. (B. 28, 840). — IV, 1573.

- $C_{15}H_{16}O_2N_4$ 9) 2-Nitro-4'-Dimethylamido-4-Methylazobenzol. Sm. 159-160° (B. 20, 2995). **— IV**, *1383*.
 - 10) 3-Nitro-4'-Dimethylamido-4-Methylazobenzol. Sm. 146-147° (B. **20**, 2995). — **IV**, *1383*.
 - 11) P-Nitro-4'-Dimethylamido-4-Methylazobenzol. Sm. 181° (B. 20, 2995). **— IV**, *1383*.
 - 12) 3-Oxy-5-Keto-1-Phenyl-4, 5-Dihydropyrazol + Phenylhydrazin.
 - Sm. 165° (B. 25, 1512). IV, 702. 13) 4-Nitro-2'-Dimethylamido-1'-Methylazobenzol. Sm. 121—122° (B. **28**, 843, 1892). — IV, 1383.
 - 14) Di[β-Phenylhydrazid] d. Methandicarbonsäure. Sm. 184° (187°)
 (B. 21, 1241; 25, 1504; 30, 1024). IV, 702.
 C 57,7 H 5,1 O 10,2 N 26,9 M. G. 312.
- $C_{15}H_{16}O_2N_6$
- 1) Benzylidenhydrazidokaffeïn. Sm. 270° (B. 27, 3090). III, 960.
- 1) Verbindung (aus Santonin) = $(C_{15}H_{16}O_2Cl_3)_x$. Sm. 171—172° u. Zers. (B. 25, 3318; 26, 982). II, 1786. $\mathbf{C}_{15}\mathbf{H}_{16}\mathbf{O}_{2}\mathbf{Cl}_{3}$
- P-Methylphenyl-1, 3-Dimethylphenylsulfon (B. 11, 2069). II, 827.
 C 66,2 H 5,9 O 17,6 N 10,3 M. G. 272.
 s-Di[2-Oxymethylphenyl]harnstoff. Sm. 108° (B. 22, 1669). II, 1062. $\mathbf{C}_{15}\mathbf{H}_{16}\mathbf{O}_{2}\mathbf{S}$ $\mathbf{C}_{15}\mathbf{H}_{16}\mathbf{O}_3\mathbf{N}_2$
 - 2) 4-Methyläther d. α -Oxy- β -Phenyl- α -[4-Oxybenzyl]harnstoff. Sm. 161° (J. pr. [2] **56**, 81).
 - 3) Dimethyläther d. s-Di[2-Oxyphenyl]harnstoff. Sm. 1820 (1740) (A. **207**, 245; B. **21**, 1654; C. **1897** [2] 113). — II, 709.
 - 4) Dimethyläther d. s-Di[4-Oxyphenyl]harnstoff. Sm. 232—2340 u. Zers.
 - (A. 175, 295, 312; Bl. [5] 17, 732). II, 720. 5) Dibenzyläther d. s-Dioxyharnstoff. Sm. 88° (B. 26, 2157). II, 532. 6) α-Oxy-4-Nitrophenyl-?-Dimethylamidophenylmethan. Sm. 96° (2HCl,
 - $PtCl_4$) (B. **21**, 3292). II, 1078. 7) Aethyläther d. 4-[2-Nitrobenzyl]amido-l-Oxybenzol. Sm. 52°. HCl (J. pr. [2] 48, 555). - II, 718.
 - 8) Methyläthyläther d. 4,4'-Dioxyazoxybenzol. Sm. 86° (B. 23, 1738). **– IV**, 1342.
 - 9) P-Nitro-10-Keto-8-Methyl-9-Aethyl-3,4-Dihydrojulol (?-Nitro-α₁-Keto- γ_1 -Methyl- β_1 -Aethyljulolin). Sm. 168° (B. 25, 1192). — IV, 194.
 - 10) Aethylester d. 6-Oxy-2-[4-Methylphenyl]-1,3-Diazin-4-Methylcarbonsäure. Sm. 164° (B. 28, 481). IV, 990.
 11) Aethylester d. 4-Keto-1-Aethyl-2-Phenyl-1,4-Dihydro-1,3-Diazin-
 - 5-Carbonsäure. Sm. 174° (B. 30, 823).
 - 12) Aethylester d. 4-Oxy-2-Phenyl-1, 3-Diazin-4-Aethyläther-5-Carbonsäure. Sm. 58-59° (B. 30, 1488). - IV, 987.
 - 13) Aethylester d. 6-Oxy-4-Methyl-2-Phenyl-1, 3-Diazin-5-Methylcarbonsäure. Sm. 178° (B. 22, 2619). — IV, 990.
 - 14) Phenylhydrazid d. $i-\alpha\beta$ -Dioxy- β -Phenylpropionsäure. Sm. 215° (B.
 - 30, 1604). IV, 709. 15) Phenylhydrazid d. r-αβ-Dioxy-β-Phenylpropionsäure. Sm. 177° (B.
 - 30, 1602). IV, 709. 16) Verbindung (aus Dehydrodiacetyllävulinsäure). Zers. bei 185—187° (G. **22** [1] 441). — I, 734.
- C 60.0 H 5.3 O 16.0 N 18.7 M. G. 300. $C_{15}H_{16}O_3N_4$
 - 1) $\beta \gamma$ -Di[Phenylnitrosamido] α -Oxypropan. Sm. 108—109° (J. 1888, 1064). — II, 426.
- 2) Diamid d. Di [Phenylamido] oxymethan-2,2'-Dicarbonsäure. Sm. 135° (J. pr. [2] 43, 217). - II, 1249. $\mathbf{C}_{15}\mathbf{H}_{16}\mathbf{O}_{3}\mathbf{Cl}_{2} 1)$ Dichlorsantonin (Bl, 5, 202; A. 63, 33). - II, 1787.
- $\mathbf{C}_{15}\mathbf{H}_{16}\mathbf{O}_{3}\mathbf{Br}_{2}$ 1) Dibrom-α-Metasantonin. Sm. 184° (J. 1880, 895). II, 1787. 2) Dibrom-β-Metasantonin. Sm. 186° (J. 1880, 895). II, 1788. $\mathbf{C}_{15}\mathbf{H}_{16}\mathbf{O}_{4}\mathbf{N}_{2}$ C 62,5 H 5,6 O 22,2 N 9,7 M. G. 288.
- 1) 2,5-Dimethyl-1-[m-Amidotolyl]pyrazol-3,4-Dicarbonsäure. bei 203° (A. **236**, 311). — IV, 549.
 - 2) 1-Methylphenylamido 2, 5 Dimethylpyrazol 3, 4 Dicarbonsäure. Zers. bei 231°. Ag (A. 236, 309). — IV, 549. C 57,0 — H 5,0 — O 20,3 — N 17,7 — M. G. 316.
- $C_{15}H_{16}O_4N_4$ 1) 3,5-Dinitro-2-[4-Dimethylamidophenyl] amido-1-Methylbenzol (B.
 - 25, 3008). IV, 585.

 $C_{15}H_{16}O_6N_4$

 $C_{15}H_{16}O_4N_4$ 2) α -Isopropyl- α -Phenyl- β -[2,4-Dinitrophenyl]hydrazin (B. 30, 2819). - IV, 1498. 1) $\alpha\beta$ -Di[Phenylsulfon] propan. Sm. 113° (116°) (B. 23, 1410, 3233; A. 283, 199; J. pr. [2] 51, 286). - Π, 784.

 $C_{15}H_{16}O_4S_2$

2) isom. αβ-Di[Diphenylsulfon] propan. Sm. 101—102° (A. 283, 196). 3) αγ-Di[Phenylsulfon]propan. Sm. 127—128° (125—126°) (B. 23, 3235; A. 283, 199; J. pr. [2] 51, 292). — II, 784. 4) ββ-Di[Phenylsulfon] propan. Sm. 187-188° (182°) (A. 253, 162; B. 25,

3429). — II, 784. 5) isom. $\beta\beta$ -Di[Phenylsulfon] propan. Sm. 97° (B. 19, 2810). 6) α-Phenylsulfon-β-[4-Methylphenyl]sulfonäthan. Sm. 162° (J. pr. [2] 30, 199). — II, 824.

7) Di[Benzylsulfon]methan. Sm. 207,5° (B. 25, 356). — II, 1053.

0.59,2 - H.5,3 - 0.26,3 - N.9,2 - M.G. 304. $C_{15}H_{16}O_5N_2$

1) 5-Amid-4-Aethylester d. 3-Oxy-2-Keto-6-Phenyl-1, 2, 3, 4-Tetrahydropyridin-4,5-Dicarbonsäure. Sm. 185—186° (Soc. 69, 1385).

1) αγ-Di[Phenylsulfon]-β-Oxypropan. Fl. (B. 23, 758; A. 283, 192).

 $C_{15}H_{16}O_5S_2$ C 56,2 - H 5,0 - O 30,0 - N 8,7 - M. G. 320. $C_{15}H_{16}O_6N_2$

1) Pyromucinornithursäure. Sm. 186° (B. 21, 3461). — II, 2111.

() 51,7 - H 4,6 - O 27,6 - N 16,1 - M. G. 348. 1) Verbindung (aus Dimethylamidobenzol u. α-Trinitrotoluol) (A. 215, 365). - II, *328*.

C 44,1 - H 3,9 - O 31,4 - N 20,6 - M. G. 408. $\mathbf{C}_{15}\mathbf{H}_{16}\mathbf{O}_{8}\mathbf{N}_{6}$

1) Verbindung (aus 1,3,5-Trinitrobenzol u. 4-Nitro-3-Methylamido-1-Dimethylamidobenzol). Sm. 144° (R. 14, 70). 1) Thiorufinsäure. Sm. bei 173°. Ba₅ (B. 10, 702; 28, 2885).

 $C_{15}H_{16}O_8S_6$

1) $\alpha\beta\gamma$ -Trioxypropan- $\alpha\gamma$ -Diphenyläther-?-Disulfonsäure. $(NH_4)_2, K_2,$ $C_{15}H_{16}O_{9}S_{2}$ Ba (B. **19**, 66). — **II**, 830.

 $C_{15}H_{16}N_2Br_2$ 1) Bromid d. Di[2-Methylphenyl]formamidin (B. 10, 1260). — II, 459. 1) α -Aethyl- $\alpha\beta$ -Diphenylthioharnstoff. Sm. 89° (B. 17, 2090; 21, 106). $\mathbf{C}_{15}\mathbf{H}_{16}\mathbf{N}_{2}\mathbf{S}$ - II, 397.

2) s-Phenyl-[α-Phenyläthyl]thioharnstoff. Sm. 106° (B. 26, 2168). —

II, 538.

3) s-Phenyl- $[\beta$ -Phenyläthyl]thioharnstoff. Sm. 106° (B. 26, 2167). — II. 539.

4) s-Phenyl-[4-Aethylphenyl]thioharnstoff. Sm. 103—104° (B. 16, 2020). - II, 537.

5) s-Dibenzylthioharnstoff. Sm. 148° (146°) (B. 5, 696; 24, 2725; Soc. 59, 406; G. 23 [2] 553). — II, 528.

6) uns-Dibenzylthioharnstoff. Sm. 141° (134-135°) (B. 24, 2727; 26,

2502; G. 19, 427; 23 [2] 39). — II, 528. 7) s-Di[2-Methylphenyl]thioharnstoff. Sm. 158° (165°); Sd. 216—218° (B. 4, 985; 12, 1854, 2301; 17, 3045). — II, 465.

8) s-Di[3-Methylphenyl]thioharnstoff. Sm. 111-111,50 (1220; 109 bis 109,5°) (B. 8, 718; Soc. 63, 328; 67, 559). — II, 479.

9) s-Di[4-Methylphenyl]thioharnstoff. Sm. 176° (J. 1869, 637; 1882,

384; A. 126, 160; B. 9, 815; 15, 1311). — II, 498. Sm. 172—173° (B. 10) s-2-Methylphenyl-4-Methylphenylthioharnstoff.

6, 445; Soc. 67, 558). — II, 498. 11) s-Benzyl-2-Methylphenylthioharnstoff. Sm. 138—139° (Soc. 59, 555).

- II, 528. Sm. 113—114° (Soc. 59, 555). 12) s-Benzyl-3-Methylphenylthioharnstoff.

– II, 528. 13) s-Benzyl-4-Methylphenylthioharnstoff. Sm. 120-121° (Soc. 59, 555).

- II, 528. 14) s-Phenyl-2,3-Dimethylphenylthioharnstoff. Sm. 125,5—126° (Soc.

67, 558). 15) 4 - Methyldiphenylmethylthioharnstoff (p-Homobenzhydrylthioharn-

stoff). Sm. 100-101° (B. 24, 2802). — II, 637. 16) $\alpha\beta$ -Dimethyl- $\alpha\beta$ -Diphenylthioharnstoff. Sm. 72,5° (B. 20, 1631). —

II, 397.

17) α -Methyl- α -Phenyl- β -Benzylthioharnstoff. Sm. 84—85° (Soc. 59, 563). — II, 528.

- $C_{15}H_{16}N_2S$ 18) α -Methyl- β -Phenyl- β -Benzylthioharnstoff. Sm. 120—121° (Soc. 59, 563). **— II**, 528.
 - 19) α -Methyl- α -Phenyl- β -[2-Methylphenyl] thioharnstoff. **17**, 3035). — **II**, 465.
 - 20) α -Methyl- α -Phenyl- β -[4-Methylphenyl]thioharnstoff. Sm. 124° (B. 17, 2091, 3035). — II, 498.
 - 21) Dibenzylaminrhodanat. Sm. 164—165° (156—157°) (B. 26, 2502).
 - 22) Phenylamidophenylimidomethyläthylsulfid. Sm. 79° (73°). HCl, $(2 \text{HCl}, \text{PtCl}_4 + 2 \text{H}_2 \text{O}), \text{ HBr}, \text{ HJ}, \text{ HNO}_3, \text{ H}_2 \text{SO}_4$ (B. 14, 1490, 1777; 15, 338, 566, 1308). — II, 395.
 - 23) Methylphenylamido-Phenylimidomethylsulfid. Sm. oberh. 300°. HJ (B. **25**, 57). — **II**, 397.
 - 24) Phenyläther d. β-Phenylhydrazon-α-Merkaptopropan. Sm. 82,5° (A. 260, 256). IV, 768.
 1) Thiocarbamat d. αβ-Diamido-αβ-Diphenyläthan. Sm. 132° (B. 28,
- C15H16N2S2 3178). **— IV**, *979*.
- $C_{15}H_{16}N_2S_3$ 1) Dimethyläther d. s-Di[2-Merkaptophenyl]thioharnstoff. Sm. 1626 (B. 20, 1794). — II, 798.
- $\mathbf{C}_{15}\mathbf{H}_{16}\mathbf{N}_{2}\mathbf{Se}$ 1) uns-Dibenzylselenharnstoff. Sm. 150° (J. 1877, 351). II, 529.
- 1) Aethyläther d. 4-[4-Oxyphenyl]amido-2-Methyl-1-Diazobenzol- $\mathbf{C}_{15}\mathbf{H}_{16}\mathbf{N}_{3}\mathbf{C}\mathbf{l}$ chlorid (A. 287, 165). — IV, 1548.
 - 2) Chlormethylat d. 5-Methyl-1-Benzyl-1, 2, 3-Benztriazol. 2+PtCl. (A. **249**, 351). — IV, 1146.
- 1) Aethyläther d. 4-[4-Oxyphenyl]amido-2-Methyl-1-Diazobenzoljodid $C_{15}H_{16}N_{8}J$ (A. 287, 165). - IV, 1548.
 - 2) Jodmethylat d. 5-Methyl-1-Benzyl-1,2,3-Benztriazol. Sm. 190 bis 192º (A. **249**, 351). — IV, 1146.
- 1) $\alpha [2 Methylphenyl] imido \beta [2 Methylphenyl] amidothioharnstoff.$ $\mathbf{C}_{15}\mathbf{H}_{16}\mathbf{N}_{4}\mathbf{S}$
 - Sm. 168° u. Zers. (B. 24, 4201). IV, 802. 2) α-[4-Methylphenyl]imido-β-[4-Methylphenyl]amidothioharnstoff. Sm. 105° u. Zers. (B. 24, 4195). IV, 806.
- Verbindung (aus Benzenylamidoxim). Sm. 134-136° u. Zers. (B. 24, 385). II, 1202.
 C 79,3 H 7,4 O 7,1 N 6,2 M. G. 227. $C_{15}H_{16}N_4S_4$ $C_{15}H_{17}ON$
 - 1) 4-Oximido-6-Methyl-2-[β-Phenyläthenyl]-1,2,3,4-Tetrahydrobenzol. Sm. 176—177° (A. 281, 93). — III, 177.
 - 2) 4-Oximido-3-Benzyliden-2, 6-Dimethyl-1, 2, 3, 4-Tetrahydrobenzol. Sm. 133—134° (A. 281, 119; G. 23 [1] 572). — III, 177.
 - 3) β -Benzylamido- α -Oxy- α -Phenyläthan. Sm. 104° (cor.) (B. 29, 210).
 - 4) Dibenzylamidooxymethan. Sm. 96° (Bl. [3] 13, 159).
 - 5) α-Oxy-?-Dimethylamidodiphenylmethan. Sm. 69—70° (B. 21, 3293). - II, 1078.
 - 6) Methyläther d. 2-Oxy-1-[4-Methylphenyl]amidomethylbenzol. Sm. 110° (A. 241, 347). II, 742.
 7) Methyläther d. 4-Oxy-1-[2-Methylphenyl]amidomethylbenzol. Sm.
 - 55° (Å. **241**, 340). II, 754.
 - 8) Methyläther d. 4-Oxy-1-[4-Methylphenyl]amidomethylbenzol. Sm. 68°. HCl (A. **241**, 339). — II, 754.
 - 9) Methyläther d. 4-[2-Methylphenyl]methylamido-1-Oxybenzol. Sd. 335-336° im H-Strom (J. pr. [2] 34, 59). — II, 718.
 - 10) Aethyläther d. 2-[4-Oxyphenyl]amido-l-Methylbenzol. Sm. 81 bis 82°; Sd. 354°₇₆₀ (A. **287**, 175).
 - 11) Aethyläther d. 4-Benzylamido-1-Oxybenzol. Sm. 45-46° (B. 28 [2] 991).
 - 12) Aethyläther d. α-Amido-2-Oxydiphenylmethan. (2 HCl, PtCl₄) (M. **16**, 269)
 - 13) Phenyläther d. γ-Oxypropylphenylamin. Sm. 32°; Sd. oberh. 300°.
 HCl (B. 24, 2638). II, 653.
 - 14) **4-M**ethylphenyläther d. α -Phenylamido- β -Oxyäthan. Sm. 55°. HCl (B. **24**, 194). — **II**, 748.
 - 15) 2-Naphtimidoisobutyläther. Sm. 38°. HCl (B. 11, 1486). II, 1454.
 - 16) 1-[α-Oximido-γ-Methylbutyl]naphtalin. Sd. 200-205°₁₀ (Bl. [3] 15, 70). — III, 177.

17) 2- $[\alpha$ -Oximido- γ -Methylbutyl]naphtalin. Sm. 99°; Sd. 208—210° $_{10}$ (Bl. $C_{15}H_{17}ON$ 3] **15**, 71). — III, 177. 18) 2- $[\beta$ -Oxy- β -Phenyläthyl]-4,6-Dimethylpyridin. Fl. HCl $+\frac{1}{12}$ H₂O,

(HCl, HgCl₂ + H₂O), (2HCl, PtCl₄ + 2H₂O), (HCl, AuCl₃ + $^{1}/_{2}$ H₂O), HBr, Pikrat (B. 27, 84). — IV, 380. 19) 10-Keto-8-Methyl-9-Aethyl-3,4-Dihydrojulol (α_{1} -Keto- γ_{1} -Methyl-

 $β_1$ -Aethyljulolin). Sm. 80°. Pikrat (B. **25**, 1191). — **IV**, 194. 20) Phenylamid d. α-Camphylsäure. Sm. 111° (C. 1897 [1] 101). 21) Phenylamid d. β-Camphylsäure. Sm. 103° (C. 1897 [1] 102).

22) 1-Naphtylamid d. Isovaleriansäure. Sm. 125-126° (B. 27 [2] 593). - II, 607.

23) 2-Naphtylamid d. Isovaleriansäure. Sm. 138,5° (B. 21, 404). -II, 617.

24) norm-Propyl-1-Naphtylamid d. Essigsäure. Sm. 93-94°; Sd. 342°,771 (B. **25**, 2324). — **II**, 599.

C 70,6 - H 6,6 - O 6,3 - N 16,5 - M. G. 255.C15H17ON3

1) 4-Benzylnitrosamido-l-Dimethylamidobenzol. Sm. 127-1280 (A. 241, 362). — IV, 586.

2) α -[2-Methylphenyl]amido- β -Phenylharnstoff. Sm. 249°. - IV, 802. 3) 4-Dimethylamido-2-Oxy-2'-Methylazobenzol. Sm. 125-127° (B. 31, 491). — IV, 1414.

4) 4-Dimethylamido-2-Oxy-4'-Methylazobenzol. Sm. 169-170° (B. 31, 493). - IV, 1414.

C15H17O2N

C 74.1 - H 7.0 - O 13.2 - N 5.7 - M. G. 243.1) 4-Valerylamido-1-Oxynaphtalin. Sm. 204-205° (B. 29, 2954).

2) 5-Diäthylamidonaphtalin-1-Carbonsäure. Sm. 166°. (2HCl, PtCl₄) (B. 21, 3130). — II, 1451.

3) Aethylester d. α -[1-Naphtyl]amidopropionsäure. Sm. 65,5° (B. 25, 2310). — II, 614.

4) Aethylester d. α-[2-Naphtyl]amidopropionsäure. Sm. 84° (B. 25, 2311). — II, *621*.

5) Aethylester d. 1,2-Dimethyl-5-Phenylpyrrol-3-Carbonsäure. Sm. 112° (B. 18, 2594). — IV, 356.
6) Aethylester d. 2-Methyl-1-Allylindol-3-Carbonsäure (B. 26, 2177).

— IV, 239. 7) Aethylester d. 6-Methyl-2-Aethylchinolin-3-Carbonsäure + xH₂O.

Sm. 170—190° (wasserfrei) (B. 18, 3304). — IV, 359.

8) Aethylester d.1-Aethyliden-2-Methylchinolinammonium-3-Carbonsäure (A. 282, 114).

9) Benzoat d. 1-Oximido-3,5-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 126° (A. 281, 116). — II, 1209.

10) Benzoat d. Ketonoxim $C_8H_{13}ON$ (aus Holztheeröl). Sm. $128-129^{\circ}$ (C. 1898 [2] 1232).

C 66,4 - H 6,3 - O 11,8 - N 15,5 - M.G. 271. $C_{15}H_{17}O_2N_3$

1) Dimethyläther d. Di[2-Oxyphenyl]guanidin. (2HCl, PtCl₄) (B. 21, 1862). — II, 705.

2) Aethylester d. Di[4-Amidophenyl]amidoameisensäure. Sm. 101° u. Zers. (B. 18, 2576). — II, 374.

3) Methylamid d. α -Phenylhydrazonphenylessigsäure + H_2O (A. 200), 293). **— IV**, 694.

C 60,2 - H 5,7 - O 10,7 - N 23,4 - M. G. 299. $C_{15}H_{17}O_{2}N_{5}$

1) 2-Methylphenylamidokaffeïn. Sm. 230° (B. 27, 3092). — III, 960.

2) 4 - Methylphenylamidokaffeïn. Sm. 270 — 275° (B. 27, 3092). — III, 960.

3) Benzylamidokaffein. Sm. 231° (B. 31, 1141).

5) Dimethyläther d. Di[2-Oxyphenylazo]methylamin. Sm. 140—141°
(B. 22, 938). — IV, 1575.
5) Dimethyläther d. Di[4-Oxyphenylazo]methylamin. Sm. 111—112°

(B. 22, 939). — IV, 1575.

 $C_{15}H_{17}O_9Br$ 1) lpha-Bromdihydrosantinsäure. Sm. 150—151° u. Zers. (G. 22 [2] 28). — II, 1444. 1) Methylester d. Dibenzylphosphinsäure. Sm. 75° (B. 22, 2146). — $\mathbf{C}_{15}\mathbf{H}_{17}\mathbf{O}_{2}\mathbf{P}$

IV, 1664.

 $C_{15}H_{17}O_8N$

C15H17O4N8

 $C_{15}H_{17}O_6P$

C 69,5 — H 6,5 — O 18,5 — N 5,4 — M. G. 259. 1) Benzoylscopoleïn. Sm. 68—70°. HCl, (2HCl, PtCl₄), (HCl, AuCl₃), HBr, HNO₃, Pikrat (C. 1895 [1] 435).

2) Benzoylosein. Sm. 59°. (HCl, AuCl₃) (A. 271, 119). — III, 797.

3) 3,4-Methylenäther d. γ -Keto- γ -Piperidyl- α -[3,4-Dioxyphenyl]propen (Piperidid d. Methylenätherkaffeesäure). Sm. 80° (B. 28, 1196). -IV, 16.

4) Methylester d. γ-Cyan-α-Keto-α-Phenylhexan-γ-Carbonsäure. Sm. 88° (Bl. [3] 17, 410 Anm.).

5) Aethylester d. γ -Cyan- α -Keto- α -Phenylpentan- γ -Carbonsäure. Sm. 64° (C. 1895 [2] 918).

 $\mathbf{C}_{15}\mathbf{H}_{17}\mathbf{O}_{3}\mathbf{C}\mathbf{I}$ 1) Chlorsantonin (Bl. 5, 202). — II, 1787.

 Bromsantonin. Zers. bei 149—151° (B. 25, 3318). — II, 1787.
 Brom-α-Metasantonin. Sm. 212° (J. 1878, 829). — II, 1787.
 Brom-β-Metasantonin. Sm. 114° (J. 1878, 829). — II, 1788. $C_{15}H_{17}O_8Br$

 $C_{15}H_{17}O_{3}P$ 1) Di[3-Methylphenylester] d. Methylphosphinsäure. Sd. 200-2059 (B. 31, 1052).

2) Di[4-Methylphenylester] d. Methylphosphinsäure. Sd. 220-225°, (B. 31, 1052).

3) Verbindung (Säure aus Dibenzylketon). Sm. 1420 (B. 7, 1628). -

C 65,4 — H 6,2 — O 23,3 — N 5,1 — M. G. 275.

1) Salicylscopolein. Sm. 105°. HCl, (2HCl, PtCl₄ + 2(1)H₂O), (HCl, AuCl₃), HBr, H₂SO₄ (C. 1895 [1] 61; 1898 [1] 1197).

2) Oxim d. Oxydihydrolapachol. Sm. 165—170° u. Zers. (Soc. 65, 722). $C_{15}H_{17}O_4N$

- III, 403.

3) Benzoat d. Nor-d-Ecgonin (B. 26, 1488). — III, 863.

4) Cocaylbenzoxylessigsäure. Sm. 230° u. Zers. $HCl + 2H_2O$, (2HCl,

PtCl₄), (HCl, AuCl₃) (B. **21**, 3030). — III, 863. 5) Benzaltropinsäure + H₂O. Sm. 190—191° u. Zers. HCl, (HCl, AuCl₃),

(2 + HCl, AuCl₃), HBr (\mathring{B} . 31, 1950). 6) Dimethylester d. δ -[4-Methylphenyl]amido- $\alpha\gamma$ -Butadiën- $\alpha\gamma$ -Dicarbonsäure. Sm. 130° (A. 273, 179).

7) γ -Aethylester d. δ -Amido- β -Phenyl- $\alpha\gamma$ -Pentadiën- $\alpha\gamma$ -Dicarbonsäure. NH₄₂ Ag (Soc. 75, 253).

8) Diäthylester d. α -Cyan- α -Phenyläthan- $\beta\beta$ -Dicarbonsäure. Sm. 48,5° (A. 293, 342).

9) Phenylamid d. Anhydrocamphoronsäure. Sm. 202 - 203° (B. 28,

318; A. 299, 141). C 59,4 — H 5,6 — O 21,1 — N 13,9 — M. G. 303.

5-Aethylcarbonat d. 5-Oxy-3-Methyl-1-[4-Acetylamidophenyl]-pyrazol. Sm. 105° u. Zers. (C. 1898 [2] 525).

1) Methyldibenzylester d. Phosphorsäure. Fl. (A. 262, 217). — II, 1051. $C_{15}H_{17}O_4P$ C 61,9 - H 5,8 - O 27,5 - N 4,8 - M. G. 291. $C_{15}H_{17}O_5N$ 1) Nitrodesmotroposantonin. Sm. 1910 (C. 1897 [1] 196).

2) β -[4,5-Dioxy-2 β -Acetylmethylamidoäthylphenylakryl]-4,5-Methylenäthersäure. Sm. 219°. Ba (A. 271, 389). — II, 1784.

C 56,4 — H 5,3 — O 25,1 — N 13,2 — M. G. 319. $\mathbf{C}_{15}\mathbf{H}_{17}\mathbf{O}_{5}\mathbf{N}_{3}$

1) Piperidin + 2,4-Dinitro-I-Oxynaphtalin. Sm. 2050 (Soc. 73, 144). C 58,6 — H 5,5 — O 31,3 — N 4,6 — M. G. 307.

 $C_{15}H_{17}O_6N$ Nitrooxydesmotroposantonin. Sm. 240° u. Zers. (C. 1897 [1] 169).
 Diäthylester d. Benzoylamidooxalessigsäure. Sm. 73—74°. Na (

24, 1257). — II, 1193. 2,2-Diäthylester d. 1-Carboxylnaphtyl-2-Phosphorsäure. Sm. 113° (B. 22, 393). — II, 1690.

 $C_{15}H_{17}O_7Br$ 1) Brompikrotoxininsäure + H_2O . Sm. 245—246°. K + H_2O , $Ca + 5H_2O$, Hg (B. 31, 2967).

C 53,1 — H 5,0 — O 37,8 — N 4,1 — M. G. 339. $C_{15}H_{17}O_8N$ Diäthylester d. 2,6-Diacetoxylpyridin-3,5-Dicarbonsäure. Sm. 69 bis 70° (B. 26, 2798). — IV, 174.

1) γ-Jod-αα-Di[Phenylamido]propan (A. ch. [6] 16, 159). — II, 444. $C_{15}H_{17}N_{9}J$ 1) Phenylhydrazon-2,4,6-Trimethylphenylphosphin. Sm. 135° (A. 294, $\mathbf{C}_{15}\mathbf{H}_{17}\mathbf{N}_{2}\mathbf{P}$ 47). **— IV**, 1680.

- 1) β-Aethylphenylamido-α-Phenylthioharnstoff. Sm. 1490 (A. 252, 273). C15H17N3S **– IV**, 680.
 - 2) α -Methylphenylamido- β -Methyl- β -Phenylthioharnstoff. Sm. 1130 (B. **27**, 863). — **IV**, 680.
 - 3) $syn-\alpha-[2-Methylphenyl]amido-\alpha-[2-Methylphenyl] thioharnstoff. Sm. 148—149° u. Zers. (Soc. 61, 1017). IV, 802. 4) <math>syn-\alpha-[2-Methylphenyl]$ amido- $\alpha-[4-Methylphenyl]$ thioharnstoff.
 - Sm. 141—142° u. Zers. (Soc. 61, 1017). IV, 802.
 - 5) α -[4-Methylphenyl]amido- β -[2-Methylphenyl]thioharnstoff. Labile Form, Sm. 130-131°; stabile Form, Sm. 162-163° (Soc. 61, 1018). IV, 806.
 - 6) α -[4-Methylphenyl]amido- β -[4-Methylphenyl]thioharnstoff. Labile Form, Sm. 120-125°; stabile Form, Sm. 153,5-154° (Soc. 61, 1018). -IV, 806.
 - α -[4-Methylphenyl] amido- β -Benzylthioharnstoff. (Soc. 61, 1022). — IV, 806.
- Bisphenylhydrazineyanurchlorid (B. 19, 2060). IV, 743. C₁₅H₁₇N₇Cl
- $C_{15}H_{17}Cl_{2}P$ 1) Dimethylphenyl-α-Chlorbenzylphosphoniumchlorid. 2 + PtCl₄ (B. **25**, 1520). — **IV**, 1662.
- $C_{15}H_{17}Cl_2As$ 1) Dimethylphenyl- α -Chlorbenzylarsoniumchlorid. 2 + PtCl₄ (B. 25, 1521). — IV, *1691*.
- 1) Jodáthylat d. Di[2-Methylphenyl]sulfid (G. 20, 30). II, 820. $\mathbf{C}_{15}\mathbf{H}_{17}\mathbf{JS}$ $\mathbf{C}_{15}\mathbf{H}_{18}\mathbf{ON}_{2}$ C 74,4 - H 7,4 - O 6,6 - N 11,6 - M. G. 242
 - 1) $\beta \gamma$ -Di[Phenylamido]- α -Oxypropan (Dianilglycerin). Sm. 53—54°; Sd.
 - 290°₁₀ u. Zers. (J. 1888, 1062). II, 426. 2) αγ-Di[Phenylamido]-β-Oxypropan. (2HCl, PtCl₄) (B. 8, 243). II, 426. 3) Aethyl-3-Oxyphenyl-2-Amidobenzylamin. Sm. 1450 (B. 23, 1781).
 - **IV**, 629. 4) α-Oxy-4-Amidophenyl-?-Dimethylamidophenylmethan. Sm. 165°
 - (B. 21, 3295). II, 1078. 5) Aethyläther d. 5-Amido-4-Phenylamido-2-Oxy-l-Methylbenzol.
 - Sm. 94—95° (A. 287, 149). 6) Aethyläther d. 5-[4-Amidophenyl]amido-2-Oxy-1-Methylbenzol.
 - Sm. 110-111° (A. 287, 153). 7) Aethyläther d. 6-[4-Amidophenyl]amido-3-Oxy-1-Methylbenzol.
 - Sm. 61° (A. 287, 157). 8) Aethyläther d. 5-Amido-2-[4-Oxyphenyl]amido-1-Methylbenzol.
 - HCl (A. 287, 173). Sm. 92—93°.
 - 9) Aethyläther d. 2-Amido-5-[4-Oxyphenyl]amido-1-Methylbenzol. Sm. 82°. HCl (A. 287, 163).
 - 10) Aethyläther d. 3-[6-Amido-3-Oxyphenyl]amido-1-Methylbenzol. HCl (A. 287, 170).
 - 11) Aethyläther d. 4-Oxyphenyl-2-Amidobenzylamin. Sm. 78°. H₂SO₄,
 - Oxalat (J. pr. [2] 52, 396). IV, 629.

 12) Aethyläther d. 4,4'-Diamido-5-Oxy-2-Methylbiphenyl. Sm. 1070
 - (B. 23, 3263). IV, 976. 13) Aethyläther d. 4,4'-Diamido-3'-Oxy-3-Methylbiphenyl. Sm. 117,5°. H₂SO₄ (B. 20, 3177). II, 898.
 - 14) γ -Oximido- β -[1-Naphtyl] amido- β -Methylbutan. Sm. 173—174° (A. 262, 338). — II, 624.
 - 15) Aethyläther d. 6-Oxy-3-Methyl-s-Diphenylhydrazin. Sm. 105° (B. 23, 3262). — IV, 1505.
 - 16) Aethyläther d. 4'-Oxy-4-Methyl-s-Diphenylhydrazin (B. 23, 3258). IV, 1505.
 - 17) 6-Oxy-4,5-Dimethyl-2-[4-Isopropylphenyl]-1,3-Diazin. Sm. 2080
 - (B. 30, 2008). IV, 985. 18) 6-Oxy-4-Methyl-2-Propyl-5-Benzyl-1, 3-Diazin. Sm. 167° (Pinner, Imidoäther 228). — IV, 984.
 - 19) 6-Oxy-4-Methyl-2-Isopropyl-5-Benzyl-1, 3-Diazin. Sm. 1840 (Pinner, Imidoäther 230). — IV, 984.
 - 20) 6-Oxy-2-Amyl-4-Phenyl-1, 3-Diazin. Sm. 164° (Pinner, Imidoäther
 - 232). IV, 984. 21) Base (aus 4,4'-Diamido-3,3'-Dimethylbiphenyl). Sm. 216°. H₂SO₄ (C. 1898 [1] 1251).

- C₁₅H₁₈ON₂ 22) Verbindung (aus d. Verbindung C₁₃H₁₈NCl₂). Sm. 55°. HCl (*J. pr.* [2] 47, 108). — $\hat{\mathbf{H}}$, 1195. C 66,7 — $\hat{\mathbf{H}}$ 6,7 — $\hat{\mathbf{O}}$ 5,9 — $\hat{\mathbf{N}}$ 20,7 — $\hat{\mathbf{M}}$. G. 270.
- $C_{15}H_{18}ON_4$
 - 1) s-Di[4-Methylphenylamido]harnstoff. Sm. 210° (B. 24, 4197). IV. 805.
 - 2) s-Di[2-Amido-4-Methylphenyl]harnstoff. 2HCl (Soc. 37, 700). IV, 614.
 - 3) 4-Methylamido-4'-Dimethylamidoazoxybenzol. Sm. 144° (B. 29, 1482). — IV, *1338*.
 - 4) Verbindung (aus 6-Nitroso-1, 2, 3, 4-Tetrahydrochinolin u. Phenylhydrazin). Sm. 126° (B. 21, 864). IV, 190.
 - 5) Verbindung (aus 4-Nitroso-1-Dimethylamidobenzol u. uns-Methylphenyl-
 - hydrazin). Sm. 141° (B. 22, 624). IV, 797. 6) Verbindung (aus d. Verb. C₉H₁₂O₅N₄). Sm. oberh. 275° (J. pr. [2] 39,
- 280). IV, 1134. C 69,8 H 7,0 O 12,4 N 10,8 M. G. 258. $\mathbf{C}_{15}\mathbf{H}_{18}\mathbf{O}_{2}\mathbf{N}_{2}$
 - 1) 24-Aethyläther d. 6-Oxy-4-Methyl-5-Aethyl-2-[4-Oxyphenyl]-1,3-Diazin. Sm. 194° (B. 23, 2955). — IV, 977. 2) Acetyldihydroharmalin. Sm. 239° (B. 30, 2485).

 - 3) Acetat d. 2-Oximidomethyl-3,3-Diäthylpseudoindol. Sm. 100° (G.
- **28** [2] 408). C 62,9 H 6,3 O 11,2 N 19,6 M. G. 286. $C_{15}H_{18}O_2N_4$
 - 1) 4-Methylamido-4'-Dimethylamidoazoperoxybenzol? Sm. 183° (B. 29, 1483).
- C 65.7 H 6.6 O 17.5 N 10.2 M. G. 274. $C_{15}H_{18}O_3N_2$
 - 1) Methylester d. 1-[2,4-Dimethyl-3-Pyrroyl]-2,4-Dimethylpyrrol-3-Carbonsäure. Sm. 163-163,5° (B. 22, 36). - IV, 86.
 - 2) Aethylphenylamidoimid d. β -Acetylpropan- $\alpha\gamma$ -Dicarbonsäure. Sm. 195° (A. **295**, 123). — **IV**, 715.
- C 59.6 H 6.0 O 15.9 N 18.5 M. G. 302. $C_{15}H_{18}O_8N_4$
 - 1) 6,7-Di[Acetylamido]-1-Acetyl-2,4-Dimethylbenzimidazol + H₂O?
 - Sm. 305° (B. 23, 3219). IV, 1245. Verbindung (aus d. Verb. $C_{28}H_{38}O_{6}N_{8}$). Sm. $190-191^{\circ}$ u. Zers. (G. 2) Verbindung (aus d. Variante d. Variante de la 1988). — III, 35.
- C 54,5 H 5,4 O 14,5 N 25,5 M. G. 330. $C_{15}H_{18}O_3N_6$
- 1) Verbindung + H₂O (aus Parabansäure u. Phenylhydrazin). Sm. 170° u. Zers. (Soc. 53, 556). — IV, 701.
- C 62,1 H 6,2 O 22,1 N 9,6 M. G. 290. $C_{15}H_{18}O_4N_2$
 - 1) Diäthylester d. 5-Phenylpyrazol-3,4-Dicarbonsäure (D. d. Zimmt-
- diazoessigsäure). Sm. 79°. Ag (B. 21, 2643; 26, 259). IV, 893, 1556. $\mathbf{C}_{15}\mathbf{H}_{18}\mathbf{O}_4\mathbf{Br}_2$ 1) 2-Acetat-5-Isobutyrat d. 3,6-Dibrom-5-Oxy-2-Oxymethyl-1,4-Dimethylbenzol. Sm. 90-91° (A. 301, 281).
 - 2) 5-Acetat-2-Isobutyrat d. 3,6-Dibrom-5-Oxy-2-Oxymethyl-1,4-Dimethylbenzol. Sm. 79—80° (A. 301, 279).
- $C_{15}H_{18}O_5N_2$
- C 58,8 H 5,9 O 26,1 N 9,1 M. G. 306.

 1) Oxim d. Diacetylhydrastinin. Sm. 121—122° (B. 22, 1156). III, 105.
 - 2) 1-Nitroso-2,6-Dimethyl-4-Phenylhexahydropyridin-3,5-Dicarbonsäure. Sm. 190° u. Zers. (B. 25, 2789). — IV, 215.
- C 55.9 H 5.6 O 29.8 N 8.7 M. G. 322. $\mathbf{C}_{15}\mathbf{H}_{18}\mathbf{O}_{6}\mathbf{N}_{2}$

 - 1) Choletelin (J. 1869, 817; J. Th. 1871, 226; 1881, 213). III, 662. 2) Diacetat-3,4-Dimethyläther d. 3,4-Dioxy-1- $[\alpha\beta$ -Dioximidopropyl]-
 - benzol. Sm. 98° (G. 24 [2] 14). II, 977.
 3) Diacetat-3,4-Dimethyläther d. isom. 3,4-Dioxy-1-[αβ-Dioximido-
 - propyl]benzol. Sm. 105° (G. 24 [2] 16). II, 977. 4) Diäthylester d. 4-Methyl-1,3-Phenylendioxaminsäure (Toluylendioxamäthan). Sm. 130° (A. 268, 340). — IV, 605.
- C 53,3 H 5,3 O 33,1 N 8,3 M. G. 338. $C_{15}H_{18}O_{7}N_{2}$
 - 1) Methylester d. ?-Dinitro-5-Pseudobutyl-1,3-Dimethylbenzol-2-Carbonsäure. Sm. 127° (B. 31, 1346).
- 1) Dimethylphenylbenzylammoniumchlorid. Sm. 110° (B. 10, 2079). $\mathbf{C}_{15}\mathbf{H}_{18}\mathbf{NCl}$ - II, 517.
- 2-[α-Phenylhydrazonäthyl]-5-Propylthiophen. Sm. 60° (B. 20, 1744). $C_{15}H_{18}N_2S$ — III, 766.

1) Jodmethylat d. 4-Dimethylamidoazobenzol. Sm. 173-1740 (B. 17, $C_{15}H_{18}N_{3}J$ 1402). — IV, *1356*.

1) s-Di[Methylphenylamido]thioharnstoff(Dimethyldiphenylsulfocarbazid). $C_{15}H_{18}N_4S$ Sm. 176° u. Zers. (168°) (A. 258, 250; B. 27, 863). — IV, 685. 2) s-Di[2-Methylphenylamido]thioharnstoff. Sm. 129—130° u. Zers. (B.

24, 4201). — **IV**, 802.

3) s-Di[4-Methylphenylamido]thioharnstoff. Sm. 121° (B. 24, 4194). IV, 806.

1) Methyläthyldiphenylphosphoniumchlorid. 2 + PtCl₄ (A. 207, 212). C15H18ClP **– IV**, 1658.

1) Methyläthyldiphenylarsoniumchlorid. 2 + PtCl₄ (A. 207, 198). -C15H18ClAs IV, 1688. 1) Methyläthyldiphenylphosphoniumjodid. Sm. 181° (A. 207, 212, 215). $C_{15}H_{18}JP$

– IV, 1658. 1) Methyläthyldiphenylarsoniumjodid. $C_{15}H_{18}JAs$ Sm. 170° (A. 207, 196). —

IV, 1688. C 78.6 - H 8.3 - O 7.0 - N 6.1 - M. G. 229. $C_{15}H_{19}ON$

1) Benzoylgranatanin. Sm. 111° (B. 27, 2852). — IV, 52.

2) 6-[4-Methylphenyl]amido-4-Keto-2,2-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 200° (A. 294, 315).

3) Dimethylphenylbenzylammoniumhydrat. Fl. Chlorid (B. 10, 2079), - II, *51*7, *51*8.

4) Cinnamaldiacetonamin. Sm. 490 (A. 227, 371). — III, 61.

5) 2-[β-Ketopropyl]-3,3-Diäthylpseudoindol. Sm. 113—114° (G. 28
 [2] 360).

6) 1-Acetyl-1, 2, 3, 4, 7, 8, 9, 10-Oktohydro-α-Naphtochinolin. Sm. 68 bis 69° (B. **24**, 2489). — **IV**, 231.

7) 4-Acetyl-1,2,3,4,7,8,9,10-Oktohydro- β -Naphtochinolin. Sm. 68,5 bis 69° (B. 24, 2660). — IV, 232.

8) isom.-4-Acetyloktohydro-β-Naphtochinolin. Sm. 110,5° (B. 24, 2656). **— IV**, 232.

9) Phenylamid d. Isolauronolsäure. Sm. 1030 (C. 1897 [1] 102; Bl. [3] 15, 1198). C 70,0 — H 7,4 — O 6,2 — N 16,3 — M. G. 257.

 $C_{15}H_{19}ON_3$

1) Aethyläther d. α-[4-Oxyphenyl]-α-[2-Amidobenzyl]hydrazin, Sm. 98°. Oxalat (B. 27, 2903). — IV, 1130.

 $C_{15}H_{19}OP$ 1) Methyläthyldiphenylphosphoniumhydroxyd. Fl. 2Chlorid + PtCl₄, Jodid, Pikrat (A. 207, 212). — IV, 1658.

 $C_{15}H_{19}OAs$ 1) Methyläthyldiphenylarsoniumoxydhydrat. 2Chlorid + PtCl₄, Jodid, Pikrat (A. 207, 198). — IV, 1688. C 73,5 - H 7,7 - O 13,1 - N 5,7 - M. G. 245. $C_{15}H_{19}O_{2}N$

1) 1,3-Diketo-2,4,4-Triäthyl-1,2,3,4-Tetrahydroisochinolin. Sm. 50°:

Sd. 308—309° (B. 20, 2493). — II, 1859. 2) Benzoyltropeïn + 2H₂O. Sm. 58°. (2HCl, PtCl₄ + 2H₂O), HNO₃, Pikrat (B. 13, 1083; A. 217, 96). — III, 787.

3) Benzoylpseudotropin (Tropacocaïn). Sm. 49°. HCl, (2 HCl, PtCl₄), (HCl, AuCl₈), HBr (B. **24**, 2336, 2337; **29**, 943; A. **271**, 208). — III, 795.

4) Benzoat d. Oxygranatanin. Sm. 69-70° (B. 29, 483; G. 26 [2] 145). • IV, 52.

5) 4-Methylphenylimid d. β -Methylpentan- $\delta \varepsilon$ -Dicarbonsäure. Sm. 104 bis 108° (B. **32**, 529).

6) 4-Methylphenylimid d. $\beta\gamma$ -Dimethylbutan- $\beta\gamma$ -Dicarbonsäure. Sm. 90° (A. 292, 176).

C 65,9 — H 7,0 — O 11,7 — N 15,4 — M. G. 273. 1) 5-Hexyl-1-Phenyl-1,2,4-Triazol-3-Carbonsäure. $C_{15}H_{19}O_2N_3$ Sm. 126° u. ger. $C_{15}H_{19}O_3N$

1) 5-Hexyl-1-Phenyl-1, 2, 4-Triazol-3-Carbonsadic. Sin. 120 Zers. Cu + H₂O, HCl (B. 25, 186). — IV, III8. C 68,9 — H 7,3 — O 18,4 — N 5,4 — M. G. 261.

1) 2-Oxybenzoyltropeïn. Sm. 58—60°. HCl, (2 HCl, PtCl₄), (HCl, AuCl₃) (B. 13, 106, 1083; A. 217, 89). — III, 787.

2) 3-Oxybenzoyltropein. Sm. 226°. HCl, (2HCl, PtCl₄), $H_2SO_4 + 4H_2O_4$

(B. 13, 1081; A. 217, 91). — III, 788. 3) 4-Oxybenzoyltropeïn + 2H₂O. Sm. 227°. (2HCl, PtCl₄ + 2H₂O), HNO₃, Pikrat (B. 13, 1082; A. 217, 93). — III, 788.

 $C_{15}H_{19}O_3N$ 4) Santoninoxim $+H_2O$. Sm. 216—217° (207—209°) (B. 18, 2746; 19, 369; **26**, 412). — **II**, *1*786.

5) Metasantoninoxim + H_2O . Sm. 220° (G. 25 [2] 465).

- 6) Furfuroamidopinen. Sm. 80-81° (A. 268, 205). IV, 79.
- Lakton d. β-[β-Oxyisobutyryl-2-Methylphenyl]amidoisobuttersäure? Sm. 95° (B. 25, 2337; Ph. Ch. 10, 663). II, 472.
 Lakton d. β-[β-Oxyisobutyryl-4-Methylphenyl]amidoisobuttersäure? Sm. 170° (B. 25, 2342; Ph. Ch. 10, 663). II, 509.
- 9) Phenylmonamid d. Pyrocamphensäure. Sm. 212° (Soc. 69, 83).
- 1) Chlorid d. Santonsäure. Sm. 170-171 (J. 1877, 810; 1878, 822; C₁₅H₁₉O₃Cl B. 13, 2210). — II, 1789.
 - 2) Chlorid d. Metasantonsäure. Sm. 139° (J. 1876, 824; G. 8, 325). II, 1789.
- C₁₅H₁₉O₃Br 1) d-?-Brom-7-Oxy-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Aethyl-α-Carbonsäure (d-Bromsantonige Säure). Sm. 116° (B. 28 [2]
 - 394; G. 25 [1] 502). II, 1672. 2) 1-?-Brom-7-Oxy-5, 8-Dimethyl-1, 2, 3, 4-Tetrahydronaphtalin-2-Aethyl-α-Carbonsäure (1-Bromsantonige Säure). Sm. 116° (B. 28 [2] 394). — II, *1672*.
 - 3) i-P-Brom-7-Oxy-5,8-Dimethyl-1, 2, 3, 4-Tetrahydronaphtalin-2-Aethyl-α-Carbonsäure (i-Bromsantonige Säure). Sm. 193—195° (B. 28) [2] 394). — II, 1672.
 - 4) Bromdesmotroposantonige Säure. Sm. 92° (G. 25 [1] 537).
 - 5) Bromid d. Santonsäure. Sm. 145,5° (J. 1878, 823; B. 13, 2210). II, 1789.
- $C_{15}H_{19}O_3J$ 1) Jodid d. Santonsäure. Sm. 136° (J. 1878, 823; B. 13, 2210). — II, 1789. $C_{15}H_{19}O_4N$ C 65,0 - H 6,8 - O 23,1 - N 5,1 - M. G. 277.
 - 1) Acetat d. 4-Diacetylamido-3-Oxy-1-Isopropylbenzol. Sm. 138—139° (Bl. [3] 9, 38). II, 762.
 - 2) 2-Phenylamidoformoxyl-1-Methylhexahydrobenzol-4-Carbonsäure. Sm. 193-194° (B. 28, 2144).
 - 3) α -[1-Piperidy1]- α -Phenyläthan- $\beta\beta$ -Dicarbonsäure. Na₃, K_2 (B. 29, 815). IV, 21.
 - 4) 2,6-Dimethyl-4-Phenylhexahydropyridin-3,5-Dicarbonsäure. HCl, Hg (B. 25, 2789). — IV, 215.
 - 5) Diäthylester d. β -Benzylamidoäthen- $\alpha\alpha$ -Dicarbonsäure. Sm. 73 -74° (B. 30, 2024).
- $C_{15}H_{10}O_4Cl$ 1) Diäthylester d. 1-Methylbenzol-3- β -Chloräthyl- $\beta\beta$ -Dicarbonsäure. Sd. 260°₁₅₀ (B. **23**, 112). — II, 1856.
- C15H10O4Br 1) 5-Acetat-2-Isobutyrat d. 6-Brom-5-Oxy-2-Oxymethyl-1,4-Dimethylbenzol. Sm. 49-50° (A. 302, 129). 2) 2-Acetat-5-Isobutyrat d. 6-Brom-5-Oxy-2-Oxymethyl-1, 4-Dimethyl
 - benzol. Sm. 39-40° (A. 302, 130). C 61,4 H 6,5 O 27,3 N 4,8 M. G. 293.
- $C_{15}H_{19}O_5N$ 1) Phenylmonamid d. d-Camphoronsäure (d-Camphoronanilsäure). Sm.
 - 147—148° (Soc. 71, 1192 Anm.). 2) Phenylmonamid d. i-Camphoronsäure (i-Camphoronanilsäure). Sm. 149° u. Zers. (Soc. 71, 1192).
- $\mathbf{C}_{15}\mathbf{H}_{19}\mathbf{O}_{5}\mathbf{N}_{3}$ C 56.1 - H 5.9 - O 24.9 - N 13.1 - M. G. 321.1) Verbindung (aus Biuret, Benzaldehyd u. Acetessigäthylester). Sm. 184 bis 185° (G. 24 [1] 291). — III, 35.
- C 58,2 H 6,1 O 31,1 N 4,5 M. G. 309. $C_{15}H_{19}O_6N$ 1) Diäthylester d. 1-Acetyl-4-Keto-2, 6-Dimethyl-1, 4-Dihydropyridin-
 - 3,5-Dicarbonsaure. Sm. 65° (B. 20, 155). II, 2005. 2) Verbindung (aus Santonin). Sm. 120—140° (C. 1897 [1] 169). C 53,4 H 5,6 O 28,5 N 12,5 M. G. 337.
- $C_{15}H_{19}O_6N_3$ 1) Aethylester d. 2-[2,4-Dinitrophenyl]hexahydrobenzol-1-Carbonsäure. Sm. 136—137° (A. 295, 205).

 C 55,4 — H 5,8 — O 34,5 — N 4,3 — M. G. 325.

 1) Glykocumaraldoxim + 2H₂O. Sm. 230° (wasserfrei) (B. 18, 1961).
- C₁₅H₁₉O₇N
- C 50.4 H 5.3 O 40.3 N 3.9 M. G. 357. $\mathbf{C}_{15}\mathbf{H}_{19}\mathbf{O}_{9}\mathbf{N}$ 1) Lithursäure. Sm. 204,5-205°. Mg (A. 165, 104). - II, 2110.

C15H21ON

C 73,8 — H 8,2 — O 6,5 — N 11,5 — M. G. 244. $\mathbf{C_{15}H_{20}ON_{2}}$ 1) Phenylhydrazid d. Isolauronolsäure. Sm. 130° (Bl. [3] 15, 1198). —

C 66,2 - H 7,3 - O 5,9 - N 20,6 - M. G. 272. $\mathbf{C}_{15}\mathbf{H}_{20}\mathbf{ON}_{4}$

1) Amid d. 5-Hexyl-1-Phenyl-1, 2, 4-Triazol-3-Carbonsäure. Sm. 82 bis

82,5° (*B.* **25**, 187). — **IV**, 1118. C 69,2 — H 7,7 — O 12,2 — N 10,8 — M. G. 260. $\mathbf{C}_{15}\mathbf{H}_{20}\mathbf{O}_{2}\mathbf{N}_{2}$ 1) Uretropin. Sm. 170° (Bl. [3] 9, 1017). — III, 787.

2) 2-Keto-3-[γ-Benzoylamidopropyl]hexahydropyridin. Sm. 151° (B.

 $\mathbf{C}_{15}\mathbf{H}_{20}\mathbf{O}_{3}\mathbf{N}_{2}$

27, 981). — IV, 491. C 65,2 — H 7,2 — O 17,4 — N 10,1 — M. G. 276. 1) Isosafrolnitrolpiperidid. Sm. 134° (G. 22 [2] 467). — IV, 20. C 61,6 — H 6,8 — O 21,9 — N 9,6 — M. G. 292. $\mathbf{C}_{15}\mathbf{H}_{20}\mathbf{O}_{4}\mathbf{N}_{2}$

1) α -Safrolnitrosit + Piperidin. Sm. 83° (G. 23 [2] 127). — II, 980. 2) Isosafrolnitrosit + Piperidin. Sm. 134° (G. 26 [1] 9). — IV, 4. Dimethylester d. γ-Phenylhydrazonpentan-αε-Dicarbonsäure. Sm. 88-90° (A. 253, 223). — IV, 714.

Dimethylester d. γ-Phenylhydrazonbutan-α-Carbonsäure-β-Methyl-carbonsäure. Sm. 83° (A. 295, 107). — IV, 714.

5) Monoäthylester d. γ -Phenylhydrazonpentan- α ε -Dicarbonsäure. Sm. 112° (B. 21, 1402). - IV, 714. 6) Diäthylester d. β -[6-Amido-3-Methylphenyl]amidoäthen- $\alpha\alpha$ -Di-

carbonsäure. Sm. 145—146° (B. 30, 2027). — IV, 617.
Diäthylester d. γ-Phenylallylidendi[amidoameisensäure] (Cinnamolurethan). Sm. 135—143° (B. 7, 1079). — III, 61.

8) Diäthylester d. β-Phenylhydrazonpropan-αα-Dicarbonsäure. Sm.

119-121° (Am. 14, 497).

9) Diäthylester d. α -Phenylhydrazonpropan- $\alpha\beta$ -Dicarbonsäure. 99-100° (A. **246**, 330). — IV, 713.

10) Acetat d. 4,6-Di[Acetylamido]-2-Oxy-1,3,5-Trimethylbenzol. 204—205° (M. 19, 254).

 $\begin{array}{c} \mathbf{C}_{15}\mathbf{H}_{20}\mathbf{O}_{4}\mathbf{Br}_{2} \ 1) \ \ \mathbf{Verbindung} \ (\text{aus Oxypipitzahoïnsäure}) \ (A. \ \mathbf{237}, \ 124). \ -- \ \mathbf{II}, \ 1674. \\ \mathbf{C}_{15}\mathbf{H}_{20}\mathbf{O}_{8}\mathbf{N}_{2} \ \ C \ 50,6 \ -- \ \mathbf{H} \ 5,6 \ -- \ 0 \ 36,0 \ -- \ \mathbf{N} \ 7,8 \ -- \ \mathbf{M}. \ G. \ 356. \\ 1) \ \mathbf{Dinitrolaserpitin}. \ \ \mathbf{Sm.} \ \ 100-115^{\circ} \ (J. \ \mathbf{1883}, \ 1361). \ -- \ \mathbf{III}, \ 635. \end{array}$

1) Chloräthylat d. 3,6-Dimethyl-2-Aethylchinolin. 2 + PtCl₄ + H₂O C15 H20 NC1 (B. 18, 3387). — IV, 340. 2) Chlormethylat d. 3-Aethyl-2-Propylchinolin. 2 + PtCl₄ (B. 18,

3364). — IV, 342.

1) Jodisoamylat d. 2-Methylchinolin. Sm. 175° (A. 242, 308). — IV, 308. $\mathbf{C}_{15}\mathbf{H}_{20}\mathbf{NJ}$ 2) Jodisoamylat d. 3-Methylchinolin. Sm. 215° (B. 18, 1643). — IV, 314.

3) Jodisoamylat d. 4-Methylchinolin. Sm. 158-1600 (R. 3, 352; J. 1855,

551). — IV, 314.
4) Jodäthylat d. 3,6-Dimethyl-2-Aethylchinolin + ½H₂O. Sm. 112 bis 114° (B. 18, 3387). — IV, 340.

5) Jodmethylat d. 3-Aethyl-2-Propylchinolin + H₂O. Sm. 172° (B. 18, 3364). — IV, 342.

6) Jodmethylat d. 3,6,8-Trimethyl-2-Aethylchinolin (B. 23, 2271). — IV, 343.

 $C_{15}H_{20}N_{2}S$ 1) α -Phenyl- β -[3,5-Dimethyl-1,2,3,4-Tetrahydro-1-Phenyl]thioharnstoff. Sm. 1720 (A. 281, 126). - IV, 52.

1) Amid d. 5-Hexyl-l-Phenyl-1,2,4-Triazol-3-Thiocarbonsäure. Sm. $C_{15}H_{20}N_4S$ $76-77^{\circ}$ (B. **25**, 188). — IV, 1118. $\mathbf{C}_{15}\mathbf{H}_{20}\mathbf{N}_{4}\mathbf{S}_{2}$

1) 3-Methyl-1, 2-Phenylendi
[β -Allylthioharnstoff]. Sm. 152°; Zers. bei 153° (A. 228, 246). — IV, 600. 2) 4-Methyl-1,2-Phenylendi [β -Allylthioharnstoff]. Sm. 150° (A. 221,

24). - IV, 615.

3) 4-Methyl-1, 3-Phenylendi [β -Allylthioharnstoff]. Sm. 150,5° (A. 228, 205). **— IV**, 604.

4) 2-Methyl-1, 4-Phenylendi [β -Allylthioharnstoff]. Sm. 175,5° (A. 228, 209). **— IV**, 609. C 77,9 — H 9,1 — O 6,9 — N 6,1 — M. G. 231.

1) 1-Cuminylhexahydropyridin (A. ch. [3] 38, 88). — IV, 15.

2) 1-Benzoyl-2-Propylhexahydropyridin (Benzoylconiin). Fl. (B. 17, 2549; **19**, 512; **26**, 860). — **IV**, 34.

C15H21ON

3) 1-[3-Oxy-1,2,3,4-Tetrahydro-2-Naphtyl] piperidin. Sm. 46—48°. (2 HCl, PtCl₄), (HCl, AuCl₅) (B. 26, 1837; A. 288, 123). — II, 855; IV, 20. 4) Furfurolfencholenamin. Sd. 167°_{16} (A. 269, 373). — IV, 59. 5) Amid d. Säure $\mathbf{C}_{15}\mathbf{H}_{20}\mathbf{O}_{2}$ (aus Camphersäureanhydrid). Sm. 77° (C. 1895)

- 2] 1082).
- 6) Phenylamid d. 1,2-Dimethylhexahydrobenzol-4-Carbonsäure.
- 115° (Soc. 71, 171).
 7) Phenylamid d. 1,3-Dimethylhexahydrobenzol-4-Carbonsäure. Sm. 180° (Soc. 71, 174). C 72,9 — H 8,5 — O 12,9 — N 5,7 — M. G. 247.

 $\mathbf{C}_{15}\mathbf{H}_{21}\mathbf{O}_{2}\mathbf{N}$

1) Santoninamin. Sm. 96°. HCl, (2HCl, PtCl₄), H₂SO₄ + H₂O (G. 22 [1] 3). **- II**, 1786.

2) Phenolconicinurethan. Sd. 325° (B. [3] 19, 188).

- 3) β -Diäthylamidoäthylester d. β -Phenylakrylsäure. (HCl, AuCl $_3$), Pikrat B. 14, 1879; 15, 1144). — II, 1406.
- 4) Phenylamidoformiat d. cis-5-Oxy-1,3-Dimethylhexahydrobenzol. Sm. 110° (A. **297**, 162).
- 5) Phenylamidoformiat d. trans-5-Oxy-1, 3-Dimethylhexahydrobenzol. Sm. 107° (A. 289, 145).
- 6) Phenylacetat d. 1-[\(\beta\)-Oxy\(\text{athyl}\)] hexahydropyridin. HCl, (HCl, AuCl₃), HBr, HJ, (HJ, J₂), Pikrat (B. 14, 1878; 15, 1144). IV, 18.
- Benzoat d. 1-[γ-Oxypropyl] hexahydropyridin. (HCl, AuCl₃), Pikrat (B. 17, 681). IV, 19.

 8) Benzoat d. Conhydrin. Sm. 132° (B. 15, 2315). — IV, 35.
 9) Amid d. γ-Keto-s-Phenyl-ββ-Dimethylhexan-ζ-Carbonsäure. Sm. 133° (B. **30**, 2270). C 65,4 — H 7,6 — O 11,6 — N 15,3 — M. G. 275.

 $C_{15}H_{21}O_2N_3$

- Eserin (Physostigmin). Sm. 105—106°. (HJ, HgJ.), Benzoat, m-Kresotinat (J. 1865, 456; 1889, 1970; A. 129, 115; 139, 82; Bl. [3] 9, 753, 1008; Fr. 28, 134; M. 18, 389). III, 882.
- 1) Lakton d. Chlordihydroalantolsäure. Sm. 117° (A. 285, 366). II, 1595. $\mathbf{C}_{15}\mathbf{H}_{21}\mathbf{O}_{2}\mathbf{C}\mathbf{I}$ $C_{15}H_{21}O_2Br$ 1) Lakton d. Bromdihydroalantolsäure. Sm. 106° (Å. 285, 367). —
 - II, 1595. C 68,4 H 8,0 O 18,2 N 5,3 M. G. 263.

C15H21O2N

1) Methyläther d. 5-Diacetylamido-2-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 104° (B. 28, 1662).

2) Dihydrometasantoninoxim. Sm. 196° (G. 25 [2] 466).

- 3) Amidopipitzahoinsäure (Perezonoxim). Sm. 153-1540 u. Zers. (B. 18, 938; A. 237, 106). — II, 1673.
- 4) Benzoylhomoconiinsäure. Sm. 142-143°. Cu, Ag (B. 17, 2549; 19, 500). — IV, 34.
- 5) γ -Oximido- ε -Phenyl- $\beta\beta$ -Dimethylhexan- ζ -Carbonsäure. Sm. 131° (B. 30, 2271).
- 6) Amid d. γ -Keto- ε -[4-Methoxylphenyl]- β -Methylhexan- ζ -Carbonsäure. Sm. 158—159° (A. 294, 335).
- 7) Phenylmonamid d. Heptan-γε-Dicarbonsäure. Sm. 133—134° (A. **292**, 209).
- 8) 4-Methylphenylmonamid d. β -Methylpentan- $\delta \varepsilon$ -Dicarbonsäure. Sm. 135—136° (B. **32**, 529). C 64,5 — H 7,5 — O 22,9 — N 5,0 — M. G. 279.

 $C_{15}H_{21}O_4N$

 $C_{15}H_{21}O_5N$

- 1) 2, 6 Dimethyl-4-Hexylpyridin-3, 5 Dicarbonsäure. Pb $+ \frac{11}{2}$ H₂O
- (Å. 246, 39). IV, 171. 2) Monäthylester d. 2,6-Dimethyl-4-Isobutylpyridin-3,5-Dicarbonsäure. Sm. 135°. $Ca + 4H_2O$, $Ba + 5H_2O$, $HCl + 2H_2O$ (A. 231, 60). **- IV**, 171.
- 3) Diäthylester d. 2,6-Dimethyl-4-Aethylpyridin-3,5-Dicarbonsäure. Sd. $305-308^{\circ}$. $(2 HCl, PtCl_4)$ (A. **231**, 40). — IV, 170.
- 4) Santonsäureoxim. Sm. 186-1870 (G. 22 [1] 186). II, 1789.

5) Metasantonsäureoxim (G. 25 [2] 470). C 61,0 — H 7,1 — O 27,1 — N 4,8 — M. G. 295. 1) Aethylester d. Benzylamoxalessigsäure. Sm. 88° (A. 295, 362).

C 57,9 - H 6,7 - O 30,9 - N 4,5 - M. G. 311. $C_{15}H_{21}O_6N$

1) Diäthylester d. 6-Oxy-2-Keto-1-Aethyl-1,2-Dihydropyridinäthyläther-3,5-Dicarbonsäure. Sm. 56° (A. 285, 66, 95).

C15 H23 ON

 $C_{53,1} - H_{6,2} - O_{28,3} - N_{12,4} - M.G._{339}$ $C_{15}H_{21}O_6N_3$ 1) P-Trinitro-P-[tert.] Dibutyl-1-Methylbenzol. Sm. 152—153° (B. 27, 1608). C 52,5 — H 6,1 — O 37,3 — N 4,1 — M. G. 343.

 $C_{15}H_{21}O_8N$

1) Verbindung (aus d. Verb. $C_{21}H_{26}O_8N_2$) (B. 13, 2135). — IV, 1641. C 46,5 — H 5,4 — O 37,2 — N 10,9 — M. G. 387.

 $C_{15}H_{21}O_9N_3$

1) norm. Tripropyläther d. 2, 4, 6-Trinitro-1, 3, 5-Trioxybenzol. Sm. 109 bis 110° (Am. 15, 629). — II, 1022.
2) Triisopropyläther d. 2,4,6-Trinitro-1,3,5-Trioxybenzol. Sm. 130°

(Am. 15, 631). — II, 1022. 3) Triäthylester d. 2,4,6-Trioximidohexahydrobenzol-1,3,5-Tricarbon-

säure. Zers. bei 169-171° (B. 21, 1768). - II, 2089.

1) Phenyläther d. 4-Merkapto-2, 2, 6, 6-Tetramethyl-1, 2, 3, 6-Tetra-C15H21NS hydropyridin $+ H_2O$. HCl (B. 31, 3150). 1) s-Phenyltropylthioharnstoff. Sm. 142—143° (B. 31, 1212, 2664 Anm.). $C_{15}H_{21}N_3S$

2) s-Phenylisotropylthioharnstoff. Sm. 138-139° (B. 31, 2663). 3) s-Phenylpseudotropylthioharnstoff. Sm. 1720 (B. 31, 1210).

C 73.2 - H 8.9 - O 6.5 - N 11.4 - M. G. 246. $\mathbf{C}_{15}\mathbf{H}_{22}\mathbf{ON}_{2}$

1) P-Benzyliden-3-Methylhexahydrophenylharnstoff. Sm. 1850 (B. 29, 2961).

2) 6-Oxy-4,5-Dimethyl-2-Camphryl-1,3-Diazin. Sm. 1330 (Pinner, Imido-

äther 290). — IV, 889. 1) Emetin = $(C_{15}H_{22}O_2N)_x$. Sm. 68° (C. 1895 [1] 802). C 68,7 — H 8,4 — O 12,2 — N 10,7 — M. G. 262. $\mathbf{C}_{15}\mathbf{H}_{22}\mathbf{O}_{2}\mathbf{N}$ $\mathbf{C}_{15}\mathbf{H}_{22}\mathbf{O}_{2}\mathbf{N}_{2}$

1) Aethylester d. β -[2,4,5-Trimethylphenyl]hydrazonbuttersäure. Sm. 77—78° (B. **18**, 707). — **IV**, 813.

2) Benzylidenamid d. Buttersäure (A. 154, 76). — III, 33.

C₁₅H₂₂O₂Cl₂ 1) Lakton d. Dichlortetrahydroalantolsäure. Sm. 127-134° u. Zers. (A. **285**, 368). — II, 1595.

C₁₅H₂₀O₂Br₂ 1) Lakton d. Dibromtetrahydroalantolsäure. Sm. bei 117° u. Zers. (A.

285, 371). — II, 1595. C 64,7 — H 7,9 — O 17,3 — N 10,1 — M. G. 278. $C_{15}H_{22}O_3N_2$

1) Hexyl-?-Nitro-4[?]Dimethylamidophenylketon. Sm. 65° (Bl. 47, 47). - III, 156. C 61,2 - H 7,5 - O 21,8 - N 9,5 -

 $C_{15}H_{22}O_4N_2$ - M. G. 294. 1) ?-Dinitro-4-Oktyl-1-Methylbenzol. Fl. (B. 31, 941).

2) Diäthylester d. $\beta\zeta$ -Dicyanheptan- $\beta\zeta$ -Dicarbonsäure. 240°_{40-50} (B. **24**, 4004). — **I**, 1226.

3) Diäthylester d. 4-Methyl-1, 3-Phenylendi [amidoessigsäure]. Sm. 70°

(B. 16, 516). — IV, 602. 4) Dipropylester d. Benzylidendi amidoameisensäure. Sm. 1430 (B. 7,

1082). — III, 33. C 52,6 — H 6,4 — O 32,7 — N 8,2 — M. G. 342. 1) Triäthylester d. $\delta \epsilon$ -Diimido- β -Ketohexan- $\gamma \zeta \zeta$ -Tricarbonsäure. Sm. $\mathbf{C}_{15}\mathbf{H}_{22}\mathbf{O}_7\mathbf{N}_2$

93° (B. 31, 2943). C 46,6 — H 5,7 — O 33,2 — N 14,5 — M. G. 386.

 $\mathbf{C}_{15}\mathbf{H}_{22}\mathbf{O}_{8}\mathbf{N}_{4}$ 1) Helicinharnstoff (B. 16, 800; G. 12, 464). — III, 69.

 $\mathbf{C}_{15}\mathbf{H}_{22}\mathbf{NCl}$ 1) Chlormethylat d. 1,3,3-Trimethyl-2-Isopropyliden-2,3-Dihydroindol. $2 + \text{PtCl}_4$, $+ \text{AuCl}_3$ (Sm. 144—146°) (G. 21 [2] 329; 28 [2] 49). - IV, 230.
2) isom. Chlormethylat d. 1,3,3-Trimethyl-2-Isopropyliden-2,3-Di-

hydroindol. + AuCl₃ (Sm. 164-165°) (G. 28 [2] 50).

1) Jodmethylat d. 1,3,3-Trimethyl-2-Isopropyliden-2,3-Dihydroindol. $\mathbf{C}_{15}\mathbf{H}_{22}\mathbf{NJ}$

Sm. 180° (174 -175°) (G. 21 [2] 328; 28 [2] 48). 1) α -Phenyl- β -[2-Propylpiperidin]thioharnstoff. Sm. $90,5^{\circ}$ (B. 30, 1061). 2) s-Phenylconiinthioharnstoff. Sm. 88° (B. 17, 3041). — IV, 34. C 77,3 — H 9,9 — 0 6,8 — N 6,0 — M. G. 233. $\mathbf{C}_{15}\mathbf{H}_{22}\mathbf{N}_{2}\mathbf{S}$

1) $2-[\alpha-Oximidoisoamyl]-4-Isopropyl-1-Methylbenzol. Fl. (J. pr. [2])$ **46**, 489). — III, 157.

2) Hexyl-4[?]-Dimethylamidophenylketon. Sm. 48,5°; Sd. 190°₂₀ (Bl. 47, 47). — III, 156.

3) δ -Benzoylamidomethylheptan. Sm. $66-67^{\circ}$ (G. 26 [2] 247).

4) Methyloxydhydrat d. 1,3,3-Trimethyl-2-Isopropyliden-2,3-Dihydroindol. Fl. Chlorid + 2PtCl₄, Chlorid + AuCl₈ (Sm. 142-145°), Jodid, Pikrat (Sm. 159-160°) (G. 21 [2] 328; 28 [2] 48). — IV, 230.

C₁₅H₂₃ON [3] 5) isom. Methyloxydhydrat d. 1,3,3-Trimethyl-2-Isopropyliden-2,3-Dihydroindol. Sm. 73—74°. Chlorid + AuCl₃ (Sm. 164—165°), Pikrat (Sm. 121—122°) (G. 28 [2] 50).
6) 2,4,5-Trimethyl-3,6-Diäthylphenylamid d. Essigsäure. Sm. 182°

(B. 19, 2384). — II, 565.

7) 4-[norm]Oktylphenylamid d. Ameisensäure. Sm. 56° (B. 18, 135). · II. 566.

C15 H22 ON C 69.0 - H 8.8 - O 6.1 - N 16.1 - M. G. 261.

1) ζ-Phenylhydrazon-η-Oximido-β-Methyloktan. Sm. 115—116° (G. 28 [2] 278; J. pr. [2] 58, 400).

1) Verbindung (aus Santelöl). Sm. 119—120,5° (*J. r.* 24, 688). — III, 549, C 72,3 — H 9,2 — O 12,8 — N 5,6 — M. G. 249. $C_{15}H_{23}OC1$ $\mathbf{C}_{15}\mathbf{H}_{23}\mathbf{O}_{2}\mathbf{N}$

1) 2 oder 3-Nitro-4-Oktyl-1-Methylbenzol. Fl. (B. 31, 941).

- 2) Amid d. Alantolsäure. Sm. 194—197° u. Zers. HCl, (2HCl,PtCl₄) (B. 9, 156; A. 285, 362). II, 1595.
- 1) Lakton d. Chlortetrahydroalantolsäure. Sm. 1200 u. Zers. (A. 285, C15H28O2Cl 375). — II, 1595.

C 67,9 — H 8,7 — O 18,1 — N 5,3 — M. G. 265.

1) Cantharidinisoamylimid. Sm. 46° (G. 21 [1] 464). — III, 623. $C_{15}H_{23}O_3N$

2) Hydrosantonamid. Sm. 190° u. Zers. (J. 1876, 620). — II, 1770.
 3) Diäthyläther d. β-[3-Aethoxylbenzyliden]amido-αα-Dioxyäthan. Sd. 228,5°₅₀ (A. 286, 7). — III, 79.
 4) α-Jononoximessigsäure. Sm. 98—99° (B. 31, 877).

 5) β-Jononoximessigsäure. Sm. 103° (B. 31, 872).
 C 61,4 — H 7,8 — O 16,4 — N 14,3 — M. G. 293.
 1) αα-Dibutyl-β-[2-Nitrophenyl]harnstoff. Fl. (Am. 19, 317). $C_{15}H_{23}O_4N_3$

C 64.0 - H 8.2 - O 22.8 - N 5.0 - M. G. 281. $C_{15}H_{23}O_4N$ 1) Diäthylester d. Dihydroparvolindicarbonsäure. Sm. 110° (A. 231,

38). — IV, 95. 2) Diäthylester d. Säure C₁₁H₁₅O₄N (aus β-Methylamido-β-Oxybuttersäure-äthylester). Sm. 86° (B. 18, 620, 2580). — IV, 95.
 C 60,6 — H 7,7 — O 26,9 — N 4,7 — M. G. 297.

 $C_{15}H_{23}O_5N$

1) Semicarbazon d. Dimethylester d. Ketonsäure C₁₂H₁₆O₅. Sm. 168° (C. 1896 [2] 1115).

C 57,5 - H 7,3 - O 30,7 - N 4,5 - M. G. 313. $C_{15}H_{23}O_6N$ 1) Triäthylester d. γ -Cyanpentan- $\beta\gamma\delta$ -Tricarbonsäure. Sd. 204—210° (A.~ch.~[6]~ 27, 280; B.~ 29, 333). — I, 1227.

 $C_{15}H_{23}O_6N_5$

 Triāthylester d. γ-Cyan-β-Methylbutan-βγδ-Tricarbonsäure. Sd. 233-235°₂₅ (Bl. [3] 17, 1037).
 C 48,8 - H 6,2 - O 26,0 - N 19,9 - M. G. 369.
 Fibroïn (Berz. J. 17, 380; A. 111, 12; Z. 1866, 23; J. 1853, 616; 1875, 883; Bl. [3] 7, 799; J. pr. [2] 44, 345; B. 21, 1529; H. 26, 541). - IV. 1631.

2) Hautfibroin (J. 1872, 1017; J. pr. [2] 44, 345). — IV, 1632.

 $C_{15}H_{28}O_8Br$ 1) Tetraäthylester d. ?-Brompropan- $\alpha\alpha\beta\gamma$ -Tetracarbonsäure. Fl. (Soc.

 $\mathbf{C}_{15}\mathbf{H}_{24}\mathbf{ON}_{2}$

73, 1008). C 72,6 — H 9,7 — O 6,4 — N 11,3 — M. G. 248. 1) d-Lupanin. Sm. 44°. $\text{HCl} + 2 \text{ H}_2\text{O}$, $(\text{HCl}, \text{AuCl}_3)$, $\text{HBr} + 2 \text{ H}_2\text{O}$, $(\text{HJ}, \text{CHNS} + \text{H}_2\text{O})$ (G. 23 [1] 149; 25 [1] 352; C. 1896 [1] 709; 1897 [1] 1232, 1233; 1897 [2] 554). — III, 891.

2) 1-Lupanin. Sm. 44°. (2HCl, PtCl₄), (HCl, AuCl₃) (C. 1896 [1] 709; 1897 1] 1233).

3) i-Lupanin. Sm. 99°. HCl + H₂O, (2 HCl, PtCl₄), (HCl, AuCl₃), HJ + 2 H₂O, CHNS + H₂O (G. 23 [1] 145; 25 [1] 365; C. 1896 [1] 709; 1897 [1] 1232). — III, 891.

4) isom. P-Lupanin. Fl. HCl + H₂O, (2HCl, PtCl₄ + 4H₂O), (HCl, AuCl₃), HBr + 2H₂O, HJ + 2H₂O, CHNS + $^{1}/_{2}$ H₂O (A. 230, 367; O. 1896 [1] 709). — III, 890.

5) Matrin. Sm. 80° (C. 1895 [2] 827).
6) Oxyspartein. Sm. 83-84°. HCl+4H₂O, (2HCl,PtCl₄+4H₂O), (HCl, AuCl₃), HBr+2¹/₂H₂O, HJ+H₂O, HNO₃+H₂O, Pikrat (B. 24, 1095; 25, 3607; 30, 197). — III, 932.
7) Pillijanin. Sm. 64-65°. (2HCl,PtCl₄), (HCl,AuCl₃), H₂SO₄+2¹/₂H₂O (G. 20, 1140).

22 [1] 149). — III, 924.

8) α-Oximido-α-[4(?)-Dimethylamidophenyl]heptan. Sm. 99° (Bl. 47, 47). $C_{15}H_{24}ON_{2}$ - III, 156. 9) 2-[Dipiperidyl]methylfuran (Furaldipiperidin). Sd. 157-1580,4 (A. 271,

14). — IV, 22. C 65,2 — H 8,7 — O 5,8 — N 20,3 — M. G. 276. 1) Diisoamylhypoxanthin. HCl (H. 18, 444). $C_{15}H_{24}ON_4$

 $C_{15}H_{24}O_2N_2$

C 68,2 — H 9,1 — O 12,1 — N 10,6 — M. G. 264. 1) Base (aus Oxysparteïnbydrochlorid u. H_2O_2). $HCl + 3^{1/2}H_2O$, (2HCl + $3^{1/2}H_2O$), (2HCl, PtCl₄ + 6H₂O), (HCl, AuCl₈), HBr + 4H₂O (B. 26, 3035). · III, 933.

C 64,3 - H 8,6 - O 17,1 - N 10,0 - M. G. 280. $C_{15}H_{24}O_3N_2$

1) Trioxyspartein. $(2HCl, PtCl_4 + 3^{1}/_2H_2O)$, $(HCl, AuCl_3)$ (B. 25, 3611). 2) Caryophyllennitrosit. α-Derivat Sm. 107°; β-Derivat Sm. 53-56° (0. 1899 [1] 108).

3) Humulennitrosit. α-Derivat Sm. 120-1210; β-Derivat Sm. 166-1680 u. Zers. (Soc. 67, 782). — III, 538.

C 53,6 — H 7,1 — O 14,3 — N 25,0 --'M. G. 336. $C_{15}H_{24}O_3N_6$

1) Tri[Carbonylpiperazin] (J. pr. [2] 53, 21).

1) 4-Oktyl-1-Methylbenzol-2 oder 3-Sulfonsäure. Ba+H₂O, Pb+4H₂O, $C_{15}H_{24}O_3S$ $Cu + 2^{1}/_{2}H_{2}O$ (B. 31, 940).

C 60.8 - H 8.1 - O 21.6 - N 9.4 - M. G. 296. $C_{15}H_{24}O_4N_2$

1) Caryophyllennitrosat. Sm. 148-149° (A. 279, 391; C. 1899 [1] 108). **–** III, 538.

2) Humulennitrosat. Sm. 162-1630 u. Zers. (Soc. 67, 781; C. 1899 [1] 108). — III, 538.

3) Säure (aus Oxysparteïn). Ba (B. 30, 198).

 $C_{15}H_{24}O_4Br_2$ 1) ?-Dibrom- $\beta\varkappa$ -Dimethyl- $\delta[\text{oder }\eta]$ -Undeken- $\varepsilon\eta$ -Dicarbonsäure. Sm. 185—186° u. Zers. (A. 282, 361).

 $C_{15}H_{24}O_4Br_4$ 1) $\delta \varepsilon \eta \vartheta$ - Tetrabrom- βz -Dimethylundekan- $\varepsilon \eta$ -Dicarbonsäure. Sm. 1720 (A. 282, 361).

1) 3-Oxy-4-Isopropyl-1-Methylbenzolisoamyläther-6-Sulfonsäure. -К, $C_{15}H_{24}O_4S$ $Ba + 3H_2O$, Pb (Z. 1869, 49). — II, 847.

2) 3-Oxy-4-Isopropyl-1-Methylbenzolisoamyläther-?-Sulfonsäure. (Z. 1869, 49). — II, 848.

C 54.9 - H 7.3 - O 29.3 - H 8.5 - M. G. 328. $\mathbf{C}_{15}\mathbf{H}_{24}\mathbf{O}_{6}\mathbf{N}_{2}$

1) 5-Aethylester d. 2-Aethylamido -2, 6-Dioxy -1-Aethyl -1, 2-Dihydropyridin - 6 - Aethyläther - 3, 5 - Dicarbonsäure. Aethylaminsalz (A. 285, 67).

1) Trimethyltriallyltrimethylentrisulfon. Sm. 267° (B. 27, 1675). $C_{15}H_{24}O_6S_3$

C 50,0 — H 6,7 — O 35,6 — N 7,7 — M. G. 360.

1) Phenylhydrazon d. Glykononose. Sm. 195—200° u. Zers. (A. 270, $\mathbf{C}_{15}\mathbf{H}_{24}\mathbf{O}_{8}\mathbf{N}_{2}$

105). — IV, 793.

2) Phenylhydrazon d. d-Mannononose. Sm. bei 223° u. Zers. (B. 23, 2237). — IV, 794.

3) Phenylhydrazid d. Rhamnooktonsäure. Sm. 220° u. Zers. (B. 23, 3110). **- IV**, 732.

C 47.9 - H 6.4 - O 38.3 - N 7.4 - M. G. 376. $C_{15}H_{24}O_9N_2$ 1) Phenylhydrazid d. Glykonononsäure. Sm. 2340 u. Zers. (A. 270, 104). — IV, 732.

 $C_{15}H_{24}O_9N_4$ C 44,6 - H 5,9 - O 35,6 - N 13,9 - M. G. 404.1) Phenylhydrazid d. d-Mannonononsäure. Sm. 254° u. Zers. (B. 22, 2236). — IV, 732.

 $C_{15}H_{24}O_{12}N_6$

C 37.5 — H 5.0 — O 40.0 — N 17.5 — M. G. 480.

1) Cyanursaures Oxamäthan. Sm. 155—160° (Bl. 21, 154). — I, 1362.

1) s-Phenyloktylthioharnstoff. Sm. 52—53° (B. 8, 805). — II, 392.

C 76.6 — H 10.6 — O 6.8 — N 6.0 — M. G. 235.

1) 4-Oenanthylidenamido-1,3-Dimethylbenzol. Fl. (B. 16, 287). — $\mathbf{C}_{15}\mathbf{H}_{24}\mathbf{N}_{2}\mathbf{S}$ $\mathbf{C}_{15}\mathbf{H}_{25}\mathbf{ON}$

II, 545.

2) Oxim d. Cedron. Sd. 175—180° $_{7.5}$ (Bl. [3] 17, 487). C 71,7 — H 10,0 — O 12,7 — N 5,6 — M. G. 251.

 $C_{15}H_{25}O_{2}N$ 1) Aethyloxydhydrat d. 8-Oxy-1-Aethyl-1,2,3,4-Tetrahydrochinolin-8-Aethyläther. Jodid (B. 19, 1045). — IV, 200.

- 2) Amid d. Dihydroalantolsäure. Zers. bei 186° (A. 285, 375). $C_{15}H_{25}O_{2}N$ II, 1595.
- C'67,4 H 9,4 O 18,0 N 5,2 M. G. 267.C15 H25 O3 N
- 1) Nitrat d. Caryophyllenhydrat. Sm. 96° (A. 271, 291). III, 513. C 63.6 - H 8.8 - O 22.6 - N 4.9 - M. G. 283.C15 H25 O4 N
 - 1) Methylpellotinmethylammoniumhydrat. Sm. 185°. Salze, siehe diese (B. 29, 219). - III, 778.
 - 2) Isovalerianat d. d-Ecgoninmethylester. Fl. HCl, (2HCl, PtCl₄), (HCl, $AuCl_3$), HNO_3 (B. **24**, 10). — III, 866.
 - 3) Isovalerianat d. 1-Ecgoninmethylester. Fl. (2HCl, PtCl₄) (B. 21, 3337). — III, 864.
 - 4) Monopiperidid d. Cineolsäure. Sm. 151-152°. Ag (A. 271, 21). -IV, 15.
- H 8,3 O 26,7 N 4,7 M. G. 299. $C_{15}H_{25}O_5N$
 - 1) Diäthylester d. β-Methylamido-ζ-Keto-δ-Methyl-β-Hepten-γε-Dicarbonsäure. Sm. 103—104° (B. 32, 420).
- C 50,7 H 7,0 O 22,5 N 19,7 -M. G. 355. $C_{15}H_{25}O_5N_5$
- 1) Amid d. Oxypentinsäure. Sm. 203—204° (A. ch. [5] 20, 487). C 44,6 - H 6,2 - O 31,8 - N 17,4 - M. G. 403. $C_{15}H_{25}O_8N_5$
- 1) Sericin (Seidenleim) (Berz. J. 17, 380; Z. 1866, 24; J. 1869, 1146). IV, 1632. C 72,0 — H 10,4 — O 6,4 — N 11,2 — M. G. 250.
- $C_{15}H_{26}ON_2$ 1) Retamin. Sm. $^{'}$ 162°. HBr, $^{'}$ 2HBr, $^{'}$ 2HJ, $^{'}$ H $_{2}$ SO $_{4}$ + $^{'}$ 2(5)H $_{2}$ O ($^{'}$ C. 1897 [2] 593; $^{'}$ Bl. [3] 17, 958).
 - 2) α -Dipentennitrolpiperidin. Sm. 154° (A. 245, 269; 252, 125). —
 - 3) β -Dipentennitrolpiperidin. Sm. 152° (A. 252, 125). IV, 23.
 - 4) α-Limonennitrolpiperidin. Sm. 93-94° (A. 252, 115). IV, 23.
 - 5) β-Limonennitrolpiperidin. Sm. 110—111° (A. 252, 116). IV, 23.
 6) Pinennitrolpiperidin. Sm. 118—119°. HCl (A. 245, 253). IV, 23. 7) Terpinennitrolpiperidin. Sm. 153-154° (A. 241, 320). - IV, 23.
 - 8) Base (aus Spartein). Fl. (2HCl, PtCl₄), (2HCl, 2AuCl₈), HJ (B. 26, 3036). **– III**, *933*.
 - 9) isom. Base (aus Spartein). Harz. (2HCl, PtCl₄), (2HCl, 2AuCl₃) (B. 26, 3037). — III, *933*.
 - 10) Isoamylamid d. 1-Isoamylpyrrol-2-Carbonsäure. Sm. 77° (B. 10. 1866). — IV, 80.
- C 67.7 H 9.8 O 12.0 N 10.5 M. G. 266. $\mathbf{C}_{15}\mathbf{H}_{26}\mathbf{O}_{2}\mathbf{N}_{2}$
 - 1) Dioxyspartein. Sm. 128-129° u. Zers. (2 HCl, HgCl₂), (2 HCl, PtCl₄), (HCl, AuCl₃), HBr, HJ, Pikrat (B. 20, 2220; 25, 3610). — III. 933.
 2) Pinolnitrolpiperidin. Sm. 154°. HCl (A. 253, 263). — IV, 23.
- C 60.4 H 8.7 O 21.5 N 9.4 M. G. 298. $C_{15}H_{26}O_4N_2$
 - 1) Diäthylester d. $\alpha \gamma$ -Propylendi [β -Amidopropen- α -Carbonsäure]. Fl. (B. 21, 2362). — İ, 1348.
- $C_{15}H_{26}O_4Br_2$ 1) ?-Dibrom- βz -Dimethylundekan- $\epsilon \eta$ -Dicarbonsäure. Sm. 1740 (A. 282,
- 1) Sulfonsäure (aus Kohlengasen). NH_4 , $Na + 6H_2O$, $Ca + 2\frac{1}{2}H_2O$, Fe C15H26O4S
- $C_{15}H_{26}O_{10}N_2$
- + $7 \, \mathrm{H}_2\mathrm{O}$, $\mathrm{Cu} + 6 \, \mathrm{H}_2\mathrm{O}$ (J. pr. [2] **56**, 262). C 45,7 H 6,6 O 40,6 N 7,1 M. G. 394. 1) Chitin (A. **54**, 298; **98**, 99, 115; H. **2**, 214; **5**, 384; Berr. J. **4**, 247; J. **1858**, 482; Bl. [3] **4**, 231; B. **28**, 821; J. pr. [2] **44**, 345). III, 576.
- 1) Trimethyl-[?-Hexyl-1-Phenyl]ammoniumjodid + H₂O. Sm. 154 bis $C_{15}H_{26}NJ$ 155° u. Zers. (A. 242, 344). — II, 565. 1) Chlorid d. Cimicinsäure (A. 114, 154). — I, 524.
- C₁₅H₂₇OCl $\mathbf{C}_{15}\mathbf{H}_{27}\mathbf{O}_{2}\mathbf{N}$ C 71,2 - H 10,7 - O 12,6 - N 5,5 - M. G. 253.
 - 1) Methylcarpain. Sm. 71° (C. 1897 [1] 985; 1897 [2] 554).
- C 60.6 H 9.1 O 16.2 N 14.1 M. G. 297. $C_{15}H_{27}O_{3}N_{3}$ 1) polym. γ -Oximido- β -Methyl- α -Buten. Sm. 111° (A. 262, 340). —
- C 71,4 H 11,1 O 6,3 N 11,1 M. G. 252. C₁₅H₂₈ON₂ 1) Terpinennitrolisoamylamin. Sm. 118—119°. HCl (A. 241, 320; J. 1888,
 - 683). III, *532*. 2) Isoamylpinennitrolamin. Sm. 105-106° (A. 268, 217). — IV, 57.

C 67,2 — H 10,4 — O 11,9 — N 10,4 — M. G. 268.

1) Terpilenolnitrolpiperidid. Sm. 159—160° (A. 277, 121). — IV, 23.

1) Verbindung (aus Convolvulinolsäure). Fl. (C. 1897 [1] 419).

1) ?-Bromtetradekan-?-Carbonsäure. Sm. 65° (B. 29, 1815). C15H302N2 $\mathbf{C}_{15}\mathbf{H}_{29}\mathbf{O}_{2}\mathbf{C}\mathbf{1}$ $\mathbf{C}_{15}\mathbf{H}_{29}\mathbf{O}_{2}\mathbf{Br}$ 2) Verbindung (aus Convolvulinolsäure). Fl. (C. 1897 [1] 419). 1) ?-Jodtetradekan-?-Carbonsäure. Sm. 78—79° (B. **29**, 1815). C 66,4 — H 10,7 — O 17,7 — N 5,2 — M. G. 271. $C_{15}H_{29}O_2J$ $C_{15}H_{29}O_3N$ 1) β -Nitro- β -[β -Oxyäthyl]- $\alpha\gamma$ -[1-Hexahydropyridyl]propan. Sm. 70 bis 71° (C. 1897 [2] 337). C₁₅H₃₀O₆S₃ 1) Hexaäthyltrimethylentrisulfon. Sm. 208° (B. 25, 243). — I, 998. C₁₅H₃₀O₇N₄ 1) Sericinsäure. Ba, Pb (J. 1871, 857). — II, 2113. C₁₅H₃₀N₃J₃ 1) Tri[Jodmethylat] d. 1, 2, 4-Tri[Dimethylamido] benzol. + 2CH₄O (Sm. 164° u. Zers.) (B. 30, 3117). — IV, 1122. C₁₅H₃₀N₃P 1) 1-Tripiperidylphosphin. Sm. 37—38° (B. 28, 1238 Anm., 2207). — IV, II.

C 74,7 — H 12,9 — O 6,6 — N 5,8 — M. G. 241.

1) 3-Oximidopentadekan. Sm. 19,5—20° (Soc. 63, 454).

2) Amid d. Lactarsäure. Sm. 108° (Bl. [3] 2, 158). — I, 1249.

C 70,0 — H 12,1 — O 12,4 — N 5,4 — M. G. 257. $C_{15}H_{81}ON$ C15H31O2N 1) Aethylester d. u-Amidododekancarbonsäure. Sm. 73°. HCl (B. 26, 2) Verbindung (Base aus Isovaleraldehyd) (B. 6, 1461). — I, 951.

1) Valeraldin. Sm. 41°. HCl (A. 90, 109; B. 4, 468). — I, 951.

1) s-Diheptylthioharnstoff. Sm. 58—59° (G. 26 [1] 327). C15H31NS $\mathbf{C}_{15}\mathbf{H}_{32}\mathbf{N}_{2}\mathbf{S}$ 1) Triisoamylphosphinoxyd. Sm. 60—65° (B. 6, 305). — I, 1505.
1) Antimontriisoamyloxyd (A. 97, 318; J. 1855, 590). — I, 1516.
C 65,4 — H 12,0 — O 17,4 — N 5,1 — M. G. 275. $C_{15}^{15}H_{33}^{3}OP$ $\mathbf{C}_{15}\mathbf{H}_{33}\mathbf{OSb}$ $C_{15}H_{33}O_3N$ 1) Verbindung (Base aus Isovaleraldehydammoniak). HCl (A. 130, 211; J. r. 6, 39; B. 6, 1461). — I, 951. C₁₅H₃₃O₃P 1) Phosphorigsäuretriisoamylester. Sd. 270—275°. +PtCl₂ (A. 92, 350; 256, 285; Bl. 18, 151). — I, 338. C₁₅H₃₃O₃As 1) Aluminiumtriamylat. Sd. 291°₁₂ (Am. 19, 603). C₁₅H₃₃O₃As 1) Arsenigsäuretriisoamylester. Sd. 193—194°₆₀ (Bl. 14, 105). — I, 343. C₁₅H₃₃O₃B 1) Borsäuretriisoamylester. Sd. 254° (270—275°) (A. Spl. 5, 187; A. 60, 253°, P. 28 [21, 572). T. 245. 253; B. 26 [2] 573). — I, 345. C₁₅H₃₃O₄As 1) Arsensäuretriisoamylester. Fl. (Bl. 14, 101). — I, 344. $C_{15}H_{35}O_4P$ 1) Trihydroxyisoamylidenphosphoniumhydrat. Sm. 125-126° (A. ch.

C_{15} -Gruppe mit vier Elementen.

C₁₅H₅ONCl₅ 1) 2,4,5,6,7-Pentachlor-3-Phenylamido-1-Ketoinden. Sm. 236—237° (A. 272, 256). — III, 169. C₁₅H₅ON₅Cl 1) 7-Chlor-8-Oxychinolin-5,6-Phenazin. Zers. oberh. 200° (A. 290,

380). — IV, 558.

[6] **2**, 33). — **I**, 952.

C₁₆H₈O₂N₂Br₆ 1) Di[?-Tribromphenylamid] d. Malonsäure. Sm. 145—146° (B. 17, 782). — II, 413.

C₁₅H₃O₄NCl₃ 1) 2,3,5-Trichlor-1,4-Benzochinon-6-Amidozimmtsäure (Bl. [3] 15, 1031).

 $\mathbf{C}_{15}\mathbf{H}_8\mathbf{O}_5\mathbf{N}_4\mathbf{S}$ 1) Verbindung (aus Thiocarbanilidothiooxanilid). Sm. 235° (J. pr. [2] 31, 6). — II, 412.

- C₁₅H₉ONS 1) Thiocarbamidophenanthrol (Merkaptophenanthronoxazol) (B. 22, 3242).

 III, 442.
- C₁₅H₉ON₂Cl₃ 1) 5,5,7-Trichlor-8-Phenylamido-6-Keto-5,6-Dihydrochinolin. Sm. 200—202° u. Zers. (A. 264, 223; 290, 334). IV, 278.
- C₁₅H₉ON₂Br 1) 1,2²-Anhydrid d. 5 oder 7-Brom-6 oder 5-Methyl-2-Phenylbenz-imidazol-2²-Carbonsäure (Bromtoluylenphtalamidon). Sm. 234—235°. + C_2 H₆O (B. 25, 1986). IV, 618.
- C₁₅H₉OClS 1) β -Thiocarbonyl- α -Keto- β -[4-Chlorphenyl]- α -Phenyläthan (p-Chlordesaurin). Sm. 280° (B. 25, 2241). III, 221.
- C₁₅H₉O₂NBr₂ 1) **4-Brom-1-Naphtylimid d. Bromcitrakonsäure.** Sm. 199° (M. 9, 290). II, 612.
 - 2) ?-Brom-2-Naphtylimid d. Bromeitrakonsäure. Sm. 1810 (M. 9, 292). II, 621.
- $C_{15}H_9O_2NBr_6$ 1) Aethylester d. Hexabromdiphenylamidoameisensäure. Sm. 1840 (B. 18, 2577). II, 374.
- C₁₅H₉O₂N₂Cl 1) **1-Chlor-3-[3-Nitrophenyl]isochinolin.** Sm. 220—223° (B. 29, 2546). — IV, 431.
 - 2) 1-Chlor-4-Nitro-3-Phenylisochinolin. Sm. 155—156° (B. 19, 834).
 IV, 431.
 - 3) 7-Chlor-8-Phenylimido-6-Oxy-5-Keto-5,8-Dihydrochinolin. Sm. 175° (195°) u. Zers. (A. 264, 226; 290, 369). IV, 278.
- C₁₅H₁₀ONCl 1) 2-Chlor-3-Phenylamido-1-Ketoinden. Sm. 203—204° (A. 247, 148).

 III, 169.
 - 2) ?-Chlor-3-Keto-1-Benzyliden-1, 3-Dihydroisoindol (Chlorbenzal-phtalimidin). Sm. 230—232° (B. 18, 1260). II, 1709.
 - 3) 4-Chlor-1-Keto-3-Phenyl-1, 2-Dihydroisochinolin? Sm. 211—212° (B. 19, 2358). IV, 431.
- C₁₅H₁₀ONBr 1) 2-Brom-3-Phenylamido-1-Ketoinden. Sm. 170° (A. 247, 148). III, 169.
 - P-Brom-3-Keto-1-Benzyliden-1, 3-Dihydroisoindol (Brombenzalphtalimidin). Sm. 210—211° (B. 18, 1260, 2435). — II, 1709.
- C₁₅H₁₀ON₂Cl₂ 1) 5,7-Dichlor-8-Phenylamido-6-Oxychinolin. Sm. 154°. HCl (A. 264, 219). IV, 278.
- 2) Mesoxanilidimidehlorid. Sd. $145-152^{\circ}_{15-20}$ (A. 270, 286). II, 421. $\mathbf{C_{15}H_{10}ON_3Br}$ 1) ?-[4-Bromphenyl]azo-6-Oxychinolin (B. 21, 1643). IV, 1486.
- 2) ?-[4-Bromphenyl]azo-8-Oxychinolin (B. 21, 1644). IV, 1486. $\mathbf{C}_{15}\mathbf{H}_{10}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{Br}_{2}$ 1) Nitril d. $\alpha\beta$ -Dibrom- α -Phenyl- β -[3-Nitrophenylpropionsäure.
- Sm. $127-128^{\circ}$ u. Zers. (A. 250, 160). II, 1467. C₁₆H₁₀O₂N₂S 1) 2-Thiocarbonyl-4,5-Diketo-1,3-Diphenyltetrahydroimidazol (Di-
- phenylthioparabansäure). Sm. 228° (B. 31, 138).

 C₁₃H₁₀O₃N₂Cl₂ 1) Verbindung (aus Phenylisocyanat u. COCl₂) (B. 17, 1284; 18, 874, 1178). II, 375.
- C₁₅H₁₀O₃ClBr 1) 2-[4-Chlor-?-Brom-3-Methylbenzoyl] benzol-1-Carbonsäure. Sm. 208—210° (A. 202, 162). II, 1888.
- C₁₅H₁₀O₄NCl 1) Chlorid d. 2-[3-Nitro-4-Methylbenzoyl] benzol-1-Carbonsäure. Sm. 142° (A. 299, 311).
- C₁₅H₁₀O₆N₂S₂ 1) Methylenimid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm. 290° (B. 30, 1266).
- C₁₅H₁₁ON₃S 1) 5-Phenylbenzoylamido-1,2,3-Thiodiazol. Sm. 157° (B. 29, 2593). — IV, 1103.
- C₁₅H₁₁O₂NCl₂ 1) Amid d. $\beta\beta$ -Dichlor- α -Keto- $\alpha\beta$ -Diphenyläthan- α^2 -Carbonsäure (A. d. β -Dichlor- α -Desoxybenzoïn-o-Carbonsäure). Sm. 197° u. Zers. (B. **29**, 2744).
 - 2) Verbindung (aus d. Inn. Anhydrid d. Benzoylamidoessigsäurephenylester). Sm. 150° u./Zers. (H. 20, 415).
- C₁₅H₁₁O₂NS₂ 1) Dithiënyl-2-Nitrophenylmethan. Sm. 84° (B. 29, 2207; 30, 2033).

 III, 769.
 2) Dithiënyl-3-Nitrophenylmethan. Sm. 72—73° (B. 29, 2206; 30,
 - 2033). III, 769.
 - 3) Dithiënyl-4-Nitrophenylmethan. Sm. 89-90° (B. 29, 2207; 30, 2033). III, 769.
- C₁₅H₁₁O₂N₂Br 1) 5 oder 7-Brom-6 oder 5-Methyl-2-Phenylbenzimidazol-2°-Carbonsäure. Sm. 267° u. Zers. (B. 23, 1044). IV, 618.

1) 2-Phenylchinolin-2³-Sulfonsäure. K + H₂O, Ba + 1¹/₂H₂O, Ag + C15 H11 O8 NS $2^{1}/_{9}$ H₂O (*M.* 13, 59). — IV, 426. 2) 2-Phenylchinolin-24-Sulfonsäure + H₂O. NH₄, Ba (M. 13, 60). -IV, 426. 3) 6-Phenylchinolin-64-Sulfonsäure + 2H₂O. Zers. bei 3000. NH₄, $Na + H_2O$ (A. 230, 30). — IV, 430. 4) 6-Phenylchinolin-?-Sulfonsäure + H₂O. Sm. noch nicht bei 300°. NH₄ (A. 230, 37). — IV, 430.

1) Benzoylmethylimid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm. C15H11O4NS 194,5° (B. **29**, 331). — III, 127. 1) ?-Phenylazo-6-Oxychinolin-?4-Sulfonsäure (B. 21, 1642). — IV, 1486. $C_{15}H_{11}O_4N_3S$ 2) ?-Phenylazo-8-Oxychinolin-?4-Sulfonsäure (B. 17, 1642). — IV, 1486. 1) Methylester d. 6-Nitro-1-Phenylisoindazol-3-Carbonsäure (B. 23, C15H11O7N8S 716). — IV, 1465. 1) Dithiënyl-3-Nitrophenylmethan-?-Trisulfonsäure. Ba, Cu (B. 30, C15H11O11NS 2034). 1) 9- $[\alpha$ -Brompropionyl] carbazol. Sm. 125° (B. 31, 2849). C₁₅H₁₂ONBr 2) Phenylamid d. α-Brom-β-Phenylakrylsäure. Sm. 80° (B. 20, 1387). 1) 4-Jodphenylamid d. β -Phenylakrylsäure. Sm. 204°. — II, 1407. $C_{15}H_{12}ONJ$ C15H12ON2S 1) 2-Phenylimido-4-Keto-3-Phenyltetrahydrothiazol (Diphenylthiohydantoin). Sm. 176°. (2HCl, PtCl₄ + 3H₂O) (B. 12, 595; A. 207, 123). — II, 403. 2) 1-Acetylphenylamidobenzthiazol. Sm. 167° (B. 24, 1411). — II, 797. 3) 2-Thiocarbonyl-3-[2-Methylphenyl]-5-Phenyl-2, 3-Dihydro-1,3,4-Oxdiazol. Sm. 96° (B. 26, 2876). — IV, 802. 4) 5-Keto-2-Thiocarbonyl-1,4-Diphenyltetrahydroimidazol. Sm. 233° (B. 24, 4152). — II, 1326. 5) 2-Thiocarbonyl-4-Keto-1-Methyl-3-Phenyl-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 288—289° (J. pr. [2] 55, 132).
6) Methyläther d. 2-Merkapto-4-Keto-3-Phenyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 125° (B. 30, 1690 Anm.; Am. 21, 150). 7) Carbonylphenyl-[4-Methylphenyl]thioharnstoff. Sm. 89° (B. 25, 1466). — II, 500. 1) P-Chlor-3-[2-Methylphenyl]hydrazon-2-Oxypseudoindol (o-Tolyl-C₁₅H₁₉ON₂Cl hydrazon d. m-Chlorisatin). Sm. 273—274° (B. 28, 545). — IV, 2) ?-Chlor-3-[4-Methylphenyl]hydrazon-2-Oxypseudoindol (p-Tolylhydrazon d. m-Chlorisatin). Sm. 253° (B. 28, 545). — IV, 809. $\alpha \gamma$ -Di[4-Chlorphenylhydrazon]- β -Ketopropan. Sm. 191° (B. 27, 221). — IV, 762. Acetat d. anti-α-Oximido-4-Chlordiphenylmethan. Sm. 147—148°
 (B. 23, 3612). — III, 189.
 Acetat d. syn-α-Oximido-4-Chlordiphenylmethan. Sm. 105—106° $C_{15}H_{19}O_{9}NC1$ (B. 23, 3612). — III, 189.
3) Phenylamid d. 2-[Chloracetyl]benzol-1-Carbonsäure. Sm. 175 bis 176° (A. 255, 381). — II, 1648. C₁₅H₁₂O₂NBr 1) Acetat d. anti-α-Oximido-3-Bromdiphenylmethan. Sm. 89,5° (A. **264**, 172). — III, 190. 2) Acetat d. syn-α-Oximido-3-Bromdiphenylmethan. Sm. 78-79° (A. **264**, 172). — III, 190. 3) Acetat d. anti-α-Oximido-4-Bromdiphenylmethan. Sm. 160,5° (A. **264**, 155). — III, 190. 4) Acetat d. syn-α-Oximido-4-Bromdiphenylmethan. Sm. 121° (A. $\begin{array}{c} \textbf{264,} \ 157). \ - \ \textbf{III,} \ 190. \\ \textbf{C}_{15}\textbf{H}_{12}\textbf{O}_{2}\textbf{N}_{2}\textbf{Br}_{2}\textbf{1)} \ \textbf{Acetat} \ \textbf{d.} \ \textbf{Phenyl-P-Dibrom-2-Oxybenzylidenhydrazin.} \ \textbf{Sm. 188}^{0} \end{array}$ (B. 17, 3008). — IV, 760. $C_{15}H_{12}O_2N_3Cl$ 1) β -Chlor- γ -Phenylhydrazon- α -[2-Nitrophenyl] propen. Sm. 140 bis 141° (B. 24, 248). — IV, 754.

2) β -Chlor- γ -Phenylhydrazon- α -[3-Nitrophenyl] propen. Sm. 154 bis

3) β -Chlor- γ -Phenylhydrazon- α -[4-Nitrophenyl|propen. Sm. 179°

 $C_{15}H_{12}O_2N_3Br$ 1) β -Brom- γ -Phenylhydrazon- α -[2-Nitrophenyl] propen. Sm. 134°

156° (B. 24, 249). — IV, 754.

(B. 24, 249). — IV, 754.

(B. 24, 248). — IV, 755.

- $C_{15}H_{12}O_2N_3Br$ 2) β -Brom- γ -Phenylhydrazon- α -[3-Nitrophenyl]propen. Sm. 120° (B. 18, 485). — IV, 755.
- C15H19O,Cl2S 1) Dimethyläther d. Di[?-Chlor-?-Oxyphenyl]thioketon. Sm. 178 bis
- 179° (B. **28**, 2872). III, 211. C₁₅H₁₂O₂Br₂S 1) Dimethyläther d. Di[?-Brom-?-Oxyphenyl]thioketon. Sm. 189 bis 190° (B. **28**, 2873). III, 211.
- $\mathbf{C}_{15}\mathbf{H}_{12}\mathbf{O}_{3}\mathbf{NCl}_{3}$ 1) Verbindung (aus Chloral u. β -2-Methyl-7-Chinolylakrylsäure). Sm. 201°. Ag, HCl (B. **22**, 283). IV, 382.
- 1) 4,5-Diphenylimidazol-2-Sulfonsäure + H₂O. Sm. 271-273° (wasser-C15H12O2N2S frei) u. Zers. (A. 284, 18). — III, 225.
- 1) s-Diphenylthioharnstoff-3,3'-Dicarbonsäure. Sm. oberh. 300° u. C15.H12O4N2S Zers. Ba $(B.\ 3,\ 812;\ A.\ 169,\ 102)$. — II, 1264. $\mathbf{C}_{15}\mathbf{H}_{12}\mathbf{O}_4\mathbf{N}_4\mathbf{Br}_2\mathbf{1})$ Dibromricininsäure. Sm. 180° $(C.\ 1895\ [1]\ 853)$.
- 1) Methylester d. [4-Sulfophenyl]azo-2,4-Dinitrophenylessigsäure. $C_{15}H_{12}O_{9}N_{4}S$ Na (B. **22**, 326). — **IV**, 1465.
- C₁₅H₁₃ONCl₂ 1) ?-Dichlor-5-Benzoylamido-1, 3-Dimethylbenzol. Sm. 158° (B. 29, 312).
 - 2) Aethyläther d. 4-[2,5-Dichlorbenzyliden]amido-1-Oxybenzol. Sm. 59° (B. 29, 876; A. 296, 70).
- 1) $\alpha\beta$ -Dibrom- γ -[4-Oxyphenyl]imido- α -Phenylpropan. Sm. 287° (B. C15H19ONBro 25, 2754). — III, 54.
 - 2) Phenylamid d. $\alpha\beta$ -Dibrom- β -Phenylpropionsäure. Sm. 174°. II, 1359.
- 1) 2-Merkapto-4,5-Diphenyl-4,5-Dihydrooxazol. Sm. 1850 (B. 29, $C_{15}H_{13}ONS$ 1212).
 - 2) 1-[4-Aethoxylphenyl]benzthiazol, Sm. 120° (B. 25, 3529). II, 1541.
 - 3) Methyläther d. 3-[4-Oxyphenyl]-2,4-Benzthiazin. Sm. 124,5° (B. 30, 1143). — IV, 420. 1) α -[3-Chlorphenyl]imido- α -Acetylamidophenylmethan. Sm. 128
- C15H19ONoCl bis 129° (Am. 20, 574). 1) Phenylhydrazid d. α-Brom-β-Phenylakrylsäure. Sm. 120° (Soc. 61, $\mathbf{C}_{15}\mathbf{H}_{13}\mathbf{ON}_{2}\mathbf{Br}$
- 282). IV, 671. 1) 5-Methyläther d. 5-Merkapto-2-Keto-1, 3-Diphenyl-2, 3-Dihydro-C15H13ON3S
- 1,3,4-Triazol. Sm. 185° (4+2HCl, PtCl₄), (2+HJ). IV, 686. 1) 2-Chlorphenylat d. 4-Acetyl-1-Phenyl-1,2,3,5-Tetrazol. 2+PtCl₄ C15H13ON4Cl (B. 30, 2997). — IV, 1241.
- 1) Aethylester d. Thiodiphenylamidoameisensäure. Sm. 109-110° C15H13O2NS (B. 18, 1845). — II, 806.
- $C_{15}H_{13}O_2N_2Cl$ 1) Acetat d. 3'-Chlor-6-Oxy-3-Methylazobenzol. Sm. 73-74° (B. 25, 1330). — IV, 1420. 2) Acetat d 4'-Chlor-6-Oxy-3-Methylazobenzol. Sm. 118—119° (B. 25,
- 1327). IV, 1420. $\mathbf{C}_{15}\mathbf{H}_{13}\mathbf{O_2N_2Cl_3}$ 1) Verbindung (aus Chloral u. Benzenylphenylamidoxim). Sm. 128—130° (B. **22**, 2402). — **II**, 1204.
- C₁₅H₁₃O₂N₃Br 1) Acetat d. 2-Brom-4'-Oxy-4-Methylazobenzol. Sm. 84-85° (B. 31, 1783). — IV, 1413.
- $\mathbf{C}_{15}\mathbf{H}_{13}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{Br}_{3}$ 1) ?-Tribrom- α α -Di[Phenylamido] propionsäure (Tribromdianilidobrenztraubensäure). Sm. 264° u. Zers. (A. 263, 126). — II, 405. 1) 5-Methylsulfon-1,2-Diphenyl-1,3,4-Triazol. Sm. 176° (B. 29, 2919).
- $C_{15}H_{13}O_{2}N_{3}S$ – IV, 1159. 1) 1,3-Dimethyl- β -Naphtochinolin- β -Sulfonsäure + $1^{1}/_{2}$ H₂O (J. pr. [2]
- $C_{15}H_{13}O_3NS$ 35, 306). — IV, 419.
- C₁₅H₁₈O₃N₂Cl 1) Aethylester d. 2'-Chlor-4-Oxyazobenzol-3-Carbonsäure. Sm. 90
 - bis 96° (Soc. 69, 1259). IV, 1469. 2) Aethylester d. 3'-Chlor-4-Oxyazobenzol-3-Carbonsäure. Sm. 102 bis 103° (Soc. 69, 1263). — IV, 1469.
 - 3) Aethylester d. 4'-Chlor-4-Oxyazobenzol-3-Carbonsäure. Sm. 1130
- (Soc.~69,~1264). = IV,~1469. $C_{15}H_{13}O_3N_2Br~1)$ Methylester d. 2-Brom-4'-Oxy-4-Methylazobenzol-3'-Carbonsäure. Sm. 134° (B. 31, 1785). — IV, 1469.
 - 2) P-Bromphenyl-2-Nitrobenzylamid d. Essigsäure. Sm. 137-138°
- (J. pr. [2] 47, 349). II, 524. 1) ?-Oxy-1,3-Dimethyl- β -Naphtochinolin-?-Sulfonsäure + $1\frac{1}{2}$ H₂O C15H13O4NS (J. pr. [2] 35, 310). - IV, 419.

- $\mathbf{C}_{15}\mathbf{H}_{18}\mathbf{O}_{4}\mathbf{NS}$ 2) \(\beta\)-Phenoxyläthylimid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm. 81—82° (B. 30, 1268).
- C15H13O5NS 1) 2-Benzoylmethylamid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm. 160° (B. **29**, 332). — **III**, 127.
- 1) 3-Nitrophenyl-2,4-Dimethylphenylketon-?-Sulfonsäure. Ba + $\mathbf{C}_{15}\mathbf{H}_{13}\mathbf{O}_{6}\mathbf{NS}$ 2H₂O (A. **286**, 335). — III, 232.
- 1) 1,3-Dimethyl- β -Naphtochinolin-?-Disulfonsäure $+4\frac{1}{2}$ H₂O. Ba+ C15H13O6NS $7 H_2 O$, $Cu + 5 H_2 O$ (J. pr. [2] 35, 307). — IV, 419.
- C15 H13 O9 NS5 1) Dithiënyl-2-Amidophenylmethan-?-Trisulfonsäure. Ba, (B. 30,
 - 2) Dithiënyl-3-Amidophenylmethan-?-Trisulfonsäure. Ba₃ (B. 30,
 - 3) Dithiënyl-4-Amidophenylmethan-?-Trisulfonsäure. Ba₃ (B. 30
- 1) 4-Chlor-5-Benzoylamido-1, 3-Dimethylbenzol. Sm. 128° (B. 29, 312). C₁₅H₁₄ONCl 2) α-Phenylamido-α-[4-Chlorbenzoyl]äthan. Sm. 111-111,5° (C. 1898)
 - [2] 203). 3) 2-Methylphenylamid d. Phenylchloressigsäure.
 - (A. 279, 126). II, 1316.
 - 4) 4-Methylphenylamid d. Phenylchloressigsäure. Sm. 1420 (A. 279, 127). — II, 1316.
 - 5) Chlorid d. Dibenzylamidoameisensäure (Dibenzylharnstoffchlorid). Fl. (B. **25**, 1819). — **II**, 524.
 - 6) Chlorid d. Di [4-Methylphenyl]amidoameisensäure. Sm. 103° (J. pr. [2] 56, 12; B. 25, 1821). II, 490.
 - 7) Chlorid d. Benzyl-4-Methylphenylamidoameisensäure. Fl. (B. 25, 1822). — II, 524.
- C15H14ONBr 1) α-Phenylamido-α-[4-Brombenzoyl]äthan. Sm. 109,5-110° (C. 1898)
 - 2) Diphenylamid d. α-Brompropionsäure. Sm. 109° (B. 31, 2682). 3) ?-Bromphenyl-[4-Methylphenyl]amid d. Essigsäure. Sm. 720 (A. 239, 57). — II, 493.
- C₁₅H₁₄ON₂Cl₂ 1) s-Di[6-Chlor-3-Methylphenyl]harnstoff. Sm. 271° (B. 20, 1568). - II, 479.
- $\mathbf{C}_{15}\mathbf{H}_{14}\mathbf{ON}_{2}\mathbf{S}$ 1) α -Benzyl- β -Benzoylthioharnstoff. Sm. 145° (A. ch. [5] 11, 324). — 2) α -[2-Methylphenyl]- β -Benzoylthioharnstoff. Sm. 118—119° (Soc.
 - 55, 622). II, 1172
 - 3) α -[4-Methylphenyl]- β -Benzoylthioharnstoff. Sm. 165° (A. ch. [5] 11, 324). — II, 1172
 - 4) α-Phenacetyl-β-Phenylthioharnstoff. Sm. 109-110° (Soc. 69, 866). 5) α -Acetyl- $\alpha \beta$ -Diphenylthioharnstoff. Sm. 91° (B. 28, 1322).
 - 6) 6-Aethyläther d. 2-Merkapto-6-Oxy-1-Phenylbenzimidazol. 229° (B. **25**, 1001). — II, 723.
 - 7) Methyläther d. 2-Thiocarbonyl-3-[2-Oxyphenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 237° u. Zers. (J. pr. [2] 52, 403). -IV, 634.
 - 8) Thiocarbaminsaures Dibenzylidenammonium (A. 168, 240). -III, 34.
- C15H14ON2S2 1) Aethylester d. Azobenzol-4-Xanthogensäure. Sm. 65° (J. pr. [2] 41, 210). — IV, 1411.
- $C_{15}H_{14}ON_8Br$ 1) 4-[α-Brompropionyl]amidoazobenzol. Sm. 185° (B. 31, 2851). 1) 4'-Aethyläther d. α-Oximido-2-Brom-4'-Oxydiphenylmethan. Sm. $C_{15}H_{14}O_2NBr$ 161—163° (B. 27, 1454). — III, 195.
- C₁₅H₁₄O₂N₂S 1) Thioharnstoff (aus d. Dimethyläther d. 4,4'-Diamido-3,3'-Dioxybiphenyl) (J. pr. [2] 58, 217).
 - 2) 3-[4-Dimethylamidophenyl]-1, 2-Benzsulfonazol (4-Dimethylamidophenylbenzalsultim). Sm. 221° (B. 29, 2297).
 - 3) Acetat d. s-Phenyl-[4-Oxyphenyl]thioharnstoff. Sm. 137° (B. 16, 1831). — II, 720.
- C15H14O2N4S
- 4) Diphenylthiohydantoïnsäure (B. 12, 597). II. 403. 1) Thiocarbonyldibenzenylamidoxim. Sm. 96° (B. 28, 2232). $C_{15}H_{14}O_3N_2S$ 1) Anhydrid d. Diphenyltaurocarbaminsäure. Sm. 186-1870 u. Zers. (M. 4, 136). — II, 380.

- $C_{15}H_{14}O_3N_3Cl$ 1) γ -Phenylhydrazon- α -Oxy- α -[5-Chlor-2-Nitrophenyl]propan. Sm. 182° (A. **262**, 167). — IV, 761.
- $C_{15}H_{14}O_3N_3Br$ 1) γ -Phenylhydrazon- α -Oxy- α -[5-Brom-2-Nitrophenyl]propan. Sm. 201° (A. 284, 151). IV, 761.
- 1) s-Di[4-Nitrobenzyl]thioharnstoff. Sm. 202° u. Zers. (B. 23, 340). $\mathbf{C}_{15}\mathbf{H}_{14}\mathbf{O}_{4}\mathbf{N}_{4}\mathbf{S}$ - II, 528.
 - 2) s-Di[2-Nitro-4-Methylphenyl]thioharnstoff. Sm. 207° (B. 16, 2338). - II, 499.
- 1) Chlorid d. Dibenzylamidothioameisensäure. Sm. 49-50° (G. 23, C₁₅H₁₄NClS [1] 38). — II, 524.
- 1) s-Di[6-Chlor-3-Methylphenyl]thioharnstoff. Sm. 177° (B. 20, 1568). $\mathbf{C}_{15}\mathbf{H}_{14}\mathbf{N}_{2}\mathbf{Cl}_{2}\mathbf{S}$ - IÌ, 479.
- 1) 4,6-Dibrom-2-Oxy-5-Phenylamidomethyl-1,3-Dimethylbenzol. C₁₅H₁₅ONBr₂ Sm. 136—137° (A. 302, 81).
 - 2) 3, 6-Dibrom-5-Oxy-2-Phenylamidomethyl-1,4-Dimethylbenzol. Sm. 134—134,5°. HCl, HBr + H_2O , HJ, HNO₈, H_2SO_4 (B. 28, 2905; 29, 1128).
- C15H15ONS 1) Methyläther d. 2-Benzoylamido-1-Merkaptomethylbenzol. Sm. 118° (B. 29, 164).
 - 2) Aethyläther d. 4-Benzoylamido-l-Merkaptobenzol. Sm. 145° (B. **27**, 1738). — II, 1179.
 - 3) 4-Aethyläther d. anti-a-Oximido-4-Merkaptodiphenylmethan. Sm. 133—134° (B. **27**, 1734). — III, 210.
 - 4) 4-Aethyläther d. syn-α-Oximido-4-Merkaptodiphenylmethan. Sm. 96° (B. 27, 1734). — III, 210.
 - 5) Phenylester d. Aethylphenylamidothioameisensäure. Sm. 69,20
 - (B. **21**, 104). **II**, 663. 6) Phenylamid d. 4-Merkaptobenzoläthyläther-1-Carbonsäure. Sm. 158° (B. **27**, 1737). — II, 1541.
 - 7) Phenylamid d. 4-Oxybenzoläthyläther-1-Thiocarbonsäure. Sm. 143° (B. **25**, 3529). — II, 1541.
 - 8) 2-Methylphenylamid d. 4-Oxybenzolmethyläther-1-Thiocarbon-
 - säure. Sm. 95° (B. 25, 3530). II, 1541. 9) 4-Methylphenylamid d. 4-Oxybenzolmethyläther-1-Thiocarbonsäure. Sm. 157° (B. 25, 3530). — II, 1541.
- C₁₅H₁₅ONS₂ 1) Amid d. αα-Dimerkaptopropiondiphenyläthersäure. Sm. 92-93°
- (B. 19, 1789). II, 788.

 1) 2-Acetylamido-1-[4-Chlorphenylamido] methylbenzol. Sm. 1880 $C_{15}H_{15}ON_{2}CI$ (J. pr. [2] 52, 384). - IV, 626.
- $C_{15}H_{15}ON_2Br$ 1) 2-Acetylamido-1-[4-Bromphenylamido] methylbenzol. $(148-149^{\circ})$ (J. pr. [2] 47, 359; [2] 52, 391). — IV, 630.
 - 2) 2-Amido-1-[Acetyl-4-Bromphenyl] amidomethylbenzol (J. pr. [2] 47, 352). — IV, 630.
 - 3) α-Brompropionyl-s-Diphenylhydrazin. Sm. 137° (B. 31, 3243). IV, 1496.
- 1) α -Acetylamido- $\alpha\beta$ -Diphenylthioharnstoff. Sm. 131—132° (B. 27, C15H15ON3S 1516). — IV, 681.
 - 2) s-Phenyl-[α-Oximido-4-Methylbenzyl]thioharnstoff. Sm. 190° (B. 22, 2435). — II, 1343.
 - 3) s-[4-Methylphenyl]-Oximidobenzylthioharnstoff. Sm. 67° (B. 24, 397). — II, *1205*.
- 1) 1-Phenylsulfon-1, 2, 3, 4-Tetrahydrochinolin. Sm. 67° (B. 24, 3697). C₁₅H₁₅O₂NS **– IV**, 195.
 - 2) Phenylamid d. 3,4-Dioxybenzoldimethyläther-1-Thiocarbonsäure. Sm. 159° (J. pr. [2] 53, 254).
- $\mathbf{C}_{15}\mathbf{H}_{15}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{Cl}$ 1) 4-Benzoylchloroximido-l-Dimethylamidobenzol? Sm. 91—92° u.
 - Zers. (B. 26, 1756). II, 1156.
 Aethyläther d. 6-Chlor-3-[4-Oxyphenyl]nitrosamido-l-Methylbenzol. Sm. 49-50° (A. 287, 169).
 α-Acetyl-α-[4-Chlorphenyl]-β-[6-Oxy-3-Methylphenyl]hydrazin.
 - Sm. 99° (B. 25, 1327). IV, 1506.
- 1) s-Di[2-Nitro-4-Methylphenyl]thioharnstoff. Sm. 1690 (B. 16, 2337). $C_{15}H_{15}O_{2}N_{3}S$ **— II**, 499.

2) 3-Phenylsulfonamido-5,7-Dimethylindazol. Sm. 232-2330 (A. C₁₅H₁₅O₂N₃S 305, 326).

1) ?-Phenylsulfon-4-Acetylamido-l-Methylbenzol (Acetylamidotolyl-C15H15O3NS phenylsulfon). Sm. 201° (B. 29, 2023). 2) Benzoylamid d. 1,3-Dimethylbenzol-4-Sulfonsäure. Sm. 149-151°.

 $Ca + H_2O$, Ba (Am. 4, 193). — II, 1175. 3) Methylbenzoylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 580 Am. 8, 242). — II, 1175.

4) Propionylphenylamid d. Benzolsulfonsäure. Sm. 1150 (Am. 19,761).

C₁₅H₁₅O₃N₂Cl₃ 1) Acetylanhydrochloralantipyrin. Sm. 154-155° (A. ch. [6] 27, 333). · IV, 510. C₁₅H₁₅O₃N₃S 1) 5-Phenylazo-2-Methyl-2,3-Dihydroindol-5⁴-Sulfonsäure. Sm. noch

nicht bei 260° (B. 26, 1289). — IV, 1484. 2) isom. 5-Phenylazo-2-Methyl-2, 3-Dihydroindol-54-Sulfonsäure (B.

26, 1289). — IV, 1484. 3) 6-Phenylazo-1, 2, 3, 4-Tetrahydrochinolin-64-Sulfonsäure (A. 257, 24). — IV, 1484.

1) Aethylester d. 2-Phenylsulfonamidobenzol-l-Carbonsäure. Sm. $C_{15}H_{15}O_4NS$ 92,5° (J. pr. [2] 44, 419). — II, 1253.

C₁₅H₁₅O₂N₂Cl₃ 1) 3,4,6-Trichlor-2,5-Di [Diacetylamido]-1-Methylbenzol. Sm. 220° (A. 237, 144). — IV, 608. $C_{15}H_{15}O_4BrS_2$ 1) $\beta\gamma$ -Diphenylsulfon- α -Brompropan. Sm. 160° (B. 23, 1412). —

II, 783. C15H15O5NS 1) α -Phenylsulfonamido- β -[4-Oxyphenyl] propionsäure (B. 23, 3198).

- II, 1569. 2) 2-[β-Phenoxyläthyl] amid d. Benzol-1-Carbonsäure-2-Sulfonsäure.

Sm. 139° (B. 30, 1268). 1) s-Diphenyldisulfonacetoxim. Sm. 136-137° (J. pr. [2] 36, 420). - $C_{15}H_{15}O_5NS_2$

II, 791. 1) Jodäthylat d. 1-Phenyl-3-Thiënylpyrazol. Sm. 173-1740 (G. 21 $\mathbf{C}_{15}\mathbf{H}_{15}\mathbf{N}_{2}\mathbf{JS}$

[2] 278). — IV, 869. 1) Aethyläther d. 6-Chlor-3-[4-Oxyphenyl]amido-1-Methylbenzol. $C_{15}H_{16}ONCl$ Sin. 77-78° (A. 287, 168).

2) α-Chlorid d. ?-Diäthylamidonaphtalin-2-Carbonsäure. Sm. 70°

(Soc. 41, 185). — II, 1459. 3) β-Chlorid d. P-Diäthylamidonaphtalin-2-Carbonsäure. Sm. 225° u. Zers. (Soc. 41, 185). — II, 1459.

1) 6-Brom-5-Oxy-2-Phenylamidomethyl-1,4-Dimethylbenzol. Sm. 75° $C_{15}H_{16}ONBr$ (A. 302, 121).

2) Methyläther d. 2-Brommethyl-1-[2-Oxyphenylamido]methylbenzol (B. 31, 423).

3) ?-Brom-10-Keto-8-Methyl-9-Aethyl-3,4-Dihydrojulol (?-Brom- α_1 -Keto- γ_1 -Methyl- β_1 -Aethyljulolin). Sm. 140° (B. 25, 1191). — IV, 194.

1-Naphtylamid d. α-Bromisovaleriansäure. Sm. 172° (B. 31, 3237).
 2-Naphtylamid d. α-Bromisovaleriansäure. Sm. 145° (B. 31, 3237).

 Dimethyläther d. Phenylimido - 2 - Oxyphenylamidomerkaptomethan. Sm. 80° (B. 21, 1870). — II, 712.
 s-Isobutyryl-1-Naphtylthioharnstoff. Sm. 167,5—168,5° (Soc. 69, 865). $C_{15}H_{16}ON_2S$

3) Benzyläther d. α -Oxy- β -[4-Methylphenyl]thioharnstoff. Sm. 125° (B. 24, 382). — II, 533.

C₁₅H₁₆ON₃J 1) Aethyläther d. 4-[4-Oxyphenyl]amido-2-Methyldiazobenzoljodid (A. 287, 165). 2) Jodmethylat d. 6-Aethoxyl-1-Phenyl-1,2,3-Benztriazol (B. 25,

1005). — IV, 1575.
 1) α-Phenyl-β-[5-Methylnitrosamido-2-Methylphenyl] thioharnstoff. Sin. 158° (B. 31, 2929).

C15H16ON4S 1) Phenylamid d. Dimethylphenylphosphinoxyd-4-Carbonsäure. Sm. $C_{15}H_{16}O_{2}NP$

235° (A. 293, 287). — IV, 1673. 1) Dimethyläther d. s-Phenyl-2,5-Dioxyphenylthioharnstoff. Sm. 137° (B. 17, 2123). — II, 948.

2) Dimethyläther d. s-Di[2-Oxyphenyl]thioharnstoff. Sm. 135° (A. **207**, 246). — II, 711.

Dimethyläther d. s-Di[4-Oxyphenyl]thioharnstoff. Sm. 185° (B. 7, 1012). — II, 720.

 $C_{15}H_{16}O_2N_2S$

- 4) β-Phenylhydrazon-α-Phenylsulfonpropan. Sm. 1290 (J. pr. [2] 36, $C_{15}H_{16}O_2N_2S$ 406). **— IV**, 768.
- 1) γ -Phenylhydrazon- α -Phenylpropan- α oder β -Sulfonsäure. Phenyl- $C_{15}H_{16}O_8N_2S$
- hydrazinsalz (B. **24**, 1807). **IV**, 755. **C**₁₅**H**₁₆**O**₈**N**₆**Cl**₂ 1) **Verbindung** + H₂O (aus 4-Chlorphenylhydrazin u. Parabansäure). Sm. 213° u. Zers. (Soc. **59**, 213). **IV**, 701.
- 1) 5-Oxy-1,2,4-Trimethyl-?-Azobenzol-?-Sulfonsäure. $K + 2H_2O$ (B. $\mathbf{C}_{15}\mathbf{H}_{16}\mathbf{O}_{4}\mathbf{N}_{9}\mathbf{S}$ 17, 887). — IV, 1425.

 2) Aethylester d. s-Diphenylharnstoff-4-Sulfonsäure. Sm. 155° (B.
 - **28**, 3233).
- C₁₅H₁₆O₄Cl₂P 1) Diåthylester d. 2-Trichlormethyl-1-Naphtylphosphorsäure (B. 21, 1189). — II, 1688.
- $C_{15}H_{16}O_5NBr$ 1) β -[?-Brom-4,5-Dioxy-2 β -Acetylmethylamidoäthylphenyl]akryl-4,5-Methylenäthersäure. Sm. 180-181° (A. 271, 389). — II, 1784.
- C₁₅H₁₆O₅N₂Cl₈ 1) Dichloralantipyrin. Sm. 67-68° (A. ch. [6] 27, 337). IV, 510.
- 1) Aethylbenzylamidophenyldichlorphosphin. Fl. (A. 260, 36). $\mathbf{C}_{15}\mathbf{H}_{16}\mathbf{NCl}_{2}\mathbf{P}$ IV, 1647.
- $\mathbf{C}_{15}\mathbf{H}_{17}\mathbf{ON}_{2}\mathbf{Cl}$ 1) Chlormethylat d. Methylharmin. 2+PtCl₄, +AuCl₃ (B. 30, 2483). $\mathbf{C}_{15}\mathbf{H}_{17}\mathbf{ON}_{9}\mathbf{J}$ 1) Jodnethylat d. Methylharmin (B. 30, 2483).
- $\mathbf{C}_{15}\mathbf{H}_{17}\mathbf{O}_{2}\mathbf{NS}$ 1) Dimethylamidophenyl-[4-Methylphenyl]sulfon. Sm. 95° (B. 12, 1793). **— II**, *824*.
 - 2) Aethylphenylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 87—88° (J. pr. [2] 47, 371). — II, 425.
- C₁₅H₁₇O₂N₂Cl 1) Dimethylphenyl-4-Nitrobenzylammoniumchlorid. Sm. 118—120° (B. **32**, 516).
- C₁₅H₁₇O₅NCl₂ 1) Diäthyläther d. 3,4-Dichlor-5,5-Dioxy-2-Keto-1-[4-Methylphenyl]-2,5-Dihydropyrrol (Dichlormaleïn-p-Toluildiäthyläther). Sm. 88° (Å. **295**, 50).
- $\mathbf{C}_{15}\mathbf{H}_{17}\mathbf{O}_{8}\mathbf{NS}$ 1) Benzaldehyd-β-Phenyläthylthionaminsäure. Sm. 1140 (B. 26, 2167). - III, 7.
 - 2) 1-Aethylbenzylamidobenzol-?-Sulfonsäure. Na + 3H₂O (B. 23, 558). — II, 582.
 - 3) [4-Aethoxylphenyl] methylamid d. Benzolsulfonsäure. Sm. 79° (A. **265**, 184). — **II**, 721.
- 1) 4'-Dimethylamido-4-Methylazobenzol-2-Sulfonsäure (B. 17, 1493; C15H17O3N3S **20**, 2996). — IV, 1384.
 - 2) 2-[α-Sulfophenylhydrazonbutyl]pyridin. Sm. 251° (B. 24, 2538). IV, 799.
 - 3) 3- $[\alpha$ -Phenylhydrazonbutyl] pyridin-P-Sulfonsäure. Sm. 283° (B. 24, 2541). — IV, 800.

 1) Phenylamid d. 4-Aethylsulfon-1-Methylbenzol-3-Sulfonsäure.
- C15H17O4NS Sm. 114º (Soc. 73, 753).
- 1) Methyl-4-Dimethylamidodiphenylphosphinoxyd. Sm. 1460 (A. 260, $\mathbf{C}_{15}\mathbf{H}_{18}\mathbf{ONP}$ 32). — IV, 1660.

 1) Chloräthylat d. 2-Methylchinolin-3-Carbonsäureäthylester. Sm.
- $\mathbf{C}_{15}\mathbf{H}_{18}\mathbf{O}_{2}\mathbf{NCl}$ 146° u. Zers. $2 + PtCl_4$ (A. 282, 113). — IV, 353.
- C₁₅H₁₈O₂NBr 1) Bromäthylat d. 2-Methylchinolin-3-Carbonsäureäthylester. Sm. 217° (A. 282, 123). — IV, 353.
- 1) Jodäthylat d. 2-Methylchinolin-3-Carbonsäureäthylester. Sm. $C_{15}H_{18}O_{2}NJ$ 236° u. Zers. (A. 282, 113). — IV, 353.
 - 2) Jodmethylat d. 2-Methylchinolin-3-Carbonsäurepropylester. Sm. 186° u. Zers. (A. 282, 124). — IV, 353.
- C₁₅H₁₈O₂N₂Cl₂ 1) Verbindung (aus d. Phenylamid d. α-Oxypropionsäure). Sm. 79—82° (A. 279, 74).
- Benzaldehyd-o-Xylylenthionaminsäure (B. 28, 608). IV, 641.
 Benzaldehyd-m-Xylylenthionaminsäure (B. 28, 604). IV, 643.
 Benzaldehyd-p-Xylylenthionaminsäure (B. 28, 606). IV, 644. $C_{15}H_{18}O_3N_9S$
 - 4) Benzylidenverbindung d. 4-Dimethylamidophenyl-1-Thionamin-säure. Sm. 150° (B. 31, 2180).
- 1) 4-Amido-5-Dimethylamido-2-Methylazobenzol-4'-Sulfonsäure. $\mathbf{C}_{15}\mathbf{H}_{18}\mathbf{O}_{8}\mathbf{N}_{4}\mathbf{S}$ Sm. 205—206°. Acetat (B. 31, 2522). — IV, 1384.
 - 2) 4-Amido-6-Dimethylamido-3-Methylazobenzol-4'-Sulfonsäure. Acetat (B. 31, 2514). — IV, 1384.

C₁₅H₁₈O₄N₂S 1) Aethyläther d. 4,4'-Diamido-3'-Oxy-3-Methylbiphenyl-6-Sulfonsäure. Ba $+ 8 H_2 O$, HCl $+ 4 H_2 O$ (B. 20, 3176). — II, 898.

C₁₅H₁₈O₈N₂S₂ 1) Di[4-Amido-3-Methylphenyl]methan-?-Disulfonsäure. (NH₄)₂, K₂

C₁₅H₁₉O₂NS₂ 1) Diäthyläther d. $\beta\beta$ -Dimerkaptopropylimid d. Benzol-1,2-Dicarbonsäure. Sm. 71—72° (B. 27, 1041). — II, 1814. C₁₅H₁₉O₃NBr₂ 1) Aethylester d. δ -[P-Dibrom-2-Acetylamidophenyl]valeriansäure. Sm. 139° (B. 20, 384). — II, 1393.

1) Benzoat d. Chlorpiperiliumhydrin. 2 + PtCl₄ (M. 15, 126). -C₁₅H₂₀O₂NCl IV, 19.

 $C_{15}H_{21}O_2N_2Cl$ 1) 2-Chlormethylat-14,5-Diäthyläther d. 5-Oxy-1-[4-Oxyphenyl]-3-Methylpyrazol. 2 + PtCl₄ (B. 28, 636). — IV, 514.

1) Aethylester d. 2-Phenylsulfonamidohexahydrobenzol-1-Carbon-

 $C_{15}H_{21}O_4NS$ säure. Sm. 93º (A. 295, 202).

1) Aethylester d. Rhodanuressigsäure. Sm. 81° (A. 136, 227; B. 14, $C_{15}H_{21}O_{6}N_{3}S_{3}$ 733). — I, *1228*.

 $\mathbf{C}_{15}\mathbf{H}_{22}\mathbf{O}_2\mathbf{N}_2\mathbf{Cl}_2$ 1) Verbindung (d. Phenylamidobrenzweinsäuremethylimid u. Methylchlorid). + PtCl₄ (B. 18, 1045). — II, 440. $\mathbf{C}_{15}\mathbf{H}_{22}\mathbf{O}_2\mathbf{N}_2\mathbf{J}_2$ 1) Verbindung (d. Phenylamidobrenzweinsäuremethylimid u. Methyljodid)

(B. 18, 1045). — II, 440.

1) Chlormethylat d. 2,4,6-Trimethylpyridin-3,5-Dicarbonsäuredi-

 $C_{15}H_{22}O_4NCl$ äthylester. $2 + PtCl_4$ (B. 17, 1021). — IV, 170.

 $\mathbf{C}_{15}\mathbf{H}_{22}\mathbf{O}_4\mathbf{NJ}$

äthylester. 2 + PtCl₄ (B. 17, 1021). — 1v, 1tb.

1) Jodmethylat d. Aethoxylhydrocotarnin + ½, H₂O. Sm. 168° (A. 254, 364). — III, 917.

2) Jodmethylat d. 2,4,6-Trimethylpyridin-3,5-Dicarbonsäurediäthylester. Sm. 140° (A. 215, 25; B. 17, 1020). — IV, 169.

1) Helicinthioharnstoff (B. 16, 800; G. 12, 464). — III, 69.

C15H22O6N4S2

 Caryophyllennitrosylchlorid. Fest. Zers. bei 161—163° (Sm. 158 bis 160°) (A. 271, 295; C. 1899 [1] 108). — III, 537.
 Humulennitrosylchlorid. Sm. 164—165° (Soc. 67, 781; C. 1899 [1] C15HONCI

108). - III, 538.

 $C_{15}H_{24}ONJ$ 1) Jodmethylat d. 3-Diäthylamido-2-Oxy-1, 2, 3, 4-Tetrahydronaphtalin. Sm. 151,5° (A. 288, 122).

2) Jodäthylat d. 8-Oxy-1-Aethyl-1,2,3,4-Tetrahydrochinolin-8-Aethyläther. Sm. 136-137° (B. 19, 1045). - IV, 200.

 Diäthyläther d. α-[ββ-Dioxyäthyl]-β-[2,4-Dimethylphenyl]thioharnstoff. Sm. 35°. Pikrat (B. 25, 2366). — II, 544.
 Chlormethylat d. Methylpellotin. 2 + PtCl₄ (B. 29, 219). — $C_{15}H_{24}O_2N_2S$

 $\mathbf{C}_{15}\mathbf{H}_{24}\mathbf{O}_{3}\mathbf{NC1}$

 Jodmethylat d. Methylpellotin. Sm. 225° (B. 29, 218). — III, 778.
 Terpendichloridnitrolpiperidid. Sm. 147° (A. 270, 203). — III, 527. C15H24O3NJ $C_{15}H_{26}ON_2Cl_2$

C₁₅H₂₆O₃N₃Br 1) Verbindung (aus polym. γ-Oximido-β-Methyl-α-Buten). Sm. 102° (A. **262**, 351). — **I**, 1032.

 $C_{15}H_{27}O_3N_3Br_2$ 1) Dibromid d. polym. γ -Oximido- β -Methyl- α -Buten. Sm. 82° (A. **262**, 351). — **I**, 1032. C₁₅H₂₈O₄NCl 1) Chlormethylat d. i-Tropinsäuredipropylester. + AuCl₃ (B. 28,

3291). — III, 794. $C_{15}H_{80}ON_3P$

1) 1-Tripiperidinphosphinoxyd (Phosphorylpiperidin). Sm. 75 – 76°. 3HCl, 2(3HCl, PtCl₄ + 6H₂O), 2 + HgCl₂ (B. 28, 1017). – IV, 11. 1) 1-Tripiperidylphosphinsulfid. Sm. 120° (B. 28, 2211). – IV, 11. 1) Thiophosphorsäuretriisoamylester. Fl. (Z. 1869, 413). – I, 342. $C_{15}H_{30}N_3SP$ $C_{15}H_{33}O_3SP$

C15H34O2NJ 1) Diäthyläther d. $\beta\beta$ -Dioxyäthyltripropylammoniumjodid (B. 30,

 $\mathbf{C}_{15}\mathbf{H}_{34}\mathbf{O}_{3}\mathbf{N}_{2}\mathbf{Cl}_{2}\ 1)\ \mathbf{Verbindung}(\mathrm{aus}\ \alpha\text{-}\mathrm{Oxyvalerians\"{a}ure}\ u.\ \mathrm{Trimethyl-}\beta\text{-}\mathrm{Oxy\"{a}thylammonium-}$ hydrat). PtCl₄ $+ 2H_2O$ (B. 27 [2] 739).

C₁₅-Gruppe mit fünf Elementen.

C₁₅H₁₂O₅N₂ClBr 1) Bromgalloeyaninhydrochlorid (Bl. [3] 15, 404). — III, 677. $\begin{array}{c} \text{C}_{15}^{15}\text{H}_{14}\text{O}_2^{\circ}\text{N}_2\text{Cl}_2\text{S} & 1) & \text{Dimethyläther d. s-Di[-5-Chlor-2-Oxyphenyl]thioharnstoff.} \\ \text{Sm. } 152,5^{\circ} & (B.~15,~1687). & -\text{II},~726. \end{array}$

1) Dimethyläther d. s-Di[3-Jod-4-Oxyphenyl]thioharnstoff. Sm. 194 $C_{15}H_{14}O_{2}N_{2}J_{2}S$ bis 195° (B. 29, 999).

C₁₆-Gruppe mit einem Element.

C16H10

C 95,0 — H 5,0 — M. G. 202.

1) αδ-Diphenyl-αγ-Butadiin (Diphenyldiacetylen). Sm. 88°. Pikrat (A.

154, 159; B. 15, 57; 20, 3081). — II, 283.
2) Pyren (Phenylennaphtalin). Sm. 148—149°; Sd. oberh. 360°. Pikrat (A. 158, 285; 240, 158, 161; B. 10, 2143; 12, 1978; 30, 1383; M. 2, 7; 4, 315). — II, 284.
C 94,1 — H 5,9 — M. G. 204.

C16H12

C16H14

1) 1-Phenylnaphtalin. Sd. 324—325° (B. 26, 1198; Soc. 63, 1185; Am.

20, 110). — II, 280.

2) 2-Phenylnaphtalin. Sm. 102—102,5° (101,5°); Sd. 345—346° (B. 6, 66; 12, 1396, 2049; 26, 1198, 1748; Soc. 39, 546; 63, 1188; 65, 872; A. 296, 28). — II, 280.

- 3) isom. [P]-Phenylnaphtalin. Sm. 101—101,5°; Sd. 345—346° (i. D.) (B. 11, 1402; 13, 304; 23, 1078; A. 226, 24, 48). II, 280. 4) Pseudophenanthren. Sm. 115°. Pikrat (Sm. 147°) (A. 191, 295). —
- 5) m-Dimethylanthracylen. Sm. 85°. Pikrat (Sm. 135°) (J. pr. [2] 41, 15). **— II**, 281.
- 6) p-Dimethylanthracylen. Sm. 63°. Pikrat (Sm. 129°) (J. pr. [2] 41, 28). **– II**, 281.
- 7) Diphenylbutin? Sm. 101°; Sd. 345—346° (B. 11, 1403, 1995; 13, 631; 14, 1896; A. 216, 301).
- 8) Kohlenwasserstoff (aus Carminsäure). Sm. 183—188° (A. 163, 112; B. 16, 2169). II, 280.
 9) Kohlenwasserstoff (aus Naphtalin) (B. 23, 1905, 3200). II, 280. C 93,2 H 6,8 M. G. 206.

1) Di[4-Methylphenyl]äthin (Dimethyltolan). Sm. 136° (B. 6, 1505; A.

279, 335). — II, 274. 2) $\alpha \delta$ -Diphenyl- $\alpha \gamma$ -Butadiën. Sm. 147—148°; Sd. 250° (G. 15, 107; 20,

154). **— II**, 275. 3) Aethylanthracen. Sm. 60-61°. Pikrat (Sm. 120°) (B. 14, 803; A.

212, 109). — **II**, 274.

212, 103; — II, 272.

4) 2,3-Dimethylanthracen. Sm. 246° (*J. pr.* [2] 41, 5). — II, 273.
5) 2,4-Dimethylanthracen. Sm. 71° (*A. ch.* [6] 6, 187). — II, 273.
6) isom. Dimethylanthracen (aus Toluol). Sm. 231—232° (215—216°) (*A. ch.* [6] 1, 482; [6] 11, 266; *B.* 18, 348). — II, 273.
7) isom. Dimethylanthracen (aus Benzylmesitylen). Sm. 218—219° (*A. ch.* [6] 6, 187). — II, 273.

8) isom. Dimethylanthracen (aus Xylol). Sm. 200° (A. 169, 207). — II, 274.

9) isom. Dimethylanthracen. Sm. 202—203° (A. 234, 238). — II, 274. 10) isom. Dimethylanthracen. Sm. 243—244° (A. 235, 319). — II, 274.

11) isom. Dimethylanthracen. Sm. 238° (B. 23, 3273). — II, 274. isom. Dimethylanthracen (aus Steinkohlentheer). Sm. 224—225° (B. 10, 1481; 17, 2816; A. 235, 172; Bl. 41, 323). — II, 274.
 Atronol. Sd. 325—326° (A. 206, 52). — II, 274.
 Diphenylsuccininden. Sm. 100° (A. 247, 156). — II, 275.
 Kohlenwasserstoff (aus Acetophenon). Sm. 49—49,5° (B. 13, 645). — II. 274.

II, 274. C 92,3 — H 7,7 — M. G. 208.

*C16H16

- 1) Hexahydropyren. Sm. 127° (A. 158, 296). II, 284.
- 2) 9-Aethyl-9,10-Dihydroanthracen. Sd. 320-3236 u. Zers. (A. 212, 78; B. 13, 1600; 14, 457). — II, 252.
- 3) 9,9-Dimethyl-9,10-Dihydroanthracen. Sm. 56° (B. 21, 2508). —
- Sm. 181—181,5° (A. 235, 4) 9,10-Dimethyl-9,10-Dihydroanthracen. 305, 332; J. 1884, 561; B. 26, 1707). — II, 252.
- 5) Distyrol. Sm. 1240 (1190) (A. 189, 340; B. 6, 256, 494; 22, 2255). —
- 6) isom. Distyrol. Sd. 310-3120 (3200) (A. 135, 122; 216, 187; B. 11, 1260). — II, 165.

C16 H16

7) αδ-Diphenyl-α-Buten. Sm. 39° (B. **23**, 2857). — **II**, 251. 8) α-Phenyl-β-[P-Aethylphenyl]äthen. Sm. 89—90° (B. **15**, 1681). — II, 252.

9) $\alpha \beta$ -Di[4-Methylphenyl]äthen. Sm. 176—177° (179°) (B. 6, 1504; 18, 1948; J. pr. [2] 39, 299; [2] 47, 46; A. 279, 337; Bl. [3] 17, 368). -II, 251.

10) uns-Di[?-Methylphenyl]äthen (Ditolyläthylen). Sd. 304-305° (B. 7, 1413). — II, 251.

- 11) Kohlenwasserstoff (aus 1,3-Dimethylbenzol). Sd. 260-270° (M. 7, 526), **- II**, 252.
- 12) Kohlenwasserstoff (aus β-Bromäthylbenzol). Sd. 287—295° (B. 15, 1984). **–** II, 62.

C16 H18

 $C_{16}H_{24}$

 $C_{16}H_{26}$

C16H28

 $C_{16}H_{30}$

 $C_{16}H_{32}$

C 91.4 — H 8.6 — M. G. 210. 1) α 0-Diphenylbutan. Sm. 52° (B. 23, 2858). — II, 239. 2) $\beta\beta$ -Diphenylbutan. Sm. 127.5—128.5° (B. II, 1990). — II, 241. 3) $\beta\gamma$ -Diphenylbutan. Sm. 123.5° (B. 7, 142, 1127; 32, 434). — II, 240. 4) $\alpha\gamma$ -Diphenyl- β -Methylpropan Sd. 300° (B. 7, 1627). — II, 241.

- 5) γ -[?-Methylphenyl]- α -Phenylpropan. Sd. 293—294° (B. 23, 3169). ÍI, 239.
- 6) α -[2-Methylphenyl]- β -Phenylpropan. Sd. 316—317° (B. 23, 3272). II. 240.

7) α -[3-Methylphenyl]- β -Phenylpropan. Sd. 311—3120 (B. 23, 3271).

II, 240.
 α-[4-Methylphenyl]-β-Phenylpropan. Sd. 316—317° (B. 23, 3272).
 II, 240.
 II, 240.
 II, 240.

II, 240.

10) αα-Di[4-Methylphenyl]äthan. Sd. 295—298° (B. 7, 1193; 15, 1476; A. 235, 315). — II, 239.

11) $\alpha\beta$ -Di[?-Methylphenyl]äthan. Sd. 296° (Z. 1866, 489). — II, 240. 12) $\alpha\beta$ -Di[?-Methylphenyl]äthan. Sd. 297—300° (Bl. 35, 52). — II, 239. 13) 4-Isopropyldiphenylmethan. Sd. 310° (B. 31, 1000).

13) 4-189 propylatiphenylmethan. Sd. 308—312° (B. 31, 1000).
14) 2,4,5-Trimethyldiphenylmethan. Sd. 308—312° (B. 31, 1001).
15) 2,4,6-Trimethyldiphenylmethan. Sm. 36—37°; Sd. 300—303° (A. ch. [6] 6, 177; J. pr. [2] 35, 486; B. 31, 1001). — II, 241.
16) P-Diäthylbiphenyl. Sd. 304—310° (A. ch. [6] 15, 252). — II, 240.
17) 1,3,1',3'-Tetramethylbiphenyl. Sd. 293—297° (290—295°) (A. 147, 38;

G. 12, 128). — II, 240.

18) 1,4,1',4'-Tetramethylbiphenyl. Sm. 125° (B. 14, 2112). — II, 240. 19) Kohlenwasserstoff (aus Aethylbenzol u. Phenylbromäthan) (B. 6, 494;

7, 811). — II, 241. C 89,7 — H 10,3 — M. G. 214. $C_{16}H_{22}$

1) 1-Methyl-3-[4-Isopropylphenyl]-1, 2, 3, 4-Tetrahydrobenzol? Sd. 157 bis 158°₁₄ (A. **303**, 272). C 88,9 — H 11,1 — M. G. 216.

1) Poly-1, 3-Dimethyl-?-Dihydrobenzol. Sd. 280-285° (A. 258, 328).

C 88,1 — H 11,9 — M. G. 218.
1) ?-Diisoamylbenzol. Sd. 265° (Bl. 31, 12; G. 19, 496). — II, 39.
2) Pentaäthylbenzol. Sd. 277° (B. 21, 2814). — II, 39.

C 87,3 — H 12,7 — M. G. 220. 1) α -Dioktin (aus Tetrahydroxylol).

Sd. 250—260° (A. ch. [6] 1, 236). — - II, 17. 2) β-Dioktin (aus Tetrahydroxylol). Sd. 260° (A. ch. [6] 1, 236). — II, 17,

3) Kohlenwasserstoff (aus Theeröl). Sd. 280° (A. 139, 246). C 86,5 — H 13,5 — M. G. 222.

1) α -Hexadekin (Tetradekylacetylen). Sm. 15°; Sd. 155°₁₅. Ag + AgNO₃ (B. 25, 2246; 29, 2236).

2) β -Hexadekin (s-Methyltridekylacetylen; Cetylen). Sm. 20°; Sd. 160°_{15} (A. 143, 268; B. 17, 1373; 25, 2245). — I, 137. C 85,7 — H 14,3 — M. G. 224.

1) a-Hexadeken (Ceten). Sm. 4°; Sd. 274° (A. 19, 292; 143, 267; J. 1860, 7, 406; B. 7, 125; 16, 3022). — I, 124.

- 2) Hexadeken (aus Azelaïnsäure). Sm. 41-42°; Sd. 283-285° (A. 136, $\mathbf{C}_{16}\mathbf{H}_{32}$ 265). — I, 125.
 - 3) Dicaprylen. Sd. 210—220°₁₅₀ (J. r. 26, 254). C 85,0 H 15,0 M. G. 226.

 - 1) norm. Hexadekan (Dioktyl; Cetan). Sm. 19—20° (18°); Sd. 287,5°₇₈₀ (A. **152**, 16; **220**, 181; B. **12**, 1882; **15**, 1702; Soc. **47**, 38). I, 106. 2) η θ-Dimethyltetradekan (Diisooktyl). Sd. 267,5—269,5°₇₈₀ (A. **220**, 187;
 - J. r. 15, 175). I, 106. 3) Hexadekan (aus Rosenöl). Sm. 36,5—36,8°; Sd. 350—380° (J. pr. [2] 48, 311).
- C16 O6 1) Verbindung (aus Kohlenoxyd) (Bl. 26, 102). - I, 545.

C₁₆-Gruppe mit zwei Elementen.

C 69,1 - H 2,1 - O 28,8 - M. G. 278. $C_{16}H_6O_5$

 $C_{16}H_{34}$

- 1) Anhydrid d. 9,10-Diketo-9,10-Dihydroanthracen-2,3-Dicarbon**säure.** Sm. 290° (*J. pr.* [2] **41**, 9). — **II**, 2036. C 65,3 — H 2,0 — O 32,7 — M. G. 294.
- $\mathbf{C}_{16}\mathbf{H}_{6}\mathbf{O}_{6}$ 1) Dianhydrid d. 1 - Phenylbenzol - 2, 3, 5, 6 - Tetracarbonsäure (Am. **20**, 106).
- C₁₆H₆Cl₄ 1) Tetrachlorpyren. Sm. über 330° (M. 4, 241-242). — II, 285.
- $\mathbf{C}_{16}\mathbf{H}_{7}\mathbf{Cl}_{3}$ 1) Trichlorpyren. Sm. 256-257° (M. 4, 241). — II, 285. $\mathbf{C}_{16}\mathbf{H}_{7}\mathbf{Br}_{8}$
- 1) Tribrompyren (A. 158, 294). II, 285. C 82,7 H 3,4 O 13,8 M. G. 232. 1) Pyrenchinon. Sm. 282° u. Zers. (A. 158, 294; 240, 166). III, 461. C 77,4 H 3,2 O 19,4 M. G. 248. C16H8O2
- $C_{16}H_8O_3$ 1) α -Phenylen- α -Naphtylenoxydchinon. Sm. 140° (A. 209, 143). — II, 1002.
 - 2) isom. Phenylennaphtylenoxychinon (A. 202, 14), IV, 453.
 - 3) 1,9-Lakton d. 1-Oxy-10-Keto-9,10-Dihydroanthracen-9-Carbonsäure (Anthracumarin). Sm. 260° (B. 20, 3141). — II, 1905.
 - 4) Anhydrid d. Anthracen-2, 3-Dicarbonsäure (J. pr. [2] 41, 11). -
- II, 1905. C 72,7 H 3,0 O 24,3 M. G. 264. 1) Biphtalyl. Sm. 334—335° (B. 8, 1054; 15, 1673; 17, 2179; 24, 2296; A. 164, 229; 228, 130; 233, 241; 242, 220; M. 12, 62; 16, 13). $\mathbf{C}_{16}\mathbf{H}_8\mathbf{O}_4$ II, 1816.
 - 2) 1,9-Lakton d. 1,4-Dioxy-10-Keto-9,10-Dihydroanthracen-9-Methenylcarbonsäure (m-Oxyanthracumarin). Sm. 325° (B. 20, 3142). —
- C 68,6 H 2,8 O 28,6 M. G. 280.

 1) Oxybiphtalyl. Sm. noch nicht bei 374° (A. 233, 244). II, 1816.
 2) 1,9-Lakton d. 1,2,3-Trioxy-10-Keto-9,10-Dihydroanthracen-9-Me-C16H8O5
 - thenylcarbonsäure (o-Dioxyanthracumarin; Styrogallol). Sm. noch nicht bei 350° (B. 20, 2588). — II, 2028.
 - 3) Anhydrid d. Diphtalylsäure. Sm. 164,5—165° (A. 242, 229). —
- C 64,8 H 2,7 O 32,4 M. G. 296. 1) Dioxybiphtalyl. Sm. 250° (A. 164, 246). II, 1817. 2) Physconsäure (A. 284, 187). III, 642. $C_{16}H_8O_6$
 - 3) 9,10-Diketo-9,10-Dihydroanthracen-1,3-Dicarbonsäure. Sm. noch nicht bei 330°. Na₂ + 9 H₂O, K₂ + 2 H₂O, Ca, Ba + H₂O, Cu + H₂O, Ag₂ (J. pr. [2] 41, 21). II, 2036.
 - 4) 9,10-Diketo-9,10-Dihydroanthracen-1,4-Dicarbonsäure. nicht bei 300°. Ca, Pb, Ag₂ (J. pr. [2] 41, 29). II, 2036.
 5) 9,10-Diketo-9,10-Dihydroanthracen-2,3-Dicarbonsäure. Sm. noch

 - Ca, Pb, Ag₂ (*J. pr.* [2] **41**, 8). II, 2036. 6) **9,10-Diketo-9,10-Dihydroanthracen-?-Dicarbonsäure** (B. **10**, 1483).
- II, 2036. C 58,6 H 2,4 O 39,0 M. G. 328. $C_{16}H_8O_8$ 1) α , 2- β , 2'-Dilakton d. $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[5,6-Dioxyphenyl] äthen-2, 2'-Dicarbonsaure (Tetraoxydiphtalyl). Sm. noch nicht bei 300° (M. 12, 67). **— II**, 2099.

 $\mathbf{C}_{16}\mathbf{H}_{8}\mathbf{Cl}_{2}$

 $C_{16}H_{10}O_{3}$

1) Verbindung (aus d. Wurzel von Ventilago madraspatana). Sm. 275 bis C18H8O8 280° u. Zers. (Soc. 65, 629). — III, 454.

1) α-Dichlorpyren. Sm. 154—156° (M. 4, 239). — II, 284.

2) β -Dichlorpyren. Sm. 194—196° (M. 4, 240). — II, 285. 1) Dibrompyrendibromid (A. 158, 294). — II, 285. $\mathbf{C}_{16}\mathbf{H}_{8}\mathbf{Br}_{4}$

C 70,8 — H 3,3 — N 25,8 — M. G. 271. C16H9N5

1) Azimidonaphtophenazin. Sm. noch nicht bei 250° (A. 295, 26). — IV, 1579.

1) Chlorpyren. Sm. 118-119°. Pikrat (Sm. 177-178°) (M. 4, 238). -C₁₆H₉Cl II, 284. C 88,1 — H 4,6 — O 7,3 — M. G. 218.

 $C_{16}H_{10}O$

1) α-Phenylen-α-Naphtylenoxyd. Sm. 178°; subl. bei 280°; Sd. oberhalb 360°. Pikrat (A. 209, 141). — II, 1002. 2) β-Phenylennaphtylenoxyd. Sm. 296° (300°) (A. 202, 15; 209, 145). —

II, 1002.

 $\mathbf{C}_{16}\mathbf{H}_{10}\mathbf{O}_2$ C 82,0 — H 4,3 — O 13,7 — M. G. 234. 1) Dioxypyren (M. 4, 320). — II, 1002.

2) 1,3-Diketo-2-Benzyliden-2,3-Dihydroinden. Sm. 150-151° (A. 252, 75). — III, *304.*

3) 2-Phenyl-1,4-Naphtochinon. Sm. 109° (Soc. 65, 873). — III, 459.

4) P-Phenyl-1,4-Naphtochinon. Sm. 109-110°. + NaHSO₈ (A. 226, 28). — III, 459. 5) polym. ?-Phenyl-1, 4-Naphtochinon. α -Modif. Sm. 225 – 229°; β -Modif.

Sm. 207—207,5° (A. **226**, 43). — III, 459.

6) Diphensuccindon (Dibenzyldicarbonid). Sm. 2020 (B. 14, 1806; A. 247, 153). **— III**, *303*.

7) Isodiphensuccindon = $(C_{16}H_{10}O_2)_x$. Sm. 280 – 290° (A. 247, 154). – III, 304.

8) Idrylearbonsäure. Sm. 165°. Ag (M. 1, 232). — II, 1480. C 76,8 — H 4,0 — O 19,2 — M. G. 250.

1) 3-0xy-2-Phenyl-1,4-Naphtochinon. Sm. 146-147°. Ag (A. 296, 18). 2) P-Oxy-P-Phenyl-1,4-Naphtochinon. Sm. 143,5—144,5°. Ca, Ba, Ag

(A. 226, 32). — III, 460. 3) 1,3-Diketo-2-[2-Oxybenzyliden]-2,3-Dihydroinden. Zers. 1960 u. Zers.

(B. 30, 2139). 4) 1,3-Diketo-2-[3-Oxybenzyliden]-2,3-Dihydroinden. Sm. 2220 (B. 30, 2140).

5) 1, 3 - Diketo - 2 - [4 - Oxybenzyliden] - 2, 3 - Dihydroinden. Sm. 2390 (B. 30, 2141).

6) 2-Benzoyl-1, 3-Diketo-2, 3-Dihydroinden. Sm. 108° (B. 27, 107). —

7) Anhydrid d. $\alpha\beta$ -Diphenyläthen- $\alpha\beta$ -Dicarbonsäure (A. d. Diphenylmaleinsaure). Sm. 155°; Sd. 236°₁₅ (B. 13, 743; 15, 1626; A. 259, 64; 279, 121; Soc. 71, 132, 142). — II, 1897. 8) Acetat d. Morphenol. Sm. 140° (B. 30, 2442; 31, 55).

9) Verbindung (aus Diphenylmaleïnsäureanhydrid). Sm. oberh. 250° (A. **269**, 92). — II, 1898.

C 72,2 — H 3,8 — O 24,0 — M. G. 266. $\mathbf{C}_{16}\mathbf{H}_{10}\mathbf{O}_{4}$

1) $\alpha\beta\gamma\delta$ -Tetraketo- $\alpha\delta$ -Diphenylbutan + H₂O. Sm. 86-87° (B. 24, 3034). III, 323.

2) 1,3-Diketo-2-[3,4-Dioxybenzyliden]-2,3-Dihydroinden. Sm. 2570 u. Zers. (B. 30, 1185).

Methylenäther d. 2-[3,4-Dioxyphenyl]-1,4-Benzpyron (M. d. Dioxyflavon). Sm. 192° (B. 30, 1083; 32, 316).
 Hydrobiphtalyl. Sm. 250° (B. 17, 2180; A. 243, 269). — II, 1817.

5) Acetat d. 1-Oxy-9,10-Anthrachinon. Sm. 176-179 (B. 15, 1804). - III, 418. 6) Acetat d. 2-Oxy-9,10-Anthrachinon. Sm. 158-159° (A. 212, 52;

B. 31, 2794). — III, 418. 7) Acetat d. 4-Oxy-9,10-Phenanthrenchinon. Sm. 200-210° u. Zers.

(B. 18, 1944). — III, 442

8) Anthracen-1, 3-Dicarbonsäure. Sm. noch nicht bei 330°. Ag. (J. pr. [2] **41**, 25). — **II**, 1905.

C16H10O4

 $C_{16}H_{10}O_{8}$

- 9) Anthracen-1,4-Dicarbonsäure. Sm. bei 320°. Pb, Ag (J. pr. [2] 41, 30). — II, 1905.
- 10) Anthracen-2, 3-Dicarbonsäure. Sm. 345°. Ca, Pb, Ag (J. pr. [2] 41, 11). — II, 1905.
- 11) Methylanthrachinoncarbonsäure. Sm. 244-246° (B. 10, 1483). -II, 1905.
- 12) Laktonsäure (aus d. Verbindung $C_{20}H_{20}O_4S_9$). Sm. $228-229^{\circ}$. Ag (B. 31, 2652).
- 13) Anhydrid d. α -Keto- $\alpha\beta$ -Diphenyläthan-2,2'-Dicarbonsäure. (A. d. Desoxybenzoïn-o-Dicarbonsäure). Sm. 260° (B. 24, 2824; 31, 2652). —
- 14) Methylester d. 9,10-Anthrachinon-1-Carbonsäure. Sm. 189° (B. **30**, 1116).
- 15) Verbindung (aus Phtalsäureanhydrid). Sm. 250° (B. 24, 2827). II, 1978.
- C18H10O5 C'68.1 - H 3.5 - O 28.4 - M. G. 282.
 - 1) Monacetat d. 1,2-Dioxy-9,10-Anthrachinon (Soc. 30, 578). III, 422. Säure (a. d. Wurzel v. Morinda ubellata). α-Modif. Sm. 198—199°;
 β-Modif. Sm. 208° (Soc. 65, 860, 865). — II, 1980.
 - 3) Anhydrid d. Benzol-1, 2-Dicarbonsäuremonaldehyd (Diphtalidäther).
- Sm. 221° (A. 239, 90). II, 1625. C 64,4 - H 3,3 - O 32,2 - M. G. 298. $C_{16}H_{10}O_{6}$
- 1) Ruffcoccin. Ca (A. 163, 105). II, 2098. 2) 3,4-Methylenäther d. 7,8-Dioxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron. Sm. 221° (B. 29, 2435).
 - 3) $\alpha\beta$ -Diketo - $\alpha\beta$ -Diphenyläthan -2,2'-Dicarbonsäure (Diphtalylsäure). Sm. $270-272^{5}$ (271-273°). Ba + 2H₂O, Ag₂ (A. 164, 236; 228, 132; 239, 98; 242, 221; B. 17, 3021; 31, 2650). — II, 2028.
 - 4) α,2-Lakton d. α-Oxydiphenylmethan-α,2,2'-Tricarbonsäure. Sm. 170° u. Zers. (A. **242**, 232). — II, 2055. C 58,2 — H 3,0 — O 38,8 — M. G. 330.
 - 1) 1-Phenylbenzol-2, 3, 5, 6-Tetracarbonsäure. Sm. bei 280°. Ca₂, Ba₂ $+8 H_2 O$, Ag₄ (Am. 20, 103).
 - 2) 1-Phenylbenzol-?-Tetracarbonsäure. Fl. Ag₄ (Am. 20, 109).
- C 83,5 H 4,3 N 12,2 M. G. 230. 1) **2,3-Biphenylen-1,4-Diazin** (Phenanthrapiazin). Sm. 180,5°. (2 HCl, $\mathbf{C}_{16}\mathbf{H}_{10}\mathbf{N}_{2}$ PtCl₄) (B. 19, 112; Soc. 55, 98). — IV, 1060.

 - 2) Benzo-p-Phenanthrolin. Sm. 160°. HCl, (2 HCl, PtCl₄), HNO₃, H₂SO₄, Bichromat, Pikrat (A. 274, 365). IV, 1060.
 3) αβ-Naphtophenazin. Sm. 142,5°; Sd. oberh. 360°. HCl, (2 HCl, PtCl₄ + H₂O) (A. 256, 239; 286, 78; 292, 262; B. 20, 573, 1169, 2474; 21, 1600; 26, 188, 622). IV, 1050.
 4) Nitral d. & Phone I. (2 Computer Mathematical Computer Com
 - 4) Nitril d. β -Phenyl- α -[2-Cyanphenyl]akrylsäure. Sm. 125,5° (B. **31**, 1583).
 - 5) Nitril d. $\alpha\beta$ -Diphenyläthen- $\alpha\beta$ -Dicarbonsäure (N. d. Diphenylmaleïnsäure). Sm. 158° (B. 13, 743; 14, 1798; 25, 288, 1680). — II, 1898. 6) Isonitril d. αβ-Diphenyläthen-αβ-Dicarbonsäure. Sm. 242° u. Zers.
 - (B. 14, 1800). II, 1898.
- 1) $\alpha\beta\gamma\delta$ -Tetrajod- $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadiën. Sm. 144° (G. 22 [2] 91). $C_{16}H_{10}J_4$ - II, 275.
- 1) Verbindung (aus d. Nitril d. 1-Chlormethylbenzol-2-Carbonsäure) (B. 23, $\mathbf{C}_{16}\mathbf{H}_{10}\mathbf{S}_3$ Verbindung (aus d. Mith d. 1-Chformethylbenzol-2-Carbonsadte) (B. 23, 2487; 31, 2648). — II, 1561.
 C 88,5 — H 5,1 — N 6,4 — M. G. 217.
 Amaron, siehe C₂₈H₂₀N₂. — III, 37.
 Amidopyren. Sm. 116°. HCl, H₂SO₄ (M. 2, 580). — II, 640.
 Phenyl-α-Naphtylcarbazol. Sm. 225° (B. 23, 2465). — IV, 452.
 Phenyl-β-Naphtylcarbazol. Sm. 330°; Sd. 440—450° (A. 202, 1; B. 121, 1277) $\mathbf{C}_{16}\mathbf{H}_{11}\mathbf{N}$
- - 12, 1978). IV, 452.
 - 5) isom. Phenylnaphtylcarbazol. Sm. 120° (B. 29, 269). IV, 453. Nitril d. αγ-Diketo-αγ-Diphenylpropan-β-Carbonsäure. Sm. 156,5°.
- Ag (J. pr. [2] 42, 267). II, 1896. C 78,4 H 4,5 N 17,1 M. G. 245. $C_{16}H_{11}N_{8}$ 1) 3-Amido- $\alpha\beta$ -Naphtophenazin. Sm. 217° (B. 31, 2415).
 - RICHTER, Lex. d. Kohlenstoffverb.

2) 5-Amido-αβ-Naphtophenazin. Sm. 294° (264°). HCl, (2HCl, PtCl₄), $C_{16}H_{11}N_3$ (HCl, AuCl₈) (B. 23, 845, 2453; 27, 3343; 29, 2952; A. 290, 295). IV, 1203.

3) 6-Amido-αβ-Naphtophenazin. Sm. 198-199°. HCl (B. 31, 2411).

4) 10-Amido-αβ-Naphtophenazin (B. 21, 1599; 30, 2632, 2640; J. r. 27,

578). — IV, 1200. 5) P-Amido- $\alpha\beta$ -Naphtophenazin. Sm. 191° (B. 23, 176). — IV, 1204. 6) 1-Phenylnaphttriazol (Phenylazimidonaphtalin). Sm. 105—107° (107 bis 108°); Sd. 260—265°₂₀ (B. 18, 3136; 27, 2376; 28, 2201). — IV. 1208.

7) 3-Phenyl- β -Naphtisotriazol. Sm. 149—150° (A. 255, 343). — IV, 1171.

C16H12O

C 87,4 — H 5,4 — O 7,2 — M. G. 220. 1) 2,4-Diphenylfuran. Sm. 109° (B. 26, 1447; 27 [2] 338). — III, 695. 2) 2,5-Diphenylfuran. Sm. 91°; Sd. 343-345° (B. 21, 1490, 3057; Soc. 57, 954). — III, 694.

3) Anhydroäthyloxanthranol (A. 212, 65). — III, 243.

- 4) 1-Keto-2-[?-Methylphenyl]-2,3-Dihydroinden. Sm. 220° (C. 1896) [1] 167).
- 5) 1-Keto-2-Benzyliden-2, 3-Dihydroinden. Sm. 109-110 (Soc. 65, 498). **– III**, 250.
- 6) Verbindung (aus 2-[2-Oxynaphtoyl]benzol-1-Carbonsäure). Sm. 108° (B. 16, 306). — II, 1909.

7) Verbindung (aus Isodypnopinakolin). Sm. 162—163° (B. 27 [2] 339). C 81.4 - H 5.1 - O 13.5 - M. G. 236.

 $\mathbf{C}_{16}\mathbf{H}_{12}\mathbf{O}_{2}$

1) 1,3-Dioxy-2-Phenylnaphtalin. Sm. 165-166° (A. 296, 16).

2) 1,4-Dioxy-2-Phenylnaphtalin. Sm. 92-93° (A. 226, 31). — III, 460.

3) Phenacetein (J. pr. [2] 23, 546; [2] 26, 54). — II, 662.

4) 1,3-Diketo-2-Methyl-2-Phenyl-2,3-Dihydroinden. Sm. 154-1550 (B. 26, 2579). - III, 303.

5) 1,3-Diketo-5-Methyl-2-Phenyl-2,3-Dihydroinden. Sm. 131° (B. **29**, 2377).

6) 1,3-Diketo-2-[3-Methylphenyl]-2,3-Dihydroinden. Sm. 134—135°

(B. 28, 1388). — III, 303. 7) 1-[4-Methylbenzoyl]benzfuran (α-Cumaryl-p-Tolylketon). Sm. 96° (B. **29**, 239). — III, 249.

8) 3-[3-Methylphenyl]-2,1-Benzpyron (Isoxylalphtalid). Sm. 92-930 (B. 23, 3166). — II, 1714.

9) 3-[4-Methylphenyl]-2,1-Benzpyron (Iso-p-Xylalphtalid). Sm. 1160 $(109-111^{\circ})$ (B. 24, 3974; 29, 2548). — II, 1715.

10) Methyläther d. γ-Keto-γ-[2-Oxyphenyl]-α-Phenylpropin. Sm. 100° (B. **25**, 3538). — **İII**, 250.

11) Acetat d. 2-Oxyanthracen. Sm. 198° (B. 12, 590; A. 212, 51). — II, 901.

12) Acetat d. 10-Oxyanthracen. Sm. 126-131° (B. 9, 1202; A. 212, 8). **- II**, 902.

13) Acetat d. P-Oxyphenanthren. Sm. 117-118° (B. 10, 1253). - II, 903. 14) 1,3-Dimethyl-9,10-Anthrachinon. Sm. 162° (A. 234, 240; A. ch. [6] 6, 193, 232; J. pr. [2] 41, 13). — III, 455.

15) 1,4-Dimethyl-9,10-Anthrachinon. Sm. 118° (A. 234, 238; J. pr. [2] 41, 27). — III, 456.

16) 2, 3-Dimethyl-9, 10-Anthrachinon. Sm. 183° (J. pr. [2] 41, 6). -III, 456.

- 17) isom. Dimethylanthrachinon. Sm. 155° (B. 10, 1482). III, 456. 18) isom. Dimethylanthrachinon. Sm. 162° (B. 18, 348). III, 456. 19) isom. Dimethylanthrachinon. Sm. 170° (A. ch. [6] 6, 190). III, 456.
- 20) isom. Dimethylanthrachinon. Sm. 236° (A. 235, 319). III, 456. 21) isom. Dimethylanthrachinon. Sm. 153° (A. 169, 211). 22) Aethyläther d. Morphenol. Sm. 59° (B. 15, 2182; 30, 2439). III, 443.

23) Lakton d. α-Oxy-αγ-Diphenylpropen-γ-Carbonsäure. Sm. 109—110°
 (A. 284, 5). — II, 1713.

24) stab. Lakton d. γ -Oxy- $\beta\gamma$ -Diphenylpropen- α -Carbonsäure. Sm. 152° (A. 269, 134; 306, 196; Soc. 67, 137; B. 31, 2227, 2231). — II, 1714. 25) Lakton d. α -Oxy- α -Phenyl- α -[3-Methylphenyl]äthen- α^2 -Carbonsäure (m-Xylylphtalid). Sm. 152—153° (B. 23, 3159). — II, 1714.

26) Lakton d. α -Oxy- α -Phenyl- β -[4-Methylphenyl]äthen- α -Carbonsäure. C16H12O2 Sm. 151° (B. 24, 3965). — II, 1715.

27) Lakton d. 4-[oder 5]-Methyl-1-[α -Oxy- β -Phenyläthenyl]benzol-2-Carbonsäure (Methylbenzalphtalid). Sm. 138° (B. 29, 2376).

28) Methylester d. Anthracen-9-Carbonsäure. Sm. 1116 (B. 20, 703). - II, 1477.

29) Acetat d. 9-Oxyphenanthren. Sm. 77-78° (Soc. 71, 1122).

 30) Verbindung (aus γ-Oxy-βγ-Diphenylpropen-γ-Carbonsäure). Sm. 118
 bis 120° (Soc. 71, 139). C 76.2 - H 4.7 - O 19.0 - M. G. 252.

C18 H12 O3

C16H12O4

1) 1,4,?-Trioxy-?-Phenylnaphtalin. Sm. 72-73° (A. 226, 32). — III, 461.

2) 3,4-Methylenäther d. γ -Keto- γ -Phenyl- α -[3,4-Dioxyphenyl] propen. Sm. 122° (B. 29, 1892).

3) Aethyläther d. 2-Oxy-9,10-Anthrachinon. Sm. 135° (B. 15, 1798;

21, 1168). — III, 418.
 4) Methyläther d. 2-Keto-1-[4-Oxybenzyliden]-1,2-Dihydrobenzfuran (Anisalcumaranon). Sm. 133,5-134,5° (B. 32, 319).
 5) Methyläther d. 7-Oxy-2-Phenyl-1,4-Benzpyron (M. d. m-Oxyflavon).

Sm. 143,5° (110-111°) (B. 30, 301; 32, 312).

6) 2-Methylphenyläther d. 3-Oxy-1, 2-Benzpyron (o-Kresolcumarin). Sm. $100-101^{\circ}$ (G. **24** [1] 46). — II, 1778.

7) 3-Methylphenyläther d. 3-Oxy-1,2-Benzpyron. Sm. 105-1060 (G. **24** [1] 46). — **II**, 1778.

8) **4-Methylphenyläther d. 3-Oxy-1,2-Benzpyron.** Sm. 113—114° (G. **24** [1] 46). — II, 1778.

9) 4-Methylphenyläther d. Oxymethylenphtalyl. Sm. 173-1740 (B. 14, 924). — III, 274.

10) Northebenol. Sm. 202—203° (B. 30, 1382).
11) Monacetat d. 9,10-Dioxyphenanthren. Sm. 168—170° u. Zers. (A. **249**, 138; Soc. **63**, 771). — II, 1000.

12) Acetat d. 10-Oxy-9-Keto-9,10-Dihydroanthracen (A. 212, 67). -

13) γ -Keto- $\beta\gamma$ -Diphenylpropen- α -Carbonsäure (Desylenessigsäure). Sm. 169° (142°). Ag (Soc. 67, 138; 71, 132, 155). — II, 1720.

14) Anhydrid d. αβ-Diphenyläthan-αα-Dicarbonsäure. Sm. 112° (A. 258, 90; **259**, 73). — II, 1891.

15) Anhydrid d. $\alpha\beta$ -Diphenyläthan- $\alpha\beta$ -Dicarbonsäure. Sm. 111—112° (B. 14, 1803; A. 258, 90; 259, 73). — II, 1890.

16) Lakton d.α-Oxy-γ-Keto-αγ-Diphenylpropan-α²-Carbonsäure (Phtalid-methylphenylketon). Sm. 141—142° (M. 19, 439).

17) Lakton d. β -Oxy- $\alpha\beta$ -Diphenyläthan- α -Ketocarbonsäure. Sm. 206° (B. 27, 2224; 29, 2586; 31, 2222, 2224). - II, 1892.

18) Aethylester d. 9-Ketofluoren-4-Carbonsäure. Sm. 1030 (A. 247, 278). — II, 1719.

19) Gem. Anhydrid d. Benzolcarbonsäure u. β -Phenylakrylsäure. Fl. (A. **87**, 80). — II, 1407.

C 71.6 — H 4.5 — O 23.9 — M. G. 268.

1) 4-[3-Oxyphenyl] \(\text{ather d. 1,2,4-Trioxynaphtalin.} \) Sm. 236—240\(\text{(B.} \) 30, 2566).

2) γ-Oxy-αβδ-Triketo-αδ-Diphenylbutan (Benzoylformoïn; Phenylglyoxalbenzoïn). Sm. 170° (B. 24, 1386, 3034; 25, 3470). — III, 316.

3) Resacetein. $HCl + 2H_2O$, H_2SO_4 (J. pr. [2] 23, 54, 541). — III, 136. 4) 3,4-Methylenäther d. γ-Keto-γ-[2-Oxyphenyl]-α-[3,4-Dioxyphenyl]-propen. Sm. 137—138° (B. 32, 315).
 5) 3,5-Dioxy-1,7-Dimethyl-9,10-Anthrachinon. Sm. 300° (A. 240, 276).

· III, 456.

- 6) Dimethylanthraflavinsäure. Sm. noch nicht bei 360° (A. 240, 277).
- 7) Dimethylbenzdioxyanthrachinon. Sm. 213° (A. 240, 278). III, 457.
- 8) Monomethyläther d. Chrysin (Tectochrysin). Sm. 163-164° (B. 6, 891; **10**, 176). — **III**, *628*.

9) Dimethyläther d. 1,3-Dioxy-9,10-Anthrachinon. Sm. 178-180° (B. **9**, 1204). — **III**, 425.

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C16H12O5

10) Dimethyläther d. 1,4-Dioxy-9,10-Anthrachinon. Sm. 143° (B. 28, C18H19O4 117). — III, 426.

11) Dimethyläther d. 2,3-Dioxy-9,10-Anthrachinon (D. d. Hystazarin) (B. 28, 118, 1533). — III, 429.

12) Dimethyläther d. 2,6-Dioxy-9,10-Anthrachinon. Sm. 247-248° (B. 9, 383; Ph. Ch. 18, 561). — III, 430.

13) 1-Aethyläther d. 1,2-Dioxy-9,10-Anthrachinon. Sm. 188-1890 (Soc. 65, 186). — III, 422.

14) Monäthyläther d. 1,4-Dioxy-9,10-Anthrachinon. Sm. 150-1510 (B.

21, 1168; Ph. Ch. 18, 561). — III, 426. 15) Monäthyläther d. 2,3-Dioxy-9,10-Anthrachinon. Sm. 234—240° (B. **22**, 684). — III, 429.

16) Monomethyläther d. 5,7-Dioxy-4-Phenyl-1,2-Benzpyron. Sm. 2070 (B. 27, 420; G. 24 [1] 576). — III, 248.
17) Monomethyläther d. 7,8-Dioxy-2-Phenyl-1,4-Benzpyron. Sm. 158°

(B. 29, 2432). 18) Acetat d. 3 - Oxy -1 - Methylxanthon. Sm. 127° (B. 24, 3981). —

III, 212.

19) Acetat d. 1-Oxy-3-Methylxanthon. Sm. 151-152° (Am. 5, 95). -III, 212.

20) αγ-Diketo-αγ-Diphenylpropan-β-Carbonsäure (Dibenzoylessigsäure). Sm. 109°. Ag (B. 16, 2133; Soc. 47, 426; 59, 100). — II, 1896.

21) αγ-Diketo-αγ-Diphenylpropan-2-Carbonsäure. Na₂, Ba (B. 27, 106). - II, 1896.

22) $\alpha\beta$ -Diphenyläthen- $\alpha\beta$ -Dicarbonsäure (Diphenylfumarsäure). Sm. 260° u. Zers. (Sm. oberh. 276°) (B. 15, 1626; Soc. 71, 142). — II, 1898.

 23) αβ-Diphenyläthen-αβ-Dicarbonsäure (Diphenylmaleïnsäure; Stilbendicarbonsäure).
 Ca, Ba, Ag, Ag₂ (B. 13, 742; 15, 1625; Soc. 71, 132). - II, 1897.

24) αβ-Diphenyläthen-2, 2'-Dicarbonsäure (Stilbendi-o-Carbonsäure). Sm. $263-264^{\circ}$. Ag₂ (A. **243**, 258). — II, 1896.

25) Säure (aus Anhydro-1-[β-Oxyäthenyl] benzol-2-Carbonsäure). Sm. 189°.

Ag₂ (B. 27, 211). — II, 1898. 26) Anhydrid d. 2-Oxy-1-Methylbenzol-3-Carbonsäure. Sm. 224—225°

(B. 25, 3645). — II, 1545. 27) Gem. Anhydrid d. Essigsäure u. 2-Benzoylbenzol-1-Carbonsäure. Sm. 112° (B. 14, 1865). — II, 1704.

28) α, 2'-Lakton d. 4-Acetoxyldiphenylmethan-2'-Carbonsäure. Sm. 125 bis 126,5° (B. 27, 2637). — II, 1881.

29) α , 2-Lakton d. α -Oxy- $\alpha\alpha$ -Diphenylmethan-2, 2'-Dicarbonsäure-2'-Methylester (L. d. Benzhydroldicarbonsäuremonomethylester). Sm. 154 bis 155° (A. 242, 241). — II, 1973.

30) α , 2-Lakton d. α -Oxy- $\alpha\beta$ -Diphenyläthan-2, 2'-Dicarbonsäure (L. d. Hydroxydiphtalylsäure). Sm. 198,5°. Ag (B. 17, 2181; 24, 2825; 27, 2502; 31, 376; A. 243, 253). — II, 1974.

31) Dialdehyd d. β-Οxy-α-Keto-αβ-Diphenyläthan-4,4'-Dicarbonsäure. Sm. 170—174° (B. 19, 1874). — III, 109.

32) Diphenylester d. Fumarsäure. Sm. 161—162° (B. 18, 1948). — II, 666.
33) Acetat d. Verb. C₁₄H₁₀O₃ (aus Salicylaldehyd) (B. 17, 502). — III, 78.
34) Verbindung (aus Rumex nepalensis). Sm. 136° (B. 29, 325).
C 67,6 — H 4,2 — O 28,2 — M. G. 284.

1) 2-[2,3-Dioxyphenyl]äther d. 1,2,4-Trioxynaphtalin. Sm. 240 bis 246° u. Zers. (B. 30, 1464, 2565).

2) 4-[2,3-Dioxyphenyl] äther d. 1,2,4-Trioxynaphtalin. Sm. 242—245° (B. 30, 2567)

(B. 30, 2507).

3) Brasilein + H₂O. FeO₂ (A. 178, 100; B. 9, 1886; 15, 2343; 18, 1142; 23, 1433; 25, 18; M. 19, 743). — III, 654.

4) Physcion (Physciasäure). Sm. 207°. + KOH (A. 284, 179; 297, 289; B. 30, 365; J. pr. [2] 57, 436, 446). — III, 64I.

5) Thebaolchinon. Sm. 233° (B. 28, 943; 30, 1391).

6) 6,7,8-Trioxy-1,3-Dimethyl-9,10-Anthrachinon (A. 240, 287).

7) Monomethyläther d. ?-Trioxy-?-Methyl-9,10-Anthrachinon. Sm. 171—173° (Soc. 65, 860). — III, 455.

C₁₆H₁₂O₅

 $C_{16}H_{12}O_{6}$

 $C_{16}H_{12}O_{7}$

- 8) Monomethyläther d. Emodin. Sm. 200° (Soc. 65, 932; 67, 1088). III, 454.
- 9) Dimethyläther d. 1,2,3-Trioxy-9,10-Anthrachinon. α -Modif. Sm. 209°; β-Modif. Sm. 225—227°; γ-Modif. Sm. 212—213° (Soc. 63, 1168; 67, 824). — III, 432.
- 10) 1[oder 3]-Aethyläther d. 1,2,3-Trioxy-9,10-Anthrachinon, Sm. 2450 (B. 21, 1169). - III, 432.
- 11) 2-Aethyläther d. 1,2,3-Trioxy-9,10-Anthrachinon. Sm. 175° (B. **21**, 1169). — III, 432.
- 12) Monäthyläther d. 1,2,6-Trioxy-9,10-Anthrachinon (B. 21, 1170). III, 435.
- 13) Monäthyläther d. 1,2,7-Trioxy-9,10-Anthrachinon. Sm. 265° (B. **21**, 1170). — III, 436.
- 14) 6-Methyläther-1-Acetat d. 1,6-Dioxyxanthon. Sm. 150° (B. 27, 1992). — III, 206.
- 15) αβ-Diphenyläthanoxyd-2,2'-Dicarbonsäure? Zers. bei 190° (A. 243,
- 267). II, 2023. 16) α-Keto-αβ-Diphenyläthan-2, 2'-Dicarbonsäure (Desoxybenzoïn-o-Dicarbonsäure). Sm. 238—239° (210°). Ag₂ (B. 24, 2821; 31, 2653). — II, 1977.
- 17) ?-Benzoyl-1-Methylbenzol-3,5-Dicarbonsäure (Benzoyluvitinsäure; 2 isom. Formen). Sm. 245°. Ag (*J. pr.* [2] **35**, 489). — II, 1977.

 18) Säure (aus d. Verb. C₁₈H₁₀O₄). Sm. 196° (*B.* **24**, 2827). — II, 1978.

 19) Succinylfluorescein + 3H₂O (*J. pr.* [2] **23**, 153). — II, 2049.

 20) Diacetat d. Anhydrobaptigenetin. Sm. 192—194° (*C.* 1897 [2] 709).

- C 64,0 H 4,0 O 32,0 M. G. 300.

 1) Hämatein. $+ 2NH_3$ (A. 44, 292; 109, 332; 178, 92; 216, 236; B. 4, 331; 14, 611; 15, 2237). III, 665.

 2) β -Hämatein $+ 3H_2O$ (B. 4, 331; A. 216, 239). III, 666.

 3) Isohämatein (B. 15, 2342). III, 666.

 4) Kämpferid $+ H_2O$. Sm. 221—222°. $2 + Ca(OH)_2$, $+ Ba(OH)_2$, Pb (B. 14, 2385). III 631.

- **14**, 2385). III, 631.
- 5) Nephromin. Sm. 196° u. Zers. (B. 30, 1989; J. pr. [2] 57, 444). 6) Ophioxylin. Sm. 71,8° (R. 8, 319). III, 638. 7) Ruflearmin (A. 163, 117). II, 2098. 8) Vincetoxin. Sm. 59° (Bl. 43, 620). III, 615.

- 9) **2,4,6,8-Tetraoxy-1,5-Dimethyl-9,10-Anthrachinon.** Sm. noch nicht bei 360° (A. **240**, 280). III, 456.
- 10) isom. ?-Tetraoxy-1, 5-Dimethyl-9, 10-Anthrachinon. Sm. 258° (Soc. 65, 858). — III, 456.
- 11) Dimethyläther d. 1,2,5,8-Tetraoxy-9,10-Anthrachinon. Sm. 225 bis 230° (A. 240, 299). — III, 438.
- 12) 3,4-3',4'-Dimethylenäther d. β -Oxy- α -Keto- $\alpha\beta$ -Di[3,4-Dioxyphenyl]äthan (Piperonyloïn). Sm. 120° (118°) (Soc. 59, 164; A. 289, 324). III, 227.
- 13) α-Oxy-β-Keto-αβ-Diphenyläthan-4,4'-Dicarbonsäure (p-Benzoïndicar-
- bonsaure). Ag₂ (B. 19, 1816). II, 2024. 14) Diphenylmethan- α ??-Tricarbonsaure + H_2O . Sm. 218—220° (A. 242, 235). — II, 2024.
- 15) **4-[4-Acetoxylbenzoyl]oxybenzol-1-Carbonsäure.** Sm. 216,5° (*J. pr.* [2] **28**, 210). II, *1528*.
- 16) Maleinfluorescein. Zers. oberh. 240°. Pb (B. 17, 1598). II, 2050.
- 17) Verbindung (aus Homooxysalicylsäure). subl.; Sm. oberh. 300° (M. 2, 466). — II, 1755.
- C 60,7 H 3,8 O 35,4 M. G. 316.

 1) Rhamnetin (Methyläther d. Quercetin). H₂SO₄ (A. 196, 313; B 1595; M. 9, 560; Soc. 67, 651). III, 604.

 2) Isorhamnetin (Methyläther d. Quercetin) (Soc. 69, 1568; 73, 269). H₂SO₄ (A. 196, 313; B. 12,
- 3) isom. Methyläther d. Quercetin (aus d. Blättern von Tamaris gallica)
- (Soc. 73, 379). $\mathbf{C}_{16}\mathbf{H}_{12}\mathbf{O}_{8}$
- C 57,8 H 3,6 O 38,6 M. G. 332.

 1) Laccainsäure. Zers. bei 180°. K₈, Ba (B. 20, 1288). II, 2082. C 44,8 H 2,8 O 42,4 M. G. 428.

 1) Monäthylester d. Mekonsäure + I Molec. Mekonsäure (A. 83, 368). $\mathbf{C}_{16}\mathbf{H}_{12}\mathbf{O}_{14}$ bis 370). — II, 2042.

 $C_{16}H_{12}N_{2}$

C 82.8 - H 5.2 - N 12.0 - M. G. 232.

1) $\alpha \delta$ -Di[2-Amidophenyl] butadiin (o-Diamidodiphenyldiacetylen).

- 128. 2 HCl (B. 15, 60). IV, 1039. 2) Diamidopyren. 2 HCl, H₂SO₄ (M. 8, 449). IV, 1039. 3) 4-Imido-1-Phenylimido-1,4-Dihydronaphtalin. Sm. 128—129° (A. 286, 186). — IV, 923.
- 4) 1-Phenylazonaphtalin. Sm. 70° (63,5°) (B. 26, 143; 31, 994). IV, 1391. 5) 2, 3-Diphenyl-1, 4-Diazin. Sm. 118-119°; Sd. bei 340° u. Zers. (2HCl. PtCl₄) (Soc. **55**, 99; **63**, 1297). — **IV**, 1038.
- 6) 2,5-Diphenyl-1,4-Diazin. Sm. 194-195°. (2 HCl, PtCl₄) (B. 9, 563; 10, 1832; 11, 1744; 13, 836; 21, 1278; 22, 3254; J. 1879, 475; Soc. 63, 1363; A. 291, 279). — IV, 1038.

7) 2, 6-Diphenyl-1, 4-Diazin. Sm. 88-89°. (2HCl, PtCl₄) (Soc. 63, 1368).

– IV, 1038.

- 8) 2,3-Biphenylen-1,4-Dihydro-1,4-Diazin (1,4-Dihydrophenanthrapiazin). Sm. 97—99°. (2 HCl, PtCl₄) (Soc. 63, 1286). — \mathbf{IV} , 1038. 9) 1-[β -Phenyläthenyl]-2,3-Benzdiazin. Sm. 115°. HCl (B. 30, 3036).
- **-- IV**, 1039.

10) Dihydronaphtophenazin. HCl (A. 292, 263). - IV, 1039.

- 11) Dihydro-α-Naphtinolin. Sm. 201°. HCl, (2HCl, PtCl₄), Pikrat (B. 27, 2257). — IV, 1039.
- 12) 1-Methylphenanthrenimidazol. Sm. 188°. HCl, HNO₃ (B. 12, 1643; Soc. 67, 45). — III, 445.
- 13) Nitril d. β -Imido- β -Phenyl- $\alpha\beta$ -Benzylidenpropionsäure. Sm. bei

260° (J. pr. [2] 52, 108). — III, 37. 14) Nitril d. $\alpha\beta$ -Diphenyläthan- $\alpha\alpha$ -Dicarbonsäure. α -Modif. Sm. 160°; ³ Modif. Sm. 239—240° (B. **25**, 289, 293). — II, 1891.

15) Nitril d. αβ-Diphenyläthan-α-Carbonsäure-2-Carbonsäure. Sm. 109 bis 110° (B. 21, 2680). — II, 1889.

16) Nitril d. 3,3'-Dimethylbiphenyl-4,4'-Dicarbonsäure. Sm. 190° (B. **25**, 1036). — **II**, 1892. C 73,9 - H 4,6 - N 21,5 - M. G. 260.

 $C_{16}H_{12}N_4$

- 1) Base (aus d. Verbind, $C_{16}H_8O_2N_4$). Sm. 193-194° (A. 255, 352). IV, 1171.
- 2) Verbindung (aus 1-Phenylazonaphtalin-2-Diazochlorid). Sm. 204-2050 (B. **20**, 2899). — IV, 1542. C 66,6 — H 4,2 — N 29,2 — M. G. 288.

 $C_{16}H_{12}N_{6}$

1) 1,1'-Diphenyl-3,3'-Bi[1,2,4-Triazol]. Sm. 277—278° (B. 27, 187). IV, 1330.

 $\mathbf{C}_{16}\mathbf{H}_{12}\mathbf{Br}_{2}$ $C_{16}H_{12}J_{2}$ $\mathbf{C}_{16}\mathbf{H}_{12}\mathbf{S}$

- 1) Dibromdimethylanthracen. Sm. 154° (A. 169, 213). II, 274. 1) Phenyl-2-Naphtyljodoniumjodid. Sm. 156—160° (B. 31, 921).
- 1) 2,4-Diphenylthiophen. Sm. 119-120° (B. 28, 893; 30, 117). III, 749.
 - 2) 2,5-Diphenylthiophen. Sm. 152° (B. 21, 3058; 28, 892). III, 749. 3) Phenyläther d. 1-Merkaptonaphtalin. Sm. 41,5°; Sd. 218°₁₄ (B. 23,
 - 3046; **28**, 2327). II, 867. 4) Phenyläther d. **2-Merkaptonaphtalin**. Sm. 51,5°; Sd. 224°₁₄ (B. **23**, 3048; **28**, 2327). — **II**, 887. C 87,7 — H 5,9 — N 6,4 — M. G. 219.

 $C_{16}H_{18}N$

- 1) I-Phenylamidonaphtalin (Phenyl-1-Naphtylamin). Sm. 62° (60°); Sd. 335°₂₈₈. HCl, Pikrat (Bl. 18, 68; B. 14, 2344; 16, 2077; A. 209, 152;
- $C. \ r. \ 73, \ 627). II, \ 599.$ 2) 2-Phenylamidonaphtalin (Phenyl-2-Naphtylamin). Sm. 107,5—108°; Sd. 395—395,5°. HCl, Pikrat (B. 13, 1300, 1850; 14, 2344; 16, 2077; A. 202, 5; 209, 156; J. 1882, 369; J. pr. [2] 51, 327). — II, 602.
- 3) 2,5-Diphenylpyrrol. Sm. 143,5° (B. 20, 1490, 3361; 21, 2837, 3061). IV, 438.
- 4) 3-Methyl-2-Phenylchinolin. Sm. 52—53°; Sd. oberh. 300°. (2 HCl, PtCl₄), Pikrat (B. 19, 527). IV, 435.
- 5) 4-Methyl-2-Phenylchinolin (Flavolin). Sm. 64-65°; Sd. 373-375°. HCl + 2H₂O, (2HCl, PtCl₄), Chromat, Pikrat (B. 15, 1503; 16, 68; 18, 34; 19, 1037). — IV, 436. 6) 6-Methyl-2-Phenylchinolin. Sm. 68°. (2HCl, PtCl₄) (A. 242, 298).

- IV, 437.

 $C_{16}H_{13}N$

7) 8-Methyl-2-Phenylchinolin. Sm. 49-50°. (2HCl, PtCl₄) (A. 242, 299). IV, 437.

8) 2-Methyl-4-Phenylchinolin. Sm. 98-99°. HCl, $(2 \text{HCl}, \text{PtCl}_4 + 2 \text{H}_2 \text{O})$, Sulfat, Pikrat (B. 18, 2406; 20, 1771; 28, 1039; J. pr. [2] 33, 420). -

9) 2-[3-Methylphenyl]chinolin (Pseudoflavolin). Sm. 77°. (2HCl, PtCl₄) (M. 9, 108). - IV, 434.

10) ?-Benzylchinolin. HCl, (2HCl, PtCl₄), Pikrat (B. 28, 1321). — IV, 433.

11) ?-Benzylchinolin. HCl, (2 HCl, PtCl₄) (B. 13, 2046). 12) 3-[3-Methylphenyl]isochinolin. Sm. 51-52° (B. 23, 3168). — IV, 437. 13) 3-[4-Methylphenyl]isochinolin. Sm. 78°. (2 HCl, PtCl₄) (B. 24, 3975). • IV, 437.

14) 3-Allyl- β -Naphtochinolin. Sm. 78° (B. 27, 2023).

 $C_{16}H_{13}N_{8}$

C 77,7 $\stackrel{\leftarrow}{-}$ H 5,3 $\stackrel{\rightarrow}{-}$ N 17,0 $\stackrel{\rightarrow}{-}$ M. G. 247. 1) Di[2-Cyanbenzyl]amin. Sm. 125°. HCl, (2HCl, PtCl₄ + 2H₂O), Pikrat (B. **23**, 2488). — **II**, *1334*.

2) 2-Amido-1-Phenylazonaphtalin. Sm. 102—1040 (B. 18, 798; 22, 1376;

25, 1372; 28, 2201). — IV, 1392.

3) 4-Amido-1-Phenylazonaphtalin. Sm. 123° . HCl, HNO₃, H₂SO₄ + $4 H_2 O (A. 137, 60; B. 12, 228; 22, 1381, 2069; 28, 2197). \longrightarrow IV, 1392.$ 4) 2-[4-AmidophenyI]azonaphtalin. Sm. 148—150°. HCl, H₂SO₄ (B. 18,

799; **20**, 2897, 3013). — **IV**, 1394.

- 5) ?-Phenylazo-1-Phenylpyrrol. Sm. 117° (B. 19, 2256). IV, 1483.
- 6) 5- $[\beta$ -Phenyläthenyl]-1-Phenyl-1,2,4-Triazol. Sm. 119—120°. (2 HCl, PtCl₄), Pikrat (B. 30, 2437). — IV, 1166.

7) 6-Amido-2,4-Diphenyl-1,3-Diazin. Sm. 120-121°. (2HCl, PtCl₄) $(J. pr. [2] 42, 14). - \overline{IV}, 1191.$

8) 2-Methyl-4,6-Diphenyl-1,3,5-Triazin. Sm. 110°; Sd. 227°₁₅. (2HCl, PtCl₄), + Br₃ (B. 17, 2513; 22, 803; PINNER, Imidoather 161). — IV, 1191. 9) Hydrazoindol. Sm. 140° (B. 8, 725). — IV, 218. 10) 2-Phenylazo-4-Methylchinolin. Sm. 98° (B. 25, 2706). — IV, 1163.

- 11) 2-Phenylhydrazonmethylchinolin. Sm. 195—198° (B. 18, 3405). —
- 12) α -Benzyliden- β -[5-Chinolyl]hydrazin. Sm. 194° (Soc. 61, 788). IV, 1160.

 $C_{16}H_{13}N_5$

C 69.8 - H 4.7 - N 25.4 - M. G. 275.1) ?-Di[Phenylazo]pyrrol. Sm. 131° (B. 19, 2258). — IV, 1483.

2) Nitril d. 3,3'-Dimethyldiazoamidobenzol-6,6'-Dicarbonsäure. 180—190° u. Zers. (B. 26, 50). — IV, 1578. C 86,5 - H 6,3 - O 7,2 - M. G. 222.

 $C_{16}H_{14}O$

1) 10-Oxy-1,3-Dimethylanthracen. Sm. 155° (J. pr. [2] 41, 21). — II, 903. 2) Aethyläther d. 2-Oxyanthracen. Sm. 145-1460 (B. 12, 591; 15, 1427; A. 212, 51). — II, 901.

3) Aethyläther d. 10-Oxyanthracen. Fl. (B. 21, 1178). — II, 902.

- 4) 1-[α -Oxybenzyl]inden. Sm. 135° (B. 28, 1504). 5) γ -Keto- $\alpha\beta$ -Diphenyl- α -Buten. Sm. 71° (M. 18, 438; 19, 413, 424). 6) α -Keto- $\alpha\gamma$ -Diphenyl- β -Buten (Dypnon). Sd. 225°₂₂. III, 249.
- 7) γ-Keto-α-Phenyl-γ-[4-Methylphenyl] propen (Benzolmethyl-p-Tolylketon). Sm. 77°; Sd. 355° (B. 29, 2246).

8) 3-Keto-1-Phenyl-1,2,3,4-Tetrahydronaphtalin? Sm. 53-540 (M. 18, 444; 19, 411).

9) 10-Keto-9,9-Dimethyl-9,10-Dihydroanthracen. Sm. 93-94° (B. 21, 2508). — III, *249.*

10) 2-Benzoyl-2,3-Dihydroinden. Sm. 107° (Soc. 65, 245). — III, 249. C 80,7 - H 5,9 - O 13,4 - M. G. 238.

 $C_{16}H_{14}O_{2}$

- 1) Dimethyläther d. $\alpha\beta$ -Di[4-Oxyphenyl]äthin. Sm. 142° (A. 279, 338).
- **II**, 999. 2) γ -Keto- γ -[4-Methylphenyl]- α -[2-Oxyphenyl]propen. Sm. 152° (B. 29, 239). **— III**, *249*.

γ-Keto-γ-Phenyl-α-[6-Oxy-3-Methylphenyl]propen. Sm. 146° u. Zers. (B. 31, 713 Anm.).

4) Methyläther d. γ-Keto-γ-[2-Oxyphenyl]-α-Phenylpropen (M. d. o-Oxyphenylstyrylketon). Sm. 106-107° (B. 25, 3536). - III, 247.

C16H14O2

5) $\alpha \delta$ -Diketo- $\alpha \delta$ -Diphenylbutan (s-Dibenzoyläthan; Diphenacyl). Sm. 144 bis 145° (134°) (B. **20**, 1375, 3361; **21**, 3056; **27**, 1168; **28**, 3033; **29**, 1750, 2096; **32**, 531; Bl. **49**, 346). — III, 280, 297.

6) $\alpha\beta$ -Diketo- $\alpha\beta$ -Di[4-Methylphenyl]äthan. Sm. 104—105. (B. 22, 381).

7) Dimethyläther d. 2,3-Dioxyanthracen. Sm. 203-2040 (B. 28, 1533). 8) Dimethyläther d. 9,10-Dioxyanthracen. Sm. 196° (B. 18, 3038). II, 1000.

9) 10-Oxy-9-Keto-?-Aethyl-9,10-Dihydroanthracen. Sm. 107° (B. 13, 1597; **14**, 458; **21**, 2507; A. **212**, 70). — III, 243.

10) Acetat d. 2-Oxy-9,10-Dihydroanthracen. Sm. 148° (B. 26, 3070). **– II**, 900.

11) Acetat d. α -Oxy- α β -Diphenyläthen? Fl. (A. 155, 73). — II, 1082.

12) $\alpha \gamma$ -Diphenylpropen - β - Carbonsäure (α -Benzyl- β -Phenylakrylsäure). Sm. 157°. Na (Am. 7, 69). — II, 1475.

13) Lakton d. γ -Oxy- $\alpha\gamma$ -Diphenylbuttersäure. Sm. 103-103,5° (A. 284, 4). - II, 1700.

14) Lakton d. γ - Oxy - $\beta\gamma$ - Diphenylbuttersäure. Sm. 112—113° (Soc. **71**, 155).

15) Lakton d. γ-Oxy-γγ-Diphenylbuttersäure. Sm. 90° (A. ch. [6] 22, 313). — II, *1*701.

16) Lakton d. β-Oxy-αγ-Diphenylpropan-β-Carbonsäure? Sm. 169° (B. **14**, 1689; A. **219**, 48). — II, 1701.

17) Lakton d. α -Oxy- α' -Phenyl- α^2 -[m-Dimethylphenyl]methan- α' , 2-Car-

bonsäure. Sm. 83,5—84° (A. 234, 237). — II, 1701. 18) Lakton d. α-Oxydi[P-Methylphenyl]essigsäure (Ditolylglykolid). Sm. 131—132° (B. 28 [2] 613).

19) Methylester d. αβ-Diphenylakrylsäure. Sm. 77-78° (G. 14, 115). -II, 1474.

20) Methylester d. Allo-αβ-Diphenylakrylsäure. Fl. (G. 27 [2] 54). 21) Aethylester d. Fluoren-1-Carbonsäure. Sm. 53,5° (A. 200, 16). — II, 1473.

22) Aethylester d. Fluoren-9-Carbonsäure. Sm. 165° (B. 10, 536). — II, 1473.

23) Benzylester d. β-Phenylakrylsäure. Sm. 30°; Sd. 225—235° (Z. 1869, 156, 157; B. 2, 181; 27 [2] 312). — II, 1406.

24) 3-Methylphenylester d. β -Phenylakrylsäure. Sm. 65° (C. 1899)

25) 4-Methylphenylester d. β -Phenylakrylsäure. Sm. 100—101°; Sd. 230° $_{15}$ (B. 18, 1945). — II, 1406.

26) Verbindung (aus Phenanthrenchinon). Sm. 80°. + C₂H₆O (Sm. 77°) (B. 12, 1307; 13, 761). — III, 443. C 75,6 — H 5,5 — O 18,9 — M. G. 254. 1) Thebaol. Sm. 94° (B. 28, 942; 30, 1389).

C₁₆H₁₄O₃

2) 2-Keto-1,3-Di[Furanylmethylen]hexahydrobenzol. Sm. 144° (B. **29**, 1840).

3) 4-Methyläther d. γ -Keto- γ -[2-Oxyphenyl]- α -[4-Oxyphenyl] propen. Sm. 93—94° (B. 32, 318).

4) 4-Methyläther d. γ-Keto-γ-[2, 4-Dioxyphenyl]-α-Phenylpropen (Benzalpaeonol). Sm. 105° (B. 32, 311).

5) 2-Oxy-1, 2-Diphenyl-R-Trimethylen-3-Carbonsäure? Sm. 125°. Ag (B. 31, 2228, 2235).

6) γ -Oxy- $\beta\gamma$ -Diphenylpropen- γ -Carbonsäure (Isocinnamenylmandelsäure). Sm. 161°. Ba + 2H₂O (B. 18, 184; Soc. 71, 135).

7) α-Phenyl-β-[4-Methoxylphenyl]akrylsäure. Sm. 188—189° (J. 1879, 731). — II, *1707*.

8) α -Oxy- β -Phenylakryl-[2-Methylphenyläther]säure. Sm. 167–168°. Ba + H₂O, Ag (G. 20, 505). — II, 1637. 9) α-Oxy-β-Phenylakryl-[3-Methylphenyläther]säure. Sm. 155° (G. 20,

505). — II, 1637

10) α-Oxy-β-Phenylakryl[4-Methylphenyläther]säure. Sm. 159—160°. Ag (G. 20, 505). — II, 1637.

11) α -Phenyl- β -Benzoylpropionsäure. Sm. 153°. Ca + H₂O, Ba + H₂O, Ag (A. 284, 3; B. 28, 962). — II, 1713.

- C16 H14 O3 12) β-Phenyl-β-Benzoylpropionsäure (Desylessigsäure). Sm. 162° (152°) Ag (B. 21, 1305; 29, 2586; 31, 2228, 2231; Soc. 67, 137; 71, 135, 155). - II, 1713.
 - 13) α -Keto- α -Phenyl- β -[3-Methylphenyl] äthan α^2 -Carbonsäure (m-Methyldesoxybenzoïn-o-Carbonsäure). Sm. 111—112°. Ag (B. 23, 3159). — II, 1714.
 - 14) α -Keto- α -Phenyl- β -[4-Methylphenyl] \ddot{a} than- α^4 -Carbons \ddot{a} ure (p-Methyldesoxybenzoïn-o-Carbonsäure). Sm. 126° (B. 24, 3966). — II, 1715.
 - 15) α -Keto- β -Phenyl- α -[4-Methylphenyl]äthan- β 2-Carbonsäure (p-Methyldesoxybenzoïn-o-Carbonsäure). Sm. 147-148° (B. 29, 2547).
 - 16) 2-[2,4-Dimethylbenzoyl]benzol-1-Carbonsäure (B. 15, 637). —
 - II, 1716. 17) 2-[2,5-Dimethylbenzoyl]benzol-1-Carbonsäure (B. 15, 637).—
 - II, 1716. 18) **2-[3,4-Dimethylbenzoyl]**benzol-1-Carbonsäure + H₂O. Sm. 161,5° (wasserfrei) (B. 15, 637). — II, 1716.
 - 19) 2-Benzoyl-1,3-Dimethylbenzol-5-Carbonsäure, Sm. 160°. Mg+ $6 \,\mathrm{H}_2\mathrm{O}$, $\mathrm{Ba} + 2 \,\mathrm{H}_2\mathrm{O}$, Ag (A. ch. [6] 6, 223). — II, 1716.
 - 20) 4-Benzoyl-1,3-Dimethylbenzol-5-Carbonsäure. Sm. 185°. Mg, Ag (A. ch. [6] 6, 219). — II, 1716.
 - 21) $\alpha \gamma$ -Lakton d. $\alpha \gamma$ -Dioxy- $\beta \gamma$ -Diphenylbuttersäure. Sm. 127° (B. 31, 2225).
 - 22) isom. $\alpha\gamma$ -Lakton d. $\alpha\gamma$ -Dioxy- $\beta\gamma$ -Diphenylbuttersäure. Sm. 170° (B. 31, 2225).
 - 23) Lakton d. α-Aethoxyl-2-Oxydiphenylessigsäure. Sm. 85-86° (B. 30, 128).
 - 24) Anhydrid d. Phenylessigsäure. Sm. 72,5° (B. 20, 1391). II, 1311.
 - 25) Anhydrid d. 1-Methylbenzol-2-Carbonsäure. Sm. 36-38°; Sd. oberh. 325° (A. **239**, 74). — II, 1329.
 - 26) p-Dimethyldisalicylaldehyd. Sm. 141° (Am. 14, 298). III, 88.
 - 27) Methylester d. α-Benzoyl-α-Phenylessigsäure. Fl. (B. 21, 1321). II, 1707.
 - 28) Methylester d. α -Keto- $\alpha\beta$ -Diphenyläthan- α , 2-Carbonsäure (M. d. o-Desoxybenzoïncarbonsäure) (B. 26, 2578). — II, 1708.
 - 29) Methylester d. 2-[4-Methylbenzoyl]benzol-1-Carbonsäure. Sm. 530 (66°) (Bl. 35, 505; A. 299, 306). — II, 1712.
 - 30) Aethylester d. 2-Benzoylbenzol-1-Carbonsäure. Sm. 58° (B. 7, 987). - II. 1704.
 - 31) Aethylester d. 4-Benzoylbenzol-1-Carbonsäure. Sm. 52° (B. 7, 988). **– II**, 1705.
 - 32) Aethylester d. Biphenyl-4-Ketocarbonsäure. Sm. 39°; Sd. 232°, (Bl.
 - [3] **17**, 809). 33) Aethylester d. 9-Oxyfluoren-9-Carbonsäure. Sm. 92° (B. 10, 534; J. 1882, 366). — II, 1706.
 - 34) Aethylester d. 2-Methyl-α-Naphtofuran-1-Carbonsäure. Sm. 108° (B. **19**, 1303). — **III**, 735.
 - 35) Acetat d. β -Oxy- α -Keto- $\alpha\beta$ -Diphenyläthan (A. d. Benzoïn). Sm. 83°
 - (A. 104, 120; 155, 92; B. 21, 1536; J. pr. [2] 34, 10). III, 223. 36) Acetat d. α -Keto- β -[4-Oxyphenyl]- α -Phenyläthan. Sm. 87° (B. 21, 2450). — III, 227.
 - 37) Acetat d. 4-Oxymethyldiphenylketon. Sm. 36° (Bl. [3] 15, 947).
 - 38) Acetat d. 1,9-Dioxy-9,10-Dihydroanthracen. Sm. 136-138° (A. 212, 19; B. **10**, 610). — **II**, 1112.
 - 39) Verbindung (aus Methylaurin) (A. 202, 208). II, 1121. C 71,1 H 5,2 O 23,7 M. G. 270.

C16H14O4

- Brasinol (B. 17, 194). III, 655.
 Physcihydron. Sm. 180—182° (A. 284, 187; 286, 376). III, 642.
- 3) 3-Methyläther d. Methyl-3-Oxy-4-Benzoxylphenylketon. Sm. 106° (B. **24**, 2866). — III, 138.
- 4) Dimethyläther d. $\alpha\beta$ -Diketo- $\alpha\beta$ -Di[4-Oxyphenyl] äthan (D. d. p-Dioxybenzil; Anisil). Sm. 133° (B. 14, 327; 24, 177; Soc. 63, 1301). -III, 295.
- 5) 1-Methyläther-2-Acetat d. 1,2-Dioxydiphenylketon. Sm. 105-1060 (G. 27 [1] 282).
- 6) α-Acetoxyl-αα-Diphenylessigsäure. Sm. 98° (B. 22, 1212). II, 1696.

7) α -Oxy- β -[4-Oxyphenyl]akryl- α -Phenyläther-4-Methyläthersäure. C, 6H, 0, Sm. 200⁶ (G. 14, 147). — II, 1778.

8) 6-Oxy-3-Benzoylbenzoläthyläther-1-Carbonsäure. Sm. 109° (A. 290, 168).

9) 2-[4-Aethoxylbenzoyl]benzol-1-Carbonsäure. Sm. 135-1360. K, Ca, $Ba + 5H_2O$, Ag (G. 20, 124). — II, 1887.

10) αα-Diphenyläthan-ββ-Dicarbonsäure (Diphenylisobernsteinsäure). Sm. 173° u. Zers. K₂ + 2H₂O, Ag₂ (Soc. 59, 731). — II, 1892.
11) αβ-Diphenyläthan-αα-Dicarbonsäure (Phenylbenzylmalonsäure). Sm.

 144° (\bar{B} . **28**, 816). — II, 1890.

12) $\alpha\beta$ -Diphenyläthan- $\alpha\alpha$ -Dicarbonsäure? Sm. 229° (252° u. Zers.). +7H₂O, Ag₂ (B. 14, 1802; 15, 2347; 25, 296; 28, 2452; A. 247, 152; 258, 89; 259, 71; Ph. Ch. 4, 484; 8, 465). — II, 1891.

13) $\alpha\beta$ -Diphenyläthan- $\alpha\beta$ -Dicarbonsäure + H₂O (s-Diphenylbernsteinsäure). Sm. 183°. Ca, Ba + $2 H_2 O$, Zn + $\frac{1}{2} H_2 O$, Ag (B. 5, 1048; 14, 1802; 15, 2347; 23, 117; 28, 2450; A. 258, 88; 259, 70; Ph. Ch. 4, 484; 8, 465). 2347; 23, — II, 1890.

14) isom. Diphenyläthandicarbonsäure. Sm. 275°. Ca (B. 15, 1481). — II, 1892.

15) $\alpha \dot{\beta}$ -Diphenyläthan- α , 2-Dicarbonsäure (Benzylhomophtalsäure). Sm. 154°; Sd. oberh. 300° (B. 21, 2682). — II, 1889.

16) $\alpha\beta$ -Diphenyläthan-2,2'-Dicarbonsäure. Sm. 229°. (NH₄)₂, Ca, Ba, Zn + ZnO, Pb + PbO, Cu + CuO, Ag₂ (B. 8, 1055; 17, 2181; 24, 2821; A. 239, 66; 243, 254, 361). — II, 1889.

17) 3,3'-Dimethylbiphenyl-4,4'-Dicarbonsaure. Sm. oberh, 300° (B. 25, 1036). — II, 1892.

18) Superoxyd d. 1-Methylbenzol-2-Carbonsäure. Sm. 60° (B. 29, 1727). 19) Superoxyd d. Phenylessigsäure. Sm. 41° (B. 29, 1727).

20) Aldehyd d. 3,4-Dioxybenzol-3-Methyläther-4-Benzoylmethyläther-1-Carbonsäure (Acetophenonvanillin). Sm. 128° (B. 27, 2463). — II, 133.

21) Dimethylester d. Biphenyl-2,2'-Dicarbonsäure. Sm. 73,50 (A. 203, 98). - II, 1884.

22) Dimethylester d. Biphenyl-2, 3'-Dicarbonsäure. Sm. 69,5° (A. 200, 10). — II, 1883.

23) Dimethylester d. Biphenyl-3,3'-Dicarbonsäure. Sm. 100-102° (B. 31, 2577).

24) Aethylester d. 6-Oxy-3-Benzoylbenzol-1-Carbonsäure. Sm. 97°. K (A. 290, 166).

25) Aethylester d. 2-Benzoxylbenzol-1-Carbonsäure. Sm. 79-80° (J. pr. [2] 47, 243; A. 89, 362; 290, 169). — II, 1497.

26) Aethylester d. 3 - Benzoxylbenzol - 1 - Carbonsäure. Sm. 58º (A. 290, 170).

27) Aethylester d. 4 - Benzoxylbenzol - 1 - Carbonsäure. Sm. 89° (A. 303, 276).

28) Monäthylester d. Biphenyl-2,2'-Dicarbonsäure. Sm. 880 (A. 247, 267). — II, 1884.

29) Aethylester d. α-Benzoyl-β-Furanylakrylsäure (Ac. d. Furalbenzoylessigsäure). Sm. 68º (Soc. 59, 1011). — III, 714.

30) Diphenylester d. Bernsteinsäure. Sm. 118°; Sd. 330° (B. 2, 519; J. pr. [2] **26**, 63). — II, 666.

31) Dibenzylester d. Oxalsäure. Sm. 80,5° (A. 147, 341). — II, 1052. 32) Diacetat d. 7,8 - Dioxyacenaphten. Sm. 130° (Soc. 55, 579). -

II, 1100.

33) Diacetat d. 3,3'-Dioxybiphenyl. Sm. 82,5° (B. 27, 2109). — II, 987. 34) Diacetat d. 4,4'-Dioxybiphenyl. Sm. 159-160° (A. 207, 336).

II, 988.

35) Diacetat d. isom. Dioxybiphenyl. Sm. 94° (A. 207, 358). — II, 990.
36) Dibenzoat d. αβ-Dioxyäthan. Sm. 73—74°; Sd. oberh. 360° (J. 1879, 486; 1879, 676; B. 23, 2498). — II, 1141.
37) Verbindung (aus d. Wurzel von Ventilago madraspatana). α-Derivat Zers. bei 260°; β-Derivat Sm. 173° (Soc. 65, 935, 937). — III, 454.

C 67,1 — H 4,9 — O 28,0 — M. G. 286. 1) Brasilin + H_2O . Pb + H_2O (J. 1864, 545; A. 178, 101; B. 4, 334; 6, 447; 9, 1883; 17, 195; 21, 3016; 27, 524; M. 19, 738). — III, 652.

 $C_{16}H_{14}O_5$

C18H14O5

C16H14O6

C16H14O7

- 2) Acetyloreoselin. Sm. 123° (118°) (A. 174, 81; M. 19, 276; C. 1899 [1] 432). — III, *620*.
- 3) Dibenzyläther-3,3'-Dicarbonsäure. Sm. 180° (B. 24, 2421). II, 1561.
- 4) Dibenzyläther-4,4'-Dicarbonsäure. Ag₂ (B. 23, 1061). II, 1561.
 5) α-Oxy-αβ-Diphenyläthan-α,2-Dicarbonsäure (Oxybibenzyl-α,0-Dicarbonsäure)
- bonsäure). Sm. 130—133°. K, (B. 27, 2504). II, 1973. 6) α-Oxy-αβ-Diphenyläthan-2,2'-Dicarbonsäure (Hydroxydiphtalylsäure). Sm. 170° . Ag₂ (B. 17, 2180; 24, 2825; 27, 2502; A. 243, 255). —
- 7) 2-[2,5-Dioxybenzoyl] benzoldimethyläther-1-Carbonsäure. Sm. 1620 (B. **28**, 117). — II, 1972.
- 8) 2-[3,4-Dioxybenzoyl] benzoldimethyläther-1-Carbonsäure. Sm. 2330 (B. 28, 118). — II, 1972.
- 9) 3,4-Dioxybenzol-3-Methyläther-4-Benzoylmethyläther-1-Carbonsäure (Acetophenonvanillinsäure). Sm. 169° (B. 27, 2464). - II, 1744.
- Anhydrid d. 4-Oxybenzolmethyläther-1-Carbonsäure. Sm. 99° (A. 102, 284; C. 1895 [2] 442). II, 1528.
- 11) Lakton d. Di[4,6-Dioxy-2-Methylphenyl]essigsäure. Sm. 263° (Soc. 73, 400).
- 12) α, 2'-Lakton d. α, 4-Dioxy-3', 4'-Dimethoxyldiphenylmethan-2'-Carbonsäure (4-Oxyphenylmekonin). Sm. 160—170° (B. 27, 2639; 31, 2792). - II, 2020.
- 13) 1-Aethylester-3-Phenylester d. 4-Oxybenzol-1, 3-Dicarbonsäure.
- Sm. 64—65° (*J. pr.* [2] 44, 13). II, 1937. 14) Diacetat d. 3,3'-Dioxydiphenyläther (*B.* 10, 1467). II, 917.
 - C 63,6 H 4,6 O 31,8 M. G. 302. 1) Hämatoxylin + 3H₂O. Sm. 100—120° (A. ch. [2] 82, 53, 126; J. 1857, 490; 1877, 1156; A. 44, 292; 109, 332; 216, 232; B. 4, 329; 12, 1392; **17**, '372). — III, '*664*.
 - 2) Hesperitin (oder $C_{32}H_{28}O_{12}$). Sm. 226° u. Zers. (B. 9, 687; 14, 951; C. 1899 [1] 118). — III, 594.
 - 3) Moradin (oder $C_{21}H_{18}O_8$). Sm. $201-202^{\circ}$ (G. 18, 409). III, 637.

 - Moradin (oder C₂₁H₁₈U₃). Sm. 201-202° (G. 18, 409). 111, 637.
 3,4,3',4'-Dimethylenäther d. αβ-Dioxy-αβ-Di[3,4-Dioxyphenyl]-äthan (Hydropiperoïn). Sm. 202° (A. 159, 131). III, 103.
 Isohydropiperoïn. Sm. 135° (A. 159, 135). III, 104.
 3,4-Methylenäther-P-Dimethyläther d. 3,4,2',4',6'-Pentaoxydiphenylketon (Protocotoïn). Sm. 141-142° (B. 24, 2982). III, 208.
 Dehydrodivanillin. Sm. 304-305° (B. 18, 3493). III, 110.
 Triacetat d. 1,2,3-Trioxynaphtalin. Sm. 250-255° (A. 295, 19).
 Triacetat d. 1,2,3-Trioxynaphtalin. (The delay of the protocological delay of the protoco
 - 9) Triacetat d. isom. Trioxynaphtalin (T. d. β-Hydrojuglon). Sm. 129
- bis 130° (B. 18, 2569). II, 1027. 10) 2-Oxybenzoläthylenäther-1-Carbonsäure. Sm. 151-152° (J. pr. [2]
- **21**, 128). **II**, 1494. 11) o-Dikresoldicarbonsäure. Sm. noch nicht bei 290° (B. 21, 1640). —
- II, 2023. 12) $\alpha\beta$ -Dioxy- $\alpha\beta$ -Diphenyläthan-2,2'-Dicarbonsäure. K_2 , Ag_2 (A. 243, 266). — II, *2023*.
- 13) $\alpha \beta$ -Dioxy- $\alpha \beta$ -Diphenyläthan-4,4'-Dicarbonsäure (Hydrobenzoïndicarbonsäure) (B. 19, 1817). — II, 2023.
- 14) Aethylenester d. 2-Oxybenzol-1-Carbonsäure. Sm. 83° (A. 123, 377). **- II**, 1492.
- 15) Coccinin, siehe $C_{14}H_{12}O_5$. C 60,4 - H 4,4 - O 35,2 - M. G. 318.
 - 1) Lecanorsäure + H_2O (Diorsellinsäure). Sm. 166° (wasserfrei). K + H_2O , Ca + $4H_2O$, Ba + $5H_2O$, Pb + Pb(OH)₂, Cu + $2H_2O$ (A. 41, 159; 48, 7; 54, 261; 68, 59; 139, 24; J. pr. [2] 57, 264; [2] 58, 473, 499). II, 1754.

 2) Säure (aus 3,3'-Diazoamidoanissäure) (A. 117, 53). IV, 1578.
- C16H14O8 C 57.5 - H 4.2 - O 38.3 - M. G. 334.1) Acetylthujigenin (J. 1858, 516). — III, 614.
 - 2) αβ-Di[5,6-Phenyl]äthan-2,2'-Dicarbonsäure (Tetraoxydibenzyldicarbonsaure). Ba + H₂O (*M*. 14, 139). — II, 2081. C 54,8 — H 4,0 — O 41,1 — M. G. 350. 1) Ketongerbsäure. Mg (*M*. 10, 651). — II, 2091.
- C16H14O9

C16H14O9 2) Rufimorinsäure? + 2 PbO, 2 + CuO (J. 1850, 530; 1851, 420; 1864. 556). — III, 208. C 50,3 — H 3,6 — O 46,1 — M. G. 382.

C₁₆H₁₄O₁₁

1) Verbindung (aus Gallussäure) (B. 5, 1097). — II, 1924. C 82.0 - H 6.0 - N 12.0 - M. G. 234.C16 H14 N2 1) 3-Amido-1-[2-Naphtylamido] benzol. Sm. 128°; Sd. 320°40. HCl, 2HCl,

 H_9SO_4 , Pikrat (B. 26, 976). — IV, 573.

2) ?-Amido-l-[?-Amidophenyl]naphtalin. Sm. 64°. 2HCl (B. 26, 144). **— IV**, 1033.

3) 2-Phenylamido-1-Amidonaphtalin. Sm. 138—140° (136—137°). HCl (B. 20, 1170, 1184; A. 255, 348). — IV, 917.
4) 2-Amido-1-Phenylamidonaphtalin? Sm. 161° (A. 255, 161). — IV, 917.
5) 4-Amido-1-Phenylamidonaphtalin. Sm. 148° (A. 243, 305; 286, 183).

— IV, 922.
6) Tetroldianil (J. pr. [2] 6, 151; B. 14, 933). — IV, 1032.
7) s-Phenyl-l-Naphtylhydrazin. Sm. 125° (B. 26, 144). — IV, 1504.
8) 3,3'-Diäthenylazobenzol (Azostyrol). Sm. 38—39° (B. 26 [2] 677). — IV. 1389.

9) 5-Methyl-1,3-Diphenylpyrazol. Sm. 47°; Sd. 365°₇₃₁ (B. 18, 933; 20, 1098). — IV, 936.

10) 3-Methyl-1, 5-Diphenylpyrazol. Sm. 63°; Sd. 335°₇₅₀. (2HCl, PtCl₄ + H_2O) (B. 18, 314, 2136). — IV, 936.

11) 4-[oder 5] Benzyliden-I-Phenyl-4,5-Dihydropyrazol (2 Modif.). Sm.

235° (J. pr. [2] 50, 550). — IV, 937. 12) 2-Methyl-4,5-Diphenylimidazol. Sm. 235°. (2 HCl, $PtCl_4 + 2H_2O$) (Soc. 49, 464). - IV, 1031.

13) 4, 6-Dimethyl-2-[2-Naphtyl]-1, 3-Diazin. Sm. 116-117° (B. 26, 2125). **– IV**, 1032.

14) 2,3-Diphenyl-1,4-Dihydro-1,4-Diazin. 3+2PtCl₄+H₂O (Soc. 63, 1293). - III, 284.

15) 5,6-Diphenyl-2,3-Dihydro-1,4-Diazin (Diphenyldihydropyrazin). Sm. 160—161° (B. 20, 268). — III, 283.

16) 5-Methyl-2- $[\beta$ -Phenyläthenyl]benzimidazol. HCl, (2HCl, PtCl₄ + $4^{1}/_{2}$ H₂O) (A. **273**, 315). — IV, 1031.

17) 4-Phenylamido-2-Methylchinolin. Sm. 150-151° (B. 20, 953). -IV, *931*.

18) 2-Phenylamido-4-Methylchinolin. Sm. 129—130°. (2HCl, PtCl₄) (A. 236, 103). — IV, 1033. 19) 4-Methyl-2-[2-Amidophenyl]chinolin (Isoflavanilin). 2HCl (B. 26,

1353). **— IV**, 1029.

20) 3-Methyl-2-[3-Amidophenyl]chinolin. Sm. 115° . $2HCl + 2H_{\circ}O_{\bullet}$

(2 HCl, PtCl₄ + 2 H₂O) (B. 19, 533). — IV, 1029. 21) 4-Methyl-2-[4-Amidophenyl]chinolin (Flavanilin; p-Amidoflavolin). Sm. 97°. $HCl + 1\frac{1}{2}H_2O$, 2HCl, $(2HCl, PtCl_4)$ (B. 15, 1500; 16, 68, 73; 19, 1038). — IV, 1029.

22) 2-[3-Amido-4-Methylphenyl]chinolin (Pseudoflavanilin). Sm. 112°. $HCl + 2H_2O$, 2HCl, $(2HCl, PtCl_4 + 3H_2O)$ (M. 9, 99). — IV, 1030.

23) 5 oder 7-[2, 6-Dimethyl-4-Pyridyl]chinolin (Lutidylchinolyl). Sm. 107 bis 109°. (2HCl, PtCl₄), (2HCl, 2AuCl₈) (G. 17, 474). — IV, 1032.

24) 2-Aethyl-4-Phenyl-1, 3-Benzdiazin. Sm. 83°. (2HCl, PtCl₄), Pikrat (B. **25**, 3086). — **IV**, 1030. 25) **4-Methyl-2-Benzyl-1**, 3-Benzdiazin. Sm. 76° (B. **26**, 1393). — **IV**, 1030.

26) 2,6 oder 2,7-Dimethyl-3-Phenyl-1,4-Benzdiazin. Sm. 46—48°; Sd. 295°₂₁₆ (B. **22**, 2130). — IV, 1031.

27) 1-[β -Phenyläthyl]-2, 3-Benzdiazin. Sm. 112,5—113,5°. HJ, HNO₃ (B. 30, 3037). — IV, 1031.

28) Tetrahydro-α-Naphtinolin. Sm. 211—212°. HCl+2H₂O, (2HCl,PtCl₄), (HCl, AuCl₃), H₂SO₄, Pikrat (B. 27, 2252). — IV, 1032.
 29) Indolin (Diindol). Sm. 245°. HCl, (2HCl, PtCl₄), H₂SO₄, Pikrat (J. 1877, 511, 1880, 586, 7 m. 18, 550).

511; **1880**, 586; *J. r.* **13**, 559). — **11**, 1623. 30) Base (aus 2-Amidodiphenylamin u. Biacetyl). Sm. 89—90° (B. **25**, 1627).

- IV, 564.
 31) Nitril d. β-Imido-αγ-Diphenylpropan-α-Carbonsäure. Fl. (J. pr. [2] 52, 114; [2] 55, 351 Anm.).

32) Nitril d. γ-Phenylamido-α-Phenylpropen-γ-Carbonsäure. Sm. 130 C16H14N2 bis 131° (B. 17, 2115; 25, 2052). — II, 1425.

33) Verbindung (Base aus Acetanilid). HCl (A. 184, 96). — II, 362.

34) Verbindung (Base aus Benzildioxim). Sm. 158-159°. (2HCl, PtCl₄) (B. **21**, 3515; **23**, 3590). — **III**, 292. C 73,3 — H 5,3 — N **2**1,4 — M. G. 262.

Anhydro-γδ-Di[Phenylhydrazon]-β-Ketobutan. Sm. 112° (B. 21, 1701). — IV, 763.
 4-Amido-1-[4-Amidophenyl]azonaphtalin. Sm. 159-160°. (2 HCl,

PtCl₄) (Soc. 43, 432). — IV, 1396.

3) 2-[2,4-Diamidophenyl]azonaphtalin (B. 16, 2031). — IV, 1398.

4) 4-Phenylazo-5-Methyl-l-Phenylpyrazol. Sm. 1120 (B. 21, 1701). 5) 3,6-Dibenzyl-1,2,4,5-Tetrazin. Sm. 74° (76°) (B. 30, 1889; 31, 313;

A. 298, 24). — IV, 1294. 6) 3,6-Di[4-Methylphenyl]-1,2,4,5-Tetrazin. Sm. 233° (B. 27, 3289;

 $C_{16}H_{14}N_4$

 $\mathbf{C}_{16}\mathbf{H}_{14}\mathbf{Cl}_{2}$

 $\mathbf{C}_{16}\mathbf{H}_{15}\mathbf{N}$

- A. 298, 17). IV, 1294.
 7) Di[4-Methylphenyl]-?-Tetrazin. Sm. 185° (Soc. 55, 247). IV, 1294. 8) 2,2'-Bi[5-Methylbenzimidazol] (Anhydrooxalyltoluylendiamin). Sm. 193°. $2 \text{HCl}, \text{H}_2 \text{SO}_4 + 2 \text{H}_2 \text{O}, \text{Acetat} (A. 209, 373; B. 8, 474; 15, 2692). --$ IV, 615.
- 9) Nitril d. β-Phenylimido-α-Methylphenylhydrazonpropionsäure.
 Sm. 150-151° (B. 21, 3004). IV, 757.
 C 66,2 H 4,8 N 29,0 M. G. 290.

 $C_{16}H_{14}N_{6}$ 1) Phenanthrenchinondiguanyl? 2 HCl (B. 19, 762). — III, 445. C 55,5 — H 4,0 — N 40,5 — M. G. 34 \hat{G} . C16H14N10

- Verbindung + H₂O (aus 3,4-Diamido:1-Phenyl-1,2,5-Triazol). Sm. 128° (175° wasserfrei) (A. 295, 144). IV, 1314.
 ββ-Dichlor-αα-Di[β-Methylphenyl]äthen. Sm. 92° (B. 7, 1191; J. pr.
- 2] **47**, 78; A. **271**, 9). II, 251.
- 1) $\alpha \alpha \beta \beta$ -Tetrachlor- $\alpha \beta$ -Di[4-Methylphenyl] \ddot{a} than. Sm. 183° (A. 279, 335). $C_{16}H_{14}Cl_4$ $\mathbf{C}_{16}\mathbf{H}_{14}\mathbf{Br}_{2}$ 1) $\gamma \delta$ -Dibrom- $\alpha \delta$ -Diphenyl- α -Buten. Sm. 147—148° u. Zers. (G. 15, 107; **20**, 154). — II, 275.
 - 2) 9,10-Dibrom 9,10-Dimethyl-9,10-Dihydroanthracen (A. 235, 309).
- II, 252. 1) $\alpha\beta\gamma\delta$ -Tetrabrom- $\alpha\delta$ -Diphenylbutan. Sm. 230° u. Zers. (G. 15, 107; $\mathbf{C}_{16}\mathbf{H}_{14}\mathbf{Br}_{4}$ 20, 154). — II, 275. C16H14S2
 - Dithiënyl-3-Methylphenylmethan. Sd. 210—220°₂₀ (B. 30, 2038).
 C 86,9 H 6,8 N 6,3 M. G. 221. 1) 1-Benzylidenamido-2, 3-Dihydroinden. Sm. 74-75° (Soc. 71, 251).
 - 2) ?-Dimethylamidoanthracen (Dimethylanthracylamin). Sm. 155% (2HCl, $PtCl_4$) (B. 16, 1637). — II, 639.
 - 3) 2,5-Dimethyl-1-[1-Naphtyl]pyrrol. Sm. 123°; Sd. 300-305°₇₅₇ (A. 236, 308). **— IV**, *72.*
 - 4) 2, 5-Dimethyl-1-[2-Naphtyl]pyrrol. Sm. 71°; Sd. 330°, (A. 236, 306).
 - IV, 72. 5) 3,7-Dimethyl-2-Phenylindol. Sm. 92—94° (Bl. [3] 17, 75). IV, 420.
 - 6) 3-Isopropyl-β-Naphtochinolin. Sm. 77°. (HCl, AuCl₃) (B. 27, 2022). • IV, 420.
 - 7) Phenylnaphtylcarbazolin. HCl, (2HCl, PtCl₄), HJ (A. 202, 9). -
 - 8) 5-Propylakridin. Sm. 72—75°. H₂SO₄ (G. 21 [2] 232). IV, 420.
 9) Nitril d. αα Diphenylbuttersäure. Sd. 183°₁₈ (A. 275, 85). —
 - II, 1469. 10) Nitril d. $\beta\beta'$ -Diphenylisobuttersäure. Sm. 89—91° (B. 21, 1328; 25, 3028). — II, 1470.
 - 11) Nitril d. α -Methyl- $\alpha\beta$ -Diphenylpropionsäure. Sd. 335—337° (A. 250, 137). — II, 1470.
 - 12) Nitril d. α-[2-Methylphenyl]-β-Phenylpropionsäure. Sd. 340-350° u. ger. Zers. (B. 21, 1333). — II, 1470.
 13) Nitril d. α-[3-Methylphenyl]-β-Phenylpropionsäure. Sm. 53°; Sd. 350—360° u. ger. Zers. (B. 21, 1332). — II, 1470.

14) Nitril d. α-[4-Methylphenyl]-β-Phenylpropionsäure. Sm. 79° (B. 21, 1334). — II, 1470.

 $C_{16}H_{15}N_{5}$

 $C_{16}H_{15}N_3$ C 77.1 — H 6.0 — N 16.9 — M. G. 249.

1) 5-Imido-2-Phenylimido-1-Phenyltetrahydropyrrol (Diphenylsuccinimidin). $HCl + \frac{1}{2}H_2O$, (2 HCl, PtCl₄) (B. **20**, 1856). — II, 352. 2) 5-Imido-1-Phenyl-3-[4-Methylphenyl]-4,5-Dihydropyrazol.

169° (*J. pr.* [2] 52, 111; [2] 58, 144). — IV, 697. 3) P-[2-Naphtyl]azo-l-Aethylpyrrol. Sm. 74° (*B.* 19, 2258). — IV, 1483. 4) 5-[β -Phenyläthyl]-1-Phenyl-1,2,4-Triazol. Sd. 340—350°₄₅. (2HCl, PtOl₄ + H₂O) (*B.* 30, 2436). — IV, 1163. 5) 2,5-Di [4-Methylphenyl]-1,3,4-Triazol. Sm. 248° (241°). Ag (*B.* 27,

3284, 3287; A. 298, 12). — IV, 1188. 6) 2,5-Dibenzyl-1,3,4-Triazol. Sm. 147°. Ag (B. 30, 1887; A. 298, 21). **- IV**, 1188.

7) 3-Benzylidenamido-5, 7-Dimethylindazol. Sm. 183,5-184,5° (A. 305,

8) 4-Phenylhydrazido-2-Methylchinolin. Sm. 134—135° (B. 26, 2227). **- IV**, 800.

9) 2-Phenylhydrazido-4-Methylchinolin. Sm. 1970 (B. 25, 2706). IV, 1163.

10) Nitril d. α-Phenylhydrazon - α-Phenylpropan-β-Carbonsäure. Sm.

100—104° (J. pr. [2] 55, 308). 11) Nitril d. β -Phenylhydrazon - β -[4-Methylphenyl] propionsäure. Sm.

153° (J. pr. [2] 58, 144). C 69,3 — H 5,4 — N 25,3 — M. G. 277.

1) Nitril d. αβ-Di[Phenylhydrazon]propan-α-Carbonsäure. Sm. 162 bis 170° (J. pr. [2] 52, 95).

2) Nitril d. β -Phenylhydrazon- α -Methylphenylhydrazonpropionsäure. Sm. 181° (B. 21, 3004). — IV, 757.

 $\mathbf{C}_{16}\mathbf{H}_{15}\mathbf{Cl}$ 1) α -Chlor- $\alpha\beta$ -Diphenyl- α -Buten. Fl. (B. 25, 2237). — II, 252.

1) α -Chlor- α β -Diphenyl- α -Buten. Fr. (B. 25, 225). α 1, 252. 2) isom. α -Chlor- α β -Diphenyl- α -Buten. Sm. 60°; Sd. 328° (Soc. 71, 226). 3) β -Chlor- α α -Diphenylbutan. Sm. 60° (A. 279, 334). 1) β -Trichlor- α α -Diphenylbutan. Sm. 80° (B. 7, 1420). — II, 240. 2) α α β -Trichlor- α β -Diphenylbutan. Sm. 90—91° (Soc. 71, 226). 3) β β β -Trichlor- α α -Di[4-Methylphenyl]äthan. Sm. 89° (B. 7, 1191;

 $\mathbf{C}_{16}\mathbf{H}_{15}\mathbf{Cl}_{3}$

J. pr. [2] 47, 77). — II, 239. C 85,7 — H 7,1 — O 7,1 — M. G. 224.

C16 H16 O

1) ?-Oxyphenyl-1, 2, 3, 4-Tetrahydronaphtalin. Sm. 129-130°: Sd. oberh. 320° (B. **24**, 179). — II, 900.

2) Aethyläther d. β -Oxy- $\alpha\alpha$ -Diphenyläthen. Sd. 178—182 $_{18}^{0}$ (A. 279) 327). — II, 1082.

3) Aethyläther d. 2-Oxy-9,10-Dihydroanthracen. Sm. 1070 (B. 26, 3071). — II, 900.

4) γ-Keto-αα-Diphenylbutan. Sm. 47,5°; Sd. 315° (Soc. 71, 678).

5) α -Keto- $\alpha\beta$ -Diphenylbutan. Sm. 58°; Sd. 323—324° (B. 21, 1299; A. **250**, 132). — III, *234*.

6) α -Keto- $\alpha \gamma$ -Diphenylbutan? Sm. 70°; Sd. 340—345° (B. 7, 1626; 13, 642). — İII, 234.

7) β -Keto- $\alpha \gamma$ -Diphenylbutan (Methyldibenzylketon). Sd. 320—326° (A. 284, 267). — $\dot{\Pi}$, $2\bar{3}4$.

8) β -Keto- α δ -Diphenylbutan. Sd. 323—324° (A. **219**, 34). — III, 234. 9) γ -Keto- β β -Diphenylbutan. Sm. 41—41,5°; Sd. 310—311° (B. 11, 1989). — III, 235.

10) α -Keto- β -Phenyl- α -[4-Aethylphenyl]äthan. Sm. 64° (B. 15, 1680). —

III. 234. 11) α -Keto- $\alpha\beta$ -Di[4-Methylphenyl]äthan (Desoxytoluoïn). Sm. 102° (97

bis 98°) (B. 22, 383; A. 279, 335; Bl. [3] 17, 509). — III, 235. 12) α -Keto- β -Phenyl- α -[2,4-Dimethylphenyl]äthan. Sd. 350° (B. 15, 1681;

24, 3541). — III, 235. 13) α -Keto- β -Phenyl- α -[2,5-Dimethylphenyl]äthan. Sd. 220—230 $^{\circ}_{26}$ (B.

24, 3541). — III, 235 14) α -Keto- β -Phenyl- α -[2,6-Dimethylphenyl]äthan? Sm. 92—93,5° (B. 15,

1681). — III, 235. 15) α -Keto- β -Phenyl- α -[3,4-Dimethylphenyl]äthan. Sm. 95°; Sd. 210 bis

 220°_{25} (B. **24**, 3540). — III, 235. 16) 4-Propyldiphenylketon. Sd. 344-346°₇₁₆ (B. **24**, 4032). — III, 235. $C_{16}H_{16}O$

 $C_{16}H_{16}O_2$

- 17) **4-Isopropyldiphenylketon.** Sd. 343°₇₈₈ (334—336°) (B. **24**, 4035; 31, 1000). — III, 236.
- 18) 2, 4, 5-Trimethyldiphenylketon. Sd. 328—329° (B. 19, 2881; 31, 1001;
- J. pr. [2] **35**, 491). III, 236. 19) **2**, **4**, **6**-Trimethyldiphenylketon. Sm. 35,5°; Sd. 318—320° (B. **16**, 966; 19, 2879; **31**, 1001; J. pr. [2] **35**, 486; A. ch. [6] **6**, 202). III, 237.
- 20) 2,2'4'-Trimethyldiphenylketon. Sd. 329-330°728 (B. 24, 4050). III, 237.
- 21) Keton (aus d. Kohlenw. C₁₈H₁₈). Sm. 120° (B. 6, 811). III, 235. 22) 2,5-Diphenyltetrahydrofuran. Sd. 320—322° (B. 21, 3057). III, 694. C 80,0 - H 6,7 - O 13,3 - M. G. 240.
 - 1) Dimethyläther d. $\alpha\beta$ -Di[2-Oxyphenyl]äthen. Sm. 136° (B. 25, 601). **- II**, 998.
 - 2) Dimethyläther d. $\alpha\beta$ -Di[3-Oxyphenyl] äthen. Sm. 93-100° (A. 277, 358). **— II**, *998*.
 - 3) Dimethyläther d. $\alpha\beta$ -Di[4-Oxyphenyl] äthen. Sm. 211° (B. 25, 603; J. pr. [2] 47, 68; A. 279, 341). — II, 998.
 - 4) Dimethyläther d. αα-Di[P-Oxyphenyl]äthen. Sm. 140° (B. 22, 1132). - II, 998.
 - 5) ?-Oxy-2,4,5-Trimethyldiphenylketon. Sm. 1870 (B. 17, 1806). III, 237.
 - 6) β -Oxy- α -Keto- $\alpha\beta$ -Di[4-Methylphenyl]äthan. Sm. 88—89° (B. 22, 380). - III, 235.
 - 7) Methyläther d. α -Keto- α -Phenyl- β -[?-Oxyphenyl]propan. Sd. 330° (B. 21, 2451). — III, 230.
 - 8) Aethyläther d. β -Oxy- α -Keto- $\alpha\beta$ -Diphenyläthan (Ae. d. Benzoïn).
- Sm. 95° (62°) (A. 155, 97; B. 26, 2415). III, 222. 9) Lapachonon. Sm. 61,5°. Pikrat (C. 1896 [1] 374). 10) αα-Diphenylbuttersäure. Sm. 173—174° (A. 275, 86). II, 1469.
- 11) $\beta \gamma$ -Diphenylbuttersäure (Pyroamarsäure). Sm. 94° (96—97°). Ag (J. 1877, 813; Soc. 71, 156). — II, 1471.
- 12) $\gamma \gamma$ -Diphenylbuttersäure. Sm. 106°. Ag (Am. 19, 645).
- 13) \$\text{\beta}\text{\beta}'\text{-Diphenylisobuttersäure}\$ (Dibenzylessigsäure). Sm. 85\(^{\text{o}}\) (87\(^{\text{o}}\)). Ca + H₂O, Ba, Ag (B. 6, 1086; 10, 759). II, 147O.
- 14) α-Methyl-α β-Diphenylpropionsäure (Benzylbydratropasäure). Sm. 126°.
- Na + 7H₂O, Ca, Ba, Cu, Ag (A. 250, 137). II, 1469. 15) α -[2-Methylphenyl]- β -Phenylpropionsäure. Sm. 95,5°. Ag (B. 21, 1333). — II, 1470.
- 16) α -[3-Methylphenyl]- β -Phenylpropionsäure. Sm. 79-80°. Ag (B. 21, 1332). — **II**, *1470*.
- 17) α -[4-Methylphenyl]- β -Phenylpropionsäure. Sm. 105°. Ag (B. 21, 1334). **— II**, *1470*.
- 18) β -[4-Methylphenyl]- β -Phenylpropionsäure. Sm. 145—146°. Ba, Ag (B. **26**, 1579). — **II**, 1469.
- 19) 1-[?-Dimethylbenzyl] benzol-2-Carbonsäure. Sm. 157—158°. Ba + H_2O (A. **234**, 237). — II, 1469.
- 20) Methylester d. αα-Diphenylpropionsäure. Fl. (B. 11, 1994). II, 1468.
- 21) Methylester d. $\alpha\beta$ -Diphenylpropionsäure. Sm. 34° (B. 21, 1313). II, 1467.
- 22) Methylester d. 4-Methyldiphenylessigsäure (B. 10, 997)
- 23) Aethylester d. Diphenylessigsäure. Sm. 57-58° (A. 171, 129). -II, 1464.
- 24) Phenylester d. 1-Isopropylbenzol-4-Carbonsäure. Sm. $57-58^{\circ}$ (A. 92, 318; J. 1858, 406). — II, 1385.
- 25) Benzylester d. β-Phenylpropionsäure. Sd. 290—300° (A. 193, 301). - II, 1357.
- 26) 1,3-Dimethylbenzylester d. Benzolcarbonsäure. Sd. 332-333° (B. 22, 123). — II, 1147.
- 27) 2,4,5-Trimethylphenylester d. Benzolcarbonsäure. Sm. 63° (J. pr. [2] **36**, 8). — **II**, 1147.
- 28) Acetat d. α-Οχy-αβ-Diphenyläthan. Fl. (A. 155, 65). II, 1079.
- 29) Acetat d. ?-Oxy-?-Methyldiphenylmethan. Sd. 245°_{34} (J. 1878, 591). - II, 898.

C18 H18 O4

C16H16O5

C18H18O9 30) Acetat d. ?-Oxy-1-[?-Methylbenzyl] benzol. Sd. 250% (J. 1879, 521). **— II**, 899.

C 75.0 - H 6.2 - O 18.7 - M. G. 256.C18 H16 O3

1) Dimethyläther d. 3,4-Dioxy-?-Benzoyl-1-Methylbenzol. Fl. (G. 28 21 288). 2) Dimethyläther d. 4-Oxyphenyl-4-Oxybenzylketon (Desoxyanisoïn).

Sm. 108—109° (95°) (A. **151**, 40; **279**, 339). — III, 227.

3) α-Oxy-αβ-Diphenylbuttersäure. Sm. 134—136° (Soc. 71, 137).
4) γ-Oxy-γγ-Diphenylbuttersäure. Sm. 145°. Ba (A. ch. [6] 22, 313).
— II, 1701.

5) β -Oxy- $\alpha\gamma$ -Diphenylpropan- β -Carbonsäure (Dibenzyloxyessigsäure; Oxatolylsäure). Sm. 156—157°. Ba + 4 H₂O, Pb + 4 H₂O, Ag (A. 113, 69; 219, 45; 284, 285; B. 13, 2219; 14, 1687). — II, 1700,

6) α-Oxypropion-4-Benzylphenyläthersäure. Sm. 100-102°. Ba+H₂O.

Pb + H_2O (B. 15, 1758; G. 12, 262). — II, 897.

7) Oxyessig-[P-Methyl-4-Benzylphenyl]äthersäure. Sm. 109-1110 (G. 11, 438). — II, 898.

8) a-Oxydiphenylessigäthyläthersäure (Aethylbenzilsäure) (A. 155, 100). - II. 1696.

9) Säure (aus Reten). Sm. 139°. Na, Ba (A. 185, 109). — II, 1702.

10) Aethylester d. α-Oxydiphenylessigsäure. Sm. 34° (A. 155, 82; B. 22, 1212, 1539). — II. 1696.

11) Aethylester d. 2 - Oxydiphenylessigsäure. Sm. 104-106° (B. 31,

12) Aethylester d. α-Oxydiphenylmethan-4-Carbonsäure. Fl. (J. 1875, 599). — II, *1698*.

13) Monacetat d. $\alpha\beta$ -Dioxy- $\alpha\beta$ -Diphenyläthan. Sm. 84° (A. 160, 190;

182, 274). — II, 1100. 14) Monacetat d. Isohydrobenzoïn. Sm. 87—88° (A. 182, 282). — II, 1102.

14) Mohacetat d. Isonydrobenzoln. Sm. 57-58 (A. 182, 202). — II, 1102.
15) Verbindung (aus Anisaldehyd). Sm. 215° (Z. 1868, 644). — II, 1118. C 70,6 — H 5,9 — O 23,5 — M. G. 272.
1) Peucedanin (Imperatorin). Sm. 81-82° (76°) (J. 1849, 475; 1854, 638; A. 5, 201; 174, 67; 176, 70; M. 19, 278). — III, 640.
2) 4,4'-Dimethyläther d. β-Oxy-α-Keto-αβ-Di[4-Oxyphenyl]äthan (Anisoïn). Sm. 109-110° (A. 151, 33; B. 14, 327; 22, 377). — III, 227.
2) Dimethyläther d. β. Dimethyläther d. Sm. 152°

3) Dimethyläther d. ?-Dioxy-?-Dimethylbiphenyldioxyd. Sm. 1530

(B. 11, 1280; 31, 1335; A. 215, 162). — II, 955.

4) Dimethyläther d. 2,4,6-Trioxy-4'-Methyldiphenylketon. Sm. 1380 B. **27**, 417). — III, 216.

5) Trimethyläther d. 2, 3, 4 [oder 3, 4, 5]-Trioxydiphenylketon. Fl. (G. 27 [2] 22).

6) Trimethyläther d. 2,4,6-Trioxydiphenylketon (Methylhydrocotoïn). Sm. 115° (113°) (A. 199, 53; B. 24, 300; 25, 1120; 27, 419, 1497; C. 1896 [1] 312). — III, 203.

7) i-Benzoylhydrocoton. Sm. 115° (A. 276, 340). — III, 204.

8) 5-Benzoat d. 3,4,5-Trioxy-1-Methylbenzol-3,4-Dimethyläther. Sm. 68° (B. **26**, 2019). — II, 1152.

9) Benzoat d. 2,4,6-Trioxy-l-Methylbenzol-P-Dimethyläther. Sm. 1180 (B. 12, 1376). — II, 1152.

10) αγ-Dioxy-βγ-Diphenylbuttersäure. Ag (B. 31, 2227)

11) isom. $\alpha\gamma$ -Dioxy- $\beta\gamma$ -Diphenylbuttersäure. Ag (B. 31, 2227).

12) $\alpha \gamma$ -Dioxy- $\alpha \gamma$ -Diphenylpropan- β -Carbonsäure (Dioxydibenzylessigsäure). Sm. 188–190° (Soc. 59, 1001). — II, 1882.

13) α -Aethoxyl-2-Oxydiphenylessigsäure. Sm. 131° u. Zers. (B. 30, 128). 14) Säure (aus Acetophenon). Sm. 99-101°. K, Ba + 31/2 H₂O (B. 20, 389).

– II, 1882.

15) Aethylester d. Dioxyessigdiphenyläthersäure. Sd. 240° 53 (B. 27, 2796). 16) Aethylester d. 4-Oxynaphtalinäthyläther-1-Ketocarbonsäure. Sm. 83°; Šd. 240—245°₁₀ (Bl. [3] **17**, 811).

17) Diäthylester d. Naphtalin-1,5-Dicarbonsäure. Sm. 123-124° (G. 26 [1] 97). C 66,7 — H 5,5 — O 27,8 — M. G. 288.

1) α-Oxy-αα-Di[P-Methoxylphenyl]essigsäure (Anisilsäure). Sm. 164°. Ba (B. 14, 327). — II, 1970.

C16H16O5

2) Aethylester d. 3, 5-Diketo-1-Phenylhexahydrobenzol-2-Ketocarbonsäure. Sm. 1310 (A. 294, 290).

3) Acetat d. Curcumin (Am. 6, 78). — III, 660.

4) 5-Benzoat-1,2,3-Trimethyläther d. 1,2,3,5-Tetraoxybenzol. Sm. 117° (C. 1896 [2] 591). C 63,2 - H 5,2 - O 31,6 - M. G. 304.

C16H16O6

1) 2',4'6'-Trimethyläther d. 3,4,2',4',6'-Pentaoxydiphenylketon (Coto-

genin). Sm. 27° (B. 26, 783). — III, 208.

2) isom. Trimethyläther d. 3,4,2,4',6'-Pentaoxydiphenylketon. Sm. 154—154,5° (B. 25, 1131). — III, 208.

3) Tetramethyläther d. Tetraoxybiphenylchinon (Cörulignon, Cedriret)

(A. 169, 221; B. 11, 335; 30, 238; 31, 615). — II, 1042. 4) Anhydrokolatannin (C. 1898 [1] 579).

5) $Di[4, 6-Dioxy-2-Methylphenyl]essigsäure (oder <math>C_{33}H_{24}O_{8}$?). Sm. 252 bis 263° (Soc. 73, 399; Am. 9, 135). — II, 962.

6) Diäthylester d. 1,4-Diketo-1,2,3,4-Tetrahydronaphtalin-2,3-Dicar-

- b) Hathlylester d. 1,4-Directo-1, 2, 3,4-Tetrahydronaphtain-2, 3-Dicarbonsäure. Sm. 63° (B. 27, 113). II, 2020.
 7) Verbindung + ½ H₂O (aus Acetaldehyd u. Pyrogallol) (B. 31, 145). C 60,0 H 5,0 O 35,0 M. G. 320.
 1) Barbaloïn + H₂O. Sm. 147° (B. 23 [2] 207; Bl. [3] 17, 847; C. 1898 [2] 118, 211, 582). III, 618.
 2) Isobarbaloïn + 3 H₂O (C. 1898 [2] 582).
 3) Homoritavin, Sm. 246° (Sa. 73, 1028).

3) Homovitexin. Sm. 245—246° (Soc. 73, 1028). 4) α-Naphtolglykuronsäure. Sm. 202—203° (B. 19, 1537). — II, 2049. 5) β -Naphtolglykuronsäure + 2H₂O. Sm. 150°. Ca + 4H₂O (B. 19, 1536).

- II, 2049.

C 52,2 - H 4,3 - O 43,5 - M. G. 368.1) Diäthylester d. 2,5-Diacetoxyl-1,4-Benzochinon-3,6-Dicarbonsäure. Sm. 174° u. Zers. (B. 22, 1287). — II, 2070. C 81,3 - H 6,8 - N 11,9 - M. G. 236.

 $C_{16}H_{16}N_2$

RICHTER, Lex. d. Kohlenstoffverb.

 $C_{16}H_{16}O_{10}$

 $C_{16}H_{16}O_7$

- 1) $\alpha\beta$ -Di[Benzylidenamido]äthan. Sm. 53—54° (B. 20, 270). III, 28. 2) $\beta\gamma$ -Di[Phenylimido]butan (Diacetyldianil). Sm. 139° (B. 21, 1415). Iİ, 447.
- 3) 4,4'-Diamido-2,2'-Diäthenylbiphenyl. Sm. 124° (B. 26 [2] 677). —

4) 4, 4'-Diäthylidenamidobiphenyl. (2HCl, PtCl₄) (B. 11, 832).

- 5) Diäthylidenbenzidin (oder $C_{18}H_{14}N_2$). (2HCl, PtCl₄) (A. 258, 376). —
- 6) β-Benzyliden-α-Allyl-α-Phenylhydrazin. Sm. 52° (B. 22, 2237). IV, 749.
- 7) Di α-Phenyläthyliden]hydrazin. Sm. 121°; Sd. oberh. 360° (J. pr. [2] 44, 167, 540). — III, 130. 8) Di [4-Methylbenzyliden]hydrazin. Sm. 154° (Bl. [3] 17, 368).

- 9) γ-Phenylhydrazon-α-Phenyl-α-Buten. Sm. 156-157° (B. 17, 576;
 20, 1099). IV, 774.
- 10) γ -Phenylhydrazon- α -Phenyl- β -Methylpropen. Sm. 137° (B. 19, 526). - IV, 755.
- 11) β -Diphenylmethylenhydrazonpropan (Diphenyldimethylazimethylen). Sm. $60,5^{\circ}$ (J. pr. [2] **44**, 205). — III, 187.
- 12) 1-Phenylhydrazon-1,2,3,4-Tetrahydronaphtalin. Sm. 84-850 (Soc **75**, 150).
- 13) 2-Phenylhydrazon-1,2,3,4-Tetrahydronaphtalin. Sm. 107,5—108° (B. 27, 1548; A. 288, 115). — IV, 774.
- 14) 1-Phenylhydrazon-2-Methyl-2, 3-Dihydroinden. Sm. 116° (B. 23, 1889). **— IV**, 774.
- 15) 1-Phenylhydrazon-4-Methyl-2, 3-Dihydroinden. Sm. 132° u. Zers. (B. 25, 2105). — IV, 774. 16) 1-Phenylhydrazon-6-Methyl-2,3-Dihydroinden. Sm. 133° u. Zers.
- (B. 25, 2105). IV, 774.
- 17) 5-Methyl-1,3-Diphenyl-4,5-Dihydropyrazol. Sm. 109° (B. 18, 316). **- IV**, 886.

18) 3-Methyl-1,5-Diphenyl-4,5-Dihydropyrazol. Sm. 114°; Sd. bei 350° u. Zers. (B. 18, 934; 20, 1098). — IV, 886.

19) 1-Phenyl-4-Benzylidentetrahydropyrazol. Sd. 280-290% (A. 274. C16H16N2 326). — IV, 480. 20) 5-Methyl-1,2-Diphenyl-4,5-Dihydroimidazol. Sm. 65°; Sd. 192°₁₉.

 $(2 \text{ IICl}, \text{PtCl}_4)$ (B. 28, 1667, 1669). — IV, 886.

21) 2-Methyl-4,5-Diphenyl-4,5-Dihydroimidazol. Sm. 162°. (2 HCl. $PtCl_4 + 2H_2O)$ (B. 28, 3177). - IV, 978. 22) 2.5-Dimethyl-1-Benzylbenzimidazol. Sm. 144°. (2HCl, PtCl₄) (A. 273,

285). **— IV**, 883. 23) 2.5-Dimethyl-1-[4-Methylphenyl]benzimidazol. Sm. 94-95°. (2HCl,

PtCl₄) (B. **26**, 187). — **IV**, 883. 24) P-Dimethyl-2-[4-Methylphenyl]benzimidazol. Sm. 217°. HCl, HNO...

H₂SO₄ (A. 205, 125; 210, 333). — IV, 1017. 25) 5-Methyl-1-Aethyl-2-Phenylbenzimidazol. (2HCl,PtCl₄) (B. 26, 201).

- IV, 1014.

26) 2-Methyl-3-[4-Methylphenyl]-3,4-Dihydro-1,3-Benzdiazin. 104—106° (J. pr. [2] 47, 361). — IV, 884. 27) Hexahydro- μ -Naphtinolin + $\frac{1}{2}$ H₂O. Sm. 128° (wasserfrei) (B. 27, 2259).

- IV, 1018. 28) Nitril d. β -[1-Naphtyl]imido- α -Methyl-norm. Valeriansäure. Sm. 70°: Sd. $425-430^{\circ}$ (Bl. [3] 1, 552). — II, 611.

29) Nitril d. β -[2-Naphtyl]imido- α -Methyl-norm. Valeriansäure. Sm. 116°. — II, 624.

 $C_{16}H_{16}N_4$

C 72,7 - H 6,1 - N 21,2 - M. G. 264. 1) 5-Phenylhydrazon-2-Phenyl-3,4,5,6-Tetrahydro-1,3-Diazin.

173-175° (B. **25**, 1566). — IV, 767.
2) 5,6-Dimethyl-2,3-Diphenyl-2,3-Dihydro-1,2,3,4-Tetrazin. Sm. 169°

u. Zers. (B. 21, 2755). — IV, 1307. 3) 3,6-Dibenzyl-1,2-Dihydro-1,2,4,5-Tetrazin. Sm. 158—160° (B. 30,

1888; 31, 312; A. 298, 22). — IV, 1290. 4) 3.6-Di[4-Methylphenyl]-1,2-Dihydro-1,2,4,5-Tetrazin. Sm. 235° u.

Zers. (B. 27, 3285; A. 298, 14). — IV, 1290. 5) 1,4-Di[2-Methylphenyl]-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 141°.

HCl (Soc. 57, 52). — IV, 1234. 6) 1,4-Di[4-Methylphenyl]-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 185°.

HCl (Soc. 55, 247; 57, 50). — IV, 1234.
7) 3,6-Dibenzyl-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 162°. HCl, HNO₃

(B. 30, 1888; A. 298, 22). — IV, 1290. 8) 3,6-Di[4-Methylphenyl]-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 295°

 $(2 \text{ HCl}, 2 \text{ AuCl}_3)$ (B. 27, 3287; A. 298, 15). — IV, 1291.

9) 3-[2,4-Dimethylphenyl]azo-5-Methylindazol. Sm. $228-229^{\circ}$ (A.

305, 365). 10) Base (aus Formaldehyd u. 1,2-Diamidobenzol). Sm. 144°. 2 HCl (B. 25, 2712). — IV, 563. C 65,7 — H 5,5 — N 28,8 — M. G. 292.

 $\mathbf{C}_{16}\mathbf{H}_{16}\mathbf{N}_{6}$

1) Glyoxalendibenzenylhydrazidin. Sm. bei 220° u. Zers. (B. 27, 995; A. 297, 247). — II, 1213. 2) $\alpha \beta$ -Di[Ímidoamidomethylimido]- $\alpha \beta$ -Diphenyläthan (Benzildiguanyl).

(2HCl, PtCl₄) (B. 19, 763). — III, 284.

3) Benzalcarbohydrazimin (s-Dibenzylidendihydrazidodiimidoäthan). Sm. 218° (J. pr. [2] **50**, 254). — IV, 1330. 1) $\beta\beta$ -Dichlor- $\alpha\alpha$ -Di[4-Methylphenyl]äthan. Sm. 80° (A. **279**, 334).

 $\mathbf{C}_{16}\mathbf{H}_{16}\mathbf{Cl}_{2}$ $\mathbf{C}_{16}\mathbf{H}_{16}\mathbf{Br}_{2}$

- 1) $\alpha\beta$ -Dibrom- $\alpha\delta$ -Diphenylbutan. Sm. 83° (B. 23, 2858). II, 240. 2) $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[4-Methylphenyl]äthan. Sm. 207—209° (203°) (B. 6, 1505; **18**, 1948). — **II**, 251. 3) Distyroldibromid. Sm. 238° (B. **22**, 2256). — **II**, 241.

4) isom. Distyroldibromid. Sm. 1020 (A. 216, 190). — II, 165.

5) isom. Distyroldibromid (A. 135, 122).
1) Distyrolsulfid. Sm. 150—151° (J. 1880, 404). — II, 1098.
1) Di[1,3-Dimethylphenylen]-4,5-Disulfid. Sm. 118° (B. 22, 910). — C16H16S $C_{16}H_{16}S_2$ II, 968. © 86,1 - H 7,6 - N 6,3 - M. G. 223.

 $C_{16}H_{17}N$

1) Allylphenylbenzylamin. Sd. 215-225°₄₂. HCl (B. **32**, 521). 2) 4-Phenylimidomethyl-l-Isopropylbenzol (Cuminalanilin). Sd. 206 bis 207°₁₅ (B. 31, 2615 Anm.).

 $C_{16}H_{17}N$

3) 5-Phenylimidomethyl-1,2,4-Trimethylbenzol. Sm. 62°; Sd. 206°, s (Bl. [3] **17**, 370).

4) 2-Phenylimidomethyl-1,3,5-Trimethylbenzol. Sm. 48-49°; Sd. 202°, 10. (Bl. [3] 17, 372).

5) 2-[2-Methylbenzyl]-1, 3-Dihydroisoindol. Fl. HCl (B. 31, 1158). 6) 4-Phenyl-1-Methyl-1,2,3,4-Tetrahydrochinolin. Fl. Pikrat (Sm.

222—224°) (B. 28, 1043). — IV, 400. 7) 6-Phenyl-1-Methyl-1,2,3,4-Tetrahydrochinolin. HCl, HJ, Pikrat (A. 230, 24). - IV, 400.

8) 4-Phenyl-2-Methyl-1, 2, 3, 4-Tetrahydrochinolin. Sm. 66-67% HOL (B. 28, 1044). — IV, 401.

9) 1,3,6,8-Tetramethylcarbazol. Sm. 128-129°. Pikrat (B. 28, 2803). — IV, 401. C 76,5 — H 6,8 — N 16,7 — M. G. 251.

C, H, N,

- 1) γ -Phenylhydrazon- α -[3-Amidophenyl]- β -Methylpropen. Sm. 157° (B. 19, 1249). — IV, 755. 2) 1-[1,2,3,4-Tetrahydro-1-Naphtyl]amidodiazobenzol. Pikrat (B. 22,
- 966). IV, 1574. 3) 1-[1,2,3,4-Tetrahydro-2-Naphtyl]amidodiazobenzol. Pikrat (B. 21,
- 1112). IV, 1574.

4) ?-Phenylazo-5-Amido-1,2,3,4-Tetrahydronaphtalin (B. 22, 626, 2069).

- IV, 1389.
5) 3,5-Di[4-Methylphenyl]-4,5-Dihydro-1,2,4-Triazol (p-Ditolenylimidin).
Sm. 161°. HCl + H₂O, (HCl, AuCl₃) (B. 27, 3290; A. 298, 18). - IV, 1185.

6) 6-Methyl-1-[4-Dimethylamidophenyl] benzimidazol. Sm. 110-1110 (Soc. 65, 883). — IV, 1184. 7) 8-Phenylazo-6-Methyl-1,2,3,4-Tetrahydrochinolin. Sm. 74,5° (B.

24, 2069). — IV, 1484.

8) 4,6-Dimethyl-2-[2,4-Dimethylphenyl]-2,1,3-Benztriazol. Sm. 83 bis 85° (B. 21, 544). — IV, 1151.

9) Nitril d. γγ-Di[Phenylamido] buttersäure. Sm. 102—103° (A. ch. [6] 16, 159). — II, 444.
 C 68,8 — H 6,1 — N 25,1 — M. G. 279.

 $C_{16}H_{17}N_5$

1) 2,4,2',4'-Tetramethyl-5-Diazoazobenzolimid. Sm. 77° (B. 21, 542). — IV, 1533. C 62,5 — H 5,5 — N 31,9 — M. G. 307.

 $C_{16}H_{17}N_{7}$

1) 3-Amido-4-[?-Dimethylamidophenyl]-1-Phenyl-1, 2, 5-Triazol. Sm. 243° u. Zers. (A. 295, 151). — IV, 1314.

 $\mathbf{C}_{16}\mathbf{H}_{17}\mathbf{Cl}$ $C_{16}H_{18}O$

1) β -Chlor- $\alpha \alpha$ -Di[4-Methylphenyl] äthan (B. 7, 1413). — II, 239. C 85,0 - H 7,9 - O 7,1 - M. G. 226.

- 1) P-Oxy-4-Isopropyldiphenylmethan. Sd. 300° (J. 1875, 438). II, 899.
- 2) α -Oxy- β -Phenyl- α -[4-Aethylphenyl] äthan, Sd. oberh. 350° (B. 15, 1681). — II, 1081.

3) α -Oxy- $\alpha\beta$ -Di[4-Methylphenyl]äthan. Sm. 148° (A. 279, 336). — II, 1081.

4) α-Oxy-2,4,6-Trimethyldiphenylmethan. Sm. 34° (A. ch. [6] 6, 209). **II**, 1081.

5) Methyläther d. α-Phenyl-α-[?-Oxy-?-Methylphenyl]äthan. Sm. 63°

C16H18O2

(B. 24, 3899). — II, 899, C 79,3 — H 7,4 — O 13,2 — M. G. 242. 1) αδ-Dioxy-αδ-Diphenylbutan. Sm. 93—94° (B. 28, 3034). 2) βγ-Dioxy-βγ-Diphenylbutan (Acetophenonpinakon). Sm. 120° (B. 4, 147; 6, 1005; 10, 1714; 13, 643). — II, 1103. 3) Diäthyläther d. 4,4'-Dioxybiphenyl. Sm. 174—176° (B. 22, 336). —

II, 988.

4) Phenyläther-2,4-Dimethylphenyläther d. $\alpha\beta$ -Dioxyäthan. Sm. 76 bis 77° (B. 29, 2403).

5) Di[2-Methylphenyl] äther d. $\alpha\beta$ -Dioxyäthan. Sm. 89° (A. 217, 42). • II, 737.

6) $\mathbf{Di}[\mathbf{4}^{-}\mathbf{M}$ ethylphenyl] äther d. $\alpha\beta$ -Dioxyäthan. Sm. 134,5°; Sd. 297° (B. 2, 625; 24, 196). — II, 748.

Verbindung (aus Cuminol) (A. 137, 104). - III, 55.

8) Verbindung (aus Camphersäure u. Benzol). Fl. (B. 27 [2] 670).

C16H18O4

 $C_{16}H_{18}O_{6}$

 $C_{16}H_{18}O_7$

 $C_{16}H_{18}O_{8}$

 $C_{16}H_{18}O_{9}$

 $C_{16}H_{18}O_{10}$

 $C_{16}H_{18}N_2$

C 74.4 - H 7.0 - O 18.6 - M. G. 258. $C_{16}H_{18}O_3$

1) Dimethyläther d. α-Oxy-αβ-Di[4-Oxyphenyl]äthan. Sm. 170° (A. 279, 340). — II, 1114.

2) Aethylester d. Säure C₁₄H₁₄O₃ (aus Benzylidenaceton u. Essigester). Sm.

94° (B. 27, 2058). — II, 1693. 3) Acetat d. Verbindung $C_{14}H_{16}O_2$ (aus Anethol). Sm. 40° (B. 13, 148). - II. 852.

4) Verbindung (aus Anethol). Sm. 87° (B. 13, 147). — II, 852.

5) Verbindung (aus 1, 2-Di[Oxymethyl] benzol). Fl. (B. 19, 1540). — II, 1096. C 70.1 - H 6.5 - O 33.4 - M. G. 274.

1) Phtalylpinakon $(\alpha \beta - \text{Dioxy} - \alpha \beta - \text{Di}[2 - \text{Oxymethylphenyl}] \ddot{a} than)$. Sm. 1970 (B. 10, 1448). — II, 1557.

 Dimethyläther d. s-Di[2,5-Dioxy-1-Methyl]-P-Biphenyl. Sm. 173° (A. 215, 161; B. 11, 1281). — II, 955.
 4,4'-Dimethyläther d. αβ-Dioxy-αβ-Di[4-Oxyphenyl]äthan (Hydranisoïn). Sm. 172° (168°) (A. 151, 38; Z. 1867, 678; 1868, 643). — II, 1118.

4) 4,4'-Dimethyläther d. isom. $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 125° (110°) (A. 151, 42; Z. 1867, 679; 1868, 644). — II, 1118.

5) Di[2-Methoxylphenyläther] d. αβ-Dioxyäthan. Sm. 136—137° (130°) (C. 1896 [1] 543; 1897 [2] 481).

6) 5-Isopropyl-2-Methyl-1,4-Benzochinonhydrochinonhemiacetal. Sm. 136—137° (Am. 18, 20). — III, 365.

7) Methylester d. 6-Oxy-4-Keto-1,5-Dimethyl-2-Phenyl-1,2,3,4-Tetrahydrobenzol-3-Carbonsäure. Sm. 1850 (A. 294, 296).

8) Methylester d. 2,6-Diketo-1,3-Dimethyl-4-Phenylhexahydrobenzol-

5-Carbonsäure. Sm. 185° (A. 294, 297).

9) Verbindung (aus Orcin). Sm. 135° (B. 27, 2894).

C 66,2 — H 6,2 — O 27,6 — M. G. 290.

 $C_{16}H_{18}O_5$ 1) Di[6-Oxy-3-Oxymethylbenzyl]äther. Zers. bei 150° (C. 1898 [2] 18). 2) Aethylester d. 6-Oxy-4-Keto-2-[4-Methoxylphenyl]-1,2,3,4-Tetra-

hydrobenzol-3-Carbonsäure. Sm. 160°. Na (A. 294, 294). C 62,7 - H 5,9 - O 31,4 - M. G. 306. 1) Crocin + $\frac{1}{2}$ H₂O. Pb (Z. 1867, 555). - III, 602.

2) 3,3'-Dimethyläther d. $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[3,4-Dioxyphenyl]äthan. Sm. 222—225° u. Zers. (B. 8, 1125). — II, 1124.

222—225° t. Zers. (B. 8, 1125). — II, 1124.

3) Tetramethyläther d. α-Hexaoxybiphenyl (Hydrocörulignon). Sm. 190°. Na₂, K₂ + 4H₂O (A. 169, 226; B. II, 1623). — III, 1041.

4) Homohydroquercinsäure (A. 263, 122). — III, 681.

5) αγ-Lakton d. α-Oxy-α-Benzoxyl-ββ-Dimethylbutan-αγ-Dicarbonsäure-α-Monomethylester. Sd. 200°₂₀ (B. 27, 2135; 28, 2162).

6) Diacetat d. Podophylloresin. Sm. 198° (Soc. 73, 221).

C 59,6 — H 5,6 — O 34,8 — M. G. 322.

1) Barbaloin (B. 8, 1600). I 1872, 481, 482, 1876, 873) — III, 618

1) Barbaloïn (B. 8, 1600; J. 1872, 481, 482; 1876, 873). — III, 618.

2) Trimethylester d. Benzol-1-Carbonsäure-3-Ketocarbonsäure-4- Isopropyl-α-Carbonsäure] (Tr. d. Iregenontricarbonsäure). Sm. 127—1280 (B. **26**, 2685). — II, 2048. C 56,8 — H 5,3 — O 37,9 — M. G. 338.

1) Diäthylester d. 1,2-Phtalyloxyessigsäure. Fl. (A. 208, 273). -II, 1794.

2) Diäthylester d. 2,5-Diacetoxylbenzol-1,4-Dicarbonsäure. Sm. 1540

(A. 219, 81; Am. 12, 416). — II, 2002. 3) Verbindung (aus d. Trimethyläther d. 5-Amido-1,2,3-Trioxybenzol). Sm. 243—244° (\check{G} . 27 [2] 355). C 54,2 — H 5,1 — O 40,7 — M. G. 354.

1) Diäthylester d. Diacetylketacetsäure. Sm. 107° (A. **269**, 39). — I, 848. C 51,9 — H 4,8 — O 43,2 — M. G. 370.

1) Fraxin (J. 1857, 525; 1859, 578; 1860, 556; 1863, 589). — III, 582. 2) Tetramethylester d. 3,6-Dioxybenzoldimethyläther-1,2,4,5-Tetra-

carbonsäure. Sm. 135° (A. **258**, 290). — II, 2095. C 80,6 — H 7,6 — N 11,8 — M. G. 238. 1) α -Phenylimido- α -Aethylphenylamidoäthan (Aethyldiphenyläthanamidin). Fl. (J. 1865, 415). — II, 347.

C16 H18 N2

C18 H18 N4

- 2) Di[2-Methylphenyl]acetamidin. Sm. 136° (140,5°). HCl, (2HCl, PtCl, (B. 10, 1262; 16, 148; A. 214, 208). - II, 459.
- 3) Di[4-Methylphenyl]acetamidin. Sm. 121-121,5°. HCl, (2HCl, PtCl₄) (A. 184, 364; 214, 203; J. 1865, 415; B. 9, 1214; 16, 148; 22, 3307; G. 24 [1] 449). — II, 488.
- 4) 2-Methylphenyl-4-Methylphenylacetamidin. Sm. 143—144° (140°; 142—143°) (B. 16, 148; A. 286, 355). II, 488.
 5) Dimethylendi-p-Toluidin. Sm. bei 90°. 2 HCl, (2 HCl, AuCl₃), 2 HBr,
- H_2SO_4 (A. **256**, 296). II, 510.
- 6) p-Dimethylenditoluidin. Sm. 119-125° (C. 1898 [1] 987).
- 7) Di-o-Xylylendiimin. Sm. 79-80°; Sd. 130-135°₁₂. HCl, 2HCl, HBr, 2 Pikrat (B. **24**, 2404). — **IV**, 996.
- 8) s-Di[2,3-Dimethylphenyl]hydrazin. Sm. 139—141° (B. 21, 3140). IV, 1503.
- 9) s-Di[2,4-Dimethylphenyl]hydrazin. Sm. 120-1220 (B. 21, 3142). IV, 1503
- 10) s-Di [2, 5-Dimethylphenyl] hydrazin. Sm. 145° (B. 21, 3143). IV, 1503.
- 11) s-Di[3,4-Dimethylphenyl]hydrazin. Sm. 106—107° (B. 21, 3141). IV, 1503.
- 12) s-Di[3,5-Dimethylphenyl]hydrazin. Sm. 124—125° (B. 21, 3142). IV, 1503.
- 13) 4-Isopropylbenzylidenphenylhydrazin. Sm. 127-129 (A. 248, 101). - IV, 754.
- 14) 2,4,6-Trimethylbenzylidenphenylhydrazin (B. 24, 3544). IV, 754.
- 15) α -Benzyliden- β -[2, 4, 5-Trimethylphenyl]hydrazin. Zers. bei 100° (Soc. 57, 55). - IV, 814.
- 16) α-Phenylhydrazon-α-[3,4-Dimethylphenyl]äthan. Sm. 112° u. Zers. (Soc. 63, 80). — IV, 773.
- 17) 2,2'-Diäthylazobenzol. Sm. 46,5° (B. 17, 473). IV, 1388.
- 18) 4,4'-Diäthylazobenzol. Sm. 63°; Sd. oberh. 340° (B. 17, 475). IV, 1388.
- 19) **2,4,5,4'-Tetramethylazobenzol.** Sm. 58° (B. **31**, 994). **IV**, 1388. 20) **2,3,2',3'-Tetramethylazobenzol.** Sm. 110—111° (B. **21**, 3139). IV, 1386.
- 21) 2,4,2',4'-Tetramethylazobenzol. Sm. 129° (B. 17, 476; 21, 3141). IV, 1386.
- **22) 2, 5, 2', 5'-Tetramethylazobenzol.** Sm. 119° (Z. 1865, 312; B. 21, 3143; J. r. 14, 327; 19, 120). — IV, 1387.
- 23) 2,4,3',5'-Tetramethylazobenzol. Sm. $46-47^{\circ}$ (B. 21, 543). IV, 1387.
- 24) 3,4,3',4'-Tetramethylazobenzol. Sm. 140-141° (B. 21, 3140; C. 1898) [2] 776). — IV, 1386. 25) 3,5,3',5'-Tetramethylazobenzol. Sm. 136—137° (B. 21, 3142). —
- IV, 1387.
- 26) 1-Phenyl-2-Benzyltetrahydropyrazol. Sd. 225040 (A. 274, 330). IV, 479.
- 27) 1,4-Diphenylhexahydro-1,4-Diazin (Diäthylendiphenyldiamin; Diphenylpiperazin). Sm. 163,5°; Sd. 300° u. Zers. 2HCl, (2HCl, PtCl₄) (J. 1858, 353; **1859**, 388; B. **22**, 1778). — II, 344.
- 28) **2,3-Diphenylhexahydro-1,4-Diazin.** Sm. 122—123°. 2 HCl, (2 HCl,
- PtCl₄ + 1 /₂H₂O) (Soc. 55, 101). IV, 996. 29) 1-[3-Amidobenzyl]-1,2,3,4-Tetrahydrochinolin. Sm. 82° (A. 259,
- 52). IV, 639. 30) 3-Methyl-2-[3-Amidophenyl]-1,2,3,4-Tetrahydrochinolin (B. 19, 535). — IV, 996.
- 31) Verbindung (Base aus Benzonitril u. Zinkäthyl). HCl (Soc. 37, 563). II, 1211.
- 32) Base (aus Acetaldehyd u. Anilin). Sm. 126°; Sd. 300° (B. 25, 2030, 2072; 27, 1300; 29, 2977). — II, 442.
- 33) isom. Base (aus Acetaldehyd u. Anilin). Sm. 85,5° (B. 27, 1299; 29, 2977). C 72,2 - H 6,8 - N 21,0 - M. G. 266.
- 1) αβ-Di[Phenylhydrazon] butan (Osazon d. Aethylketol). Sm. 116° (A. 288, 20). — IV, 758.
- 2) αδ-Di[Phenylhydrazon] butan. Sm. 124—125° (B. 23, 1784). IV, 758.

3) β_{γ} -Di[Phenylhydrazon] butan. Sm. 242° (239°) u. Zers. (B. 20, 3164; $C_{18}H_{18}N_4$ 21, 2754; 28, 2038; 31, 2124; J. pr. [2] 49, 405; A. 247, 222; 249, 203). - IV, 780.

4) β-Phenylhydrazon-α-Methylphenylhydrazonpropan. Sm. 151-1520

(Soc. 53, 527). — IV, 758.

5) $\alpha\beta$ -Di[Methylphenylhydrazon] äthan (Glyoxalmethylphenylosazon). Sm. 221—222° (217—218°) (B. 30, 2877; A. 253, 17). — IV, 755. 6) o-Toluidineyanid. 2HCl, 2HNO₈ (Bl. 41, 128). — II, 474. 7) m-Toluidineyanid. Sm. 200°. 2HCl, 2HNO₈ (Bl. 41, 129). — II, 479.

8) p-Toluidineyanid (p-Ditolyldiamidodiimidoathan). 2HCl, 2HNO3, 2H2SO4 + 6H₂O, Oxalat (A. 66, 144; 126, 165; Bl. 41, 126; B. 24, 805). II, 512.

9) Benzylamincyanid. Sm. 140°. 2HCl (B. 5, 693; 24, 806; A. 257, 206). **- II**, 531.

10) Di[Phenylacet] hydrazidin. Sm. 1530. HCl, HNO, (B. 30, 1887; A. 298, 20). — IV, 1289.

11) p-Ditolenylhydrazidin. Sm. 196° u. Zers. 2HCl, (2HCl, PtCl₄), (2HCl, 2AuCl₃), 2HNO₃ (B. 27, 3280; A. 298, 10). — IV, 1289.

12) 5,7-Dimethyl-2-[2,4-Dimethylphenyl]-2,3-Dihydro-1,2,3,4-Benz-

tetrazin. Sm. 136—137° (*B.* 21, 543). — IV, 1262. 13) Diäthylderivat d. Base $C_{12}H_{10}N_4$ HCl, H_2CO_3 (*A.* 290, 273). —

- IV, 1279.
 1) Di[3-Methylbenzyl]sulfid. Fl. (Z. 1866, 489). II, 1064. C16H18S
 - 2) 4-Methylphenyläther d. 2-Merkapto-1,3,5-Trimethylbenzol. Sm. 89,6°; Sd. 190°₁₁ (B. **28**, 2326).

1) Di[α-Phenyläthyl]disulfid. Sm. 57—58° (B. 28, 909). $C_{16}H_{18}S_2$

- 2) Dimethyläther d. 4,4'-Dimerkapto-3,3'-Dimethylbiphenyl. 118° (J. pr. [2] 41, 216). — II, 994.
- 3) Diäthyläther d. 4,4'-Dimerkaptobiphenyl. Sm. 135° (J. pr. [2] 41, 214). — II, 989.

 $C_{16}H_{18}Hg$

- 1) Quecksilberdi[2,4-Dimethylphenyl]. Sm. 169—170° (B. 20, 1719). IV, 1711.
- 2) Quecksilberdi [2,5-Dimethylphenyl]. Sm. 123° (B. 14, 2112). IV, 1711.
- 3) Quecksilberdi [3,4-Dimethylphenyl]. Sm. 150° (B. 17, 2374 Anm.). IV, 1711. C 85,3 - H 8,4 - N 6,2 - M. G. 225.

 $C_{16}H_{19}N$

- 1) 4-Diäthylamidobiphenyl. Sm. unter 100°. (2HCl, PtCl₄), HBr, HJ (J. 1862, 345). — II, 633.
- 2) Phenyl-4-Isopropylbenzylamin. Sm. 41,5°. HCl (A. 245, 290).
- 3) Di[β -Phenyläthyl]amin. Sd. 335—337° 608. HCl, (2HCl, PtCl₄) (J. 1879, 440; B. 12, 1308, 1700). II, 539.
- 4) Aethyldi [4-Methylphenyl]amin. Sd. $255-260^{\circ}_{20}$ (Bl. **24**, 120). -II, 486.
- 5) Aethylbenzyl-2-Methylphenylamin. Sd. 230°_{20—25} (Bl. [3] 5, 742). II, 518.
- 6) Aethylbenzyl-4-Methylphenylamin. Sd. 200—210°₁₀ (Bl. [3] 6, 139). - II, 518.
- 7) β -Amidomethyl- $\alpha\gamma$ -Diphenylpropan ($\beta\beta$ -Dibenzyläthylamin). HCl, (2 HCl, PtCl₄) (G. 26 [2] 226).
- 8) Aethyldibenzylamin. Sd. 306°. HCl, (2HCl, PtCl₄) (A. 144, 315; B. 20, 1752; 23, 2782). II, 520.
- 9) Di[2, 4 Dimethylphenyl]amin. Sd. 305 310° (B. 20, 1042). -II, 543.
- 10) Di[3,4-Dimethylphenyl]amin. Sd. 340—345° u. Zers. (B. 20, 1041). - II, 541.
- 11) Di[P-Dimethylphenyl]amin. Sd. 305-315° (Bl. 18, 69). II, 548.
- 12) Di[?-Dimethylphenyl]amin. Sm. 162°; Sd. 305—315° (Bl. 18, 69). II, 548.
 13) Di[3-Methylbenzyl]amin. Fl. HCl, HBr (A. 151, 131). — II, 545.
- 14) Methylbenzyl-2,4-Dimethylphenylamin. Sd. 205—210° (Bl. [3] 7, 52). - II, 543.

- $C_{16}H_{19}N$
- 15) **2-Methyl-1-[2-Naphtyl]**hexahydropyridin. Sd. 186—190 $^{\circ}_{10}$. HC (2 HCl, PtCl₄ + 6 H₂O), (HCl, AuCl₃ + 9 H₂O). Pikrat (B. **29**, 1180). HCl,
- 16) Base (aus Harnstoff u. Aceton). Sm. 119°; Sd. 320°. (2 HCl, PtCl₄) (A. 238, 24). IV, 381.
 C 75,9 H 7,5 N 16,6 M. G. 253.
- $C_{16}H_{19}N_3$

 $\mathbf{C}_{16}\mathbf{H}_{19}\mathbf{P}$ C16H20O

C16H20O3

- 1) 1-Aethyl-4, 4'-Dimethyldiazoamidobenzol. Fl. (B. 20, 3018). —
- IV, 1568.
 2) 1-[4-Isopropylbenzyl]amidodiazobenzol. Sm. 50-51° (B. 22, 928). - IV, 1573.
- 3) 4-Methyl-1-[2,4,5-Trimethylphenyl]amidodiazobenzol. Sm. 106° (B. 25, 1360). — IV, 1573.
- 4) 4-Amido-2, 3, 2', 3'-Tetramethylazobenzol. Sm. 110,5° (B. 18, 2684). - IV, *1386*.
- 5) 4'-Amido-2,4,2',5'-Tetramethylazobenzol. Sm. 110—111° (115°). HCl, (211Cl, PtCl₄) (B. 13, 471; 18, 2686). IV, 1387.
- 6) 2'-Amido-2,4,3',5'-Tetramethylazobenzol. Sm. 78°. HCl (B. 18, 2682). - IV, 1386.
- 7) 4-Amido-2, $\mathbf{5}$, $\mathbf{2}'$, $\mathbf{5}'$ -Tetramethylazobenzol. Sm. 150° (B. 18, 2685). —
- IV, 1387. 8) 4-Amido-2, 6, 3', 5'-Tetramethylazobenzol. Sm. 95° (B. 18, 2684). —
- IV, 1387. 9) 4'-Amido-2, 6, 3', 5'-Tetramethylazobenzol. Sm. 77,5° (B. 18, 2684).
- **IV**, 1386. 10) 6-Amido-3,4,3',4'-Tetramethylazobenzol. Sm. 179° (B. 18, 2685). —
- IV, *1386*. 11) Base (aus Dimethylanilin u. 4-Nitroso-1-Dimethylanilin). Sm. 215° (B. 16,
- 2729). IV, 839. 12) Base (aus salzs. Dimethylanilin u. 4-Amido-1-Dimethylamidobenzol). HCl,
- $(2 \text{HCl}, \text{ZnCl}_2), (2 \text{HCl}, \text{HgCl}_2), (2 \text{HCl}, \text{PtCl}_4) (B. 10, 473; 13, 208; 16, 473),$ 865, 2855). — IV, 838. C 68,3 — H 6,8 — N 24,9 — M. G. 281.
- $\mathbf{C}_{16}\mathbf{H}_{19}\mathbf{N}_{5}$ 1) Di[4-Methylphenylazo]äthylamin. Sm. 121° u. Zers. (B. 21, 1025). **— IV**, 1569.
 - Aethyldibenzylphosphin. Sd. 320—330° (Soc. 53, 725). IV, 1664.
 C 84,2 H 8,8 O 7,0 M. G. 228.
 - 1) 1-Keto-5-Methyl-3-[4-Isopropylphenyl]-1,2,3,4-Tetrahydrobenzol. Sm. 27°; Sd. 210,5°₁₇ (A. 303, 243).
 - 2) Oktohydro 2, 5 Diphenylfuran. Sd. 210-220 (Soc. 57, 955). -III, 694.
 - 3) Hydrocarpol. Sd. 220° (i. V.) (A. 170, 261, 264). II, 1686.
- C 78,7 H 8,2 O 13,1 M. G. 244. $C_{16}H_{20}O_{2}$
 - 1) Benzylidenthujaketon. Sm. 170° (B. 30, 425). C 73,8 — H 7,7 — O 18,5 — M. G. 260.
 - 1) Methyläther d. Desmotroposantonin. Sm. 152—153° (G. 25 [1] 472). **– II**, 1790.
 - 2) Methyläther d. Iso-Desmotroposantonin. Sm. 111—1120 (G. 25 [1] 480). — II, 1791.
 - 3) $\alpha \alpha$ -Diäthyläther β -[1-Naphtyläther] d. $\alpha \alpha \beta$ -Trioxyäthan (α -Naphtoxylacetal). Sd. 207-208° (B. 30, 1703).
 - 4) $\alpha \alpha$ -Diäthyläther β -[2-Naphtyläther] d. $\alpha \alpha \beta$ -Trioxyäthan (β -Naphtoxylacetal). Sd. 240% (B. 30, 1439, 1701).
 - 5) Methylester d. Hyposantonigen Säure (M. d. 5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Aethyl-α-Carbonsäure). Sm. 43° (G. 26 [2] 460).
 - 6) Aethylester d. γ-Keto-α-[4-Isopropylphenyl]-α-Buten-β-Carbonsäure. Sd. 198°₁₀ (B. 31, 731).
 7) Verbindung (aus Chloranethol). Sd. 268—270° (B. 13, 148). II, 852.
 - 8) Verbindung (aus Camphersäureanhydrid u. Benzol). Sm. 125-126°
 - (Bl. [3] 4, 112). II, 24.9) Verbindung (aus Drachenblut). Sd. 236-240° (M. 1, 612). - III, 556.
 - 10) Verbindung (aus Selleriöl). Sm. 66-67° (B. 30, 495). C 69,5 H 7,2 O 23,2 M. G. 276.
- C16H20O4 1) Aethylester d. $\beta\zeta$ -Diketo- δ -Phenylheptan- γ -Carbonsäure. Sm. 155 bis 157° u. Zers. (J. pr. [2] 49, 24). — II, 1871.

1624 16 II. 2) Diäthylester d. δ-Phenyl-α-Buten-αγ-Dicarbonsäure (D. d. Benzyl-C16H20O4 glutakonsäure). Sd. 203—204°₁₀ (Soc. **63**, 259). — II, 1870. 3) Diäthylester d. δ-Phenyl-α-Buten-δδ-Dicarbonsäure (D. d. Phenylallylmalonsäure). Sd. 1.76—1.78°₁₆ (B. 29, 2600).

4) Diäthylester d. β-Phenyl-β-Buten-γδ-Dicarbonsäure (D. d. Methylphenylitakonsäure). Sd. 305—307° (B. 30, 95).

C 65,8 — H 6,8 — O 27,4 — M. G. 292. C10 H20 O5 1) η -Keto- η -Phenyl- β -Methylheptan- ε ε -Dicarbonsäure (β -Benzoyl- α -Isoamylisobernsteinsäure). Sm. 160°. NH₄ (B. **23**, 1500). — II, 1968. 2) Aethylester d. Filixsäure. Sm. 142° (B. **21**, 2964). — II, 1967. 3) Diäthylester d. γ -Keto- α -Phenylbutan- $\alpha\beta$ -Dicarbonsäure (D. d. Phenylacetbernsteinsäure). Sm. 75-76° (B. 14, 430; 17, 71). — II, 1965. 4) Diäthylester d. α-Keto-α-Phenylbutan-βδ-Dicarbonsäure. Sd. 200 bis 210°₁₂ (B. 31, 2001). C 62,3 - H 6,5 - O 31,2 - M. G. 308. $C_{16}H_{20}O_{6}$ 1) Säure + H₂O (aus Isopropylisoparakonsäureäthylester). Ca, Ba, Ag (A. 304, 295). 2) Triacetat d. αγδ-Trioxy-α-Phenylbutan. Sd. 221—222% (Bl. [3] 13, 124). C 59.2 - H 6.2 - O 34.6 - M. G. 324.C16H20O7 1) Methylglyko-o-Cumarketon + H₂O. Sm. 192^o (wasserfrei) (B. 18, 1964). **– III**, 161. 2) Diäthylester d. d-2-Methylbenzoylweinsäure. Sm. 32,50 (Soc. 73, 315). 3) Diäthylester d. d-3-Methylbenzoylweinsäure. Sm. 56° (Soc. 73, 318). 4) Diäthylester d. d-4-Methylbenzoylweinsäure. Sm. 94° (Soc. 73, 313). 5) Triäthylester d. 5-Oxy-1-Methylbenzol-2,3,4-Tricarbonsäure. Fl.

C16H20O8

C 56,4 — H 5,9 — O 37,6 — M. G. 340.

1) Kolatannin (C. 1897 [1] 933; 1898 [1] 578). 2) Glykoferulaaldehyd + 2H₂O. Sm. 200—202° (wasserfrei) (B. 18, 3482). - III, 106. 3) Diäthylester d. Diacetylsuccinylbernsteinsäure? Sm. 168—169°

(A. 219, 86; Am. 12, 416; B. 19, 428). - I, 824.

4) Triäthylester d. 4,6-Dioxybenzol-2-Methylcarbonsäure-1,3-Dicarbonsäure (Tr. d. Dioxyphenylessigdicarbonsäure). Sm. 98° (B. 19, 1448; 31, 2015). — II, 2070. C 53,9 — H 5,6 — O 40,5 — M. G. 356.

 $\mathbf{C}_{16}\mathbf{H}_{20}\mathbf{O}_{9}$

1) Trikohlensäureäthylester d. 2,4,6-Trioxy-l-Methylbenzol. Sd. 245 bis 248°_{17} (*M.* **19**, 229).

C16H20O10

C 51,6 - H 5,4 - O 43,0 - M. G. 372.1) Pentaacetylcellulose (Soc. 57, 2). — I, 1077.

 $\mathbf{C}_{16}\mathbf{H}_{20}\mathbf{O}_{12}$

C 47,5 — H 4,9 — O 47,5 — M. G. 404. 1) Hexamethylester d. β -Buten- $\alpha\alpha\beta\gamma\delta\delta$ -Hexacarbonsäure. Sm. 128 bis 130° (*M.* 9, 455). — I, 872. C 80,0 — H 8,3 — N 11,7 — M. G. 240.

C16 H20 N2

- 1) $\beta \gamma$ -Di[Phenylamido]butan. Sd. 225—228°₄₁. 2HCl (B. 25, 3280). II, 345.
- 2) $\alpha \beta$ -Di[Phenylamido]- β -Methylpropan. Fl. 2HCl, 2HBr (Bl. 48, 800). • II, 345.
- 3) $\alpha\beta$ -Di[Benzylamido]äthan. Sd, 175—182°. 2HCl (C. 1898 [2] 743).

4) $\alpha\beta$ -Di Methylphenylamido äthan. Sm. 165° (B. 31, 3256).

5) $\alpha \beta$ -Di 2-Methylphenylamido äthan. Sm. 75—76°. HCl, (2HCl, PtCl₄), HBr, H₂SO₄ (*Bl.* 48, 799; *M.* 7, 231; *B.* 23, 1982, 2031). — II, 458. 6) αβ-Di[3-Methylphenylamido]äthan. Sm. 58,5°. 2 HCl (*Soc.* 71, 426).

7) $\alpha\beta$ -Di[4-Methylphenylamido]äthan. Sm. 97,5° (J. 1873, 698). -II. 487

8) Methylamidodibenzylamidomethan (B. 28 [2] 852). 9) 4,4'-Diamido-3,3'-Diäthylbiphenyl. H₂SO₄ (B. 17, 473). — IV, 985. 10) ?-Diamido-?-Diäthylbiphenyl. H₂SO₄ (B. 17, 475). — IV, 985.

11) 2, 2'-Diamido - 3, 5, 3', 5'-Tetramethylbiphenyl. Sm. 180°. (2 HCl, PtCl₄), 2 HNO₃ (B. **28**, 2801). — **IV**, 985. 12) **4**, **4**'-Di[Aethylamido]biphenyl. Sm. 65°. (2 HCl, PtCl₄) (A. 115, 366).

— IV, 963.

- $\mathbf{C}_{16}\mathbf{H}_{20}\mathbf{N}_{2}$
- 13) **2,4'-Di**[Dimethylamido]biphenyl. Sm. 51—52°; Sd. 333—345°₇₅₀. Pikrat (B. 22, 3016). - IV, 959.
- 14) 4,4'-Di[Dimethylamido]biphenyl. Sm. 195°; Sd. oberh. 360°. 2HCl, (2HCl, PtCl,), 2HBr, 2HJ (B. 14, 2162; 17, 115; Bl. [3] 1, 692; [3] 5, 59; [3] 13, 274). — IV, 962.
- 15) Phenylhydrazidocarvol. Sm. 109—110° (106°) (B. 17, 1578; 27, 811). **– II**, 769.
- 16) Phenylhydrazonanhydrid d. $\zeta \vartheta$ -Diketo- β -Methyl- β -Nonen. Sd. 182°_{8} (Bl. [3] **17**, 749). — **IV**, 783. C 71,7 — H 7,4 — N 20,9 — M. G. 268.

 $C_{16}H_{20}N_4$

 $C_{16}H_{21}N$

 $C_{16}H_{21}N_{2}$

 $C_{16}H_{22}O$

- 3,3'-Di[Dimethylamido]azobenzol. Sm. 118°. 2HCl + 2H₂O, (2HCl, PtCl₄), 2H₂SO₄ + 2H₂O, Bioxalat, Pikrat, Ferrocyanid (B. 30, 2936; Bl. [3] 7, 470). IV, 1361.
- 2) 4,4'-Di[Dimethylamido]azobenzol. Sm. 265°. (2HCl, PtCl₄), Pikrat + C_2H_6O (Bl. 48, 637; B. 13, 2136; 18, 1144; 21, 2612; 30, 2946; M. 4, 287). — IV, 1361.
- 3) Diäthyldiphenyltetrazon. Sm. 108° u. Zers. (A. 199, 327). IV, 1308.
- 4) 1,4-Di [4-Amidophenyl] hexahydro-1,4-Diazin (Diäthylendiphenylentetramin).
 Sm. 221°. 4HCl + 4H₂O (B. 12, 1796; 22, 1388). IV, 587.
 C 84,6 H 9,2 N 6,2 M. G. 227.

1) ϑ -Phenylimido- $\beta\zeta$ -Dimethyl- $\beta\zeta$ -Oktadiën (Phenylimidocitral). Sd. bei 200°_{20} (B. **26**, 2716; **28**, 2133). — III, 507.

2) 1-Dipropylamidonaphtalin. Sd. oberh. 300°. HCl + H₂O, (2 HCl, PtCl₄), HJ (M. 16, 804).

3) 3-Isopropyl-2-Isobutylchinolin. Sd. 295—296°₇₀₉. HCl + H₂O, (2 HCl, PtCl₄), HNO₃ + H₂O, H₂SO₄, H₂Cr₂O₇, Pikrat (B. 17, 1718; 18, 3373; 24, 1726). — IV, 343.
4) Validin. Fl. (Z. 1867, 429). — IV, 343.
C 75,3 — H 8,2 — N 16,5 — M. G. 255.

- 1) Di[4-Dimethylamidophenyl]amin. Sm. 119°. (2 HCl, ZnCl₂) (B. 16, 474, 866). — IV, 1168.
- 2) Aethyldi[2-Amidobenzyl]amin. Sm. 94° (B. 26, 2584). IV, 628. C 83,5 - H 9,6 - O 6,9 - M. G. 230.
- 1) 5-Keto-1-Methyl-3-[4-Isopropylphenyl]hexahydrobenzol. Sm. 67,5°; Sd. 187°₁₁ (A. 303, 273).

α-Camphylphenyläther. Sd. 178—180° (C. 1898 [2] 888).
 C 78,1 — H 8,9 — O 13,0 — M. G. 246.
 Phenolcampher. Fl. (Bl. [3] 4, 725). — III, 487.

 $\mathbf{C}_{16}\mathbf{H}_{22}\mathbf{O}_{2}$

- 2) 3,6-Dipropionyl-1,2,4,5-Tetramethylbenzol. Sm. 176°; Sd. 330 bis 335° (B. **28**, 3214). — III, 274.
- 3) Phenylester d. Campholsäure. Sm. 22°; Sd. 305° (Bl. [3] 11, 496). II, 662.
- 4) Methyläther d. Verb. $C_{15}H_{20}O_2$ (aus Camphersäureanhydrid). Sm. 85 bis 87° (*Bl.* [3] **13**, 904). — III, 167. C 73,3 — H 8,4 — O 18,3 — M. G. 262.

 $C_{16}H_{22}O_3$

- Resorcincampher. Sm. 29° (Bl. [3] 4, 726). III, 487.
 θ-Benzoyloktan-α-Carbonsäure. Sm. 78—79° (A. ch. [6] 22, 364). —
- II, 1674.
 3) 1-7-Methoxyl-5, 8-Dimethyl-1, 2, 3, 4-Tetrahydronaphtalin-2-Aethylα-Carbonsäure (l-Methyläthersantonige Säure). Sm. 116—117° (B. 28 [2] 393). — II, 1671.
- 4) i-7-Methoxyl-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Aethylα-Carbonsäure (Methylätherisosantonige Säure). Sm. 135-135,5 ° (B.
- 28 [2] 393). II, 1671. 5) isom. 7-Methoxyl 5, 8-Dimethyl-1, 2, 3, 4-Tetrahydronaphtalin-2-Aethyl-α-Carbonsäure (Methylätherdesmotroposantonige Säure). Sm. 97 bis 98° (G. 23 [2] 480; B. 28 [2] 393). — II, 1672.
 6) Pelargonbenzolcarbonsäureanhydrid. Fl. (A. 85, 231). — II, 1158.
- 7) Methylester d. d-7-Oxy-5, 8-Dimethyl-1, 2, 3, 4-Tetrahydronaphtalin-**2-Aethyl-α-Carbonsäure** (M. d. d-Santonigen Säure). Sm. 81—84° (86°) (G. 12, 395; 25 [1] 493; J. 1880, 895; B. 12, 1574; 16, 427). — II, 1670. 8) Methylester d. isom. 7-Oxy-5,8-Dimethyl-1,2,3,4-Tetrahydro-
- naphtalin-2-Aethyl-α-Carbonsäure (M. d. Desmotroposantonigen Säure). Sm. 95—96° (G. 23 [2] 477). — II, 1671.

 $\mathbf{C}_{16}\mathbf{H}_{22}\mathbf{O}_{13}$

16 II. C 69,1 - H 7,9 - O 23,0 - M.G. 278. $C_{16}H_{22}O_4$ 1) Lakton d. Dihydroalantdicarbonsäure. Sm. 137°; Sd. 250°, Na. Ca, Ba, Ag (A. 293, 360). 2) Methylester d. Santonsäure. Sm. 86-86,5° (J. 1876, 618; B. 13, 2210; G. 8, 332). — II, 1788. 3) Methylester d. Isosantonsäure. Sm. 69-70° (G. 25 [2] 473) 4) Methylester d. Metasantonsäure. Sm. 101,5—102,5° (J. 1878, 825; G. 8, 336). — II, 1789. 5) Methylester d. Parasantonsäure. Sm. 183-184° (J. 1876, 826; B. 13, 2210). — II, 1791. 6) Diäthylester d. Benzol-1, 3-Di Aethyl-β-Carbonsäure. Sd. 247—250° 60. (B. 21, 39). — II, 1858. 7) Dibutylester d. Benzol-1,4-Dicarbonsäure. Fl. (B. 10, 1743). —

II, 1832. 8) Diisobutylester d. Benzol-1,4-Dicarbonsäure. Sm. 52,5° (B. 10, 1743).

- II, 1832. 9) Dipropionat d. 3,6-Dioxy-1,2,4,5-Tetramethylbenzol. Sm. 138,5

bis 139,5° (B. 29, 2175).

10) Verbindung (aus Dehydracetsäurechlorid). Zers. bei 202° (B. 25, 339). - II, 1757.

C 65.3 - H 7.5 - O 27.2 - M. G. 294.C16H22O5

1) η -Oxy- η -Phenyl- β -Methylheptan- $\varepsilon\varepsilon$ -Dicarbonsäure (B. 23, 1503). — II, 1959.

2) η -Oxy- β -Methylheptanphenyläther- $\gamma \varepsilon$ -Dicarbonsäure. Sm. 90—93° (Soc. 69, 1505).

3) Diäthylester d. δ-Oxybutanphenyläther-αα-Dicarbonsäure. Sm. 30° (32°); Sd. 271°₁₄₀ (B. **25**, 417; **26**, 2569; **28**, 1199). — II, 667. 4) Diäthylester d. δ-Oxybutanphenyläther- $\beta\beta$ -Dicarbonsäure. Sd. 230°₄₅

(C. 1895 [1] 825; Soc. 69, 171).

5) Diäthylester d. α -Oxy- α -Phenyläthanäthyläther- $\beta\beta$ -Dicarbonsäure (D. d. Oxybenzylmalonäthyläthersäure). Fl. Na (B. 26, 1877). — II, 1952. C 61,9 - H 7,1 - O 31,0 - M. G. 310.

 $C_{16}H_{22}O_{6}$ 1) Bilinsäure. Sm. 190°. K, Pb, Ag (B. 12, 1068). — II, 2008.

2) Dipropylester d. 3,4-Dioxybenzoldimethyläther-1,2-Dicarbonsäure (D. d. Hemipinsäure). Sm. 43-45° (M. 16, 121). — II, 1996.

C16H22O7 C 58,9 — H 6,7 — O 34,4 — M. G. 326. 1) α-Diterpylsäure. Sm. 216° u. Zers. (A. 256, 123). — I, 848.

2) Eugenolglykosid. Sm. 132° (Am. 6, 340). — II, 975. $C_{16}H_{22}O_8$

C 56,1 — H 6,4 — O 37,4 — M. G. 342. 1) Coniferin + $2\,\mathrm{H}_2\mathrm{O}$. Sm. 185° (Z. 1866, 339; M. 3, 402; B. 7, 609; 16, 44; 18, 1599; 25, 3221; H. 12, 368). — III, 577.

2) Tripropionylshikiminsäure (B. 24, 1284). — I, 769. C 53,6 - H 6,1 - O 40,2 - M. G. 358.

 $\mathbf{C}_{16}\mathbf{H}_{22}\mathbf{O}_{9}$ 1) $\delta\delta\delta$ -Triacetat d. β -Anhydrid d. $\beta\beta\delta\delta\delta$ -Penta[Oxymethyl]- γ -Oxynorm. Valeriansäure-γ-Lakton. Sm. 161° (A. 276, 73). C16H22O10 C 51,3 - H 5,9 - O 42,8 - M. G. 374.

1) Quercitpentacetat (A. ch. [5] 15, 44; A. 190, 284). — I, 416.

2) Tetraäthylester d. $\alpha\delta$ -Diketobutan- $\alpha\beta\gamma\delta$ -Tetracarbonsäure (T. d. Dioxalbernsteinsäure). Fl. Na₂ (A. 285, 20).

C16 H22 O11 C 49,2 - H 5,6 - O 45,1 - M. G. 390.1) Pentaacetat d. d-Galaktose. Sm. 142° (B. 11, 1071; 22, 2207, 2209).

- I, 1041. 2) Pentaacetat d. d-Glykose. Sm. 111—112° (B. 22, 1464; 25 [2] 911;

Bl. [3] 13, 271). — I, 1048. 3) isom. Pentaacetat d. Glykose. Sm. 134° (130°) (B. **25** [2] 911; Bl. [3]

4) isom. Pentaacetat d. Glykose. Sm. 86° (Bl. [3] 11 269).

5) Pentaacetat d. Lävulose (B. 23, 672). — I, 1054. C 45,5 - H 5,2 - O 49,3 - M. G. 422

1) Hexamethylester d. Oxymethantri [Methyldicarbonsäure]. Sm. 136 bis 137° (B. 28, 2946).

 $\mathbf{C}_{16}\mathbf{H}_{22}\mathbf{O}_{15}$ C 42,3 - H 4,8 - O 52,9 - M. G. 454.1) Pektinsäure. Pb, Ag₂ (A. 67, 276), siehe auch C₁₄H₂₀O₁₃. — I, 1105. $C_{16}H_{22}N_2$

C16 H22 N4

C16 H23 N

 $C_{16}H_{24}O$

 $\mathbf{C}_{16}\mathbf{H}_{24}\mathbf{O}_{2}$

C16H24O5

C 79,3 - H 9,1 - N 11,6 - M. G. 242.

1) Bi-Dimethylanilin. Sm. 173°. 4HCl, (2HCl, PtCl₄) (B. 13, 2139). —

2) Diäthylparanilin (J. 1862, 344). — IV, 943.

3) θ -Phenylhydrazon- $\beta\zeta$ -Dimethyl- $\beta\zeta$ -Oktadiën (Citralphenylhydrazon) (B. 26, 2716; 28, 2133; 31, 821).

4) 1-Phenylhydrazon-3-Isopropyl-5-Methyl-1,2,3,4-Tetrahydrobenzol. Sm. bei 60° (A. 297, 147). 5) Phenylhydrazon d. Campher: Sd. 230—235° u. ger. Zers. (G. 15,

247; 16, 132). — IV, 795.
6) polym. Phenylhydrazon d. Campher. Fest (Bl. [3] 1, 241). — IV, 796. 7) Phenylhydrazon d. Keton C₁₀H₁₆O (aus Isolauronolsäure). Sd. 185

Phenylhydrazon d. Keton C₁₀H₁₈O (aus Isolatronoisatre). St. 160 bis 190°₁₃ (C. 1897 [1] 814; Bl. [3] 19, 704).
 Phenylhydrazon d. Keton C₁₀H₁₈O (aus Nitrosomenthen). Sm. 73,5 bis 74° (Am. 18, 775). — IV, 770.
 Phenylcamphenylamidin. Fl. (B. 18, 1633). — IV, 533.

10) Verbindung + ⁵/₃ H₂O (aus Methyläthylketon u. Pyrrol). (wasserfrei). 2 + AgNO₃ (B. **20**, 2454). — IV, 943. C 71,1 — H 8,1 — N 20,7 — M. G. 270, Sm. 142°

- 1) αβ-Di[4-Amido-2-Methylphenylamido]äthan. 4HCl (Soc. 71, 425). IV, 602.
- 2) $\alpha \beta$ -Di[4-Amido-3-Methylphenylamido]äthan. Sm. 143° (Soc. 71, 427). **IV**, 612.

3) $\alpha \beta$ -Di[6-Amido-3-Methylphenylamido] äthan. Sm. 158—159° (B. 17, 780). **— IV**, *612*.

4) 4, 4'-Diamido-2, 2'-Di[Dimethylamido] biphenyl. Sm. 166°. 2HCl, 4HCl, (4HCl, PtCl₄), 2HBr, 2HJ, H₂SO₄ (B. 14, 2164; 17, 118; 30, 2940; Bl. [3] 7, 472). — IV, 1275.
5) 2,4'-Diamido-3,3'-Di[Dimethylamido]biphenyl. Sm. bei 100°. 4HCl

 $+4 H_2 O (B. 30, 2942)$. -1V, 1275. 6) s-Di[3-Dimethylamidophenyl]hydrazin. Sm. 99–100° (B. 30, 2939). C 83.8 - H 10.0 - N 6.1 - M. G. 229.

1) Methyldiisopropyldihydrochinolin. Sd. 298—300°. (2HCl, PtCl₄) (B.

21, 3437). — **IV**, 234. Phenyl-I-Fenchylamin. Sm. 93—94° (A. 263, 150). — IV
 isom. Phenylfenchylamin. Sd. 171—173°₁₃ (Soc. 73, 277).
 Nitril d. α-Phenylnonan-α-Carbonsäure. Sd. 328° (B. 2

Sd. 328° (B. 22, 1237). —

C'82.8 - H 10.3 - O 6.9 - M. G. 232.

1) 5-Oxy-1-Methyl-3-[4-Isopropylphenyl]hexahydrobenzol. Sd. 185₁₄ (A. 303, 268).

2) Methyl-4-Oktylphenylketon. Sd. bei 300° (B. 31, 938).

3) Propyl-4-Pseudobutyl-2,6-Dimethylphenylketon. Sm. 50°; Sd. 290 bis 295° (B. 31, 1349).

4) Verbindung (aus d. Pinakon C₁₀H₂₆O₂). Sd. 220—225°₂₅ (Soc. 57, 248). C 77,4 — H 9,7 — O 12,9 — M. G. 248.

1) Methylhexyläther d. 3,4-Dioxy-1-Allylbenzol. Sd. 296—300° (J. 1877, 581). — II, *974*.

2) 2,5-Diisoamyl-1,4-Benzochinon. Sm. 140° (B. 25, 2653). — III, 369. 3) bim. Dimethylcyklohexenon. Sm. 113°; Sd. 258-262°₇₅₈ (B. **32**, 422). C 72,7 — H 9,1 — O 18,2 — M. G. 264.

 $C_{16}H_{24}O_{8}$ Methylester d. Alantolsäure. Sm. 83° (A. 285, 361). — II, 1594.
 C 68,6 — H 8,6 — O 22,8 — M. G. 280. $\mathbf{C}_{16}\mathbf{H}_{24}\mathbf{O}_{4}$

1) Acetat d. 2,4-Diketo-6-Oxy-1,1,3,3-Tetraäthyl-1,2,3,4-Tetrahydro-

benzol. Sm. 60—62% (M. 9, 888). — II, 1025.

2) Diacetat d. Aescigenin (J. 1862, 492, 493). — III, 613.

C 64,9 — H 8,1 — O 27,0 — M. G. 296.

1) Dihydroalantdicarbonsäure. Na₂, Ca, Ba, Pb (A. 293, 362). 2) Verbindung (aus Camphocarbonsäureäthylester). Sd. 179,5-181,50 (B.

24, 3392). — **1**, 628. C 61,5 — H 7,7 — O 30,8 — M. G. 312. $C_{16}H_{24}O_{6}$

1) Thymolglukosid + H₂O. Sm. 100° (Bl. [3] 13, 5). 2) Aethylester d. Pentinsäure. Fl. (A. 219, 114). — I, 620.

 $\mathbf{C}_{16}\mathbf{H}_{24}\mathbf{O}_{10}$

 $C_{16}H_{26}O_{3}$

C₁₆H₂₄O₆
3) Diäthylester d. cis-2,5-Diketo-1,4-Diäthylhexahydrobenzol-1,4-Dicarbonsäure (D. d. Diäthylsuccinylbernsteinsäure). Sd. 215°₁₅ (B. 26, 232).
4) Diäthylester d. trans-2,5-Diketo-1,4-Diäthylhexahydrobenzol-1,4-Dicarbonsäure (D. d. Diäthylsuccinylbernsteinsäure). Sm. 65—66°; Sd. 215°₁₅ (B. 26, 232).
5) Diäthylester d. 2,5-Diketo-1-Methyl-4-Propylhexahydrobenzol-

1,4-Dicarbonsäure (D. d. Methylpropylsuccinylbernsteinsäure). Sd. 195 bis 200₁₅ (B. 26, 233).
6) Diäthylester d. 2,5-Diketo-1-Methyl-4-Isopropylhexahydrobenzol-

Diathylester d. 2,5-Diketo-1-Methyl-4-Isopropylhexahydrobenzol-1,4-Dicarbonsäure (D. d. Methylisopropylsuccinylbernsteinsäure). Sd. 195 bis 200°₁₅ (B. 26, 233).
 C 58,5 — H 7,3 — O 34,2 — M. G. 328.

C₁₈H₂₄O₇ C 58,5 — H 7,3 — O 34,2 — M. G. 328. 1) 1-Isopropylbenzol-4-Carbonsäurealdehydglykose (Cuminolglykose) (A. 244, 22). — III, 55.

2) Pseudocholoïdansäure (oder C₂₅H₈₆O₁₀). Pb₈, Ag₂ (Bl. 38, 135). — I, 727. C₁₆H₂₄O₈ C 55,8 — H 7,0 — O 37,2 — M. G. 344. 1) α-Camphoglykuronsäure + H₂O. Sm. 128—130° wasserfrei. Ba, Ag

+ xH₂O (*H*. 3, 423). - I, 866. 2) β-Camphoglykuronsäure. Sm. 100°. Ag + 3H₂O (*H*. 3, 431). - I, 866.

Diäthylester d. polym. Aethen-αα-Dicarbonsäure (Tetraäthylester d. Dimethylenmalonsäure). Sm. 155—156° (146—150°) (B. 22, 3295; A. 273, 48; Soc. 73, 340; C. 1898 [2] 1169). — I, 706.

Tetraäthylester d. R-Tetramethylen-1, 1, 3, 3-Tetracarbonsäure. Sd. 220—250° u. Zers. (A. 256, 199). — 1, 865.

5) Tetraäthylester d. α-Buten-ααγγ-Tetracarbonsäure (T. d. Methyldicarboxyglutakonsäure). Sd. 210°₁₈ (Soc. 63, 878).
 6) αγγ-Triäthyl-α-Propylester d. Propen-ααγγ-Tetracarbonsäure. Fl.

6) αγγ-Triāthyl-α-Propylester d. Propen-ααγγ-Tetracarbonsäure. F.
 (B. 22, 1422). — I, 864.
 C 51,1 — H 6,4 — O 42,5 — M. G. 376.

1) Tetracetat d. i-Inositdimethyläther. Sm. 193°; Sd. 335—340° u. Zers. (A. ch. [6] 12, 567). — I, 1052.

Verbindung (aus d. Weinsäurediäthylester). Fl. (R. 12, 57).
 C 49,0 — H 6,1 — O 44,9 — M. G. 392.

 $\begin{array}{c} \mathbf{C}_{16}\mathbf{H}_{24}\mathbf{O}_{11} & \mathbf{C} \ 49,0 \ - \ \mathbf{H} \ 6,1 \ - \ \mathbf{O} \ 44,9 \ - \ \mathbf{M} \ \mathbf{G} \ 392. \\ \mathbf{1)} \ \mathbf{Dulcitpentacetat.} & \mathbf{Sm} \ 163^{\circ} \ (A. \ ch. \ [4] \ \mathbf{27}, \ 156). \ - \ \mathbf{I}, \ 418. \\ \mathbf{C} \ 74,1 \ - \ \mathbf{H} \ 9,6 \ - \ \mathbf{N} \ 16,2 \ - \ \mathbf{M} \ \mathbf{G} \ . \ 259. \\ \mathbf{1)} \ \mathbf{Base} \ (\mathbf{aus} \ \mathbf{Campherosazon}). & \mathbf{Fl}. \ \ \mathbf{2HCl} \ (G. \ \mathbf{17}, \ 160). \ - \ \mathbf{IV}, \ 796. \end{array}$

C₁₆H₂₅Cl 1) Base (aus Campnerosazon). Fi. 2 HCl (G. 17, 160). — 1V, 796. 1) 6-Chlor-1, 2, 3, 4, 5-Pentaäthylbenzol. Sm. 290—295° (A. ch. [6] 6, 428). — II, 56.

 $C_{16}H_{25}Br$ 1) 6-Brom-1,2,3,4,5-Pentaäthylbenzol. Sm. 47,5°; Sd. bei 315° (B. 21, 2815). — II, 72. $C_{16}H_{26}O$ C 82,1 — H 11.1 — 0 6.8 — M. G. 234.

 $\begin{array}{c} \mathbf{C_{16}H_{26}O} & \mathbf{C} \ 82,1 \ - \ \mathbf{H} \ 11,1 \ - \ \mathbf{0} \ 6,8 \ - \ \mathbf{M} \ \mathbf{G} \ 234. \\ \mathbf{1)} \ \mathbf{Dimethylheptenon}. \quad \mathbf{Sd.} \ 172 \ - \ 174^{0}_{\ 16} \ (Bl. \ [3] \ \mathbf{21}, \ 88). \\ \mathbf{C_{16}H_{26}O_{2}} & \mathbf{C} \ 76,8 \ - \ \mathbf{H} \ 10,4 \ - \ \mathbf{O} \ 12,8 \ - \ \mathbf{M} \ \mathbf{G} \ 250. \end{array}$

1) 1,2-Dioxy-?-Diisoamylbenzol. Sm. 60° (B. 25, 2654). — II, 971. 2) 1,3-Dioxy-?-Diisoamylbenzol. Sm. 89° (B. 25, 2653). — II, 972. 3) 1,4-Dioxy-?-Diisoamylbenzol. Sm. 185° (B. 25, 2650). — II, 972.

4) Diisoamyläther d. 1,3-Dioxybenzol. Sm. 47° (G. 19, 496). — II, 917. 5) Diisoamyläther d. 1,4-Dioxybenzol. Sm. 65° (B. 25, 2652). — II, 940.

6) Benzoresinol. Sm. 274°. K (B. 26 [2] 679). — III, 554. 7) Verbindung (Pinakon). Sd. 259—260°₂₅ (Soc. 57, 248). — I, 272.

C 72,2 — H 9,8 — O 18,0 — M. G. 266. 1) 1,2,3-Trioxy-?-Diisoamylbenzol. Sm. 90° (B. 25, 2656). — II, 1026. 2) 2,4,6-Triketo-1,1,3,3,5-Pentaäthylhexahydrobenzol (M. 9, 893). —

II, 1026.
3) 2,4-Diketo-6-Oxy-1,1,3,3,5-Pentaäthyl-1,2,3,4-Tetrahydrobenzol.

Sm. 91—94° (M. 9, 221; 13, 247). — II, 1026.
4) Aethyläther d. 2,4-Diketo-6-Oxy-1,1,3,3-Tetraäthyl-1,2,3,4-Tetrahydrobenzol. Fl. (M. 9, 887). — II, 1025.

5) Aethylester d. 1-Keto-3-Hexyl-5-Methyl-1,2,3,4-Tetrahydrobenzol-2-Carbonsäure. Sd. 186—188° (A. 288, 342).
6) Aethylester d. 1-Keto-3-Hexyl-5-Methyl-1,2,3,4-Tetrahydrobenzol-

4-Carbonsäure. Sd. 186—188° (A. 288, 342).

 $C_{16}H_{26}O_{3}$

7) Digitaliretin. Sm. 60° (J. 1858, 529).

 $C_{16}H_{26}O_4$

 $\mathbf{C}_{16}\mathbf{H}_{26}\mathbf{O}_{5}$

 $\mathbf{C}_{16}\mathbf{H}_{26}\mathbf{O}_{6}$

C16H26O7

8) Verbindung (aus Brasilin) (B. 17, 194). — III, 655. C 68,1 — H 9,2 — H 22,7 — M. G. 282.

1) Hederasäure. Sm. 223° (J. 1878, 960; B. 22 [2] 61). — I, 733.

2) i-β-Methylbutylester d. l-α-Valeroxylbuttersäure. Sd. 252° (Bl. [3] **15**, 493).

C 64,4 — H 8,7 — O 26,8 — M. G. 298.

1) Oxyleinölsäure. Pb (J. 1865, 324).

2) Dipropionat d. Pinolglykol. Sm. 106° (A. 268, 223). — III, 509.
C 61,1 — H 8,3 — O 30,6 — M. G. 314.

1) Dulcamaretin (J. 1875, 828). — III, 582.

2) Triäthylester d. α-Hepten-δδε-Tricarbonsäure. Sd. 285—290° (B. 25, 488; **29**, 977). — **I**, 821.

3) Triäthylester d. ε -Methyl- α -Hexen- $\delta \delta \varepsilon$ -Tricarbonsäure. Sd. 295 bis 300° (B. 29, 977).

4) Diäthylester d. $\beta \zeta$ -Diketo- δ -Isopropylheptan- $\gamma \varepsilon$ -Dicarbonsäure (D. d. Isobutylidendiacetessigsäure). Sm. 117° (A. 288, 323).
C 58,2 — H 7,9 — O 33,9 — M. G. 330.
1) Triäthylester d. β-Keto-γ-Aethylpentan-γδε-Tricarbonsäure. Sd.

194—196°, (Soc. **73**, 728). C 55,5 — H 7,5 — O 37,0 — M. G. 346.

 $C_{16}H_{26}O_8$

1) Dimethylester d. Divalerylweinsäure. Sd. 208—210°₁₁ (Bl. [3] 11, 312).

2) Dimethylester d. Diisovalerylweinsäure. Fl. (Bl. [3] 11, 369)

3) Diäthylester d. Dibutyrylweinsäure. Sd. 212-2150,4 (B. 25 [2] 859; Bl. [3] 11, 311).

4) Diäthylester d. Diisobutyrylweinsäure. Fl. (Bl. [3] 11, 368).

5) norm. Dipropylester d. Dipropionylweinsäure. Sd. 222—225°₄₅ (B. 25 [2] 859; 26 [2] 923; Bl. [3] 9, 683; [3] 11, 311).
6) norm. Dibutylester d. Diacetylweinsäure. Sd. 218°₂₃ (B. 25 [2] 859;

Bl. [3] 11, 310).

7) Diisobutylester d. Diacetyl-d-Weinsäure. Sd. 322-324° (B. 14, 2790; 25 [2] 859; J. 1882, 857; Bl. [3] 11, 367). — I, 797. 8) Tetraäthylester d. Butan- $\alpha\alpha\beta\beta$ -Tetracarbonsäure. Sd. $200^{\circ}_{.150}$ (B. 17,

2785). — I, 860.

9) Tetraäthylester d. Butan-ααδδ-Tetracarbonsäure. Sd. 275—280°₂₂₅. Na_2 (Soc. 51, 19; 65, 578; 67, 109; B. 26, 2243). — I, 860.

10) Tetraäthylester d. Butan - $\alpha\beta\gamma\gamma$ - Tetracarbonsäure. Sd. 201°_{12} (Soc. **73**, 1009).

11) Tetraäthylester d. Butan- $\alpha\beta\gamma\delta$ -Tetracarbonsäure. Sd. bei 300° (B. **27**, 1124).

12) Tetraäthylester d. Butan - $\beta\beta\gamma\gamma$ - Tetracarbonsäure. Sd. 310 – 315° (A. 234, 63, 70; Am. 16, 578) $\stackrel{\frown}{-}$ I, 860.

13) Tetraäthylester d. Butan-?-Tetracarbonsäure. Sd. $211-212.5^{\circ}_{17}$ (*J. pr.* [2] **45**, 59). — **I**, 860.

14) Tetraäthylester d. Butan-?-Tetracarbonsäure. Sd. oberh. 300° (201°) 170 (J. pr. [2] 45, 57). - I, 860.

(a. μ. [2] 40, 50. — 1, 500.
(b. μ. [2] 40, 50. — 1, 500.
(c. μ. [2] 40, 50. — 1, 500.
(c. μ. [2] 40, 50. — 1, 500.
(c. μ. [2] 40, 50. — 1, 500.
(d. 200 bis 201°₁₂ (Soc. 73, 1010).
(d. 218, 158; B. 31, 2587). — 1, 860.
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(d. 218, 158). — 1, 860.
(d. 218, 158). — 1, 860.
(d. 218, 158). — 1, 860.
(d. 218, 158). — 1, 860.
(d. 218, 158). — 1, 860.
(d. 218, 158). — 1, 860.
(d. 218, 158). — 1, 860.
(d. 218, 158). — 1, 860.
(d. 218,

 202°_{15} (B. **22**, 1423). — I, 859. C 50,8 — H 6,9 — O 42,3 — M. G. 378.

1) Tetraäthylester d. $\beta\gamma$ -Dioxybutan- $\alpha\alpha\delta\delta$ -Tetracarbonsäure. Fl. (A.

246, 3). — I, 870. C 48,7 — H 6,6 — O 44,7 — M. G. 394. 1) Verbindung (aus Weinsäurediäthylester). Cu (R. 12, 52). C 78,0 — H 10,6 — N 11,4 — M. G. 246.

1) $\alpha - [6 - Methyl - 3 - Pyridyl] - \alpha - [2 - Propylhexahydro - 1 - Pyridyl] äthan$

(Collidinconiin). (2HCl, PtCl₄) (B. **28**, 2276). — **IV**, 864. 2) **Tetrahydrodicollidin**. Sd. 255—260°. (2HCl, PtCl₄), HJ (A. **215**, 46). - IV, 75.

3) Coniceïdin. Sm. 55-56°; Sd. oberh. 300° u. Zers. HCl, (2HCl, PtCl₄) (B. 18, 126). — IV, 37.

 $\mathbf{C}_{16}\mathbf{H}_{26}\mathbf{O}_{10}$

C16H26O11

 $\mathbf{C}_{16}\mathbf{H}_{26}\mathbf{N}_{2}$

C16H28O5

 $\mathcal{E} = \mathcal{O}_{\mathcal{F}} + \mathcal{O}_{16} \mathbf{H}_{30} \mathbf{O}_{2}$

C 63.6 - H 8.6 - N 27.8 - M. G. 302.C16 H26 N

1) Verbindung (aus maleïnsaurem 5-Methylpyrazolin). Sm. 140-141°. Pikrat (J. pr. [2] **58**, 330). C 82,4 — H 11,6 — N 6,0 — M. G. 233.

 $C_{16}H_{27}N$

1) Diisoamylamidobenzol. Sd. 275—280°. (2HCl, PtCl₄) (A. 74, 155). —

2) Paradiconiin. Sd. 210° (A. 166, 100). - IV, 54.

 $C_{16}H_{28}O_2$

C 76,2 — H 11,1 — O 12,7 — M. G. 252.

1) Palmitolsäure. Sm. 42° (47°); Sd. 240°₁₅. Ba, Ag (A. 143, 27; B. 25, 485; 27, 3400). — I, 534.

2) Caprylat d. 1-Borneol. Sd. 175° 15 (B. 31, 1775).

3) Verbindung (aus 4-Acetyl-5-Methyl-2, 3-Dihydro-R-Penten). Sd. 250 bis 255° ₅₀ (Soc. **57**, 245). — **I**, 1012. C 71,6 — H 10,4 — O 17,9 — M. G. 268.

C16 H28 O3

1) Anhydrid d. Thapsiasäure. Sm. 71° (G. 13, 516). — I, 689. C 67,6 — H 9,8 — O 22,5 — M. G. 284. 1) Palmitoxylsäure. Sm. 67°. Ag (A. 143, 35). — I, 695. $C_{16}H_{28}O_4$

2) Diäthylester d. $\beta \varepsilon$ -Dimethyl- γ -Hexen- $\gamma \delta$ -Dimethylcarbonsäure. Sd.

2) Diathylester d. β-Dimethyl-γ-Hexen-γο-Dimethylcarbonsaure. Sd. 156°₁₀ (Bl. [3] 19, 199).
 3) Dibutyrat d. δε-Dioxy-δ-Okten (Dibutyryl). Sd. 245—260° (A. 118, 35; B. 19, 1846; 24, 1272; 31, 1217; G. 25 [2] 57, 131). — I, 424. C 64,0 — H 9,3 — O 26,7 — M. G. 300.
 1) Diäthylester d. β-Keto-γ-Isobutylhexan-γδ-Dicarbonsäure. Sd. 280 bis 285° (B. 29, 981).

2) Diäthylester d. β -Keto- γ -Isoamylpentan- γ δ -Dicarbonsäure. Sd. 295 bis 300° (B. **29**, 981).

C 60.8 - H 8.8 - O 30.4 - M. G. 316.C16H28O6

1) 1-Naphtolglykosid + H_2 0. Sm. 147° (Bl. [3] 13, 5). 2) Triäthylester d. Heptan- $\gamma\delta\delta$ -Tricarbonsäure. Sd. 285—290° (B. 29,

3) Triäthylester d. β -Methylhexan- $\beta\gamma\gamma$ -Tricarbonsäure. Sd. 300-3010 (B. **23**, 1937). — **1**, 815. 4) Triäthylester d. β -Methylhexan- $\gamma\gamma\delta$ -Tricarbonsäure.

Sd. 280—285° (B. **29**, 976).

5) Triäthylester d. β -Methylhexan- $\gamma \delta \delta$ -Tricarbonsäure. Sd. 285—290° (B. **29**, 976).

6) Triäthylester d. β -Methylhexan- $\delta \delta \varepsilon$ -Tricarbonsäure. Sd. 290-295° (B. 29, 976).

7) Triäthylester d. $\beta\delta$ -Dimethylpentan- $\beta\gamma\gamma$ -Tricarbonsäure. Sd. 290 bis 295° (B. 29, 976).

8) Triacetat d. Trioxydekan. Sd. 215-220° (J. pr. [2] 48, 304). C16H28O7 C 57,8 — H 8,4 — O 33,7 — M. G. 332.

1) Paridin $+ 2H_2O$ (J. 1858, 527; 1860, 543). — III, 599. 2) Triaceton- α -Glykoheptit. Sd. $200-201_{24}^{\circ}$ (B. 28, 2534).

 $C_{16}H_{28}N_{2}$

1 1,4-Di [Isoamylamido] benzol. Sm. 49° (B. 22, 2173). — IV, 583.
2) 1,2-Di [Isobutylamidomethyl|benzol. Sd. 188—190° (B. 31, 1705).
3) 1,2-Di [Dimethylamidomethyl]benzol. Sd. 170—175° (B. 31, 427).

4) 2,5-Dimethyl-3,6-Diamyl-1,4-Diazin. Fl. (2HCl, PtCl₄) (B. 30, 1517), **— IV**, 832.

 $C_{16}H_{29}N_3$ C 73,0 — H 11,0 — N 16,0 — M. G. 263.

1) Nitril d. Imidocaprylsäure. HCl (A. 177, 134). — I, 1205.

C 75,6 — H 8,3 — O 8,3 — M. G. 254. 1) Gaïdinsäure. Sm. 39°. Na, Cu (A. **99**, 307; **143**, 38). — I, 524. 2) Hypogäsäure (Physetölsäure). Sm. 33°. Ba, Cu (A. 94, 230; 143, 22; 244, 253; J. 1860, 324; B. 27, 3398; J. pr. [2] 57, 26). — I, 524.

3) Lycopodiumölsäure. Fl. (B. 22 [2] 341, 835). — I, 525.

4) Physetölsäure. Sm. 30°. Ba, Pb (A. 91, 182). — I, 525.

5) Methylester d. Säure C₁₅H₂₈O₂ (aus Petroleum). Sd. 280—290° (B. 20, 598). — I, 524. 6) Acetat d. ζ-Oxymethyl-ζ-Trideken. Sd. 285—290° (280—285°) (B. 15,

2809; **16**, 211, 1029). — **1**, 255.

7) Capronat d. d-Citronellol. Sd. 168-170° (Bl. [3] 19, 638).

C 71,1 — H 11,1 — O 17,8 — M. G. 270. 1) Dikonylenalkohol (A. 130, 300). — I, 270. C16H30O8

2) η-Ketopentadekan-α-Carbonsäure (Ketopalmitinsäure). Sm. 74° (B. 27. 3400).

3) Oxyhypogäsäure. Sm. 34° (A. 143, 36). — I, 612.

4) Säure (aus Lycopodiumsporen) (B. 22 [2] 341). — I, 612. 5) Anhydrid d. Caprylsäure. Sd. 280—290° (A. 85, 229). — I, 464.

6) Aethylester d. η-Ketotridekan-ζ-Carbonsäure (Ae. d. Oenanthylönanthsäure). Sd. 290-2920 (Bl. [3] 2, 339). - I, 612.

Verbindung (aus Isobutyraldehyd). Sd. 190-200° (Soc. 43, 95; M, 19. 374). — I, 947. C 67,1 — H 10,5 — O 22,4 — M. G. 286.

C16H30O4

 $C_{16}H_{30}O_{6}$

 $\mathbf{C}_{16}\mathbf{H}_{91}\mathbf{N}_{3}$

 $C_{16}H_{32}O_2$

 Thapsiasäure. Sm. 123—124°. K₂, Ba, Ag₂ (G. 13, 514). — I, 689.
 Jalapinolsäure, siehe C₁₆H₃₉O₃. — III, 595.
 Diacetat d. Alkohol C₁₂H₂₆O₂ (aus Isobutyraldehyd). Sd. 180—190° (Soc. 43, 91). — I, 947.

C 63,6 - H 9,9 - O 26,5 - M. G. 302.C16 H30 O5

1) Agaricinsaure + H₂O. Sm. 138—139°. NH₄, K₂, Ba, Ag₂ (Z. 1870, 352; J. 1864, 613; 1875, 861). — I, 760. C 60,4 — H 9,4 — O 30,2 — M. G. 318.

1) Diisoamylidenäther d. Sorbit. Sm. 70° (A. ch. [6] 22, 423). — I, 953. C 57,5 - H 9,0 - O 33,5 - M.G. 334.C16 H30 O7

 Cardensäure. Sm. 126° (C. 1896 [1] 112).
 C 54,8 — H 8,6 — O 36,6 — M. G. 350. $C_{16}H_{30}O_{8}$

1) Sebacin? (A. ch. [3] 41, 293). — I, 687. 1) Cetylenbromid (A. 143, 268).

 $\mathbf{C_{16}H_{30}Br_{2}}$ $\mathbf{C}_{16}^{10}\mathbf{H}_{31}^{31}\mathbf{N}$

C 81,0 — H 13,1 — N 5,9 — M. G. 237.

1) Nitril d. Palmitinsäure. Sm. 31°; Sd. 251,5°₁₀₀ (108°₀). 2 + HBr (B. 15, 1730; 22, 812; 24 989; 26, 2847; 29, 1324). — I, 1468. C 72,5 — H 11,7 — N 15,8 — M. G. 265.

1) Tri[1-Hexahydropyridyl] methan $+ H_2O$. Sd. 98°_{15} (B. 20, 3247). —

2) Tetrapropylsuccinimidin. (2HCl, PtCl₄), 2HNO₃ (B. 23, 2931). —

1) Bromceten (A. 143, 268). — I, 124. C16 H21 Br

2) β [oder γ]-Brom- β -Hexadeken. Sd. 198—200 $^{\circ}_{18}$ (B. 25, 2245). C 80,3 — H 13,3 — O 6,7 — M. G. 240. $C_{16}H_{32}O$

1) Isopropyläther d. 5-Oxy-3-Hexyl-1-Methylhexahydrobenzol. Sd. 138—139°₁₀ (A. **289**, 152).

2) β -Ketohexadekan (Methyltetradekylketon). Sm. 43—43,5°; Sd. 230 bis 231°_{100} (B. **15**, 1707). — **1**, 1005.

3) Hexadekanoxyd (Cetenoxyd). Sm. unter 30°; Sd. unter 300° (A. 126,

203). — I, 310. 4) Aldehyd d. Palmitinsäure. Sm. 58,5° (46—47°); Sd. 192—193°₂₂ (B. 13,

1416; A. 131, 287). — I, 957. C 75,0 — H 12,5 — O 12,5 — M. G. 256.

1) Palmitinsäure. Sm. 62°; Sd. 339-356° (138-139°). Salze meist bekannt, Lit. bedeutend. - I, 442.

2) Pentadekan-θ-Carbonsäure (norm. Diheptylessigsäure). Sm. 26—27°;
 Sd. 240—250°_{80—80}. Ba, Cu (A. 200, 116). — I, 444.
 3) γ-Methyltetradekan-ζ-Carbonsäure. Sm. 65—66°. Ag (J. pr. [2] 57, 455).

4) Methylester d. Laktarsäure. Sm. 38° (Bl. [3] 2, 157). — I, 442.

- 5) Methylester d. Tetradekan-?-Carbonsäure. Sm. 66-68° (B. 20, 965).
- 6) Aethylester d. Myristinsäure. Sm. 10,5—11,5°; Sd. 295° (A. 37, 157; B. 18, 2016, 2623; 19, 1434). — I, 441.
 7) Isoamylester d. Umbellulsäure. Sd. 295° (Am. 4, 206). — I, 440.
- 8) β -Methylbutylester d. Undekylsäure. Sd. 293 -296°_{729} (Bl. [3] 15, 284).
- 9) Diisobutylhydratester d. Isooktylessigsäure. Sd. 278-281° (Soc. 35, 128). **— I**, *438*.

10) Oktylester d. norm. Caprylsäure. Sd. 297-299° (305,9°) (A. 152, 6; **233**, 289). — **I**, 437.

 $\mathbf{C}_{16}\mathbf{H}_{32}\mathbf{Br}_{2}$.

 $C_{16}H_{34}N_{2}$

 $\mathbf{C}_{16}\mathbf{H}_{34}\mathbf{S}$

C16 H35 N

11) norm. Tetradekylester d. Essigsäure. Sm. 12—13°; Sd. 175,5—176,5° 15 $C_{16}H_{32}O_{2}$ (B. 16, 1720). — I, 411. 12) Tetradekylester d. Essigsäure (aus Amylheptyläthylalkohol). Sd. 275

bis 280° (B. 15, 2811; 16, 1032; Soc. 43, 77). — I, 411.

13) Verbindung (aus αγ-Dioxy-ββδ-Trimethylpentan). Sd. 260-262° (M. 3, 624; **4**, 671; **17**, 100). — **1**, 1003. C 70,6 — H 11,7 — O 17,7 — M. G. 272.

 $C_{16}H_{32}O_{3}$

1) α -Oxypentadekan - α - Carbonsäure (α -Oxypalmitinsäure). Sm. 82—83°. Ba, Pb, Cu (B. 24, 939). — I, 579.

Ba, Pb, Cu (B. 24, 939). — 1, 579.
2) δ-Oxy-γ-Methyltetradekan-ζ-Carbonsäure (Jalapinolsäure). Sm. 64 bis 64,5° (67-68°). NH₄, KH, Na, Ba, Cu, Pb, Ag (A. 95, 149; 116, 306; J. 1884, 1447; J. pr. [2] 57, 448, 457). — III, 595.
3) Lanopalminsäure. Sm. 87-88° (B. 29, 2891).
4) Tampikolsäure. Na (Z. 1870, 667, 668). — III, 613.
5) Methylester d. δ-Oxy-γ-Methyltridekan-γ-Carbonsäure. Sm. 33,5°; Sd. 206-208°₁₅ (R. 13, 206).
C 66,7 — H 11,1 — O 22,2 — M. G. 288.
1) Diegypolysitin synchrotic (R. 142, 27).
I. Diegypolysitin synchrotic (R. 142, 27).
I. Diegypolysitin synchrotic (R. 142, 27).
I. Diegypolysitin synchrotic (R. 142, 27).
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I. Diegypolysitin synchrotic (R. 142, 27).
I. Diegypolysitin synchrotic (R. 142, 27).
I. Diegypolysitin synchrotic (R. 142, 27).
I. Diegypo

 $C_{16}H_{32}O_4$

1) Dioxypalmitinsäure. Sm. 115°. Ba (A. 143, 37). — I, 635. 2) isom. Dioxypalmitinsäure. Sm. 57° (M. 8, 497). — I, 635.

3) Turpetholsäure. Sm. 87° (70,5-71°). Na, Ba, Ag (A. 139, 53; C. 1895 [2] 790). — III, 614. C 46,2 — H 7,7 — O 46,1 — M. G. 416.

 $\mathbf{C}_{16}\mathbf{H}_{32}\mathbf{O}_{12}$

1) Hexaäthylester d. Dimalonylmaleinsäure. Sm. 175°; Sd. 210-212°, 15 (M. 9, 451). C 76,2 — H 12,7 — N 11,1 — M. G. 252.

 $C_{16}H_{32}N_2$

1) Bismethylhexylazimethylen. Sd. 286-290° (J. pr. [2] 44, 166). -

2) 5-Methyl-3, 5-Dihexyl-4, 5-Dihydropyrazol. Fl. (J. pr. [2] 58, 324). 1) Dibromhexadekan (Cetenbromid). Sm. 13,5°; Sd. 225-227°₁₅ (B. 17,

1373; **23**, 2353). — **I**, *180*. 2) isom. Dibromhexadekan (A. 136, 265; 143, 268).

 $\mathbf{C}_{16}\mathbf{H}_{33}\mathbf{Cl}$ 1) Chlorhexadekan (Cetylchlorid). Sd. 289° (113°) (J. 1860, 406; B. 29, 1325). — **I**, *157*.

 $\mathbf{C}_{16}\mathbf{H}_{33}\mathbf{Br}$

 Bromhexadekan (Cetylbromid). Sm. 15° (A. 83, 15). — I, 180.
 Jodhexadekan (Cetyljodid). Sm. 22°; Sd. 211° (128°) (A. 83, 9; B. 19, $\mathbf{C}_{16}\mathbf{H}_{33}\mathbf{J}$ 2219; **29**, 1325). — **I**, *196*. C 79,3 — H 14,0 — O 6,6 — M. G. 242. C16H34O

1) Oxyhexadekan (Cetylalkohol). Sm. 50°; Sd. 344° (119°). Na (A. 83, 7; 206, 352; H. 3, 225; 21, 287; B. 3, 616; 16, 1721; 29, 1325; J. pr. [2] 43, 152; G. 14, 522; J. 1852, 504; 1862, 413). — I, 240.

2) norm. Oktyläther d. a-Oxyoktan (norm. Oktyläther). Sd. 280-2820

C₁₆H₃₄O₂

(291,7°) (A. 185, 56; 243, 10). — I, 300.

C 74,4 — H 13,2 — O 12,4 — M. G. 258.

1) Dioxyhexadekan (Cetenglykol). Sm. 75—76° (72—73°). Sd. 220—221°₁₅ (A. 143, 270; B. 23, 2354). — I, 267.

C 70,1 — H 12,4 — O 17,5 — M. G. 274.

 $C_{16}H_{84}O_{3}$

Triisoamyläther d. Trioxymethan (Triisoamyläther d. Orthoameisensäure). Sd. 265—267° (A. 92, 348; B. 12, 118). — I, 312.
 C 75,6 — H 13,4 — N 11,0 — M. G. 254.

1) Palmitinamidin. Sm. 85°; Sd. 194°₁₃. HCl, (2HCl, PtCl₄) (B. 26, 2843,

1) Merkaptohexadekan (Cetylmerkaptan). Sm. 50,5° (A. 83, 18). — I, 350.

Dioktylsulfid. Sd. 310° u. Zers. (A. 185, 59). — I, 363.
Quecksilberdioktyl (B. 12, 1880). — I, 1526.
C 79,6 — H 14,5 — N 5,8 — M. G. 241.

 $\mathbf{C}_{16}\mathbf{H}_{34}\mathbf{Hg}$

1) α-Amidohexadekan (Cetylamin). Sm. 45—46°; Sd. 330°. HCl, (2 HCl, PtCl₄), HJ (B. 22, 812; 29, 1331). — I, 1138.

2) α-Oktylamidooktan (norm. Dioktylamin). Sm. 36,5°; Sd. 297—298°. HCl, (2HCl, PtCl₄) (A. **166**, 87; B. **17**, 630). — **I**, II37. 3) sec. Dioktylamin. Sd. 260—270°. HCl, (2HCl, PtCl₄), (HCl, AuCl₃) (B. **17**, 636; A. ch. [6] **13**, 511). — **I**, II38.

C₁₆-Gruppe mit drei Elementen.

- $C_{16}H_3O_5Br_9$ 1) Nonobrombrasilein. $+C_2H_4O_2$ (B. 22, 1557). III, 655.
- 1) Tetrachlorbiphtalyl (A. 233, 245). II, 1816. $\mathbf{C}_{16}\mathbf{H}_{4}\mathbf{O}_{4}\mathbf{Cl}_{4}$
- Oktobrombrasilein. + 2C₂H₄O₂ (B. 22, 1550). III, 655.
 Tribrompyrenchinon (M. 4, 317). III, 462.
 C 74,4 H 2,3 O 12,4 N 10,9 M. G. 258. $\mathbf{C}_{16}\mathbf{H}_4\mathbf{O}_5\mathbf{Br}_8$
- $\mathbf{C}_{16}\mathbf{H}_5\mathbf{O}_2\mathbf{Br}_3$
- $\mathbf{C}_{16}\mathbf{H}_{6}\mathbf{O}_{2}\mathbf{N}_{2}$
- Verbindung (aus Pyridin u. Chloranil) (Bl. [3] 19, 1008). 1) Dibrompyrenchinon. Sm. noch nicht bei 310° (B. 29, 462). $\mathbf{C}_{16}\mathbf{H}_{8}\mathbf{O}_{2}\mathbf{Br}_{2}$ III, 462.
- 1) Diacetat d. Oktochlor-P-Dioxybiphenyl. Sm. 193-1940 (B. 16, 885). $\mathbf{C}_{16}\mathbf{H}_{6}\mathbf{O}_{4}\mathbf{Cl}_{8}$ - II, 990.
- C 50,3 H 1,6 O 33,5 N 14,6 M. G. 382. $\mathbf{C}_{16}\mathbf{H}_{6}\mathbf{O}_{8}\mathbf{N}_{4}$
- $\mathbf{C}_{16}\mathbf{H}_7\mathbf{O}_4\mathbf{Br}$
- $\mathbf{C}_{16}\mathbf{H}_7\mathbf{O}_6\mathbf{N}$
- 1) Tetranitropyren. Sm. oberh. 300° (A. 158, 293). II, 285.
 1) Brombiphtalyl (A. 164, 247). II, 1816.
 C 62,1 H 2,3 O 31,1 N 4,5 M. G. 309.
 1) Nitrobiphtalyl. Sm. 270° (A. 233, 243). II, 1816.
 1) Dichlor-α-Phenylen-α-Naphtylenoxyd. Sm. 245° (A. 209, 144). C₁₆H₈OCl₂ II, 1002.
- $C_{16}H_8OBr_4$ 1) 3,4-Dibrom-2,5-Di[4-Bromphenyl]furan. Sm. 190-191° (Soc. 57, 954). — III, 695.
- 1) Dibrom-α-Phenylen-α-Naphtylenoxyd. Sm. 284° (A. 209, 144). $\mathbf{C}_{18}\mathbf{H}_{8}\mathbf{OBr}_{2}$ II, 1002. C 73,8 — H 3,1 — O 12,3 — N 10,8 — M. G. 260.
- $\mathbf{C}_{16}\mathbf{H}_8\mathbf{O}_2\mathbf{N}_2$ 1) 1,4-Naphtochinonphenazin (B. 23, 2797). — III, 375.
 - 2) 5,6-Diketo-5,6-Dihydro- $\alpha\beta$ -Naphtophenazin. Sm. 265° u. Zers. (A.
- **286**, 57, 79; **295**, 22). **IV**, *1058*. C 66,7 **H** 2,8 O 11,1 N 19,4 M. G. 288. $\mathbf{C}_{16}\mathbf{H}_{8}\mathbf{O}_{2}\mathbf{N}_{4}$
 - Verbindung (aus 1-Amido-2-Phenylamidonaphtalinhydrochlorid u. N₂O₃). Sm. 207—208° (A. 255, 351). IV, 1171.
 Chlorid d. Anthracen-1,3-Dicarbonsäure (J. pr. [2] 41, 27). —
- C₁₆H₈O₂Cl₂
- 1) Dílakton d. $\alpha\beta$ -Dimerkapto- $\alpha\beta$ -Diphenyläthen-2, 2'-Dicarbonsäure $\mathbf{C}_{16}\mathbf{H}_8\mathbf{O}_2\mathbf{S}_2$ (Dithiodiphtalyl). Sm. 332—333° (B. 31, 2649). C 65,8 — H 2,7 — O 21,9 — N 9,6 — M. G. 292.
- $C_{16}H_8O_4N_2$
 - 1) αδ-Di[2-Nitrophenyl]-αγ-Butadiën. Sm. 212° u. Zers. (B. 15, 51). II, 283.

 - 2) Dinitropyren. Sm. über 240° (A. 158, 292; M. 2, 581). II, 285. 3) 2-Nitroketonaphtophenoxazin. Sm. 246-247° (B. 30, 2132). 4) 3-Nitroketonaphtophenoxazin. Sm. 253-254° (B. 30, 2134). 5) ?-Nitroketonaphtophenoxazin. Sm. 234-235° (B. 28, 354; 30, 2136). - IV, 460.
 - 6) Nitril d. 3-[3-Nitrophenyl]-1,2-Isobenzpyron-4-Carbonsäure (3-m-Nitrophenyl-4-Cyanisocumarin). Sm. 210-2110 (B. 29, 2543).
 - 7) Verbindung (aus Diphtalylsäure). Sm. 285-286° (A. 242, 230). -II, 2029.
- 1) Biphtalylchlorid. Sm. 245° (A. 228, 133). II, 1816. $\mathbf{C}_{16}\mathbf{H}_{8}\mathbf{O}_{4}\mathbf{Cl}_{2}$
- 1) Biphtalylbromid. Sm. bei 225° (A. 228, 131). II, 1816. $\mathbf{C}_{16}\mathbf{H}_{8}\mathbf{O}_{4}\mathbf{Br}_{2}$ 2) Acetat d. 1,3-Dibrom-2-Oxy-9,10-Anthrachinon. Sm. 189-1900 (A. **202**, 137). — III, 419.
- C 62.3 H 2.6 O 26.0 N 9.1 M. G. 308. $\mathbf{C}_{18}\mathbf{H}_{8}\mathbf{O}_{5}\mathbf{N}_{2}$
- 1) Dinitro-α-Phenylen-α-Naphtylenoxyd. Sm. 235° (A. 209, 145). II, 1002. C₁₈H₈O₅Br₄ 1) Tetrabromsuccinylfluoresceïn (Succinyleosin). K (J. pr. [2] 23, 155).
- II, 2049. C 53,9 H 2,5 O 29,6 N 8,6 M. G. 324.
- $\mathbf{C}_{16}\mathbf{H}_{8}\mathbf{O}_{6}\mathbf{N}_{2}$ 1) Bianhydrid d. 4,4'-Diamidobiphenyl-?-Tetracarbonsäure. Sm. oberh. 300°. NH_4 , $Na_2 + xH_2O$, $K_2 + 5H_2O$, Pb, Ag_2 , Ag_4 (B. 16, 1759). —
- II, 2085. C 54,5 H 2,3 O 27,3 N 15,9 $\mathbf{C}_{16}\mathbf{H}_8\mathbf{O}_6\mathbf{N}_4$
 - 1) Dinitroindigo (B. 12, 1316). II, 1620. 2) Dinitroindin (J. pr. [1] 25, 452). — II, 1616.

 $\mathbf{C}_{16}\mathbf{H}_{9}\mathbf{O}_{5}\mathbf{Br}_{3}$ $\mathbf{C}_{16}\mathbf{H}_{9}\mathbf{O}_{6}\mathbf{N}_{5}$

C 56.5 - H 2.3 - O 32.9 - N 8.2 - M. G. 340.C16H8O7N2 Anhydrid d. αβ-Di[P-Nitrophenyl]äthen-αβ-Dicarbonsäure. Erweicht bei 73° (B. 14, 1801). — II, 1898.
 C 46,2 — H 1,9 — O 38,4 — N 13,5 — M. G. 416.
 P-Trinitro-4-Acetoxylphenylimid d. Benzol-1,2-Dicarbonsäure. $\mathbf{C}_{16}\mathbf{H}_{8}\mathbf{O}_{10}\mathbf{N}_{4}$ Sm. 176—177° (*G*. **16**, 253). — **II**, 1809. C 41,4 — H 1,7 — O 44,8 — N 12,1 — **M. G.** 464. $C_{16}H_8O_{13}N_4$ 1) Monomethyläther d. Tetranitroemodin. Sm. 2750 u. Zers. (Soc. 65, 935). — III, 454. 1) 5, 6-Dichlor- $\alpha\beta$ -Naphtophenazin. Sm. 202° (A. 286, 56). — IV, 1051. $\mathbf{C}_{16}\mathbf{H}_{8}\mathbf{N}_{2}\mathbf{Cl}_{2}$ 1) Verbindung (aus Nitroso- β -Naphtochinonanilid)? = $(C_{16}H_9ON_2)_X$. Sin. 217° C16H9ON2 (B. 15, 286). — III, 393. C 77,7 — H 3,6 — O 12,9 — N 5,7 — M. G. 247. $C_{16}H_9O_2N$ 1) α -Phenyl- δ -[2-Nitrophenyl]- $\alpha \gamma$ -Butadiin. Sm. 154—155° (B. 15, 58). **— II**, 283. 2) Nitropyren. Sm. 141—142° (149,5—150,5°) (A. 158, 292; M. 2, 580; 10, 2143). — II, 285. 3) Phenochinoxanthon. Sm. 188°. HCl (B. 25, 1644). — IV, 375. 4) Ketonaphtophenoxazin. Sm. 191—192° (B. 28, 354). — IV, 460.
 5) Phenyl-β-Naphtylcarbazolchinon. Sm. 307° (A. 202, 13). — IV, 453. 6) α, α²-Lakton d. β-Cyan-α-Oxy-αβ-Diphenyläthen-α²-Carbonsäure.
 Sm. 164—165,5° (B. 18, 1264; J. pr. [2] 55, 330). — II, 1977. 7) Nitril d. 3-Phenylisobenzpyron-4-Carbonsäure (3,4-Phenylcyanisocumarin). Sm. 204—205° (B. 25, 3572; 27, 832 Anm.). — II, 1977. 8) Verbindung (aus Desoxybenzoïndicarbonimidosäure) (B. 24, 2823). II, 1978. C $^{'}$ 69,8 — H 3,3 — O 11,6 — N 15,3 — M. G. 275. 1) **6-Nitro-** $\alpha\beta$ -Naphtophenazin. Sm. 221—222° (B. 23, 175). — IV, 1051. $C_{16}H_9O_2N_3$ 2) Monooxim d. 5, 6-Diketo-5, 6-Dihydro- $\alpha\beta$ -Naphtophenazin. Sm. 219° u. Zers. (A. **286**, 80). — **IV**, 1058. C 73,0 — H 3,4 — O 18,2 — N 5,3 — M. G. 263. l) Biphtalylimid. Sm. oberh. 274° (A. **228**, 137; **233**, 246; B. **26**, 540). $\mathbf{C}_{16}\mathbf{H}_{9}\mathbf{O}_{3}\mathbf{N}$ - II, 1817. $C_{16}H_9O_3N_3$ C 66,0 - H 3,1 - O 16,5 - N 14,4 - M. G. 291.1) Nitril d. 1-Keto-3-[3-Nitrophenyl]-1,2-Dihydroisochinolin-4-Carbonsäure (3-m-Nitrophenyl-4-Cyanisocarbostyril). Sm. oberh. 315° (B. 29, 2545). — IV, 432. C 62,5 — H 2,9 — O 20,8 — N 13,7 — M. G. 307. $\mathbf{C}_{16}\mathbf{H}_{9}\mathbf{O}_{4}\mathbf{N}_{3}$ 1) 2-Nitro-4-Cyanbenzylimid d. Benzol-1, 2-Dicarbonsäure. Sm. 1940 (B. **27**, 2165). — II, 1813. C 57,3 — H 2,7 — O 19,1 — N 20,9 — M. G. 335. $C_{16}H_9O_4N_5$ 1) 1-[2,4,6-Dinitrosonitrophenyl]azonaphtalin. Sm. 210° (J. pr. [2] 43, 183). — IV, 1392. 2) 2-[2,4,6-Dinitrosonitrophenyl]azonaphtalin. Sm. 231° u. Zers. (*J. pr.* [2] 43, 183). — IV, 1392. C 65,1 — H 3,0 — O 27,1 — N 4,7 — M. G. 295. C16H9O5N Verbindung (aus Isatin u. Anhydroglykopyrogallol) (B. 29, 1752).
 C 59,4 — H 2,8 — O 24,8 — N 13,0 — M. G. 323. C16H9O5N3 1) 3-[2-Nitrophenyl]azo-2-Oxy-1,4-Naphtochinon. Sm. 255-257° u. Zers. (B. 30, 2129). — IV, 1481. 2) 3-[4-Nitrophenyl]azo-2-Oxy-1,4-Naphtochinon. Zers. bei 260-261° (E. 30, 2129). — IV, 1481. C 54,6 — H 2,6 — O 22,8 — N 19,9 — M. G. 351. $\mathbf{C}_{16}\mathbf{H}_{9}\mathbf{O}_{5}\mathbf{N}_{5}$ 1) 1-[2,4,6-Nitrosodinitrophenyl]azonaphtalin. Sm. 232° (J. pr. [2] 43, 182). — IV, 1392. 2) 2-[2,4,6-Nitrosodinitrophenyl]azonaphtalin. Sm. 245° (J. pr. [2] 43, 182). — IV. 1392.

181). — IV, 1392.
2) 2-[2,4,6-Trinitrophenyl]azonaphtalin. Sm. 205° u. Zers. (J. pr. [2] 43, 182). — IV, 1392.
C.-H.O.Br. 1) Methylither d. Methylither at the control of t

1) 1-[2, 4, 6-Trinitrophenyl]azonaphtalin. Sm. 226° u. Zers. (J. pr. [2] 43,

 $C_{16}H_9O_7Br_3$ 1) Methyläther d. Tribromquercetin (4. 196, 321). — III, 605.

1) Tribrombrasileïn + H₂O (B. 23, 1429). — III, 655. C 52,3 — H 2,4 — O 26,2 — N 19,1 — M. G. 367.

- C 48.1 H 2.2 O 32.1 N 17.5 M. G. 399. $\mathbf{C}_{16}\mathbf{H}_{9}\mathbf{O}_{8}\mathbf{N}_{5}$
 - 1) ?-Tetranitro-I-Phenylamidonaphtalin. Sm. 253° (B. 15, 2720). II, 600.
 - 2) ?-Tetranitro-l-Phenylamidonaphtalin. Sm. 162,50 (B. 15, 2717). II, 600.
- C'45,0 H 2,1 O 30,0 N 22,9 M. G. 427. $C_{16}H_9O_8N_7$
 - 1) ?-Tetranitro-2-Methyl-4, 6-Diphenyl-1, 3, 5-Triazin (Pinner, Imido-
- äther 162). IV, 1191. 1) Chloracetat d. 1,2,3,5,6,7-Hexaoxy-9,10-Anthrachinon (B. 10, 881). $\mathbf{C}_{16}\mathbf{H}_{9}\mathbf{O}_{9}\mathbf{C}\mathbf{1}$ **- III**, 439.
- 1) P-Tetrabrom-2-Phenylamidonaphtalin. Sm. 202-2030 (1980) (A. 209, $\mathbf{C}_{16}\mathbf{H}_{9}\mathbf{NBr}_{4}$ 159; B. **20**, 1170; **28**, 337). — II, 602.
- $\mathbf{C}_{16}\mathbf{H}_{9}\mathbf{N}_{2}\mathbf{C}\mathbf{1}$ 1) 9-Chlor- $\alpha\beta$ -Naphtophenazin. Sm. 191° (B. 31, 2479).
 - 2) Verbindung (aus 4, 4'-Tetramethyldiamidobiphenyl) (Bl. [3] 5, 59). IV, 962. C 78,0 — H 4,1 — O 6,5 — N 11,4 — M. G. 246.
- $\mathbf{C}_{16}\mathbf{H}_{10}\mathbf{ON}_{2}$
 - 1 4-[4-Dimethylamidophenyl]imido-1-Keto-2-Aethyl-1,4-Dihydrobenzol. Sm. 83-84° (A. ch. [7] 10, 60). IV, 599.
 2) Nitrophenyl-β-Naphtylcarbazol. Sm. 240° (A. 202, 8). IV, 453.
 3) Nitrosophenylnaphtylcarbazol. Sm. 132° (B. 29, 269). IV, 453.
 4) P-Imidoketonaphtophenoxazin. Sm. 242—243° (B. 28, 355). IV, 460.

 - 5) 5-Oxy- $\alpha\beta$ -Naphtophenazin (α -Naphtenrhodol) (B. 23, 846, 2453; 28, 349, 357). — IV, 1054.
 - 6) 6-Oxy-αβ-Naphtophenazin. Sm. 197-198° (199°) (B. 26, 618; 31, 2412). IV, 1054.
 - 7) isom. 6-Oxy- $\alpha\beta$ -Naphtophenazin (B. 26, 619). IV, 1054.
 - 8) 5,6-Dihydro- $\alpha\beta$ -Naphtophenazin-5,6-Oxyd. Sm. $186-187^{\circ}$ (B. 26,
 - 617). IV, 1053. 9) Nitril d. 1-Keto-4-Phenyl-1,2-Dihydroisochinolin-3-Carbonsäure.
 - Sm. 267°. Ag (B. 27 [2] 589).
 10) Nitril d. 1-Keto-3-Phenyl-1, 2-Dihydroisochinolin-4-Carbonsäure. Sm. 285° (B. 25, 3573; 27, 832 Anm.). — II, 1897.
 - 11) Nitril d. β -Oxy- β -Phenyl- α -[2-Cyanphenyl] äthen- α -Carbonsäure.
 - Sm. $109-110^{\circ}$. K + $3 H_2 O$, Ag (B. 27, 832). II, 1977. 12) Verbindung (aus 2-Oxynaphtalin u. 1,4-Benzochinondichlordiimid). HNO₃
 - (B. 21, 1745). III, 330. C 73,3 H 3,8 O 12,2 N 10,7 M. G. 262. 1) Indigotin (Indigoblau). Sm. 390—392° u. Druck; subl. 156—158°. Lit.
- $C_{16}H_{10}O_2N_2$
 - bedeutend. II, 1618.
 - 2) Indin. K (J. pr. [1] 25, 445; A. 72, 282; J. 1865, 584). II, 1616.
 - 3) Indirubin (Isatinindogen; Indigpurpurin) (B. 3, 515; 12, 459, 1220; 14, 1745; 17, 976; 28, 541, 2525; J. 1858, 468). II, 1622.
 4) 4-Phenylazo-1,2-Diketo-1,2-Dihydronaphtalin. Sm. 265° u. Zers.
 - (A. 286, 85). IV, 1480.
 - 5) Bis-m-Indolon. Sm. noch nicht bei 330° (B. 26, 539). II, 1625.

 - 6) Phenanthrenchinondihydrocyanid (Soc. 51, 32). III, 443. 7) 5-Phtalylmethylbenzimidazol. Sm. 223 225° (A. 273, 320). IV, 893.
 - 8) 2,3-Difuranyl-1,4-Benzdiazin. Sm. 134° (B. 25, 2843). IV, 1061.
 - 9) 2-Amidoketonaphtophenoxazin. Sm. $255-256^{\circ}$ (B. 30, 2132). IV, 1060.
 - 10) 3-Amidoketonaphtophenoxazin. Zers. bei 280° (B. 30, 2135). -IV, 1060.
 - 11) P-Amidoketonaphtophenoxazin. Sm. 211-2120 (B. 30, 2136). -IV, 1060.
 - 12) **5,6-Dioxy-\alpha\beta-Naphtophenazin** ($\alpha\beta$ -Oxynaphteurhodol). Sm. 241° (A. 286, 77). — İV, 1057.
 - 13) 9,10-Dioxy- $\alpha\beta$ -Naphtophenazin. Sm. bei 300° (B. 24, 1339). IV, 1057.
 - 14) 2-Cyanbenzylimid d. Benzol-1,2-Dicarbonsäure. Sm. 181-1820 (B. **20**, 2231). — II, 1805.
 - 15) 3-Cyanbenzylimid d. Benzol-1, 2-Dicarbonsaure. Sm. 147° (B. 24, 2418). — II, 1805.
 - 16) 4-Cyanbenzylimid d. Benzol-1,2-Dicarbonsäure. Sm. 183-1840 (B. **23**, 1058). — **II**, 1805.

 $C_{16}H_{10}O_{2}N_{2}17$) polym. Cyanid d. Benzolcarbonsäure = $(C_{8}H_{5}ON)_{2}$. Sm. 99-100° (95°):

Sd. 220°₁₅ (J. pr. [2] 39, 260; A. 287, 305).

18) Verbindung (aus?-Nitro-1,8-Naphtochinon). Sm. 128° u. Zers. (B. 21,

1462). — III, 398.

19) Verbindung (aus Amido-β-Naphtochinonanilid). Sm. 275° (B. 15, 286). - III, 393.

C 66.2 - H 3.4 - O 11.0 - N 19.3 - M. G. 290.C16H10O2N

1) 1-[2,4-Dinitrosophenyl]azonaphtalin. Sm. 1620 (J. pr. [2] 43, 188). **- IV**, 1391.

- 2) 2-[2,4-Dinitrosophenyl]azonaphtalin. Sm. 178° (J. pr. [2] 43, 188). **— IV**, 1391.
- 3) 5,5'-Diphenyl-3,3'-Bi[1,2,4-Oxdiazol]. Sm. 246° (B. 22, 2948). IV, 1210. 4) 3,3'-Diphenyl-5,5'-Bi[1,2,4-Oxdiazol]. Sm. 1420 (B. 22, 3138).
- 5) ?-Nitro-1-[1-Naphtyl]-1,2,3-Benztriazol. Sm. 182° (B. 21, 2303). IV. 1144.
- 6) ?-Nitro-1-[2-Naphtyl]-1,2,3-Benztriazol. Sm. 203—204° (B. 21, 592). – IV, 1144.
- 7) 2-[3-Nitrophenyl]naphttriazol. Sm. 223-2240 (Soc. 59, 379). -IV, 1208.

8) 2-[4-Nitrophenyl]naphttriazol. Sm. 236° (Soc. 59, 379). — IV, 1208. $\mathbf{C}_{16}\mathbf{H}_{10}\mathbf{O}_{2}\mathbf{S}$ 1) Atronylsulfon. Sm. 1930 (A. 206, 63). — II, 281.

C16H10O3N2

- C 69.1 H 3.6 O 17.3 N 10.0 M.G. 278.
- 1) ?-Nitroso-4-Phenylimido-2-Oxy-1-Keto-1, 4-Dihydronaphtalin. Sm. 245°. $+ C_2H_6O$ (B. 15, 286). — III, 393.

2) 3-Phenylazo-2-Oxy-1, 4-Naphtochinon. Sm. 225-226° u. Zers. NH4, Ag (B. 30, 2127). — IV, 1480.

- 3) 3,4-Dibenzoyl-1,2,5-Oxdiazol. Sm. 118° (B. 26, 529; G. 23 [2] 23). - III, *323*.
- 4) Anhydrid d. Dibenzylidenhydrazin-2,2'-Dicarbonsäure. Sm. 219 bis 220° (B. 30, 3024 Anm.).

C 62,7 - H 3,3 - O 15,7 - N 18,3 - M. G. 306C16H10O3N4

- 1) 1-[2, 4-Nitrosonitrophenyl]azonaphtalin. Sm. 2010 (J. pr. [2] 43, 186). • IV, 1392.
- 2) 2-[2,4-Nitrosonitrophenyl]azonaphtalin. Sm. 205° (J. pr. [2] 43, 187). - IV, 1392.

3) Acetylnitroindophenazin (B. 29, 203). — IV, 1189.

- C₁₆H₁₀O₈Cl₄ 1) Aethylester d. 3,4,5,6-Tetrachlor-2-Benzoylbenzol-1-Carbonsäure. Sm. 90° (A. 238, 341). — II, 1704.
- $\mathbf{C}_{16}\mathbf{H}_{10}\mathbf{O}_{3}\mathbf{S}$ 1) Pyrensulfonsaure. $K + H_2O$ (M. 4, 250). — II, 285. $\mathbf{C}_{18}\mathbf{H}_{10}\mathbf{O}_{4}\mathbf{N}_{2}$ C 65,3 - H 3,4 - O 21,8 - N 9,5 - M. G. 294.
 - 1) Diphenyltetracipiperazin (Dioxanilid) (J. pr. [2] 41, 80; B. 23, 2028). - II, 412.
 - 2) 4,5-Dibenzoyl-1,2,3,6-Dioxdiazin (Dibenzoylglyoximsuperoxyd). 87° (B. 20, 3360; 21, 2838; R. 11, 259; J. pr. [2] 41, 492; G. 23 [1] 421; A. **269**, 130). — III, 298.
 - 3) 2-[2-Nitrophenyl]amido-1,4-Naphtochinon (B. 23, 2797). III, 375. 4) 2-[3-Nitrophenyl]amido-1,4-Naphtochinon. Sm. oberh. 270° (B. 14, 1905). — III, *375*
 - 5) 2-[4-Nitrophenyl]amido-1,4-Naphtochinon. Sm. noch nicht bei 270° (B. 14, 1904). — III, 375.
 - 6) 3-Nitro-1, 2-Naphtochinonphenylimid. Sm. 253° (246-248°) (B. 17, 908, 1133). — III, 392

 - 7) Bilifuscin (A. 132, 337; J. 1876, 935). III, 663. 8) Diisatinsäure + 2 H₂O? (C. 1898 [2] 203). 9) Anhydrid d. Diisatinsäure (J. pr. [2] 58, 107).
- 10) Verbindung (aus Trioxyaposafranon) (B. 31, 2439). $C_{16}H_{10}O_4N_4$ C 59.6 - H 3.1 - O 19.9 - N 17.4 - M. G. 322.
 - 1) 1-[2,4-Dinitrophenyl]azonaphtalin. Sm. 190° (J. pr. [2] 43, 186). —
 - IV, 1392. 2) 2-[2,4-Dinitrophenyl]azonaphtalin. Sm. 178° (J. pr. [2] 43, 186). —

 $C_{18}H_{10}O_4N_4$ 3) 5,5'-Bi[2-Keto-3-Phenyl-2,3-Dihydro-1,3,4-Oxdiazol]. Sm. oberh. 300° (B. 21, 1243). — IV, 701. 4) P-Dinitro-2, 3-Diphenyl-1, 4-Diazin (Soc. 55, 101). — IV, 1038. $\mathbf{C}_{16}\mathbf{H}_{10}\mathbf{O}_{4}\mathbf{Br}_{2}$ 1) γ -Oxy- α $\beta\delta$ -Triketo- $\alpha\delta$ -Di [4-Bromphenyl] butan (p-Brombenzoyl-100)

formoïn). Sm. 180° (B. 25, 3476). — III, 318. 2) Monomethyläther d. Dibromchrysin (Dibromtectochrysin) (B. 6, 892,

893). — III, 628. C₁₆H₁₀O₄Br₄ 1) Diacetat d. ?-Tetrabrom-4,4'-Dioxybiphenyl. Sm. 245° (B. 13, 225). **– II**, 988.

1) Diphenylester d. Dijodfumarsäure. Sm. 127° (B. 26, 847). — II, 666. $\mathbf{C}_{16}\mathbf{H}_{10}\mathbf{O}_{4}\mathbf{J}_{2}$ C 61.9 - H 3.2 - O 25.8 - N 9.0 - M. G. 310. $\mathbf{C}_{16}\mathbf{H}_{10}\mathbf{O}_{5}\mathbf{N}_{2}$

1) **2,4-Dinitrophenyläther d. 2-Oxynaphtalin.** Sm. 95° (B. **23**, 3429). - II, 877.

2) 2-[4-Nitro-2-Oxyphenyl]amido-1,4-Naphtochinon. Zers. bei 270°

(B. 30, 2135). 3) 2-[5-Nitro-2-Oxyphenyl] amido-1,4-Naphtochinon. Zers. bei 240°.

Na (B. 30, 2133). 4) 1,2-[3-Nitrobenzoylmethyl]imid d. Benzol-1,2-Dicarbonsäure. Sm.

204° (B. **22**, 3249). — III, 128. C 56,8 — H 3,0 — O 23,7 — N 16,5 — M. G. 338. $\mathbf{C}_{16}\mathbf{H}_{10}\mathbf{O}_{5}\mathbf{N}_{4}$

1) ?-Dinitro-1-Oxy-2-Phenylazonaphtalin. Sm. 250-251° (Soc. 65, 840). **– IV**, 1429.

 $\gamma\gamma$ -Dioxy- $\alpha\beta\delta$ -Triketo- $\alpha\delta$ -Di[4-Bromphenyl]butan. Sm. 135° u. Zers. $C_{16}H_{10}O_5Br_2$ 1) (B. **25**, 3476). — III, *323*.

 $C_{16}H_{10}O_5Br_4$ 1) Tetrabrombrasilin (B. 18, 1141). — III, 654.

 $\mathbf{C}_{16}\mathbf{H}_{10}\mathbf{O}_{6}\mathbf{N}_{2}$

2) isom. Tetrabrombrasilin (B. 22, 1553). — III, 654. C 58,9 — H 3,1 — O 29,4 — N 8,6 — M. G. 326. 1) Azobenzol-3,3'-Diketocarbonsäure + 2H₂O. Sm. 134,5—135° (151° wasserfrei). Ba, Ag₂ (B. 16, 1308). — IV, 1472.

 $\mathbf{C}_{16}\mathbf{H}_{10}\mathbf{O}_{6}\mathbf{N}_{4}$ C 54,2 — H 2,8 — O 27,1 — N 15,8 — M. G. 354.

1) 1-[2,4,6-Trinitrophenyl]amidonaphtalin. Sm. 1970 (Soc. 59, 716). —

II, 600. C 50,3 — H 2,6 — O 25,1 — N 22,0 — M. G. 382. $\mathbf{C}_{16}\mathbf{H}_{10}\mathbf{O}_{6}\mathbf{N}_{6}$ 1) Phenanthrenchinondinitrodiurein (G. 27 [1] 234).

C 46.8 - H 2.4 - O 23.4 - N 27.3 - M. G. 410. $\mathbf{C}_{16}\mathbf{H}_{10}\mathbf{O}_{6}\mathbf{N}_{8}$ 1) m-Nitroäthylenbenzazimid. Sm. bei 290° (J. pr. [2] 53, 218). — IV, 1555.

 $C_{16}H_{10}O_{6}Br_{2}$ 1) Dibromkämpferid. Sm. 224—225° u. Zers. (B. 14, 2389). — III, 632.

 $C_{16}H_{10}O_6Br_6$ 1) Anhydrohexabromkolatannin (C. 1898 [1] 579).

1) Pyrendisulfonsäure. $K + 2^{1}/_{2}H_{2}O$, $Ca + 2H_{2}O$, $Ba + 3^{1}/_{2}H_{2}O$ (M. 4, $\mathbf{C}_{16}\mathbf{H}_{10}\mathbf{O}_{6}\mathbf{S}_{2}$ 244). — II, 285.

C = 56.1 - H = 2.9 - O = 32.7 - N = 8.2 - M. G. = 342. $\mathbf{C}_{16}\mathbf{H}_{10}\mathbf{O}_7\mathbf{N}_2$

1) Aethyläther d. 1,3-Dinitro-2-Oxy-9,10-Anthrachinon. Sm. 158° (B. 15, 694). — III, 419. 2) Azoxybenzol-4,4'-Diketocarbonsäure. Sm. bei 190° (B. 22, 205). —

 $\mathbf{C}_{16}\mathbf{H}_{10}\mathbf{O}_{7}\mathbf{N}_{6}$

IV, 1345. 3) 5,5'-Dialdehyd d. Azoxybenzol-2,5,2',5'-Tetracarbonsäure. Zers. bei 280° (B. 19, 1090). — IV, 1345.

C 48.2 - H 2.5 - O 28.1 - N 21.1 - M. G. 398.

1) 4-[4-Nitrophenyl] hydrazon-5-Keto-1-[4-Nitrophenyl]-4,5-Dihydropyrazol-3-Carbonsäure. Sm. 238-240° u. Zers. Na+H₂O, Ca, Ba+2H₂O, Ag (A. 299, 104, 107, 110). — IV, 729.

2) Anhydrid d. Di[4-Nitrophenylhydrazon]äthan-αβ-Dicarbonsäure. Sm. 278—280° u. Zers. (A. 299, 115). — IV, 729. C₁₈H₁₀O₇Br₄ 1) Tetrabromlecanorsäure. Sm. 157° (A. 139, 28). — II, 1754.

C 53,6 — H 2,8 — O 35,7 — N 7,8 — M. G. 358. $\mathbf{C}_{16}\mathbf{H}_{10}\mathbf{O}_{8}\mathbf{N}_{2}$

1) Azobenzol-2, 3, 2', 3'-Tetracarbonsäure. Sm. 230°. Na₂ + $10 \, \text{H}_2 \, \text{O}$, K₂ $+6 H_2 O$, Mg $+18 H_2 O$, Ba, Ag₂ (B. 14, 1331). — IV, 1474 2) Azobenzol-2, 5, 2', 5'-Tetracarbonsäure (B. 19, 1093). — IV, 1475.

C 51,3 — H 2,7 — O 38,5 — N 7,5 — M. G. 374.
1) Dinitrophyseion. Sm. 96° (A. 284, 184). — III, 641. $\mathbf{C}_{16}\mathbf{H}_{10}\mathbf{O}_{9}\mathbf{N}_{2}$

2) Azoxybenzol-2,5,2',5'-Tetracarbonsäure. Zers. bei 250-280°. Ag₂ (B. 19, 1091). — IV, 1345.

C 44,6 - H 2,3 - O 33,5 - N 19,5 - M. G. 430. $C_{16}H_{10}O_9N_6$ 1) Verbindung (aus N-Diphenyl-αβ-Diacipiperazin). Sm. 290° (B. 23, 2029).

- II, 411. C 42,7 - H 2,2 - O 42,7 - N 12,4 - M. G. 450. $\mathbf{C}_{16}\mathbf{H}_{10}\mathbf{O}_{12}\mathbf{N}_{4}$

1) Diacetat d. 3,5,3',5'-Tetranitro-4,4'-Dioxybiphenyl. Sm. 236° (B. 21, 3532). — II, 988.

1) α -Phenylen- α -Naphtylenoxydtetrasulfonsäure. Ba, +4 H, O (A. 209, C18H10O18 145). — II, 1002.

C₁₆H₁₀NBr₃ 1) ?-Tribrom-1-Phenylamidonaphtalin. Sm. 137^o (A. 209, 155). — 1) Disulfid d. 5-Merkapto-2-Phenyl-1,2,4-Thiodiazol. Sm. 120° (B. $\mathbf{C}_{16}\mathbf{H}_{10}\mathbf{N}_{4}\mathbf{S}_{4}$

24, 389). — IV, 846. 1) Disulfid d. 5-Merkapto-2-Thiocarbonyl-3-Phenyl-2,3-Dihydro-1,3,4- $C_{16}H_{10}N_4S_6$

Thiodiazol. Sm. 124-125° (B. 27, 2513; 29, 2128). — IV, 684.

1) Verbindung (aus 5-Hydrosulfamin-2-Thiocarbonyl-3-Phenyl-2,3-Dihydro- $C_{16}H_{10}N_4S_8$ 1,3,4-Thiodiazol). Sm. 131—132° (B. **29**, 2135). — IV, 684. C 82,4 — H 4,7 — O 6,9 — N 6,0 — M. G. 233.

 $C_{16}H_{11}ON$

1) 2-Oxy-3-Benzoylchinolin. Sm. oberh. 270° (B. 16, 1838). — IV, 375. C 73,6 — H 4,2 — O 6,1 — N 16,1 — M. G. 261.

C16H11ON8 1) 3-[4-Cyanbenzyl]-5-Phenyl-1, 2, 4-Oxdiazol. Sm. 105° (B. 22, 2984). - II, 1844.

2) 2-Oxyphenylazimido-β-Naphtalin. Sm. 140° (B. 18, 3137). — IV, 1576.

3) 4-Oxyphenylazimido- β -Naphtalin. Sm. 198—199° (B. 18, 3138). IV, 1576.

4) Acetylisatohydrophenazin. Sm. 2020 (B. 28, 2529). — IV, 1189. 1) 6-Brom-1-Keto-2-Benzyliden-2, 3-Dihydroinden. Sm. 162-163° (B.

 $C_{16}H_{11}OBr$ 31, 721). C 77,1 — H 4,4 — O 12,8 — N 5,6 — M. G. 249. C16H11O2N

1) ?-[4-Nitrophenyl]naphtalin. Sm. 1290 (B. 29, 168).

2) 4-Phenylimido-2-Oxy-1-Keto-1, 4-Dihydronaphtalin (Anilido-β-Naphtochinon). Sm. 265° (240°). Ca, Ba, Ag (A. 211, 75; B. 14, 1314, 1494; 15, 279, 690; 25, 3607; 27, 25, 242). — III, 392.

3) 2-Phenylamido-1,4-Naphtochinon. Sm. 190—191° (A. 211, 82; B. 12, 1645; 14, 1494, 1664; 25, 2732; 28, 349; 29, 1612; Soc. 37, 639). —

4) ?-Oxy-?-Phenyl-1,4-Naphtochinonimid. Sm. 173,5-1740 (A. 226, 38). - III, 460.

5) 1,3-Diketo-4-Benzyliden-1,2,3,4-Tetrahydroisochinolin. Sm. 173 bis 174° (B. 20, 1204). — II, 1897.

6) Benzoat d. 6-Oxychinolin. Sm. 230-2310 (M. 3, 556). - IV, 272.

7) Benzoat d. 7-Oxychinolin. Sm. 88-89°. (2HCl, PtCl₄) (M. 3, 567). - IV, 272.

8) Benzoat d. 8-Oxychinolin. Sm. 118—120° (B. 14, 1367). — IV, 275. 9) 2-Phenylchinolin-4-Carbonsäure. Sm. 208—209° (207°). Ca + 2¹/₂ H₂O, Zn + H₂O, Pb + H₂O, Cu + H₂O, Ag, (2 HCl, PtCl₄), Pikrat (J. pr. [2] 38, 583; [2] 56, 293; A. 242, 291). — IV, 445.

10) 4-Phenylchinolin-2-Carbonsäure. Sm. 171°. Na, K, (2HCl, PtCl₄) (B. 19, 2429; 28, 1049). — IV, 446.

11) 4-Phenylchinolin-3-Carbonsäure. $Ba + 6H_{0}O$ (B. 18, 2706). — IV, 446.

12) β-[5-Akridyl]akrylsäure. Zers. bei 208°. Ag, HCl (B. 20, 1544). IV, 446.

13) Säure (aus Diphenylmaleïnsäureisonitril). Sm. 2220 (B. 14, 1801). -II, 1898

14) Inn. Anhydrid d. α -Benzoylamido- β -Phenylakrylsäure. Sm. 165 bis 166° (B. **16**, 2815; A. **275**, 3; G. **19**, 55). — II, 1420.

15) Imid d. $\alpha\beta$ -Diphenyläthen- $\alpha\beta$ -Dicarbonsäure (I. d. Diphenylmaleïn-

säure). Sm. 213° (B. 13, 746). — II, 1897.

16) Nitril d. β-Oxy-α-Benzoyl-β-Phenylakrylsäure (N. d. Dibenzoylessigsäure) (J. pr. [2] 42, 268; [2] 58, 151).
17) Nitril d. β-Benzoxyl-α-Phenylakrylsäure. Sm. 116—117° (J. pr. [2] **55**, 340).

18) Verbindung (aus 4,4'-Di-1,2-Naphtochinonoxyd) oder C32H22O4N2 (B. 30, 2202).

 $C_{16}H_{11}O_2N_3$

- C 69,3 H 4,0 O 11,5 N 15,2 M. G. 277.

- 1) 1-[3-Nitrophenyl]azonaphtalin. Sm. 127—128°. IV, 1391.
 2) Indigooxim. Sm. 205° u. Zers. (B. 31, 1252).
 3) Desoxyimidoisatin. Sm. 209—210° u. Zers. (A. 190, 379; 194, 86). II, 1610.
- 4) 2,4-Diphenyl-1,3,5-Triazin-6-Carbonsäure. Sm. 1920 u. Zers. K (B. 23, 2382). - IV, 1199.

5) Verbindung (aus 3,4-Dibenzoyl-1,2,5-Oxdiazol). Sun. 221° (G. 23 [2] 24; B. 26, 529). — III, 323.
1) 2-Chlor-1,3-Diketo-2-[3-Methylphenyl]-2,3-Dihydroinden. Sm. 92

 $\mathbf{C}_{16}\mathbf{H}_{1}, \mathbf{O}_{2}\mathbf{C}\mathbf{I}$

bis 93° (B. **28**, 1389). — III, 303.

2) Methylester d. 10-Chloranthracen-9-Carbonsäure. Sm. 1230 (B. **20**, 703). — II, 1478.

C₁₈H₁₁O₂Br 1) 6-Brom-1-Keto-2-[2-Oxybenzyliden]-2, 3-Dihydroinden. Zers. bei

- 220° (B. 31, 721). 2) 6-Brom-1-Keto-2-[3-Oxybenzyliden]-2, 3-Dihydroinden. Sm. 239°
- (B. 31, 722). 3) 6-Brom-1-Keto-2-[4-Oxybenzyliden]-2, 3-Dihydroinden. Sm. 2520
- (B. 31, 723).
- 4) 2-Brom-1, 3-Diketo-5-Methyl-2-Phenyl-2, 3-Dihydroinden. Sm. 76 bis 77° (B. 29, 2379).
- 5) 2-Brom-1, 3-Diketo-2-[3-Methylphenyl]-2, 3-Dihydroinden. Sm. 880 (B. **28**, 1389). — III, 303. C 72.5 - H 4.1 - O 18.1 - N 5.3 - M. G. 265.

 $C_{16}H_{11}O_3N$

- 1) 5-Keto-2-Benzoyl-3-Phenyl-2,5-Dihydroisoxazol. Sm. 161° (B. **30**, 1615).
- 2) 4-Keto-5-Benzoyl-3-Phenyl-4, 5-Dihydroisoxazol. Sm. 175° (B. 25, 3470). — III, 318.
- 3) 1-Benzoyl-2, 3-Diketo-5-Methyl-2, 3-Dihydroindol (Benzoyl-p-Methyl-
- isatin). Sm. 193° (B. 28, 735). II, 1651. 4) 6-Benzoylamido-1,2-Benzpyron (6-Benzoylamidocumarin). Sm. 173° (B. **27**, 1937). — **II**, *1632*.
- 5) 2-[2-Oxyphenyl]amido-1,4-Naphtochinon. Sm. 187-1880 (B. 28, 354). 6) 3-Phenylamido-2-Oxy-1, 4-Naphtochinon. Sm. 210° (B. 16, 896; 25, 3605; A. **286**, 73). — III, 385.
- 7) 2-Phenylamido-7-Oxy-1,4-Naphtochinon. Sm. oberh. 240° u. Zers. (B. **27**, 3051). — **III**, 385.
- 8) Monoxim d. 3-Oxy-2-Phenyl-1,4-Naphtochinon. Sm. 215-2160 u. Zers. (A. 296, 22).
- 9) 1-Acetylamido-9,10-Anthrachinon. Sm. 2020 (2150) (B. 15, 1791; 30, 1117). **— III**, 413.
- 10) 2-Acetylamido-9,10-Anthrachinon. Sm. 257° (263°) (B. 12, 1570; 15, 228; A. **212**, 61). — III, 413.
- 11) Phenylamidojuglon. Sm. 230° (B. 18, 473). III, 387.
- 12) Benzoat d. 5-Oxy-3-Phenylisoxazol. Sm. 115° (B. 30, 1616).
- 13) Isaphensäure. Sm. 294—296°. Ag (B. 26, 2484). II, 1898. 14) 5-Benzoylinden-2-Carbonsäure. Sm. 284-285° u. Zers. (Soc. 55, 617).
- III, 187. 15) 4-Oxy-2-Phenylchinolin-3-Carbonsäure. Sm. 232°. Ca, Ag (B. 18, 2633; **19**, 1462). — **IV**, 446.
- 16) 6-Oxy-2-Phenylchinolin-4-Carbonsäure. Sm. über 320°. Ca, Pb, Cu, CuOH, Ag, HCl (A. 281, 11; 282, 99). — IV, 446.
- 17) 8-Oxy-2-Phenylchinolin-4-Carbonsaure. Sm. 247°. Ca, Cu + CuO, Ag (A. 281, 7). IV, 447.
 18) 2-[2-Oxyphenyl]chinolin-4-Carbonsaure. Sm. 238°. Ag, (2 HCl, PtCl₄)
- (A. **249**, 100). **IV**, 447.
- 19) 4-[2-Oxyphenyl]chinolin-2-Carbonsäure. Sm. 243-245° u. Zers. (B.
- 27, 3039). IV, 448. 20) 4-[3-Oxyphenyl]chinolin-2-Carbonsäure. Sm. 235° (B. 27, 3043).
- 21) 4-[4-Oxyphenyl] chinolin-2-Carbonsäure. Sm. 234-235° u. Zers. (B. 27, 912). — IV, 448.
- 22) 1-Keto-2-Phenyl-1, 2-Dihydroisochinolin-3-Carbonsäure. Sm. 265°. Ag (B. 27, 202). — IV, 365.
- 23) Desoxybenzoïndicarbonimidosäure (B. 24, 2822). II, 1978.

C₁₈H₁₁O₃N 24) Phenylester d. 8-Oxychinolin-?-Carbonsäure. Sm. 225-226° (B. 20, 2691). — IV, 364.

25) Acetat d. 10-Nitroso-9-Oxyanthracen. Sm. 153-154° (Soc. 59, 644). - II, 261.

- 26) Acetylimid d. Biphenyl-2, 2'-Dicarbonsäure. Sm. 92° (A. 252, 19). - II, 1884.
- 27) Benzoylmethylimid d. Benzol-1,2-Dicarbonsäure. Sm. 1670 (B. 21, 2685). — III, 128.
- 28) Verbindung (Benzoylimidocumarin?). Sm. 170—171°. 2KHO (B. 18, 1184; G. 19, 43). — II, 1633.
- 29) Verbindung (Isobenzoylimidocumarin). Sm. 154—155° (G. 19, 45). II, 1633.
- 30) Verbindung (aus d. Säure $C_{18}H_{18}O_4N$). Sm. 181—182° (G. 19, 49). II, 1633.

C'65,5 - H 3,7 - O 16,4 - N 14,3 - M. G. 293. $\mathbf{C}_{16}\mathbf{H}_{11}\mathbf{O}_{3}\mathbf{N}_{3}$

- 1) Imasatin (J. pr. [1] **25**, 459; [1] **35**, 114; B. **10**, 432). II, 1608. 2) Monamidoisatin. Sm. $250-252^{\circ}$. NH₄, K + $1^{1}/_{2}$ H₂O (M. 1, 579). —
- II, 1610. 3) 2-[2-Nitrophenyl]azo-l-Oxynaphtalin. Sm. 215—216° (B. 28, 1889;
- **30**, 515). **IV**, 1430. 4) 2-[4-Nitrophenyl]azo-1-Oxynaphtalin. Sm. 234—235°; Zers. bei 255 bis 260° (B. 28, 849, 1125, 1894; 30, 515). — IV, 1430.
- 5) 4-[2-Nitrophenyl]azo-1-Oxynaphtalin. Sm. 244—245° u. Zers. (B. 28, 1888). **— IV**, *1430*.
- 6) 4-[3-Nitrophenyl]azo-1-Oxynaphtalin (J. 1881, 490). IV, 1430.
- 7) 4-[4-Nitrophenyl]azo-l-Oxynaphtalin. Sm. 277—279° u. Zers. (B. 28, 848, 1125, 1894). — IV, 1430.
- 8) 1-[2-Nitrophenyl]azo-2-Oxynaphtalin. Sm. 209-210° (Soc. 59, 374).
- IV, 1430.
 9) 1-[3-Nitrophenyl]azo-2-Oxynaphtalin. Sm. 193-1940 (Soc. 45, 668; 51, 440; 53, 463). — IV, 1430.
- 10) 1-[4-Nitrophenyl]azo-2-Oxynaphtalin. Sm. 249° (Soc. 47, 662; 53, 466; B. 28, 853, 1894). — IV, 1431.
- 11) P-Nitroso-I-Phenylazo-2, 4-Dioxynaphtalin. Zers. bei 1750 (B. 22,
- 3165). **IV**, *1450*. 12) 1 [oder 4]-Oxim d. 3-Phenylazo-2-Oxy-1,4-Naphtochinon (B. 30, 2127). — IV, 1481.
- 13) 6-Oxy-4-Phenyl-2-[3-Nitrophenyl]-1,3-Diazin. Sm. 271° (B. 28, 485). **– IV**, 1039.
- 14) 4-Benzoat d. 4-Oximido-5-Keto-3-Phenyl-4, 5-Dihydropyrazol. Sm. 142° (J. pr. [2] **52**, 29). — IV, 905.
- $C_{18}H_{11}O_3Br$ 1) 6-Brom-1-Keto-2-[3,4-Dioxybenzyliden]-2,3-Dihydroinden. Sm. 279 bis 280° (B. 31, 723).

 $\mathbf{C}_{16}\mathbf{H}_{11}\mathbf{O}_{4}\mathbf{N}$ C 68,3 - H 3,9 - O 22,8 - N 5,0 - M. G. 281.

- 1) Acetat d. 1-Amido-2-Oxy-9,10-Anthrachinon. Sm. 170° (J. pr. [2] 18, 143). — III, 420.
- 2) Acetat d. 2-Amido-1-Oxy-9,10-Anthrachinon. Sm. 242° (J. pr. [2] 18, 145). — III, 419.
- 3) 1-Benzoxylindol-2-Carbonsäure. Sm. 151° u. Zers. (B. 29, 649). IV, 237.
- 4) Lakton d. 1- $[\alpha$ -Oxy- β -Nitro- β -(3-Methylphenyl)äthenyl]benzol-2-Carbonsäure (Nitro-m-Xylalphtalid). Sm. 144° u. Zers. (B. 23, 3163).
- 5) Lakton d. 1-[α-Oxy-β-Nitro-β-(4-Methylphenyl)äthenyl]benzol-2-Carbonsäure. Sm. 205—207° u. Zers. (B. 24, 3971). II, 1715.
- 6) 4-Acetoxylphenylimid d. Benzol-1,2-Dicarbonsäure. Sm. 238,5° (226°) (G. 16, 252; C. 1897 [1] 49). II, 1809.
 7) Verbindung (aus Desoxybenzoïndicarbonsäure). Sm. 229—230° (B. 24,
- 2824). II, 1978.

 $\mathbf{C}_{16}\mathbf{H}_{11}\mathbf{O}_{4}\mathbf{N}_{3}$ $C_{62,1} - H_{3,6} - O_{20,7} - N_{13,6} - M_{6,309}$

- 1) 1-[2,4-Dinitrophenyl]amidonaphtalin. Sm. 190,5° (B. 21, 2302). II, 600.
- 2) P-Dinitro-l-Phenylamidonaphtalin. Sm. 77° (A. 209, 155). II, 599.

 $C_{18}H_{11}O_4N_3$ 3) 2-[2,4-Dinitrophenyl]amidonaphtalin. Sm. 179° (169,5°) (B. 21, 589; **23**, 3429). — **II**, 602.

4) ?-Dinitro-2-Phenylamidonaphtalin. Sm. 192-195° (A. 209, 160). -

П, 602. С 57,0 — Н 3,2 — О 19,0 — N 20,8 — М. G. 337. $C_{16}H_{11}O_4N_5$

1) 2-Methyl-4, 6-Di[3-Nitrophenyl]-1, 3, 5-Triazin. Sm. 185° (B. 28, 483). **– IV**, 1191.

 $\mathbf{C}_{16}\mathbf{H}_{11}\mathbf{O}_{4}\mathbf{Cl}$ 1) Isobrasileinchlorhydrin (B. 15, 2345). — III, 655. Isobrasile in bromhydrin (B. 15, 2345). — III, 655.
 C 64,7 — H 3,7 — O 26,9 — N 4,7 — M. G. 297.
 Aethyläther d. 1-Nitro-2-Oxy-9,10-Anthrachinon. Sm. 243° (B. 15, $\mathbf{C}_{16}\mathbf{H}_{11}\mathbf{O}_{4}\mathbf{Br}$ $C_{16}H_{11}O_5N$

1796). — III, 419. C 54,4 — H 3,1 — O 22,7 — N 19,8 — M. G. 353. C18 H11 O5 N5

1) 1-Acetyl-2, 5-Di[4-Nitrophenyl]-1, 3, 4-Triazol. Sm. 237° (A. 298, 52). - IV, 1187.

 $\mathbf{C}_{16}\mathbf{H}_{11}\mathbf{O}_{5}\mathbf{Cl}$ 1) Isohämateinehlorhydrin (B. 15, 2341). — III, 666.

1) Anhydrid d. 2-[3,4-Dimethoxylbenzoyl] pyridin-3,4-Dicarbonsäure (A. d. Papaverinsaure). Sm. 169-170° (M. 10, 159; 13, 698). — IV, 177. C 56,3 — H 3,2 — O 28,2 — N 12,3 — M. G. 341.

1) 1,3,5-Trinitrobenzol + Naphtalin. Sm. 152° (Bl. 30, 6; A. 215, 377). $C_{16}H_{11}O_6N_3$

- II, 182.

C 52,0 - H 3,0 - O 26,0 - N 19,0 - M. G. 369. $C_{16}H_{11}O_6N_5$

1) α -[2,4,6-Trinitrophenyl]- β -[1-Naphtyl] hydrazin. 2 Formen. Stab. Form Zers. bei 176° (J. pr. [2] 43, 177). — IV, 926.

α-[2,4,6-Trinitrophenyl]-β-[2-Naphtyl] hydrazin.
 Formen. Stab. Form Zers. bei 175° (J. pr. [2] 43, 179).
 IV, 928.

3) P-Trinitro-3-Methyl-1, 5-Diphenylpyrazol. Sm. 176--178° (B. 22, 174).

— IV, 936. C 58,4 — H 3,3 — O 34,1 — N 4,2 — M. G. 329. 1) Nitrophyscion. Sm. 210° (A. 284, 183). — III, 641. $C_{16}H_{11}O_7N$

2) Monomethyläther d. Nitroemodin. Sm. 215-217° (Soc. 65, 934). -III, 454.

C 53.8 - H 3.1 - O 31.4 - N 11.7 - M. G. 357. $C_{16}H_{11}O_7N_3$

- 1) 2,3,6-Trinitro-1-Oxybenzol + Naphtalin. Sm. 100° (A. 215, 332). - II, 183.
- 2) 2,4,6-Trinitro-1-Oxybenzol + Naphtalin. Sm. 149° (J. 1857, 456; 1879, 376; J. r. 15, 477). — II, 182. 3) 3,4,6-Trinitro-1-Oxybenzol + Naphtalin. Sm. 72—73° (A. 215, 332).

— II, 183.

C 51,5 - H 2,9 - O 24,3 - N 11,3 - M. G. 373.C16H11O8N3

1) 2,4,6-Trinitro-1,3-Dioxybenzol + Naphtalin. Sm. 163,5°. + Aceton (C. 1897 [2] 430).

C 47,4 — H 2.7 - O 39.5 - N 10.4 - M. G. 405. $\mathbf{C}_{16}\mathbf{H}_{11}\mathbf{O}_{10}\mathbf{N}_{3}$

1) Aethylester d. 4-Oxybenzol-2, 4, 6-Trinitrophenyläther-1-Ketocarbonsäure (*Bl.* [3] **17**, 948).

 $C_{18}H_{11}O_{15}N_{4}$ 1) Säure (aus Strychnin) = $(C_{16}H_{11}O_{15}N_{4})_{x}$. Sm. oberh. 300° u. Zers. (J. 1878, 910). — III, *935*.

 $C_{16}H_{11}NBr_2$ 1) P-Dibrom-2-Phenylamidonaphtalin. Sm. 140° (A. 209, 158). — II, 602.

 Thiophenyl-I-Naphtylamin. Sm. 178° (B. 23, 2466). — II, 867.
 Thiophenyl-2-Naphtylamin. Sm. 137—138° (B. 23, 2464). — II, 887. $C_{16}H_{11}NS$

1) 1-Chlor-2-Phenylazonaphtalin. Sm. 115° (B. 21, 3542). — IV, 1391. $\mathbf{C}_{16}\mathbf{H}_{11}\mathbf{N}_{2}\mathbf{C}\mathbf{1}$ 1-Phenylazonaphtalin-2-Diazochlorid. 2+PtCl₄ (B. 20, 2898). - $\mathbf{C}_{16}\mathbf{H}_{11}\mathbf{N}_{4}\mathbf{C}\mathbf{I}$ IV, 1542.

1) 4-Nitroso-1-Phenylamidonaphtalin. Sm. 150° (B. 20, 1248; A. 286, 182). — II, *599*.

2) 1-Phenylnitrosamidonaphtalin. Sm. 92° (B. 20, 1247; A. 243, 306). · II, 599. 3) 2-Phenylnitrosamidonaphtalin. Sm. 93° (A. 209, 159). — II, 602.

5) 4-Oxy-1-Phenylazonaphtalin. Sm. 206° u. Zers. K (B. 10, 1580; 16, 2859; 17, 3026; 22, 2069; 28, 1219, 2418; 30, 2657; G. 15, 408). IV, 1427

6) 1-Oxy-2-Phenylazonaphtalin. Sm. 138° (B. 16, 1563; 17, 3030; 19, 2484; **28**, 2418). — IV, 1429.

Sm. 122-123° (G. 19, 139). — IV, 550. Sm. 59-60° (A. 279, 255). — IV, 906. 7) 4-Benzoyl-1-Phenylpyrazol.

8) 1-Benzoyl-5-Phenylpyrazol. 9) 5-Keto-4-Benzyliden-I-Phenyl-4, 5-Dihydropyrazol. Sm. 170° (B. 28, 39). — IV, 955.

10) 5-Keto-4-Benzyliden-3-Phenyl-4,5-Dihydropyrazol. Sm. über 250° (J. pr. [2] 50, 227; [2] 52, 26; B. 27, 783). — IV, 1040. 11) 5-Phenyl-3-[β -Phenyläthenyl]-1,2,4-Oxdiazol. Sm. 102° (B. 19, 1509).

- II, 1409.

12) 6-Oxy-2,4-Diphenyl-1,3-Diazin. Sm. 284° (B. 22, 1626; J. pr. [2] 42,

15). **— IV**, 1039.

13) 6-Benzoylamidochinolin. Sm. 130° (*J. pr.* [2] 53, 120). — IV, 913.
14) 5-Benzylidenamido-8-Oxychinolin (*B.* 27, 1939). — IV, 912.
15) Indileucin. Sm. 258° u. Zers. Pikrat (*B.* 17, 978; 28, 542). — II, 1622.
16) Isoindileucin. Sm. 191—192°. Pikrat (*B.* 18, 2241). — III, 121.

17) Nitril d. β-Amido-α-Benzoyl-β-Phenylakrylsäure. Sm. 213° (J. pr. [2] 58, 156).

18) Naphtylamid d. Pyridin-4-Carbonsäure. Sm. 128° (B. 27, 1787).

19) Base (aus Indigweiss) (J. 1877, 512). — II, 1624.

20) Verbindung (aus Benzil). Sm. 196° (B. 16, 2416; Soc. 51, 30). - II, 2023; III, 282.

 $C_{16}H_{12}ON_4$ C 69.6 - H 4.3 - O 5.8 - N 20.3 - M. G. 276.

1) 3-Acetylamido-1, 5-2, 3-Diphenylen-2, 3-Dihydro-1, 2, 4-Triazol. Sm.

269—270° (B. 28, 153). — IV, 1292. 2) Nitril d. 3,3'-Dimethylazoxybenzol-6,6'-Dicarbonsäure. (J. pr. [2] 40, 9). — IV, 1344. C 63,2 — H 3,9 — O 5,3 — N 27,6 — M. G. 304.

 $\mathbf{C}_{18}\mathbf{H}_{19}\mathbf{ON}_{8}$

1) Anhydro-5-Keto-1-Phenyl-4, 5-Dihydro-1, 2, 4-Triazol. Sm. 1620 (C. 1897 [1] 594). — IV, 1100.

1) Aethyläther d. 9,?-Dibrom-10-Oxyanthracen. Sm. 116-1170 (B. 21, C₁₆H₁₂OBr₂ 1180). — II. 902.

2) 2-Brom-1-Keto-2- $[\alpha$ -Brombenzyl]-2, 3-Dihydroinden. Sm. 144—145° u. ger. Zers. (Soc. 65, 499). — III, 250. 3) Verbindung (aus Aethyloxanthranol) Sm. 123° (A. 212, 96). — III, 243.

1) 2,3-Dijod-1-Keto-2-[?-Methylphenyl]-2,3-Dihydroinden. Sm. 250 C16H10OJ bis 251° (C. **1896** [1] 167). C 72,7 — H 4,5 — O 12,1 — N 10,6 — M. G. 264.

 $\mathbf{C}_{16}\mathbf{H}_{12}\mathbf{O}_{2}\mathbf{N}_{2}$

1) ?-Nitro-2-Phenylamidonaphtalin. Sm. 85° (A. 209, 158). — II, 602. 2) 4-[4-Amidophenyl]imido-2-Oxy-l-Keto-1, 4-Dihydronaphtalin. Zers.

oberh. 280° (B. 27, 26). 3) ?-Amido-4-Phenylimido-2-Oxy-1-Keto-1, 4-Dihydronaphtalin. HCl

(B. 15, 286). — III, 393.

4) 2-[4-Amidophenyl]amido-1,4-Naphtochinon. Sm. 175-177° (B. 14, 1905). — III, 376.

5) 4-[4-Oxyphenyl]azo-l-Oxynaphtalin (B. 27, 2358). — IV, 1440.

6) 1-[2,4-Dioxyphenyl]azonaphtalin (Resorcin-α-Azonaphtalin). Sm. bei 200° (B. 15, 28). — IV, 1445.

7) 1-Phenylazo-2, 4-Dioxynaphtalin. Sm. 230°. Ca $+ 4H_2O$, Ba $+ 10H_2O$ (B. 17, 1810; 22, 3165). — IV, 1449.

8) 1-Phenylazo-2, 7-Dioxynaphtalin. Sm. 220° (B. 23, 523). — IV, 1450. 9) 1-Phenylazo-3,4-Dioxynaphtalin. Sm. 214°. HCl (A. 286, 81). -IV, 1448.

10) Indigweiss (A. 48, 257; 136, 96; B. 15, 54; J. r. 13, 559). — II, 1623.
11) Diphensuccindondioxim. Sm. 254° u. Zers. (A. 247, 155). — III, 304.

12) Dihydrodiphtalyldiimid. Sm. 284° u. Zers. (280—281°) (B. 26, 539; **29**, 2745). — II, 1626.

13) 3,5-Diketo-l-Phenyl-4-Benzylidentetrahydropyrazol (B. 25, 1509). **– IV**, 955.

- C₁₆H₁₂O₂N₂14) 4,5-Diketo-2-Methylen-1,3-Diphenyltetrahydroimidazol (Vinylidenoxanilid). Sm. 208-210° (B. 30, 2791, 2878).
 - 15) 2,5-Diketo-1,4-Diphenyl-1,2,4,5-Tetrahydro-1,4-Diazin (1,4-Di-
 - phenyl-2,5-Diacipiazin). Sm. oberh. 300° (J. pr. [2] 47, 190). II, 430. 16) 1,1'-Bi-2-Methylbenzoxazol. Sm. 195° (193°) (B. 21, 3333, 3532). II, 989.
 - 17) 2-Furanyl-1-Furanylmethylbenzimidazol (Phenylfurfuraldehydin). Sm. 95-96°. (2HCl, PtCl₄), HNO₃, H_2SO_4 (B. 11, 1655). — IV, 564.
 - 18) ?-Nitro-4-Methyl-2-Phenylchinolin (Nitroflavolin) (B. 16, 68). IV, 436.
 - 19) 3-Methyl-2-[3-Nitrophenyl]chinolin. Sm. 145°. (2HCl, $PtCl_4 + 2H_2O$)
 - (B. 19, 531). IV, 436. 20) 2-Acetyl-1-Keto-4-Phenyl-1, 2-Dihydro-2, 3-Benzdiazin. Sm. 178 bis 179° (J. pr. [2] 51, 153). — IV, 1023.
 - 21) 1,5-Diphenylpyrazol-3-Carbonsäure. Sm. 185°. $+ C_2H_8O$ (B. 20,
 - 2186). IV, 946. 22) 6-Methyl-2-Phenyl-1, 3-Benzdiazin-4-Carbonsäure. Sm. 155°. NH₄, Ag (B. **28**, 736). — IV, 1036.
 - 23) Nitril d. β -Phenylamidoformoxyl- α -Phenylakrylsäure. Sm. 153 bis 154° (A. 291, 202).
 - 24) Nitril d. $\alpha\beta$ -Dioxy- $\alpha\beta$ -Diphenyläthan- $\alpha\beta$ -Dicarbonsäure (N. d. Di-
 - phenylweinsäure). Sm. 132° (A. 34, 190; B. 19, 1519). II, 2022. 25) Phenylimid d. Phenylamidomaleïnsäure. Sm. 231—232° (B. 19, 626;
 - 22, 3350; Am. 9, 185; A. 239, 140). II, 441.
 26) Verbindung (aus 1,2-Diamidobenzol u. 1,4-Diketo-1,2,3,4-Tetrahydronaphtalin-2,3-Oxyd). Zers. über 150° (A. 286, 77). IV, 1058.
 - 27) Verbindung (sus 1,4-Diphenyl-2,6-Diacipiperazin oder $C_{16}H_{14}O_2N_2$). Sm. 98° (B. 23, 1991). — II, 431. C 65,8 — H 4,1 — O 10,9 — N 19,2 — M. G. 292.
- C16H12O2N4
 - 1) Diamidoindigo (B. 12, 1317). II, 1621. 2) Diimidoisatin (Isatindiamid). Sm. oberh. 300° u. Zers. HCl, HNO₃, H_2CrO_4 , H_2SO_4 (A. 190, 374; 194, 86; B. 12, 980; M. 1, 578). II, 1609.
 - 3) 2-Amido-1-[2-Nitrophenyl]azonaphtalin. Sm. 1980 (Soc. 59, 373). **– IV**, 1394.
 - 4) 2-Amido-1-[3-Nitrophenyl]azonaphtalin. Sm. 182' (Soc. 45, 116; **53**, 463; B. **18**, 797). — **IV**, 1395.
 - 5) 2-Amido-1-[4-Nitrophenyl]azonaphtalin. (2HCl, PtCl₄) (Soc. 43, 430). - IV, 1395.
 - 6) 4-Amido-1-[3-Nitrophenyl]azonaphtalin. Sm. 202-2030 (Soc. 45,
 - 114). IV, 1395. 7) 4-Amido-1-[4-Nitrophenyl]azonaphtalin. Sm. 252°. (2HCl, PtCl₄)
 - (Soc. 43, 430; B. 28, 842). IV, 1395. 8) Di-Benzoyleyanamid. Sm. 112° (J. pr. [2] 13, 285; [2] 42, 109). —

 - 9) Phenanthrenchinondiureïn (B. 27 [2] 270; G. 27 [1] 233). 10) Dimethylnaphtalloxazin. Sm. 285° (B. 24, 3029). IV, 919.
 - 11) Verbindung (aus Chlorbrommaleïnsäureanhydrid u. Phenylhydrazin). Sm. 245° (B. 29 [2] 187). C 60,0 — H 3,7 — O 10,0 — N 26,3 — M. G. 320.
- $\mathbf{C}_{16}\mathbf{H}_{12}\mathbf{O}_{2}\mathbf{N}_{6}$
- 1) Verbindung (aus d. Aethylenamid d. 2-Amidobenzol-1-Carbonsäure). Sm. 216° (J. pr. [2] 48, 92). II, 1247. C₁₂H₁₂O₂Cl₂ 1) $\alpha\beta$ -Dichlor- $\gamma\gamma$ -Diphenylcrotonsäure. Sm. 152°. Ca + 2H₂O, Ba + 2H₂O (Am. 19, 642).
 - 2) Aethylester d. 9,9-Dichlorfluoren-4-Carbonsäure? Sm. 73° (A. 247, 280). — II, 1719.
- C₁₆H₁₂O₂Cl₄ 1) Verbindung (aus Polyporsäure). Sm. 109-110° (A. 195, 371). II, 1907. $\mathbf{C_{16}H_{12}O_{2}Br_{2}}\text{ 1) } \underline{\mathbf{M}} ethyl \\ \\ \underline{\mathbf{M}} ethyl \\ \underline{\mathbf{M}} ther \\ \underline{\mathbf{d}}. \\ \alpha \\ \beta - \underline{\mathbf{D}} \underline{\mathbf{i}} \underline{\mathbf{D}} rom \\ -\gamma - \underline{\mathbf{K}} \underline{\mathbf{e}} \underline{\mathbf{to}} - \gamma - \underline{\mathbf{[2-Oxyphenyl]}} \\ -\alpha - \underline{\mathbf{P}} \underline{\mathbf{h}} \underline{\mathbf{e}} \underline{\mathbf{m}} \underline{\mathbf{p}} \underline{\mathbf{r}} \underline{\mathbf{e}} \underline{\mathbf{m}} \underline{\mathbf{e}} \underline{\mathbf{m}} \underline{\mathbf{e}} \underline$ Sm. 138—140° (B. 25, 3538). — III, 247.
 - Sm. $146-147^{\circ}$. Ca $+ 2 \text{ H}_{\circ}\text{ O}$. 2) $\alpha\beta$ -Dimbrom- $\gamma\gamma$ -Diphenylerotonsäure.
 - Ba + 3H₂O, Ag (Am. 19, 646). 3) Lakton d. αβ-Dibrom-α-Oxy-α-Phenyl-β-[4-Methylphenyl]äthan-α, 2-Carbonsäure (Dibrom-p-Xylylphtalid). Sm. 150° u. Zers. (B. 24, 3968). **— II**, 1702.

1) Methyläther d. α -Thiocarbonyl- γ -Keto- γ -Phenyl- β -[4-Oxyphenyl]- $C_{16}H_{12}O_{2}S$ propen (B. 21, 2452). - III, 227.

2) Phenyl-1-Naphtylsulfon. Sm. 99,5—100,5° (B. 10, 585; 23, 3047). —

3) Phenyl-2-Naphtylsulfon. Sm. 115—116° (B. 7, 1167; 10, 585; 11, 2069; 23, 3049). — II, 887. C 68,6 — H 4,3 — O 17,1 — N 10,0 — M. G. 280.

 $C_{16}H_{12}O_3N_2$

1) β -Phenylhydrazon- α -Keto- α β -Di[$\hat{\mathbf{2}}$ -Furanyl] $\hat{\mathbf{a}}$ than (Furilphenylhydrazon). Sm. 82-83° (A. 258, 225). - IV, 788. 2) 4-Keto-3-Phenyl-5-[α-Oximidobenzyl]-4,5-Dihydroisoxazol. Sm. 191°

u. Zers. (B. 25, 3471). — III, 318.

3) 3-Keto-1-[\alpha-Nitro-3-Methylbenzyliden]-1,3-Dihydroisoindol. Sm. 157 bis 159° (B. 23, 3161). — II, 1714.

4) 3-Keto-1-[α-Nitro-4-Methylbenzyliden]-1, 3-Dihydroisoindol. Sm. 227°

u. Zers. (B. 24, 3970). — II, 1715.

5) P-Nitro-2-[4-Oxy-3-Methylphenyl]chinolin. Sm. 160° (M. 9, 107). — 6) Methyläther d. 6-Oxy-2-[3-Nitrophenyl]chinolin. Sm. 130° (B. 20,

1919). **— IV**, 427.

7) Methyläther d. 4-Nitro-1-Oxy-3-Phenylisochinolin. Sm. 167-169° (B. 19, 832). — II, 1711.

8) 1-Methoxyl-2-Phenyl-2, 3-Benzdiazin-4-Carbonsäure. Sm. 114° (B. 21, 1611). — IV, 718.

9) 1-Keto-2-Phenyl-1,2-Dihydro-2,3-Benzdiazin-4-Methylcarbonsäure.

Sm. 160° u. Zers. Ca + 3H₂O (B. 18, 803). — IV, 718. 10) Anhydro-α-Phenylamido-α-Phenylimidoäthan-2', 2²-Dicarbonsäure.

Sm. 248° (B. 30, 1187).

11) Anhydrid d. Phenylimidoessigsäure (A. d. Anilglyoxylsäure) (A. 198, 225). — II, 407.

12) Benzylester d. 3-Phenyl-1, 2, 4-Oxdiazol-5-Carbonsäure. Sm. 105°; Sd. oberh. 300° u. Zers. (B. 22, 3136). — II, 1203.

13) Acetat d. 9-Oximidofluoren-1-Carbonsäureamid. Sm. 177-178° (A.

252, 29). — II, 1719.

14) Nitril d. α-[4-Nitrophenyl]-β-[4-Methoxylphenyl]akrylsäure. Sm. 165—166° (B. 23, 3135). — II, 1707.

15) Verbindung (aus Diacetylweinsäureanhydrid u. Anilin) oder C₁₆H₁₂O₂N₂.
 Zers. bei 200° (Soc. 71, 1061).
 C 62,3 — H 3,9 — O 15,6 — N 18,1 — M. G. 308.

 $C_{16}H_{12}O_3N_4$

1) 3,4-Di[α-Oximidobenzyl]-1,2,5-Oxdiazol. Sm. 179° (B. 26, 529). — III, 323.

2) P-Nitro-3-[2-Methylphenyl]hydrazon-2-Oxypseudoindol. Sm. über 290° u. Zers. (B. 28, 547).

3) P-Nitro-3-[4-Methylphenyl]hydrazon-2-Oxypseudoindol. Sm. 274 bis 275° u. Zers. (B. 28, 547).

4) 4-Phenylhydrazon-5-Keto-l-Phenyl-4,5-Dihydropyrazol-3-Carbonsäure. Sm. 230—232°. Ag (B. 20, 839; 21, 1204; 24, 4213; A. 294, 238). — IV, 729. 5) Anhydrid d. Di[Phenylhydrazon]äthan- $\alpha\beta$ -Dicarbonsäure. Sm. 235°

u. Zers. (A. **299**, ¹123). — **IV**, 728. C₁₀H₁₂O₃Br₂ 1) **A**ethylester d. ?-Dibrom-9-Oxyfluoren-9-Carbonsäure. Sm. 150 bis C16H12O3S

151° (B. 10, 537). — II, 1706. 1) Atronylensulfonsäure. Sm. 258° u. Zers. (A. 206, 61). — II, 281. 2) 2-Naphtylester d. Benzolsulfonsäure. Sm. 105-107° (B. 24, 417). · II, 878.

 $\mathbf{C}_{16}\mathbf{H}_{12}\mathbf{O}_{4}\mathbf{N}_{2}$ C 64.8 - H 4.1 - O 21.6 - N 9.5 - M. G. 296.

1) Isatyd (J. pr. [1] 24, 15; [1] 25, 436, 438; A. 72, 285; 140, 9; Bl. [3] 9, 880). — II, 1615.

2) $\beta \gamma$ -Dioximido- $\alpha \delta$ -Diketo- $\alpha \delta$ -Diphenylbutan. Sm. 168° u. Zers. (B. 26, 528). — III, *323*.

3) $\alpha\delta$ -Dioximido- $\beta\gamma$ -Diketo- $\alpha\delta$ -Diphenylbutan. Sm. 176° u. Zers. $+C_2H_6O$ (B. **25**, 3472). — III, 323.

4) 1,3-Dinitrobenzol + Naphtalin. Sm. 52-53° (A. 215, 379). — II, 182. 5) 1,4-Dinitrobenzol + Naphtalin. Sm. 110-115 (118-119) (Bl. 30, 6; A. 215, 379). — II, 182.

 $\mathbf{C}_{16}\mathbf{H}_{12}\mathbf{O}_{4}\mathbf{N}_{2}$ 6) Dibenzylidenhydrazin - $\alpha\alpha'$ -Dicarbonsäure. Sm. 179° (C. 1896 [2] 380; Bl. [3] 17, 367).

7) Dibenzylidenhydrazin - 2,2'-Dicarbonsäure (Diphtalaldehydhydrazonsäure). Sm. 211°. Ag₂ (B. 26, 535). — II, 1626.

8) 7-Oxy-1-Keto-2-Phenyl-1,2-Dihydro-2,3-Benzdiazin-7-Methyläther-4-Carbonsäure. Sm. 223° (A. 296, 360). — IV, 724.

9) Diacetat d. 2,3-Dioxy-5,10-Naphtdiazin. Sm. 230° (B. 23, 843). — IV, 1002. C 59,3 — H 3,7 — O 19,7 — N 17,3 — M. G. 324.

 $\mathbf{C}_{16}\mathbf{H}_{19}\mathbf{O}_{4}\mathbf{N}_{4}$

- 1) α -[2, 4-Dinitrophenyl]- β -[1-Naphtyl]hydrazin. Sm. 181° (J. pr. [2] 43, 184). — IV, 926.
- 2) α -[2,4-Dinitrophenyl]- β -[2-Naphtyl]hydrazin. Sm. 188° u. Zers. (J. pr. [2] **43**, 185). — IV, 928. 3) Dinitroindolin (J. 1880, 586). — II, 1623.

4) Diimidohydrindincarbonsäure (A. 194, 98). — II, 1610.

- 5) Acetat d. 3-Oxy-5-Phenyl-1-[3-Nitrophenyl]-1, 2, 4-Triazol. Sm. 130 bis 132° (Soc. 73, 373). — IV, 1157.
- 6) Acetat d. 3-Oxy-5-[3-Nitrophenyl]-1-Phenyl-1,2,4-Triazol. Sm. 116° (Soc. 71, 211). IV, 1157.
 7) Acetat d. 3-Oxy-5-[4-Nitrophenyl]-1-Phenyl-1,2,4-Triazol. Sm. 152°
- (Soc. 71, 206). IV, 1158.

 $C_{16}H_{12}O_4Cl_2$ 1) Hydropiperoïnchlorid. Sm. 198° (A. 159, 132). — III, 104.

- Phenyl-3,4-Dioxy-1-Naphtylsulfon. Sm. 1856 u. Zers. (B. 28, 1316).
 C 61,5 H 3,8 O 25,6 N 9,0 M. G. 312. $C_{16}H_{12}O_4S$ $\mathbf{C}_{16}\mathbf{H}_{12}\mathbf{O}_{5}\mathbf{N}_{2}$
 - 1) Aethyläther d. ?-Nitro-9-Nitroso-10-Keto-2-Oxy-9,10-Dihydroanthracen (B. 15, 1429, 1794). — II, 901.
 - 2) 1,3-Dinitro-?-Oxybenzol + Naphtalin (Z. 1868, 213). II, 182. 3) Säure (aus 3-Cyanbenzol-1-Carbonsäure). Sm. oberh, 300°. Ag, (B. 20, 530). — II, *1229*.

4) Verbindung (aus Diisatinsäure). Ag (C. 1898 [2] 203). C 52,2 — H 3,3 — O 21,7 — N 22,8 — M. G. 368.

- 1) ?-Dinitro-5-Keto-4-Phenylazo-3-Methyl-1-Phenyl-4,5-Dihydropyrazol. Sm. 292—294° u. Zers. (B. 29, 1663). — IV, 1489.
- 2) 5-Keto-4-[4-Nitrophenyl]azo-3-Methyl-1-[4-Nitrophenyl]-4,5-Dihydropyrazol. Sm. oberh. 280° (B. 31, 3129). — IV, 1489.

 $\mathbf{C}_{16}\mathbf{H}_{12}\mathbf{O}_{5}\mathbf{N}_{6}$

- $\mathbf{C}_{16}\mathbf{H}_{12}\mathbf{O}_{5}\mathbf{Cl}_{2}$ 1) Dichlorbrasilin (B. 9, 1887). III, 653. $\mathbf{C}_{16}\mathbf{H}_{12}\mathbf{O}_{5}\mathbf{Br}_{2}$ 1) Dibrombrasilin + $2^{1}/_{2}\mathbf{H}_{2}\mathbf{O}$. Sm. 170—180° (B. 9, 1887; 22, 1550). III, 653. 2) α , 2'-Lakton d. ?-Dibrom- α , 4-Dioxy-3', 4'-Dimethoxyldiphenyl
 - methan-2'-Carbonsäure (Dibromoxyphenylmekonin). Sm. 195,5-196,5° $(B. \ 27, \ 2640). \ - \ II, \ 2020.$
- 1) Aethylester d. 9,10-Anthrachinon-2-Sulfonsäure. Sm. 125° (B. 28, $C_{16}H_{12}O_5S$ 2262). **— III**, 415.

C 58.5 - H'3.7 - O 29.3 - N 8.5 - M. G. 328. $\mathbf{C}_{16}\mathbf{H}_{12}\mathbf{O}_{6}\mathbf{N}_{2}$

- 1) ?-Dinitro-10-Oxy-9-Keto-?-Aethyl-9,10-Dihydroanthracen (B. 13, 1599). - III, 245.
- 2) Benzol-1, 3 Dicarbonsäure 2 Phenylhydrazonmethylcarbonsäure. Sm. 205—208° (A. 290, 210). — IV, 727.
- 3) 2,2'-Dicarbonsäure d. Oxalsäurediphenylamid. Cu, Ag₂ (M. 9, 741). **– II**, *1253*.
- 4) 3,3'-Dicarbonsäure d. Oxalsäurediphenylamid (Oxaldibenzamsäure) (A. 232, 137; B. 18, 2412). — II, 1265.
- 5) Lakton d. $\alpha\beta$ -Dinitro- α -Oxy- α -Phenyl- β -[3-Methylphenyl] äthanα, 2-Carbonsäure (m-Xylalphtaliddinitrür). Sm. 133° u. Zers. (B. 23, 3162).
- 6) Lakton d. αβ-Dinitro-α-Oxy-α-Phenyl-β-[4-Methylphenyl]äthan-α, 2-Carbonsäure. Sm. 140° u. Zers. (B. 24, 3971). II, 1702.
- 7) Verbindung (aus 2-Nitrophenylbrenztraubensäure). Sm. 160° (B. 30, 1045). C 53,9 H 3,4 O 27,0 N 15,7 M. G. 356. 1) 2,4,6-Trinitro-1-Amidobenzol + Naphtalin. Sm. 168—169° (B. 8,
- $C_{16}H_{12}O_6N_4$ 378). — II, *182*.
- C₁₆H₁₂O₆Br₂ 1) Dibromhämatoxylin. Zers. oberh. 120° (B. 17, 373). III, 665. 2) 3,4-Methylenäther-?-Dimethyläther d. ?-Brom-3,4,2',4',6'-Pentaoxydiphenylketon. Sm. 170° (B. 24, 2984). — III, 208.

 $\begin{array}{c} \mathbf{C_{16}H_{12}O_6Br_4\,1)} \\ \mathbf{C_{16}H_{12}O_7Br_2\,1)} \\ \mathbf{Dibromlecanors\"{a}ure.} \\ \mathbf{Sm.} \\ 179^0 \ (A. \ \mathbf{139}, \ 28). \\ \mathbf{-II}, \ 1754. \\ \mathbf{C_{16}H_{12}O_8N_2} \\ \end{array}$

1) Diacetat d. 3,3'-Dinitro-4,4'-Dioxybiphenyl. Sm. 215° (B. 21, 3531). - II, 988. 2) ?-Dinitro - $\alpha\beta$ -Diphenyläthan - $\alpha\alpha$ -Dicarbonsäure. Sm. 242° (B. 14,

1804). — II, 1891.

3) ?-Dinitro- $\alpha\beta$ -Diphenyläthan- $\alpha\beta$ -Dicarbonsäure + H₂O. Sm. 100° (u. 226° zum zweiten Male) (B. 14, 1804). — II, 1890.

4) αβ-Di[P-Nitrophenyl] äthan-2, 2'-Dicarbonsäure. Ca (A. 239, 70). II, 1889.

5) Dimethylester d. 4,4'-Dinitrobiphenyl-2,2'-Dicarbonsäure.

177—178° (A. 203, 111). — II, 1885.
6) Dimethylester d. isom. ?-Dinitrobiphenyl-2,2'-Dicarbonsäure. Sm. 131-132° (A. 203, 111). — II, 1886. C 46,1 — H 2,9 — O 30,8 — N 20,2 — M. G. 416.

 $C_{16}H_{12}O_8N_6$

1) Di [3-Nitrophenylhydrazon] \ddot{a} than - $\alpha\beta$ - Dicarbons \ddot{a} ure. Sm. bei 200° (B. 22, 2814). - IV, 729.

2) Di[4-Nitrophenylhydrazon] \ddot{a} than- $\alpha\beta$ -Dicarbonsäure (A. 299, 104). - IV, 729.

3) Verbindung (aus d. Base C₁₇H₁₈N₂) (J. pr. [2] 36, 233). — II, 510.

1) Isobrasileïndisulfat (Brasileïnschwefelsäure) (B. 15, 2344). — III, 655. C16H12O8S C 51,1 - H 3,2 - O 38,3 - N 7,4 - M. G. 376. $\mathbf{C}_{16}\mathbf{H}_{12}\mathbf{O}_{9}\mathbf{N}_{2}$ 1) 2-[?-Nitro-3,4-Dimethoxylbenzoyl]pyridin-3,4-Dicarbonsäure(Nitro-

papaverinsäure). Sm. 215° (wasserfrei). Ag₂ (M. 6, 391). — IV, 177.

1) Isohämateinsulfat (B. 15, 2339). — III, 665. $C_{16}H_{12}O_9S$ $\mathbf{C}_{16}\mathbf{H}_{12}\mathbf{O}_{10}\mathbf{N}_{4}$ C 45.7 - H 2.9 - O 38.1 - N 13.3 - M. G. 420.

1) Aethylester d. Di[2,4-Dinitrophenyl]essigsäure. Sm. 153 (150,5° u. Zers.). Na, K (B. 21, 2471; A. 220, 137). — II, 1464. C 42,8 — H 2,7 — O 35,7 — N 18,8 — M. G. 448. Sm. 153—154°

 $\mathbf{C}_{16}\mathbf{H}_{12}\mathbf{O}_{10}\mathbf{N}_{6}$

1) Di[4,6-Dinitro-2-Methylphenylamid] d. Oxalsäure (Am. 11, 237; Soc. 61, 464, 1068). — II, 467.

2) Di[2, 6-Dinitro-4-Methylphenylamid] d. Oxalsäure (Am. 11, 239; Soc. 61, 465, 1068). — II, 501.

 $\mathbf{C}_{16}\mathbf{H}_{12}\mathbf{NCl}$ 1) 1-Chlor-3-[3-Methylphenyl]isochinolin. Sm. 43-440 (B. 23, 3167). - IV, 437.
2) 1-Chlor-3-[4-Methylphenyl]isochinolin. Sm. 70-71° (B. 24, 3975).

- IV, 438.

 $C_{16}H_{12}N_2Cl_2$ 1) Dichlorindolin (J. 1880, 586). — II, 1623.

2) 2,4-Dichlor-1,3-Di[Phenylimido]tetrahydro-R-Buten. Sm. 133—134°. $HCl, (2HCl, PtCl_4) (B. 13, 518; A. 214, 221; 279, 52). - II, 363.$

 $C_{16}H_{12}N_2Br_2$ 1) Dibromtetrahydro- α -Naphtinolin. Sm. 244°. $+3C_2H_4O_2$ (\dot{B} . 27, 2256). **– IV**, 1032.

 $\mathbf{C}_{16}\mathbf{H}_{12}\mathbf{N}_{2}\mathbf{S}$ 1) Di[2-Cyanbenzyl]sulfid. Sm. 111° (B. 31, 2648 Anm.).

 $\mathbf{C}_{16}\mathbf{H}_{12}\mathbf{N}_{2}\mathbf{S}_{2}$ 1) s-Dibenzthiazoläthan (Tetronamidothiophenol). Sm. 137°. HCl, (HCl,

AuCl₃), (2 HCl, PtCl₄) (B. 13, 1231). — II, 799. 2) Di[2-Cyanbenzyl]disulfid. Sm. 124° (B. 23, 2485). — II, 1561.

3) Dibenzylidendithiooxamid? Sm. 209° (B. 24, 1027). — III, 35. 4) 3,3'-Dimethylbiphenylen-4,4'-Disenföl. Sm. 157° (B. 21, 1066). —

IV, 982. $\mathbf{C}_{18}\mathbf{H}_{12}\mathbf{N}_{2}\mathbf{Se}_{2}\text{ 1) Di}[\mathbf{2}\text{-Cyanbenzyl}] \text{diselenid.} \quad \text{Sm. } 108-110^{\circ} \text{ u. Zers. } (B. \ \mathbf{24}, \ 2568). \ \mathbf{-}$ II, 1061.

 $C_{10}H_{12}N_3Cl$ 1) 2-Amido-1-[4-Chlorphenyl]azonaphtalin. Sm. 1160 (Soc. 59, 690). - IV, 1394.

 $C_{18}H_{12}N_8Br$ 1) 2-[4-Bromphenyl]amidodiazonaphtalin. Sm. 164° (B. 21, 2570). IV, 1574.

 $C_{16}H_{12}N_4S_2$ 1) Phenanthrenchinondithiourein (B. 27 [2] 270; G. 27 [1] 245).

 $C_{16}H_{12}N_5Br_3$ 1) 4,6-Di[Phenylamido]-2-Tribrommethyl-1,3,5-Triazin. Sm. 280° (J. pr. [2] 50, 110).

1) Sulfid d. 3-Merkapto-1-Phenyl-1,2,4-Triazol. $\mathbf{C}_{16}\mathbf{H}_{12}\mathbf{N}_{6}\mathbf{S}$ Sm. 136° (G. 28 [2] 553). Verbindung (aus 2,5-Diphenyldiamido-1,3,4-Thiodiazol) (B. 22, 1180).

IV, 1236.

1) Phenyl-2-Naphtyljodoniumchlorid. Sm. 1970 (B. 31, 920). $\mathbf{C}_{16}\mathbf{H}_{12}\mathbf{ClJ}$

 $\mathbf{C}_{10}\mathbf{H}_{10}\mathbf{ON}$

C 81.7 - H 5.5 - O 6.8 - N 6.0 - M. G. 235.

- 1) 7-Phenylamido-2-Oxynaphtalin. Sm. 1630 (1600) (B. 23, 529; 26, 3087). - II, 885.
- 2) 9-Acetylamidoanthracen. Sm. 273-2740 (B. 23, 2524). II, 640.
- 3) ?-Acetylamidoanthracen. Sm. 240° (A. 212, 61; B. 15, 225, 228). -- II, 640.
- 4) 2-Keto-4, 5-Diphenyl-2, 3-Dihydropyrrol. Sm. 188-1890 (A. 269, 140). **— IV**, 443.
- 5) 2-Methyl-4,5-Diphenyloxazol. Sm. 28°; Sd. 214°₁₇ (Soc. 63, 472). IV, 443.

6) 1-Benzoyl-2-Methylindol. Sm. 82° (B. 20, 817). — IV, 221

- 7) 3-Keto-1-Methylen-2-Benzyl-1,3-Dihydroisoindol. Sm. 1220 (B. 29, 2521 Anm.).
- 8) 3-Keto-1-[3-Methylbenzyliden]-1,3-Dihydroisoindol (m-Xylalphtalimidin). Sm. 165° (B. 23, 3161). — II, 1714.
- 9) 3-Keto-1-[4-Methylbenzyliden]-1,3-Dihydroisoindol (p-Xylalphtalimidin). Sm. 203—204° (B. **24**, 3968). — II, 1715. 10) **4-Oxy-6-Methyl-2-Phenylchinolin**. Sm. 291° (B. **19**, 1544). — IV, 437.
- 11) 4-Oxy-7-Methyl-2-Phenylchinolin. Sm. 270° (B. 27, 1397). IV. 12) 6-Oxy-2-Methyl-4-Phenylchinolin, Sm. 248°. HCl, (2HCl,PtCl₄+ 2H₂O), HBr, Pikrat (B. 28, 1048). — IV, 435.
- 13) 2-[4-Oxy-3-Methylphenyl]chinolin (Pseudoflavenol). Sm. 195—196°. $HCl + 2H_2O$, $(2HCl, PtCl_4)$ (M. 9, 104). — IV, 434.
- 14) 4-Methyl-2-[4-Oxyphenyl]chinolin (Oxyflavolin; p-Flavenol). Sm. 238°.
- HCl, (2HCl, PtCl₄), H₂SO₄ (B. **15**, 1502; **16**, 69). IV, 436. 15) **2-Methyl-4-[2-Oxyphenyl]**chinolin. Sm. 187—188° (B. **27**, 3038). IV, 435.
- 16) 2-Methyl-4-[4-Oxyphenyl]chinolin. Sm. 255° (B. 27, 912). IV, 435.
- 17) Methyläther d. 4-Oxy-2-Phenylchinolin. Sm. 69-70° (B. 30, 939). **– IV**, 427.
- 18) Methyläther d. 6-Oxy-2-Phenylchinolin. Sm. 1330, HCl, (2HCl, PtCl₄), Pikrat (A. **249**, 106). — IV, 427.
- 19) Methyläther d. 8-Oxy-2-Phenylchinolin. Fl. $(2 \text{HCl}, \text{PtCl}_4 + 2 \text{H}_2\text{O})$
- (A. 249, 108). IV, 427. 20) 2-Keto-4-Methyl-3-Phenyl-1,2-Dihydrochinolin. Sm. 275° (B. 26, 1398). — IV, 437.
- 21) 2-Keto-1-Methyl-4-Phenyl-1, 2-Dihydrochinolin. Sm. 143-144° (B. 28, 1040). **— IV**, 429.
- 22) 4-Keto-l-Methyl-2-Phenyl-1,4-Dihydrochinolin. Sm. 85° (B. 30, 939). **— IV**, 427.
- 23) 1-Keto-3-[3-Methylphenyl]-1,2-Dihydroisochinolin (Isoxylalphtalimidin). Sm. 196° (B. 23, 3167). — II, 1715.
- 24) 1-Keto-3-[4-Methylphenyl]-1,2-Dihydroisochinolin. Sm. 226-228° (B. 24, 3974; 29, 2548). — II, 1715. 25) Nitril d. α-Phenyl- β -[4-Methoxylphenyl]akrylsäure. Sm. 93° (A. 250,
- 159). II, 1707.
- 26) Nitril d. β -Keto- $\alpha \gamma$ -Diphenylpropan- α -Carbonsäure. Sm. 85—86° (J. pr. [2] **52**, 115; [2] **55**, 348).
- 27) Nitril d. α -Phenyl- β -Benzoylpropionsäure. Sm. 127,5° (A. 284, 2; B. 28, 960). — II, 1713. C 73,0 - H 4,9 - O 6,1 - N 16,0 - M. G. 263.

C13 H13 ON3

- 1) **4-A**mido-1-[3-Oxyphenylazo]naphtalin. Sm. 196°. $HCl + H_2O$ (B. 27)
- [2] 596). 1V, $14\overline{14}$. 2) 4-Amido-1-[4-Oxyphenylazo]naphtalin + $3H_2O$. Sm. 170°. H_2SO_4 $+6\,\mathrm{H}_2\mathrm{O}$ (B. 12, 229), — IV, 1415.
- 3) 2-Oxyphenylhydrazimido-β-Naphtalin. Sm. 192—193° (Β. 18, 3126). · IV; 1575.
- 4) 4-Oxyphenylhydrazimido-β-Naphtalin. Sm. 192—193° (B. 18, 3129). - IV, 1576.
- 5) 1-Phenyl-4- $[\alpha$ -Oximidobenzyl] pyrazol. Sm. 152—1540 (G. 19, 140). **–** IV, 550.
- 6) 4-Benzylidenamido-5-Keto-3-Phenyl-4,5-Dihydropyrazol. Sm. 152° (J. pr. [2] 52, 30). - IV, 1162.

- 7) 1-Acetyl-2, 5-Diphenyl-1, 3, 4-Triazol. Sm. 105° (B. 27, 998; A. 297, $\mathbf{C}_{18}\mathbf{H}_{13}\mathbf{ON}_{3}$ 256). — II, 1214; IV, 1187.
 - 8) 3-Oxy-5- $[\beta$ -Phenyläthenyl]-1-Phenyl-1,2,4-Triazol. Sm. 2870 (2840). $Na + 3^{1/2}H_{2}O$, $Ag + 1^{1/2}H_{2}O$ (B. 29, 1952; Soc. 71, 215, 311). **- IV**, *1166*.
 - 9) 3-Benzoyl-5-Methyl-1-Phenyl-1,2,4-Triazol. Sm. 55,5° (B. 26, 2789). **– IV**, 1119.

10) Nitrosoindol? HNO_8 (B. 8, 723). — IV, 218.

- 11) 7-Phenylazo-8-Oxy-5-Methylchinolin. Sm. 120° (B. 24, 3978). IV, 1486.
- 12) ?-[4-Methylphenyl]azo-6-Oxychinolin (B. 21, 1643). IV, 1486. 13) ?-[4-Methylphenyl]azo-8-Oxychinolin (B. 21, 1644). IV, 1486.
- 14) Nitril d. Phenylazo-2-Methylbenzoylessigsäure. Sm. 124,7° (J. 1890, 1425) 1435). — IV, 1478.
- 15) Nitril d. α-Phenylhydrazon-α-[4-Methylbenzoyl]essigsäure. Sm. 152 bis 153° (J. pr. [2] 52, 113). — IV, 1478.
- 16) Amid d. 6-Methyl-2-Phenyl-1,3-Benzdiazin-4-Carbonsäure. Sm. 256° (B. **28**, 737). — **IV**, 1036.
- 17) Verbindung (aus d. Nitril d. β-Imido-β Phenylpropionsäure u. Phenyl-carbonimid). Sm. 125° (J. pr. [2] 52, 106).

 $\mathbf{C}_{16}\mathbf{H}_{13}\mathbf{OC1}$ 1) 10-Chlor-9-Keto-10-Aethyl-9,10-Dihydroanthracen. Sm. 88-89° u. Zers. (A. 212, 87; B. 14, 459). — III, 243.

 $\mathbf{C}_{16}\mathbf{H}_{13}\mathbf{OJ}$ $C_{16}H_{13}O_{2}N$

- 1) Phenyl-2-Naphtyljodoniumoxydhydrat. Chlorid, Jodid (B. 31, 920). C 76,5 - H 5,2 - O 12,7 - N 5,6 - M. G. 251.
- 1) γ -Phenylimido- α -[3,4-Dioxyphenylmethylenäther] propen(Piperonylakroleïnanilid). Sm. 118º (B. 27, 2959). — III, 107.
- 2) 10-Nitroso-9-Keto-10-Aethyl-9,10-Dihydroanthracen (Aethylnitroso-anthron). Sm. 1350 (B. 14, 475). II, 253.
- 3) Aethyläther d. 9-Oximido-10-Keto-9,10-Dihydroanthracen. Sm. 97°
- (Soc. 69, 73). III, 410. 4) 2-Dimethylamido-9,10-Anthrachinon. Sm. 181° (Bl. [3] 19, 831). 5) 4,5-Diketo-1,2-Diphenyltetrahydropyrrol. Zers. bei 147-1486 (B.
- **31**, 1310). 6) Methyläther d. 5-[4-Oxyphenyl]-2-Phenyloxazol. Sm. $84-85^{\circ}$. HCl
- (B. 29, 2099). IV, 433.7) Methyläther d. 2-[4-Oxyphenyl]-5-Phenyloxazol. Sm. 99°; Sd. oberh.
- 360°. HCl, Pikrat (B. 29, 2098). IV, 433. 8) 5-Keto-4-Phenyl-3-Benzyl-4, 5-Dihydroisoxazol. Sm. 106-107°. Ag,
- Anilinsalz, Toluidinsalz, Phenylhydrazinsalz (A. 296, 6). 9) 1-Acetyl-2-Keto-3-Phenyl-2, 3-Dihydroindol. Sm. 1030 (M. 18, 548).
- 10) ?-Oxy-2-[4-Oxy-3-Methylphenyl]chinolin (Oxypseudoflavenol). 89° (M. 9, 107). — IV, 434.
- 11) 6-Methyläther d. 6-Oxy-2-[3-Oxyphenyl]chinolin. Sm. 1880 (B. 20, 1922). **— IV**, 428.
- 12) 2-Benzoyl-1-Keto-1, 2, 3, 4-Tetrahydroisochinolin. Sm. 132° (B. 26, 1216). — II, *1372*.
- 13) 1,3-Diketo-4-Benzyl-1,2,3,4-Tetrahydroisochinolin (Imid d. Benzylhomophtalsäure). Sm. 170°; Sd. oberh. 300° (B. 21, 2681). — II, 1889. 14) 1-Benzylindol-2-Carbonsäure. Sm. 195° u. Zers. (A. 227, 362). —
- IV, 236
- 15) 3-Aethyl- β -Naphtochinolin-1-Carbonsäure + $2H_2O$. Sm. 283°. HCl (B. **27**, 2021). — IV, 423.
- 16) Akridin-5-Aethyl- β -Carbonsäure (β 5-Akridylpropionsäure). Sm. noch nicht bei 300° . Na $+ 2^{1/2}$ H₂O, Ag, HCl, (2HCl, PtCl₄ + H₂O) (G. 22 [2] 553). — IV, 423.
- 17) Inn. Anhydrid d. 1- $[\alpha$ -Oximido- β -(3-Methylphenyl)äthyl]benzol-2-Carbonsäure. Sm. 133—134° (B. 23, 3160). — II, 1714.
- 18) Inn. Anhydrid d. 1- $[\alpha$ -Oximido- β -(4-Methylphenyl)äthyl]benzol-2-Carbonsäure. Sm. 126° (B. 24, 3967). — II, 1715.
- 19) Anhydroverbindung d. α-Benzoylamidopropionsäurephenylester.
 Sm. 41—42° (H. 20, 424).
- 20) Benzoat d. syn-γ-Oximido-α-Phenylpropen (B. 19, 1513). III, 62. 21) 4-Methylphenylimid d. 1-Methylbenzol-3,4-Dicarbonsäure. Sm. 180° (M. 12, 630). — II, 1846.

C_{1a}H_{1a}O₂N 22) Benzylimid d. Benzol-1-Carbonsäure-2-Methylcarbonsäure. Sm. 127° (B. **20**, 2497). — II, 1843.

23) 2-Methylbenzylimid d. Benzol-1, 2-Dicarbonsäure. Sm. 148-149° (B. 21, 576). — II, 1805.

- 24) 3-Methylbenzylimid d. Benzol-1,2-Dicarbonsäure. Sm. 117-1180 (B. **21**, 2700). — II, 1805.
- 25) 4-Methylbenzylimid d. Benzol-1, 2-Dicarbonsäure. Sm. 1170 (B. 28,
- 26) Verbindung (aus d. Verb. $C_{15}H_{11}O_2N$). 2 isom. Form. 1) Sm. 119 bis 121°; 2) Sm. 235—237° (B. 20, 2868). II, 1708.

C 68.8 - H 4.7 - O 11.5 - N 15.0 - M. G. 279. $C_{16}H_{13}O_{2}N_{3}$

1) 1-[4-Nitro-2-Amidophenyl]amidonaphtalin. Sm. 145-1476 (B. 21, 2302). — IV, 556. 2) 2-[4-Nitro-2-Amidophenyl]amidonaphtalin. Sm. 195° (B. 21, 590;

C. 1898 [2] 343). — IV, 556.

3) 3-Methyl-5-[2-Nitrophenyl]-1-Phenylpyrazol. Sm. 95°; Sd. 285°₇₀. $(2 \text{HCl}, \text{PtCl}_4)$ (B. 18, 2261). — IV, 936.

4) 3-Methyl-5-[4-Nitrophenyl]-1-Phenylpyrazol. Fl. (2 HCl, PtCl₄) (B. 18, 2259). — IV, *936*.

5) Nitromethyldiphenylpyrazol? Sm. 120° (A. 221, 333; B. 18, 2136). · III, 271.

6) 5-Keto-4-Benzoyl-3-Methyl-1-Phenyl-4, 5-Dihydro-1, 2, 4-Triazol. Sm. 129°. — IV, 1105.

7) Acetat d. 3-Oxy-1,5-Diphenyl-1,2,4-Triazol. Sm. 1330 (130-1310) (Soc. 67, 1066; B. 29, 1952, 2312). — IV, 1157.

8) 6-Benzoyl-2-[4-Methylphenyl]-1,2,3,5-Oxtriazin. Sm. 210° (R. 11, 261; **16**, 340). — **IV**, 1119.

9) 6-[4-Methylbenzoyl]-2-Phenyl-1, 2, 3, 5-Oxtriazin. Sm. 211° (R. 16, 340). — IV, 1119.

10) $\mathbf{5}$ -[$\mathbf{4}$ -Methylbenzoyl]- $\mathbf{2}$ -Phenyl- $\mathbf{1}$, $\mathbf{2}$, $\mathbf{3}$, $\mathbf{6}$ -Oxtriazin (R. $\mathbf{16}$, 321). 11) **5-Benzoyl-2-Benzyl-1, 2, 3, 6-Oxtriazin.** Zers. bei 1120 (R. 16, 319).

12) 5-Benzoyl-2-[4-Methylphenyl]-1,2,3,6-Oxtriazin (R. 16, 316). 13) 1-Acetyl-3-[2-Amidophenyl]imido-2-Keto-2, 3-Dihydroindol (Acetylamidophenimesatin). Sm. 285-286° (B. 28, 2529; 29, 197). — IV, 1187.

14) 2-Acetat d. 3-Phenylhydrazon-2-Oxypseudoindol (Phenylhydrazon

d. Acetylisatin). Sm. 131° (B. 23, 543). — IV, 695.
 Benzoat d. 1-[β-Oximido-β-Amidoäthyl]benzol-4-Carbonsäurenitril.
 Sm. 171,5—172° (B. 22, 2983). — II, 1844.

16) Methylester d. 1,5-Diphenyl-1,2,4-Triazol-3-Carbonsäure. Sm. 1590 (B. 22, 799). - IV, 1164.

C 62.5 - H 4.2 - O 10.4 - N 22.8 - M. G. 307. $\mathbf{C}_{16}\mathbf{H}_{13}\mathbf{O}_{2}\mathbf{N}_{5}$ 1) Verbindung (aus Dichlormaleïnsäureimid). Sm. 269—271° (B. 22, 2495). **— IV.** 707.

C₁₆H₁₃O₂Cl 1) α-Verbindung (aus Chlormethylphenylketon). Sm. 117° (B. 9, 1759; 13, 836; 32, 531). — III, 120.

2) β-Verbindung (aus Chlormethylphenylketon). Sm. 154-155° (B. 9, 1759; **13**, 836; **32**, 531). — **III**, 120.

C₁₆H₁₈O₂Cl₈ 1) $\beta\beta\beta$ -Trichlor- α -[?-Methylphenyl]- α -Phenyläthan-?-Carbonsäure. Sm. 173—174° (B. 7, 1192). — II, 1471.

 $\mathbf{C}_{18}\mathbf{H}_{18}\mathbf{O}_{2}\mathbf{Br}$ 1) γ -Keto- γ -[4-Methylphenyl]- α -[5-Brom-2-Oxyphenyl] propen. Sm. 196° u. Zers. (B. 31, 714 Anm.).

2) β-Brom-αδ-Diketo-αδ-Diphenylbutan (Bromdiphenacyl). Sm. 161-162° (B. 22, 3231; 28, 2106, 3029; 29, 1750, 2092). — III, 298. 3) isom. Bromdiphenacyl. Sm. 129° (B. 29, 2094).

4) Methylester d. β-Brom-αβ-Diphenylakrylsäure. Sm. 70° (B. 26, 663). - II, 1474.

5) Verbindung (aus 10-Oxyanthracen). Sm. 135-138° (B. 21, 1180). -

6) Verbindung (aus Tolandibromid). Sm. 107° (B. 4, 380). — II, 272.

1) Joddiphenacyl. Sm. 215° (B. 32, 533). $C_{16}H_{13}O_{2}J$ C 71,9 — H 4,9 — O 18,0 — N 5,2 — M. G. 267. $C_{16}H_{18}O_{8}N$

1) 3-Phenylamido-2-Oxy-1,4-Diketo-1,2,3,4-Tetrahydronaphtalin (B. **25**, 3604; A. **286**, 73). — III, 382.

 $C_{16}H_{13}O_{8}N$

- 2) 10-Nitro-9-Keto-10-Aethyl-9,10-Dihydroanthracen (Aethylnitroanthron). Sm. 102° (B. 14, 474). — II, 253.
- 3) Aethyläther d. 1-Amido-2-Oxy-9,10-Anthrachinon. Sm. 1820 (B. 15, 1796). — III, 419.
- 4) Methylenäther d. 7,8-Dioxy-1-Keto-2-Phenyl-1,2,3,4-Tetrahydroisochinolin. Sm. 157º (Soc. 57, 1035). — II, 1765.
- 5) Acetat d. β-Oximido-α-Keto-αβ-Diphenyläthan (A. d. α-Benziloxim). Sm. $61-62^{\circ}$ (B. **22**, 545). — III, 289.
- 6) Acetat d. isom. β -Oximido- α -Keto- $\alpha\beta$ -Diphenyläthan. Sm. $78-79^{\circ}$ (B, 22, 545). — III, 290.
- 7) Acetat d. 5-Oxy-3-Methyl-1-Phenylbenzoxazol. Sm. 113-1140 (B. 30, 1106).
- 8) Acetat d. 2-Oxy-2-Phenyl-1, 3-Benzoxazin. Sm. 212-2130 (B. 31,
- 9) Benzoat d. 5-Oxy-1, 3-Dimethylbenzoxazol. Sm. 108-110° (M. 19, 511).
- 10) Benzoat d. 2-Oxy-2-Methyl-1, 3-Benzoxazin. Sm. 1910 u. Zers. (B. **31**, 1598).
- 11) β -[2-Benzoylamidophenyl]akrylsäure. Sm. 191—193°. Ba (B. 25, 1263). — II, *1419*.
- 12) α-Benzoylamido-β-Phenylakrylsäure. Sm. 225° u. Zers. (A. 275, 3;
 B. 16, 2815; 30, 2976; J. 1883, 1177). II, 1420.
- 13) γ-Phenylimido-α-Keto-α-Phenylpropan-γ-Carbonsäure (Benzoylanilbrenztraubensäure). Sm. 168—170° (B. 21, 1134). — II, 1862. 14) Dihydroisaphensäure. Sm. 202°. Ag (B. 26, 2485). — II, 1892.
- 15) Lakton d. α-Acetylamido-2-Oxydiphenylessigsäure. Sm. 225—228° (B. **31**, 2817).
- 16) Lakton d. γ-Oximido-α-Oxy-αγ-Diphenylpropan-α²-Carbonsäure. Sm. 181—182° (M. 19, 440).
- 17) β-Phenoxyläthylimid d. Benzol-1, 2-Dicarbonsäure. Sm. 129—130° (B. **22**, 3255). — **II**, 1800.

 $C_{16}H_{13}O_{8}N_{3}$

- C 65.1 H 4.4 O 16.3 N 14.2 M. G. 295.
- 1) Dihydroamidoisatin. Sm. 213°. Na, K (A. 194, 88; M. 1, 582). II, 1610.
- 2) Oxyamidohydroisatin. Fest; Zers. bei 187-190° ohne Sm. (A. 194, 100). — II, 1610.
- 3) Trioxim d. 2-Benzoyl-1,3-Diketo-2,3-Dihydroinden + H₂O. Sm. 232° u. Zers. (B. 27, 108). — III, 318.
- 4) 4-Oximido-5-[\alpha-Oximidobenzyl]-3-Phenyl-4,5-Dihydroisoxazol. Sm. 219° (207—211°) (B. **22**, 2560; **23**, 3580; **30**, 1312). — III, 92.
- 5) 2-Keto-5-Methyl-3-[4-Benzoylamidophenyl]-2,3-Dihydro-1,3,4-Oxdiazol. Sm. 207—208° (B. 26, 1319). — IV, 1127.
- 6) Methyläther d. 6-[4-Oxybenzoyl]-2-Phenyl-1,2,3,5-Oxtriazin. Sm. 185° (R. 11, 265; 16, 265). — IV, 1120.
- 7) Acetat d. 7-Acetylamido-2-Oxy-5, 10-Naphtdiazin. Sm. 258° (B. 28, 2975). **— IV**, *1178.*
- 8) Phenylamid d. 3-Oxy-5-Keto-l-Phenyltetrahydropyrazol-2-Carbon-
- säure + H₂O. Sm. 166° (B. **25**, 1505). **IV**, 702. 9) Phenylimid d. Phenylnitrosoamidobernsteinsäure. Sm. 180° (A. **252**, 166). — II, 437.

 $C_{16}H_{13}O_{3}N_{5}$

- C 59,4 H 4,0 O 14,9 N 21,7 \leftarrow M. G. 323.
- 1) ?-Nitro-5-Keto-4-Phenylazo-3-Methyl-1-Penyl-4,5-Dihydropyrazol. Sm. 234° u. Zers. (B. 29, 1662). — IV, 1489.
- 2) 5-Keto-4-[4-Nitrophenyl]azo-3-Methyl-1-Phenyl-4,5-Dihydropyrazol. Sm. 199,5°. Na + H₂O (B. 31, 3128; 32, 204, 209). — IV, 1489. 1) Northebenoljodhydrin. Zers. bei 270° (B. 30, 1383).

 $\mathbf{C}_{16}\mathbf{H}_{13}\mathbf{O}_{3}\mathbf{J}$ $C_{16}H_{13}O_4N$

- C 67,9 H 4,6 O 22,6 N 4,9 M. G. 283.
- 1) 6,7 Dioxy-1-[3,4-Dioxybenzyl] isochinolin $+ 2H_2O$ (Papaverolin). $HCl + H_2O$, $HJ + 2H_2O$, $H_2SO_4 + 8^{1/2}H_2O$, Oxalat + $3H_2O$ (M. 6, 967; 11, 351). – IV, 443.
- 2) 2-Benzoylmethylformylamidobenzol-1-Carbonsäure. Sm. 1840 (B. 20, 3342). — II, *1254*.
- 3) 4-Benzoylamido-1-Methylbenzol-3-Ketocarbonsäure (Benzoyl-p-Methylisatinsäure). Sm. 1830 (B. 28, 735). — II, 1652.

4) Säure (aus Salicylaldehyd u. Hippursäure). Sm. 1950 u. Zers. (G. 19, $C_{18}H_{18}O_4N$ 49). — II, 1633.

- 5) Säure (aus Benzil). Sm. 196° (Soc. 51, 31). III, 282.
 6) Gem. Anhydrid d. Benzoylamidoessigsäure u. Benzolcarbonsäure (A. 133, 107). II, 1186.
- 7) Methylester d. α -Phenyl- β -[2-Nitrophenyl]akrylsäure. Sm. 75—76° (G. 25 [1] 172, 322). - II, 1474.
- 8) Methylester d. isom. α-Phenyl-β-[2-Nitrophenyl]akrylsäure (vom Sm. 146-147°). Sm. 94-95° (G. 25 [1] 173). II, 1474.
- 9) Methylester d. α -Phenyl- β -[3-Nitrophenyl]akrylsäure. Sm. 78—79° (G. 25 [1] 174, 323). - II, 1474.
- 10) Methylester d. isom. α -Phenyl- β -[3-Nitrophenyl]akrylsäure (vom Sm. 195—196°). Sm. 115—116° (G. 25 [1] 175). — II, 1474.
- 11) Methylester d. α -Phenyl- β -[4-Nitrophenyl]akrylsäure. Sm. 141 bis 142° (G. 25 [1] 176, 324). II, 1475.
- 12) Methylester d. isom. α -Phenyl- β -[4-Nitrophenyl]akrylsäure (vom Sm. 138—142°). Sm. 147—148,5° (G. 25 [1] 176). II, 1475.
- 13) Acetat d. Orcirufin. Sm. 2040 (B. 23, 721). II, 965.
- 14) Benzoat d. Acetylbenzoylhydroxylamin. Sm. $68-69^{\circ}$ (Am. 20, 14). 15) N-Benzoat d. Acetbenzhydroxamsäure. Sm. $84-85^{\circ}$ (Am. 20, 19).
- 16) Dibenzoat d. Acethydroxamsäure. Fl. (B. 29, 1220; Am. 20, 15). 17) Benzoylmethylamid d. Benzol-1,2-Dicarbonsäure. Sm. 160°. Ag
- (B. 21, 2686). III, 128. 18) 4-Methoxylbenzoylamid d. Benzolketocarbonsäure. Sm. 150° (B.
- **29**, 2105).
- 19) 2-Naphtylimid d. Acetyläpfelsäure. Sm. 116° u. Zers. (B. 24, 2008). - II, 620.
- C 61,7 H 4,2 O 20,6 N 13,5 M. G. 311. $C_{16}H_{13}O_4N_3$
 - 1) Isamsäure. Ba, Ag (J. pr. [1] 35, 462; [1] 35, 115). II, 1609.
 - 2) Aethylester d. 6-Nitro-I-Phenylisoindazol-3-Carbonsäure. Sm. 158° (B. 23, 715). — IV, 1465.
 - 3) Diacetat d. 1,3-Dioximidonaphtisoindol. Sm. 2130 (B. 25, 2476). II, 1879.
- 1) Chlorderivat d. Verbindung $C_{20}H_{16}O_6$ (aus $\alpha\beta\beta$ -Tri[1,4-Dioxyphenyl]- $C_{16}H_{18}O_4C1$ äthan) (A. 243, 192). — II, 1046. C 64,2 - H 4,3 - O 26,7 - N 4,7 - M. G. 299. $C_{16}H_{13}O_5N$
 - 1) 3-Carboxylbenzylmonamid d. Benzol-1,2-Dicarbonsäure (m-Carboxylbenzylphtalamidsäure). Sm. 228-230° (B. 24, 2420). — II, 1798.
 - 2) 4-Carboxylbenzylmonamid d. Benzol-1, 2-Dicarbonsäure. Sm. 255°. Ag (B. 23, 1059). — II, 1798.
- C 58.7 H 4.0 O 24.5 N 12.8 M. G. 327. $C_{16}H_{13}O_5N_3$
 - 1) Dimethyläther d. 5-Nitro-7,8-Dioxy-1-Keto-2-Phenyl-1,2-Dihydro-2,3-Benzdiazin (Nitroopiansäurephenylhydrazid). Sm. 173° (B. 19, 765). - IV, 717.
 - 2) 2-Nitro-4-Methylphenylazobenzoylessigsäure. Sd. 1940 (B. 18, 2566). - IV, 1473.
 - 3) 3, 3' Dicarbonsäuremonamid d. Oxalsäurediphenylamid (Oxaldibenzamamidsäure) (A. 232, 138). — II, 1265.
- $C_{16}H_{13}O_5Br$ 1) Brombrasilin (B. 18, 1140). III, 653.
 - 2) Aethylester d. 3-Brom-1,4-Naphtochinon-2-Acetessigsäure. Sm. 98° (B. **32**, 263).
- C 61,0 H 4,1 O 30,5 N 4,4 M. G. 315. $\mathbf{C}_{16}\mathbf{H}_{13}\mathbf{O}_{6}\mathbf{N}$
 - 1) Säure + 2 H₂O (aus Corydinsäure). Pb (Soc. 71, 663).
 - 2) Aethylester d. 6-Oxy-3-[3-Nitrobenzoyl]benzol-1-Carbonsäure. Sm. 116° (A. 290, 170).
 - 3) Acetat d. 2-Methyl-6-[2-Nitro-5-Oxy-3-Methylphenyl]-1,4-Benzochinon. Sm. 143° (B. 31, 1336).
- C 56,0 H 3,8 O 28,0 N 12,2 M. G. 343. $C_{16}H_{18}O_6N_3$
 - 1) 9,9,10-Trinitro-10-Aethyl-9,10-Dihydroanthracen. Zers. (B. 14, 473). — II, 252.
 - 2) Diacetat d. 4'-Nitro-3,4-Dioxyazobenzol. Sm. 126-127° (B. 26, 1075). - IV, 1441.

C16H18O7N

C 58.0 - H 3.9 - O 33.8 - N 4.3 - M. G. 331.

1) 2-[3,4-Dimethoxylbenzoyl]pyridin-3,4-Dicarbonsäure + H₂O (Papaverinsaure). Sm. 233° u. Zers. K, $K_2 + 2^{1/2}H_2O$, $Ca + 1^{1/2}H_2O$, Ba, $2Cu + Cu(OH)_2 + 6H_2O$, $AgH + H_2O$, $Ag_2 + 2^{1/2}H_2O$, $HCl + 2^{1/2}H_2O$ (M. 6, 380; 10, 692; 18, 466; Ph. Ch. 3, 398; 5, 419). — IV, 176.

2) α, 2'-Lakton d. ?-Nitro-α, 4-Dioxy-3', 4-Dimethoxyldiphenylmethan-2'-Carbonsäure (Nitrooxyphenylmekonin). Sm. 177,5-1790 (B. 27, 2639).

- II, 2021.

C 53,5 - H 3,6 - O 31,2 - N 11,7 - M. G. 359.C18H13O7N3

1) ?-Trinitro-2, 4, 5-Trimethyldiphenylketon. Sm. 155° (J. pr. [2] 35, 493). — III, 236.

2) ?-Trinitro-2,4,5-Trimethyldiphenylketon. Sm. 185° (J. pr. [2] 35, 493). **— III**, *236*.

3) ?-Trinitro-2,4,6-Trimethyldiphenylketon. Sm. 145° (J. pr. [2] 35, 488). — III, *237*.

4) ?-Trinitro-2,4,6-Trimethyldiphenylketon. Sm. 1880 (J. pr. [2] 35, 488). — III, *237*.

 $C_{16}H_{13}O_7Cl_3$ 1) Trichlorbarbaloïn + H_2O (C. 1898 [2] 582). 2) Trichlorisobarbaloin $+4H_2O$ (C. 1898 [2] 582).

C₁₆H₁₈O₇Br₃ 1) Tribromaloïn. Sm. 191° (B. 23 [2] 207; C. 1898 [2] 582; Bl. [3] 21, 670 Anm.). - III, 618.

C 51.2 - H 3.5 - O 34.1 - N 11.2 - M. G. 375. $C_{16}H_{13}O_8N_3$

1) 3-Methyläther-4-[2,4,6-Trinitrophenyl]äther d. 3,4-Dioxy-1-Allylbenzol. Sm. 92-93° (B. 27, 2458). - II, 974.

2) 3-Methyläther-4-[2,4,6-Trinitrophenyl] äther d. 3,4-Dioxy-1-Propenylbenzol. Sm. 145-146° (B. 27, 2459). - II, 977.

C 45.8 - H 3.1 - O 34.3 - N 16.7 - M. G. 419. $C_{16}H_{18}O_9N_5$

1) Aethylester d. ?-Trinitro-4-Benzoylamidophenylamidoameisensäure. Sm. 210° (B. 17, 2628). — IV, 595.

C 47.2 - H 3.2 - O 39.3 - N 10.3 - M. G. 407. $\mathbf{C}_{16}\mathbf{H}_{13}\mathbf{O}_{10}\mathbf{N}_{3}$

1) Diäthylester d. ?-Trinitronaphtalin-1,5-Dicarbonsäure. Sm. 152 bis 153° (G. 26 [1] 106).

1) 2-Methyl-4,5-Diphenylthiazol. Sm. 51-52°. HCl (A. 259, 244). - $\mathbf{C}_{16}\mathbf{H}_{18}\mathbf{NS}$ IV, $44\overline{3}$. C₁₈H₁₃N₂Cl₃ 1) $\alpha\beta\delta$ -Trichlor- $\alpha\gamma$ -di[Phenylimido]butan. Sm. 209—211° (A. 214, 221;

279, 50).

 $C_{16}H_{13}N_2Br$ 1) 4-Brom-3-Methyl-1,5-Diphenylpyrazol. Sm. 75° (B. 18, 316). — IV, 936.

 $C_{16}H_{13}N_3Cl_2$ 1) 3-Chlor-5-[lpha- oder β -Chlor- β -Phenyläthyl]-1-Phenyl-1,2,4-Triazol. Sm. 112—113° (B. 30, 2435). — IV, 1163.

 $C_{10}H_{13}N_3Br_2$ 1) 5-[$\alpha\beta$ -Dibrom- β -Phenyläthyl]-1-Phenyl-1,2,4-Triazol. Sm. 1520 (B. 30, 2438). — IV, 1163.

1) 3-Benzylidenamido-2-Thiocarbonyl-1-Phenyl-2,3-Dihydroimidazol.

 $C_{16}H_{13}N_3S$ Sm. 140—141° (B. 27, 2206).

C₁₆H₁₃N₃S₂ 1) 5-Dimethylamidobiphenyl-2, 4'-Dithiocarbonimid. Sm. 149° (A. 303, 358).

 $C_{16}H_{18}Cl_3Br_21$) $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[?-Brom-4-Methylphenyl]äthan. Sm. 148° (B. 7, 1192). — II, *239*.

C 76.8 - H 5.6 - O 6.4 - N 11.2 - M. G. 250.C16H14ON2

1) 3-Phenylhydrazon-1-Keto-2-Methyl-2, 3-Dihydroinden. Sm. 162 bis 164° (A. **252**, 84). — IV, 784.

2) 2-Phenylhydrazon-3-Methyl-1, 2-Benzpyron. Sm. 1160 (B. 24, 3461). - IV, 697

3) 5-Methyl-3-Phenyl-1-[4-Oxyphenyl] pyrazol. Sm. 206° (A. 278, 300). · IV, 937. 4) 3-Keto-2-Phenyl-5-Benzyl-2, 3-Dihydropyrazol. Sm. 131-1340 (A.

298, 381). — IV, 938. 5) 3-Keto-4-Phenyl-5-Benzyl-2,3-Dihydropyrazol. Sm. 172°. $+ C_2H_6O$ (Sm. 125—126°) (A. **296**, 10). — IV, 1033.

6) 3-Keto-2-Methyl-1,5-Diphenyl-2,3-Dihydropyrazol. Sm. 139°. Pikrat

(B. 26, 110). — IV, 907. 7) 3-Keto-l-Methyl-2,5-Diphenyl-2,3-Dihydropyrazol. Sm. 150°. HCl, $4 \text{ CHN} + \text{Fe(CN)}_2$, Pikrat (B. 20, 2549). — IV, 906.

- 8) 5-Keto-3-Methyl-1,4-Diphenyl-4,5-Dihydropyrazol. Sm. 196° (B. C₁₆H₁₄ON₂ **31**, 3164).
 - 9) 2-Keto-1-Methyl-4,5-Diphenyl-2,3-Dihydroimidazol. Sm. noch nicht bei 290° (A. 284, 33). — III, 223.
 - 10) 1-Benzoyl-2-Phenyl-4,5-Dihydroimidazol (B. 25, 2136). IV, 841.
 - 11) 5-Imido-4-Phenyl-3-Benzyl-4,5-Dihydroisoxazol. Sm. 107-108°. HCl (J. pr. [2] 55, 351).
 - 12) 3,5-Di[2-Methylphenyl]-1,2,4-Oxdiazol. Sm. 58-59° (B. 22, 3156). - II, *1331.*
 - 13) 3,5-Di[4-Methylphenyl]-1,2,4-Oxdiazol. Sm. 1350 (B. 22, 2437; 28, 2229). — II, 1344.
 - 14) 5-Phenyl-3-[2,4-Dimethylphenyl]-1,2,4-Oxdiazol. Sm. 98° (B. 22, 2444). II, 1377.
 - 15) **2,5-Di**[4-Methylphenyl]-1,3,4-Oxdiazol. Sm. 233—234°. + AgNO_{*} (B. 27, 3288; A. 298, 16). — IV, 1034, 1290.
 - 16) 3-Keto-2, 6-Diphenyl-2, 3, 4, 5-Tetrahydro-1, 2-Diazin (Inn. Anhydrid d. γ-Phenylhydrazon-γ-Phenylbuttersäure). Sm. 98° (B. 24, 4081; 26, 462; A. **299**, 16, 53). — **IV**, 697.
 - 17) 6-Oxy-4,5-Dimethyl-2-[2-Naphtyl]-1,3-Diazin. Sm. 248° (B. 25. 1427). — IV, 1032.
 - 18) 3 [2 Methylphenyl] imido 2 Keto 5 Methyl 2, 3 Dihydroindol (p-Methylisatin-o-Tolylimid). Sm. 191° (B. 16, 2268). — II, 1652.
 - 19) 3-[4-Methylphenyl]imido-2-Keto-5-Methyl-2, 3-Dihydroindol. 259° (B. 16, 2262; 18, 198; 28 [2] 613). — II, 1652.
 - 20) 2-Oxy-4-Methyl-6-[4-Amidophenyl]chinolin (M. 19, 704).
 - 21) Methyläther d. 6-Oxy-2-[3-Amidophenyl]chinolin. Sm. 127°. (2 HCl, $PtCl_4 + H_2O$), $H_2SO_4 + 2H_2O$ (B. **20**, 1920). — IV, 1024.
 - 22) 3-Keto-2-[β-Phenyläthenyl]-1,2,3,4-Tetrahydro-1,4-Benzdiazin. Sm. 223-224° (B. 25, 954). IV, 1033.
 23) 2-Keto-3-Methyl-1-Benzyl-1,2-Dihydro-1,4-Benzdiazin. Sm. 99 bis
 - 100°. Sd. oberh. 350° u. Zers. IV, 903.
 - 24) 1-Keto-2-Aethyl-4-Phenyl-1,2-Dihydro-2,3-Benzdiazin. Sm. 1090 [J. pr. [2] **51**, 152). — **IV**, 1023.
 - 25) 1-Keto-2-Methyl-4-Benzyl-1, 2-Dihydro-2, 3-Benzdiazin. Sm. 148° (B. **29**, 1434).
 - 26) 1- Keto-2-Methyl-4-[4-Methylphenyl]-1,2-Dihydro-2,3-Benzdiazin. Sm. 170° (J. pr. [2] 51, 154). — IV, 1029.
 - 27) 1-Keto-4-[?-Dimethylphenyl]-1,2-Dihydro-2,3-Benzdiazin. Sm. oberh. 250° (J. pr. [2] 51, 154). — IV, 1033. 28) Hydroisoindileucin. Sm. 160° u. Zers. (B. 18, 2243). — III, 121.

 - 29) Oxymethylphenylchinizin $+ \frac{1}{2} H_2 O$. Sm. 122°. (2 HCl, PtCl₄) (B. 19,
 - 1771; M. 7, 194). IV, 1496.

 30) Nitril d. β -Oximido- $\alpha\gamma$ -Diphenylpropan- α -Carbonsäure. Sm. 107° (J. pr. [2] 52, 115).
 - 31) Dibenzylamid d. Cyanameisensäure. + AgCN (B. 25, 1827). -
 - 32) Di[4-Methylphenyl]amid d. Cyanameisensäure. + 2AgCN (B. 25, 1828). — II, 490.
 - 33) y-Phenylallylidenhydrazid d. Benzolcarbonsäure (Cinnamalbenzoylhydrazin). Sm. 193° (J. pr. [2] 50, 303). — III, 62.
 - 34) Verbindung (aus Amidomethylphenylketon). Sm. 118-119° (B. 21, 1276). - III, 125.
 - 35) Base (aus Benzidin u. Formaldehyd) oder C₁₅H₁₄ON₂. (2HCl, PtCl₄) (B. **25**, 1936). — **IV**, 967.
 - 36) Verbindung (aus 3,4-Diamido-1-Methylbenzol u. Phenylbrenztraubensäure). Sm. 202—203° (A. 271, 168). — IV, 618. C 69,1 - H 5,0 - O 5,8 - N 20,1 - M. G. 278.

 $\mathbf{C}_{16}\mathbf{H}_{14}\mathbf{ON}_{4}$

- 1) 5-Keto-4-Phenylhydrazon-3-Methyl-1-Phenyl-4, 5-Dihydropyrazol. Sm. 156° (153°) (A. 238, 197; 247, 205; 253, 188; 295, 338; B. 21, 1203; 22, 2546; 23, 851; 27, 1143, 1176; 28, 1790; 29, 1662; 32, 203; Soc. 59, 336). — IV, 801, 1488.
- 2) 5-Keto-4-[2-Methylphenyl]hydrazon-3-Phenyl-4,5-Dihydropyrazol. Sm. 179° (B. 27, 783; J. pr. [2] 51, 62). — IV, 1490.

3) 5-Keto-4-[4-Methylphenyl]hydrazon-3-Phenyl-4,5-Dihydropyrazol. $C_{16}H_{14}ON_4$ Sm. 185° (B. 27, 784; J. pr. [2] 51, 62). — IV, 1490. 4) 5-Nitrosimido-1-Phenyl-3-[4-Methylphenyl]-4,5-Dihydropyrazol.

Sm. 232° (J. pr. [2] 58, 145).

5) 1-Acetyl-3, 6-Diphenyl-1, 4-Dihydro-1, 2, 4, 5-Tetrazin. Sm. 267° (B. 27, 1005; A. 297, 262). — II, 1215.

 $C_{18}H_{14}OBr_2$ 1) $\alpha\beta$ -Dibrom- γ -Keto- $\alpha\beta$ -Diphenylbutan. Sm. 93° (M. 19, 413).

2) ?-Dibrom- α -Keto- β -Phenyl- α -[4-Methylphenyl] athan. Sm. 113° (B. 15, 1681). — III, 235. C 72,2 — H 5,3 — O 12,0 — N 10,5 — M. G. 266.

 $C_{16}H_{14}O_2N_2$

- 1) $\alpha\beta$ -Di[Benzoylamido] athen. Sm. 202—203° (A. 273, 352). II, 1170. 2) isom. $\alpha\beta$ -Di[Benzoylamido] äthen. Zers. bei 280—290° (Å. 273, 355). - II, 1170.
- 3) s-Cinnamoylphenylharnstoff. Sm. 211-2120 (Soc. 67, 1047). 4) polym. 2-Methylphenylisocyanat, siehe C₈H₇ON. — II, 463.

5) polym. 4-Methylphenylisocyanat, siehe C₈H₇ON. — II, 494. 6) 1,3-Dioximido-5-Methyl-2-Phenyl-2,3-Dihydroinden. Sm. 2040 u.

Zers. (B. 29, 2380).

7) 1,3-Dioximido-2-[3-Methylphenyl]-2,3-Dihydroinden. Sm. 2220 u. Zers. (B. 28, 1389). — III, 303.

8) Methylenäther d. γ-Phenylhydrazon-α-[3,4-Dioxyphenyl]propen (Piperonylakroleïnphenylhydrazon). Sm. 160° (B. 27, 2959). — IV, 764. 9) α -Phenylazo- α -Benzoyl- β -Ketopropan (Benzolazobenzoylaceton). Sm.

99° (B. 21, 1705). — IV, 1480.

10) α -Benzoylphenylhydrazon- β -Ketopropan. Sm. 122° (B. 25, 1345). —

11) Hydrastalphenylhydrazon. Sm. 103-104° (B. 22, 2333). - IV, 764. 12) Methyläther d. 7-Oxy-2-Phenylhydrazon-1, 2-Benzpyron. Sm. 1150

(B. **24**, 3467). — IV, 709.

13) Methyläther d. 5-Keto-3-[2-Oxyphenyl]-1-Phenyl-4,5-Dihydropyrazol. Sm. 114° (B. 25, 1307). — IV, 709. 14) Aethyläther d. 5-Phenyl-3-[3-Oxyphenyl]-1,2,4-Oxdiazol. Sm. 71°

(B. 18, 2476). — II, 1519.

15) 6-Oxy-2-Furanyl-4-Methyl-5-Benzyl-1,3-Diazin. Sm. 238° (B. 25, 1419). — IV, 1034.

16) 2,3-Diketo-1,4-Diphenylhexahydro-1,4-Diazin. Sm. 258-260° (B.

22, 1805; **23**, 2028). — II, 411. 17) 2,5-Diketo-1,4-Diphenylhexahydro-1,4-Diazin. Sm. 263° (273°) (B.

10, 1967; 22, 1797; J. pr. [2] 40, 430; A. 301, 68). — II, 430.

18) 2,6-Diketo-1,4-Diphenylhexahydro-1,4-Diazin. Sm. 152—153° (B. **22**, 1802; **23**, 1990). — **II**, 430. 19) 1-Phenylacetylamido-4-Methylbenzoxazol. Sm. 86-87° (B. 22, 3237).

20) 2,4-Diketo-l-Methyl-3-[4-Methylphenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 254° (J. pr. [2] 55, 131)

21) 1,4-Diketo-3-Aethyl-2-Phenyl-1,2,3,4-Tetrahydro-2,3-Benzdiazin. Sm. 105-106° (J. pr. [2] 35, 286). — IV, 711.

22) 5,10-Diacetyl-5,10-Dihydrophenazin. Sm. 180° (A. 292, 259). — IV, 993.

23) Benzoat d. γ -Oximido- γ -Amido- α -Phenylpropen (B. d. γ -Phenylallenylamidoxim). Sm. 160° (B. 19, 1508). — II, 1409.

24) Inn. Anhydrid d. α-Amido-α-Phenylessigsäure. Sm. 274° u. Zers. (B. **24**, 4149). — **II**, 1323.

25) Aethylester d. 2-Phenylbenzimidazol-24-Carbonsäure. Sm. 242 bis 243° (A. 205, 121; 210, 340; B. 11, 296). — IV, 1021.

26) Aethylester d. 2-Phenylindazol-23-Carbonsäure. Sm. 920 (B. 25,

3595). — IV, 867. 27) Diphenylamid d. Fumarsäure. Sm. 313—314° u. Zers. (A. 259, 138; B. 23, 2041; 24, 2002). — II, 416.

28) Diphenylamid d. Maleinsäure. Sm. 211-2120 (A. 239, 140; Am. 9, 183). — II, 416.

29) Phenylimid d. Phenylamidobernsteinsäure. Sm. 211° (213-214°) (G. 14, 474; B. 19, 1373; 25, 651; A. 239, 154; 252, 166; 279, 131; 303, 215). — II, 437.

- $C_{16}H_{14}O_2N_230$) β -Phenylamidoäthylimid d. Benzol-1,2-Dicarbonsäure. Sm. 99 bis 100° (B. **22**, 2224). — II, 1800.
 - 31) Verbindung (aus Amidobenzol u. Nitro-1,3-Dioxybenzol). Sm. 238 bis 239° (Bl. 39, 594). II, 934.
 C 65,3 H 4,8 O 10,9 N 19,0 M. G. 294.
- $C_{16}H_{14}O_{2}N_{4}$
 - 1) Tolanharnstoff (Diphenylacetylendiurein). Zers. oberh. 310° (G. 19, 563; A. 261, 133). — III, 285.
 - 2) αβ-Di[Benzoylhydrazon]äthan (Glyoxalbenzoylosazon). Zers. bei 380° (B. 31, 33).
 - 3) 4-Phenylhydrazon-3, 5-Diketo-1-[4-Methylphenyl]tetrahydropyra-
 - zol. Sm. 234° (B. 30, 1022). IV, 808. 4) 3-Oxy-5-[3-Acetylamidophenyl]-1-Phenyl-1,2,4-Triazol. Sm. 294° (Soc. 71, 212). — IV, 1271.
 - 5) 3-Oxy-5-[4-Acetylamidophenyl]-l-Phenyl-1,2,4-Triazol. Sm. 278° (Soc. 71, 209). — IV, 1271.
 - 6) **5**-[**4-Methylbenzoyl**]-**2**-Phenylamido-1, **2**, **3**, **6**-Oxtriazin (*R*. **16**, 326). - IV, 764.
 - 7) 2,3-Di[Acetylamido]-5,10-Naphtdiazin. Sm. 270° (B. 22, 357). IV, 1281.
 - 8) 2,8-Di [Acetylamido] -5,10-Naphtdiazin. Sm. bei 330° (B. 23, 1855).
 - IV, 1282. 9) Aethylester d. Cycloformazylameisensäure. Sm. noch nicht bei 280° (A. **295**, 332). — IV, 1291.
 - 10) Di Benzylidenhydrazid d. Oxalsäure. Sm. noch nicht bei 250° (J. pr. [2] **51**, 195). — **III**, 40.
 - 11) Verbindung (aus 3,5,3',5'-Tetraamido-4,4'-Dioxybiphenyl) (B. 21, 3533). **- II**, 989.
- $C_{16}H_{14}O_2Cl_2$ 1) Dichlorlapachonon. Sm. 108° (C 1896 [1] 375).
- $\mathbf{C}_{16}\mathbf{H}_{14}\mathbf{O}_{2}\mathbf{Cl}_{4}$ 1) Dimethyläther d. $\alpha\alpha\beta\beta$ -Tetrachlor- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 169° (A. **279**, 339).
- $\textbf{C}_{10}\textbf{H}_{14} \circlearrowleft_2 \textbf{Br}_2$ 1) Methyläther d. $\beta\gamma$ -Dibrom- α -Keto- α -[?-Oxyphenyl]- γ -Phenylpropan. Sm. 158—159° (B. **25**, 3536). III, 228.
 - 2) Dimethyläther d. $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[4-Oxyphenyl]äthen. Sm, 1970 (A. **279**, 339). — **II**, *998*.
 - 3) Benzoat d. 3,6-Dibrom-5-Oxy-1,2,4-Trimethylbenzol. Sm. 120—120,5° (B. **28**, 2923).
 - 4) Methylester d. $\alpha\beta$ -Dibrom- $\alpha\beta$ -Diphenylpropionsäure. Sm. 111° (B. 26, 662; G. 14, 115). — II, 1467
- 1) Di[Benzoylmethyl]sulfid (Phenacylsulfid). Sm. 770 (B. 23, 3474). $C_{16}H_{14}O_{2}S$ III, 129.
- 1) Aethylenester d. Benzolthiolcarbonsäure. Sm. 96° (B. 24, 784). $\mathbf{C}_{16}\mathbf{H}_{14}\mathbf{O}_{2}\mathbf{S}_{2}$ II, 1291. H 5,0 - 0 17,0 - N 9,9 - M. G. 282.
- $\mathbf{C}_{16}\mathbf{H}_{14}\mathbf{O}_{3}\mathbf{N}_{2}$ 1) Phtalaldehydsäureacetylphenylhydrazon. Sm. 1910 (B. 24, 2353). — IV, 696.
 - 2) β -Phenylhydrazon- α -Oxy- $\alpha\beta$ -Di[2-Furanyl]äthan (Furoïnphenylhydrazon). Sin. 79—81° (A. 258, 222). — IV, 788
 - 3) 3,5-Diketo-4-Phenylhydrazon-2-Furanyl-1,2,3,4-Tetrahydrobenzol. Sm. 152° (A. 294, 314). — IV, 1480.
 - 4) N-Benzyl-3-Nitrobenzaldoxim. Sm. 123° (A. 298, 193).
 - 5) 6-Methyläther d. 5,6-Dioxy-4-Keto-3-Benzyl-3,4-Dihydro-2,3-Benzdiazin. Sm. 199-200° (B. 27, 1419). - II, 1939.
 - 6) Dimethyläther d. 7,8-Dioxy-1-Keto-2-Phenyl-1,2-Dihydro-2,3-Benzdiazin (Opianylphenylhydrazid). Sm. 175° (B. 19, 764). — IV, 716.
 7) α-[4-Benzoylphenyl]hydrazonpropionsäure. Sm. 210° u. Zers. (Soc.
 - 55, 616). III, 187.
 - 8) 4-Methylphenylazobenzoylessigsäure. Sm. 169-170° (B. 21, 2123). **– IV**, 1473.
 - 9) 2-Phenylureïdozimmtsäure (β-2-Phenylharnstoffphenylakrylsäure). Sm. 236°. Ag (B. 28, 3228).
 - 10) 3-Phenylureïdozimmtsäure. Sm. 249°. Ag (B. 28, 3230).
 11) 4-Phenylureïdozimmtsäure. Sm. 252°. Ag (B. 28, 3231).
 - 12) Laktond. α-Oxy-?-Nitroso-4-Dimethylamidodiphenylmethan-2'-Carbonsäure. Sm. 157° (A. 300, 235).

 $C_{16}H_{14}O_4N_4$

C₁₆H₁₄O₃N₂13) Acetat d. Anhydro-o-Phenylendiimidoglykobrenzkatechin. Sm. 1410 (B. 27, 1984). — IV, 565.

14) Amid d. 4-Benzoylamido-1-Methylbenzol-3-Ketocarbonsäure. Sm. 219° (B. 28, 737). — II, 1652.

- 15) Phenylmonamid d. β -Phenylamidoäthen- $\alpha\alpha$ -Dicarbonsäure. Sm. 182,5°. Ag (A. 285, 125).
- 16) Phenylmonamid d. Phenylamidoäthen-αβ-Dicarbonsäure (Phenylmonamid d. Phenylamidomale insäure). Sm. 175-176° (Am. 9, 185; B. 19. 1377; 20, 3105; 26, 1764; A. 285, 131). — II, 441.

17) Phenylamid-Phenylacetylamid d. Oxalsäure. Sm. 197-198° (G. 24)

1] 447).

18) Verbindung (aus Benzaldehyd u. Hippurazid) (J. pr. [2] 52, 270). III, 39.

 $\mathbf{C}_{16}\mathbf{H}_{14}\mathbf{O}_{3}\mathbf{N}_{4}$

C 61,9 — H 4,5 — O 15,5 — N 18,1 — M. G. 310.

1) Isamid (Amasantin) (J. pr. [1] 25, 460; [1] 35, 117). — II, 1609.

2) Acetylcarbonylphenylhydrazin (G. 22 [2] 103). — IV, 671.

3) Aethyläther d. 3-Oxy-5-Phenyl-1-[3-Nitrophenyl]-1,2,4-Triazol. Sm. 96° (Soc. 73, 373). — IV, 1157.

4) Aethyläther d. 3-Oxy-5-[3-Nitrophenyl]-1-Phenyl-1,2,4-Triazol.

Sm. 98° (Soc. 71, 210). — IV, 1157. 5) Aethyläther d. 3-Oxy-5-[4-Nitrophenyl]-1-Phenyl-1,2,4-Triazol.

Sm. 140° (Soc. 71, 206). — IV, 1158.

6) 3, 6-Diketo-2-Acetyl-1, 4-Diphenylhexahydro-1, 2, 4, 5-Tetrazin. Sm. 173° (B. 21, 2330). — IV, 676.

7) Methyläther d. 5-[4-Oxybenzoyl]-2-Phenylamido-1,2,3,6-Oxtriazin. Zers. bei 97° (R. 16, 328). — IV, 764.

8) Methylester d. Formazylglyoxalsäure. Sm. 124-125°. Ag (B. 27, 151). **— IV**, *1228*.

9) Methylester d. Isoformazylglyoxalsäure. Sm. 109—111° (B. 28. 1285 Anm.). — IV, 1228.

C 56.8 - H 4.1 - O 14.2 - N 24.8 - M. G. 338. $C_{16}H_{14}O_{3}N_{6}$

1) Oxydiimidodiamidoisatin. Sm. 295-300°. HNO3, H2SO4 (A. 190, 377; 194, 92). — II, 1610.

 $C_{16}H_{14}O_{8}S$ 1) Atronolsulfonsäure. Sm. 130-131° u. Zers. Ca + 2H₂O, Ba (A. 206, 52). — II, 275.

2) Aethylester d. Anthracen-2-Sulfonsäure. Sm. 160° (B. 28, 2261).

 $\mathbf{C_{16}H_{14}O_4N_2}$ C 64.4 - H 4.7 - O 21.5 - N 9.4 - M. G. 298.1) 3-Nitrotetrahydro-1, 2-Naphtochinonphenylamid. Sm. 1860 (B. 17,

1134). — III, *392*. 2) α -Phenylamido- α -Phenylimidoäthan-2',2°-Dicarbonsäure (Aethenyl-

dianthranilsäure). Sm. 226° (B. 30, 1188). 3) 2-[?-Nitroso-4-Dimethylamidobenzoyl]benzol-1-Carbonsäure + H₂O.

Sm. 112° (164° wasserfrei). Ba (A. 300, 232).

4) 2,2'-Dimethylazobenzol-5,5'-Dicarbonsäure. Sm. 182-184° (B. 7, 1358). — IV, 1465. 5) Azobenzol-4, 4'-Dimethylcarbonsäure. Sm. noch nicht bei 300°. Ba

 $+5 H_2 O$, Ag₂ (J. r. 16, 590). — IV, 1465.

6) isom. Azobenzol-4,4'-Dimethylcarbonsäure. Sm. 138° (B. 2, 210). - IV, 1465.

7) Diacetat d. 2,4-Dioxyazobenzol. Sm. 104° (B. 25, 1342). - IV, 1442.

8) 5-Nitro-2-Methoxylphenylamid d. β -Phenylakrylsäure (A. 74, 306). **– II**, 1408.

9) Verbindung (aus Phenylisocyanat u. 2-Acetylamidobenzol-1-Carbonsäure). Sm. 175° (J. pr. [2] **55**, 135). C 58,9 — H 4,3 — O 19,6 — N 17,2 — M. G. 326.

- 1) $\alpha \beta \gamma \delta$ -Tetraoximido- $\alpha \delta$ -Diphenylbutan. Sm. 225° (B. 26, 530). III, 323.
- 2) $\alpha\beta$ -Diimido- $\alpha\beta$ -Di
[Phenylamido]äthan- $\alpha^3\beta^3$ -Dicarbonsäure (3-Amidobenzol-1-Carbonsaurecyanid)? (A. 113, 332; Z. 1866, 35; 1867, 535; B. 1, 192, 194; 3, 703; 11, 1986; 16, 338 Anm.). — II, 1268.
 3) Di[Phenylhydrazon]äthan-αβ-Dicarbonsäure. Sm. 194—196° u. Zers.

 $(NH_4)_2$, Ba + $4H_2O$, Ag₂ (B. **26**, 1983). — IV, 728.

4) 3,3'-Dicarbonsäurediamid d. Oxalsäurediphenylamid (Oxaldibenzamdiamid) (A. 232, 139). — II, 1265.

- $C_{16}H_{14}O_4N_4$ 5) Di[4-Oxybenzylidenhydrazid] d. Oxalsäure (J. pr. [2] 51, 196). III, 86.
 - 6) Dibenzoat d. $\alpha\beta$ -Diamido- $\alpha\beta$ -Dioximidoathan. Sm. 217° (222°) (R. 13, 84; B. 22, 2947). — II, 1210.
 - 7) Verbindung (aus 2,3-Diamido-1-Methylbenzol-4-Carbonsaure) (B. 22, 1984). II, 1352. C 54,2 H 3,9 O 18,1 N 23,7 M. G. 354.
- C16H14O4N6
 - 1) P-Tetranitroso-2, 3-Diphenylhexahydro-1, 4-Diazin. Sm. 142-1430
- (Soc. 55, 103). IV, 996. $\mathbf{C}_{16}\mathbf{H}_{14}\mathbf{O}_{4}\mathbf{C}\mathbf{I}_{2}$. 1) Trimethyläther d. 3,5-Dichlor-2,4,6-Trioxydiphenylketon? (Dichlormethylhydrocotoïn). Sm. 81-82° (B. 24, 2980). - III, 204.
- C₁₈H₁₄O₄Br₂ 1) Trimethyläther d. ?-Dibrom-2,4,6-Trioxydiphenylketon (Dibrommethylhydrocotoïn). Sm. 84° (A. 199, 56). — III, 204.
 - 2) Acetat d. Dibromsaliretin. Sm. 95° (C. 1897 [2] 1075).
- 1) Diacetat d. Di[4-Oxyphenyl]sulfid. Sm. 92-940 (G. 17, 85). - $C_{16}H_{14}O_4S$ II, 951.
- 1) Merkaptoessig-4,4'-Biphenyläthersäure (Biphenyldisulfacetsäure). Sm. $C_{16}H_{14}O_4S_2$ 252° (B. **13**, 390). — **II**, *989*. 2) Dimethylester d. Diphenyldisulfid-2,2'-Dicarbonsäure. Sm. 130,5°
 - (131°) (B. 31, 1670; Am. 21, 210).
 3) Diacetat d. Di[4-Oxyphenyl]disulfid. Sm. 88-89° (J. pr. [2] 41, 196).
 - II. 951.
- 1) Diacetat d. Di[?-Oxyphenyl]trisulfid (G. 22 [2] 615). II, 913. C16H14O4S3 $C_{16}H_{14}O_5N_2$ C 61,2 - H 4,4 - O 25,5 - N 8,9 - M. G. 314.
 - Methyläther d. Gallocyanin. HCl, + C₆H₇N (B. 21, 1742). III, 677.
 Dioxim d. Brasilein (B. 23, 1436). III, 654.

 - 3) 3-[2-Nitrobenzylacetyl]amidobenzol-1-Carbonsäure. Sm. 2390 (B. **25**, 3594). — **II**, 1260.
 - 4) Dimethylester d. Azoxybenzol-2,2'-Dicarbonsäure. Sm. 115,5° (J. r.
 - 23, 89). IV, 1343. 5) Aethylester d. 3-Nitro-2-Benzoylamidobenzol-1-Carbonsäure. Sm. $85,5^{\circ}$ (J. pr. [2] 43, 444). — II, 1282.
 - 6) 2-Carboxylphenylamid d. 2-Carboxylphenylamidoessigsäure. Fest, Zers. bei 250° (B. 27, 3253). — II, 1252.
- 1) Diacetat d. Di [4-Oxyphenyl] sulfoxyd. Sm. 110,5° (B. 25, 1894). C16H14O5S
- C 58,2 H 4,2 O 29,1 N 8,5 M. G. 330. $C_{16}H_{14}O_6N_2$ 1) 3-Methyläther-4-[2,4-Dinitrophenyl]äther d. 3,4-Dioxy-1-Allyl
 - benzol. Sm. 114—115° (B. 27, 2457). II, 974. 2) 3-Methyläther-4-[2,4-Dinitrophenyl]äther d. 3,4-Dioxy-1-Propenylbenzol. Sm. 129—130° (B. 27, 2457). — II, 977.
 3) Diisatinsäure. Sm. 226—227°. Ag (J. pr. [2] 58, 106).

 - 4) $\beta\beta'$ -Di[2-Nitrophenyl]isobuttersäure. Sm. 149°. NH₄ + $\frac{1}{2}$ H₂O (B.
 - 27, 2248). II, 1471. 5) $\beta\beta'$ -Di[4-Nitrophenyl]isobuttersäure. Sm. 185° (B. 27, 2251). II, 1471.
 - 6) β -[2-Nitrophenyl]- β '-[4-Nitrophenyl]isobuttersäure. Sm. 161° (B. 27, 2250; **29**, 637). — **II**, 1471.
 - 7) 6-Nitro-3,4-Dioxy-1-Phenylimidomethylbenzol-3,4-Dimethyläther-2-Carbonsäure (Anilidonitroopiansäure). Sm. 183-184° (B. 19, 2285). - II, 1944.
 - 8) 6,6'-Dimethoxylazobenzol-3,3'-Dicarbonsäure (Azoanissäure). Ba +
 - H_2O (A. 129, 345). IV, 1471. 9) 2,2'-Azophenoxylessigsäure + 2H₂O. Sm. 162° (wasserfrei). Na_2 + $3 \, \mathrm{H}_2\mathrm{O}, \ \mathrm{K}_2 + 3 \, \mathrm{H}_2\mathrm{O}, \ \mathrm{Ca} + 8 \, \mathrm{H}_2\mathrm{O}, \ \mathrm{Ba} + 2 \, \mathrm{H}_2\mathrm{O}, \ \mathrm{Ag}_2 + 3 \, \mathrm{H}_2\mathrm{O} \ (\textit{J. pr. [2]} \ 29, \ 161). - \mathrm{IV}, \ 1405 \, \mathrm{Monoamid} \ \mathrm{d. 2-[3,4-Dimethoxylbenzoyl]} \ \mathrm{pyridin-3,4-Dicarbons \ddot{a}ure}$

 - (Papaverinaminsäure). NH₄, Ag (M. 13, 700). IV, 177. 11) Verbindung (aus 3-Amidobenzol-1-Carbonsäure). Ba (Soc. 69, 1515). C 53,6 — H 3,9 — O 26,8 — N 15,6 — M. G. 358.
- C16 H14 O6 N4 1) ?-Dinitro-4,4'-Di[Acetylamido] biphenyl. Sm. oberh. 300° (B. 20,
 - 1024). IV, 964. 2) $\alpha\beta$ -Di[Phenylnitrosamido] äthan- $\alpha\beta$ -Dicarbonsäure. Sm. 142,5 ° (B. **26**, 1765). — **II**, 438.

C₁₆H₁₄O₆N₄ 3) Methylester d. ?-Methylphenylazo-2,4-Dinitrophenylessigsäure.
Sm. 168° (B. 22, 325). — IV, 1465.
4) Acetat d. 5,6'-Dinitro-2'-Oxy-2,3'-Dimethylazobenzol. Sm. 205° (B. 26, 2353). — IV, 1423.
5) Acetat d. 5,6'-Dinitro-4'-Oxy-2,3'-Dimethylazobenzol. Sm. 211° (B. 26, 2354). — IV, 1423.

6) Di[4-Nitrophenylamid] d. Bernsteinsäure. Sm. 260° (A. 209, 377).

- II, 414.

7) Di[4-Nitro-2-Methylphenylamid] d. Oxalsäure. Sm. oberh. 260° (Soc. 61, 463). — II, 467.

8) Di 2-Nitro-4-Methylphenylamid d. Oxalsäure (B. 8, 474; 15, 2691; A. 209, 372). — II, 501.

9) Di[3-Nitro-4-Methylphenylamid] d. Oxalsäure (B. 31, 396).

C 49.7 - H 3.6 - O 24.9 - N 21.7 - M. G. 386. $\mathbf{C}_{16}\mathbf{H}_{14}\mathbf{O}_{6}\mathbf{N}_{6}$

1) Aethylester d. Di[3-Nitrophenyl]formazylameisensäure. Sm. 2170 (B. **28**, 1695).

C₁₆H₁₄O₆Br₄1) Tetramethyläther d. Tetrabromhexaoxybiphenyl. Sm. 217—218° (B. 9, 930). — II, 1042. 1) Diacetat d. Di[P-Oxyphenyl]sulfon. Sm. 163—165° (A. 147, 58; G.

 $\mathbf{C}_{16}\mathbf{H}_{14}\mathbf{O}_{6}\mathbf{S}$ 17, 90). — II, 840. C 55,5 — H 4,0 — O 32,4 — N 8,1 — M. G. 346.

 $\mathbf{C}_{16}\mathbf{H}_{14}\mathbf{O}_{7}\mathbf{N}_{2}$

1) 2,2'-Azoxyphenoxylessigsäure + H₂O. Sm. 186-187°. (NH₄)₂, Ba $+2 H_2 O$, Ag_2 (J. pr. [2] **29**, 152). — IV, 1342.

2) 2-[a-Oximido-3,4-Dimethoxylbenzyl]pyridin-3,4-Dicarbonsäure (Oxim d. Papaverinsäure). Sm. 154-1576 (M. 10, 693). — IV, 177.

3) Verbindung (aus 4-Nitrobenzol-1-Carbonsäure u. 4-Acetylamidobenzol-1-Carbonsäure). Sm. 252—254°. Ca + xH₂O, Ag₂ (H. 17, 296). — II, I272. C 51,3 — II 3,7 — O 30,0 — N 15,0 — M. G. 374. $\mathbf{C}_{16}\mathbf{H}_{14}\mathbf{O}_{7}\mathbf{N}_{4}$

1) 4,6-Dinitro-1,3,5-Trimethyl-2-Phenylamid d. 3-Nitrobenzol-1-Carbonsäure. Sm. 307° (B. 10, 1711). — II, 1234.

2) 2,4-Dinitro-1,3,5-Trimethyl-6-Phenylamid d. ?-Nitrobenzolcarbonsäure. Sm. bei 300° (B. 10, 1711). — II, 1167. C 53,0 — H 3,9 — O 35,4 — N 7,7 — M. G. 362.

 $\mathbf{C}_{16}\mathbf{H}_{14}\mathbf{O}_{8}\mathbf{N}_{2}$

1) Diäthylester d. ?-Dinitronaphtalin-1,5-Dicarbonsäure. Sm. 160° (G. **26** [1] 108).

2) Diäthylester d. isom. ?-Dinitronaphtalin-1,5-Dicarbonsäure. Sm. $253-254^0$ (G. $\bf 26$ [1] 110). C 49,2 — H 3,6 — O 32,8 — N 14,4 — M. G. 390.

 $C_{16}H_{14}O_8N_4$

1) Aethylenester d. 2-Nitrophenylamidoameisensäure. Sm. 160° (Am. **19**, 315).

IV, 428.

1V, 428.

2) Chlormethylat d. 6-Phenylchinolin. 2+PtCl₄ (A. 230, 18). — IV, 430.

3) Chlormethylat d. 8-Phenylchinolin. 2+PtCl₄ (A. 230, 42). — IV, 430.

4) Chlorbenzylat d. Chinolin + 3 H₂O. Sm. 65°. 2 + PtCl₄ (B. 13, 2045; 16, 1279; 18, 36; J. 1882, 1109; J. pr. [2] 51, 96). — IV, 252.

5) Chlorbenzylat d. Isochinolin (M. 9, 678). — IV, 300.

C₁₀H₁₄NBr₃ 1) Bromid d. Chinolinbrombenzylat. Sm. 100° (B. 18, 1305). — IV, 252.

C₁₆H₁₄NJ 1) Jodmethylat d. 2-Phenylchinolin. Sm. 197° (B. 19, 1198). — IV, 425.

2) Todmethylat d. 4. Phenylchinolin. Sm. 292° p. 7675 (B. 28, 1039). 2) Jodmethylat d. 4-Phenylchinolin. Sm. 222° u. Zers. (B. 28, 1039). **– IV**, 428.

3) Jodmethylat d. 6-Phenylchinolin $+ 2H_2O$. Sm. 194° (A. 230, 17). **- IV**, 430.

4) Jodmethylat d. 8-Phenylchinolin. Sm. 1630 (A. 230, 41). — IV, 430. $\mathbf{C}_{16}\mathbf{H}_{14}\mathbf{N}_{2}\mathbf{Cl}_{2}$ 1) $\alpha\beta$ -Dichlor- $\alpha\beta$ -Di[2-Methylphenylimido] äthan. Sm. 130—131° (A. **279**, 181).

 $\mathbf{C}_{16}\mathbf{H}_{14}\mathbf{N}_{2}\mathbf{S}$ 1) 2,5-Dibenzyl-1,3,4-Thiodiazol. Sm. 41-420 (A. 184, 310). — II, 1328. 2) Methyläther d. 2-Merkapto-4,5-Diphenylimidazol. Sm. 233-234°. HJ, $HJ + CH_4O$ (A. 284, 14). — III, 224.

 $C_{16}H_{14}N_2S_2$ 1) Thiocarbonyldi [4-Methylphenyl] thioharnstoff. Sm. 109 ° (B. 25, 1465). — II, 500.

- $C_{18}H_{14}N_2S_2$ 2) Verbindung (aus $\alpha\beta$ -Dirhodanäthylbenzol u. Benzol). Sm. 62° (J. 1880, 404). — II, 1098.
- 1) 4-Methylphenylsenfölsulfid. Sm. 175-176° (B. 25, 3527). II, 497. $C_{16}H_{14}N_{2}S_{8}$ 2) Dibenzyläther d. 2,5-Dimerkapto-1,3,4-Thiodiazol. Sm. 89° (B. **27**, 2520).
- $C_{16}H_{14}N_4Br_2$ 1) ?-Dibrom-1,4-Di[4-Methylphenyl]-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 245° u. Zers. (Soc. 57, 51). — IV, 1234. 1) Tolanthioharnstoff. Zers. bei 300° (A. 261, 134). — III, 285.
- C16H14N4S2
 - 2) 2-Thiocarbonyl-5-[2-Methylphenyl]azo-3-[2-Methylphenyl]-2,3-Di-
 - hydro-1,3,4-Thiodiazol. Sm. 155° (B. 24, 4204). IV, 803.

 3) 2-Thiocarbonyl-5-[4-Methylphenyl]azo-3-[4-Methylphenyl]-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 237—238° (B. 24, 4191). IV, 806.
- 1) Sulfid d. 5-Merkapto-3-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. $C_{16}H_{14}N_4S_4$ 135° (B. 28, 2639). — IV, 745. C 81,8 — H 6,3 — O 6,7 — N 5,9 — M. G. 237. C16H15ON
- - 1) γ-Phenylimido-α-Keto-α-Phenylbutan. Sm. 110° (B. 20, 1770, 2180). **- III**, 270.
 - 2) γ-[4-Methylphenyl]imido-α-Keto-α-Phenylpropan. Sm. 160—163°
 (B. 21, 2193). III, 95.
 - 3) γ -Benzoylamido- α -Phenylpropen. Sm. 94-95° (B. 26, 1860). —
 - 4) α-Phenylamido-β-Benzoylpropen. Sm. 132° (B. 22, 3278). III, 163.
 5) γ-Oximido-αβ-Diphenyl-α-Buten. Sm. 102—103° (M. 18, 439).

 - 6) α-Oximido-αγ-Diphenyl-β-Buten (Dypnonoxim). Sm. 65°. III, 249. 7) 3-Oximido-1-Phenyl-1, 2, 3, 4-Tetrahydronaphtalin? Sm. 153° (M.
 - **19**, 410). 8) N-Benzylzimmtaldoxim. Sm. 130° (A. 298, 192).

 - 9) 1-Benzoylamido-2,3-Dihydroinden. Sm. 142—143° (Soc. 71, 251). 10) 5-Keto-2,3-Diphenyltetrahydropyrrol. Sm. 207° (A. 269, 139).
 - 11) 1-Benzoyl-2-Methyl-2, 3-Dihydroindol. Sm. 91,5° (B. 26, 1303). -IV, 189.
 - 12) 1-Benzoyl-1,2,3,4-Tetrahydrochinolin. Sm. 75° (B. 13, 2400; 16, 734). **— IV**, *195*.
 - 13) 2-Benzoyl-1,2,3,4-Tetrahydroisochinolin. Sm. 129°; Sd. 245-250°, (B. 26, 1213). — IV, 201.
 - 14) 1-Acetyl-3, 6-Dimethylcarbazol. Sm. 129° (B. 24, 2598). IV, 398.

 - 15) 3-[β-Oxypropyl]-β-Naphtochinolin. Fl. (B. 27, 2028).
 16) Inn. Anhydrid d. α-Oxy-α-Phenyl-β-[4-Methylphenyl]äthan-α²-Carbonsäureamid (p-Xylylphtalimidin). Sm. 149° (B. 24, 3969). II, 1702.
 - 17) Aldehyd d. β-Methylphenylamido-α-Keto-α-Phenyläthan-β-Carbon-säure? Sm. 103° (B. 21, 1137). III, 95.
 - 18) Phenylamid d. 2,3-Dihydroinden-2-Carbonsäure. Sm. 1820 (Soc. 65, 236). — II, *1430*.
 - 19) 2-Methylphenylamid d. β-Phenylakrylsäure. Sm. 167°. II, 1408.
 - 20) 4-Methylphenylamid d. β-Phenylakrylsäure. Sm. 168°. II, 1408.
 - 21) Nitril d. β-Oxy-αγ-Diphenylpropan-β-Carbonsäure. Sm. 113° u. Zers. (B. 14, 1688; A. 119, 45). — II, 1701.

 - Oxim d. Ketongerbsäure C₁₈H₁₄O₉ (M. 10, 656). II, 2091.
 Verbindung (aus Phenol u. 1-Amidonaphtalin). Sm. 30,1° (Soc. 43, 468). • II, *592*.
- C 72,5 H 5,7 O 6,1 N 15,8 M. G. 265. $C_{16}H_{15}ON_3$
 - 1) 3-Keto-5-Methyl-2-Phenyl-1-Benzyl-2, 3-Dihydro-1, 2, 4-Triazol. Sm. 79-80°. — IV, 1105. 2) 1[oder 4]-Acetyl-3,5-Diphenyl-4,5-Dihydro-1,2,4-Triazol (B. 27,
 - 1009).
 - 3) Aethyläther d. 3-Oxy-1,5-Diphenyl-1,2,4-Triazol. Sm. 92° (Soc. **67**, 1066). — **IV**, 1157.
 - 4) 2-Methyl-1-[4-Acetylamidophenyl] benzimidazol. Sm. 219° (B. 28,
 - 5) 1-Acetyl-2-[4-Methylphenyl]imido-2, 3-Dihydrobenzimidazol. Sm. 152° (B. **24**, 2511). — **IV**, 567.
 - 6) 1 oder 3-Acetyl-2-Phenylimido-5-Methyl-2,3-Dihydrobenzimidazol. Sm. 147° (B. 24, 2516). — IV, 623.

- 7) Nitril d. β -Phenylamido- α -Benzylidenamido- α -Oxypropionsäure. C18H15ON Sm. 253° (B. 31, 2710).
 - 8) Nitril d. 2,6-Dimethyl-4-[4-Methoxylphenyl]-1,4-Dihydropyridin-
 - 3,5-Dicarbonsäure. Sm. 215—216° (J. pr. [2] 56, 132).
 9) Cinnamylidenhydrazid d. Phenylamidoameisensäure (J. pr. [2] 53, 529).
- C 65.5 H 5.1 O 5.5 N 23.9 M. G. 293. $C_{16}H_{15}ON_{5}$
 - 1) 4-Phenylharnstoff-1-Phenyl-3-Methyl-1, 2, 5-Triazol. Sm. 240° (B. 28. 1287). - IV, 1238.
- 1) α -Chlor- γ -Keto- $\alpha\beta$ oder $\alpha\delta$ -Diphenylbutan. Sm. bei 140° (M. 18. $C_{16}H_{15}OCl$ 443; 19, 407).
- C 75.9 H 5.9 O 12.6 N 5.5 M. G. 253.C16H15O2N
 - 1) ?-Diacetylamidoacenaphten. Sm. 122° (B. 21, 1458). II, 634.
 - 2) 2-Methyläther d. γ-Oximido-γ-[2-Oxyphenyl]-α-Phenylpropen. Sm. 122-133° (B. 25, 3536). III, 247.
 3) Aethyläther d. Benzoylimidooxymethylbenzol. Sm. 65° (Am. 19,
 - 137; **20**, 73).
 - 4) Benzyläther d. α-Oximido-β-Keto-α-Phenylpropan. Sm. 62° (A. 291, 284). — III, 268.
 - 5) 2-Propionylamidodiphenylketon. Sm. 78,5° (B. 25, 3085). III, 182.
 - 6) 3-Acetylamidophenyl-4-Methylphenylketon. Sm. 1390 (A. 286, 314). **– III**, 214.
 - 7) 4-Acetylamido-4-Methylphenylketon. Sm. 155° (A. 286, 326). III, 214.
 - 8) α-Benzoylamidoäthylphenylketon. Sm. 103° (B. 30, 1523)
 - 9) Methyl-2-Phenylacetylamidophenylketon. Sm. 790 (B. 26, 1392). - III, 124.
 - 10) Phenylacetylamidobenzoylmethan. Sm. 126-127° (B. 15, 2470). III, 127.
 - 11) γ -Phenylhydrazon α [3, 4-Dioxyphenylmethylenäther] α -Propen (Piperonylakroleïnphenylhydrazon). Sm. 160° (B. 27, 2959).
 - 12) 6-Phenylamido -4-Keto-2-Furanyl-1,2,3,4-Tetrahydrobenzol. Sm. 214° (A. 294, 313).
 - 13) 2-Phenylamido 5, 6, 7, 8-Tetrahydro 1, 4-Naphtochinon. Sm. 164° (B. **31**, 903).
 - 14) 6-Oxychinolinbenzyloxydhydrat + 2H₂O. Zers. bei 120-125° (J. pr. [2] **43**, 527). — IV, 271.
 - 15) 8-Oxychinolinbenzyloxydhydrat + xH₂O. Chlorid (J. pr. [2] 47, 429; [2] **54**, 8). — **IV**, 273.
 - 16) 8-Oxyisochinolinbenzyloxydhydrat $+ 2 H_2 O$. Sm. 72° (110° wasserfrei). Salze, siehe diese (J. pr. [2] 52, 15). — IV, 303.
 - 17) Aethyläther d. 2-Oxy-2-Phenyl-1,3-Benzoxazin. Zers. bei 200° (B. **31**, 1603).
 - 18) Benzyläther d. 2-Oxy-2-Methyl-1, 3-Benzoxazin. Zers. bei 185° (B. 31, 1599).
 - 19) 4-Benzoyl-3-Methyl-3,4-Dihydro-1,4-Benzoxazin. Sm. 126° (B. **30**, 1638).
 - 20) γ -Phenylamido- α -Phenylpropen- γ -Carbonsäure. Sm. 154°. Cu (B. 17, 2116). — II, 1424.
 - 21) Lakton d. α-Oxy-4-Dimethylamidodiphenylmethan-2'-Carbonsäure. Sm. 186° (188°) (B. 28 [2] 995; C. 1896 [1] 105; A. 300, 234; Bl. [3] 19, 830).
 - 22) Aldehyd d. 2-Benzoylamidomethylphenylessigsäure. Sm. 106 bis 108° (B. 30, 2191).
 - 23) Methylester d. β -Phenylamido- β -Phenylakrylsäure. Sm. $92-93^{\circ}$ (A. **245**, 372). — II, 1644.
 - 24) Phenylester d. 1,2,3,4-Tetrahydrochinolin-1-Carbonsäure. Sm. 51 bis 52°; Sd. bei 300° (Bl. [3] 21, 12).
 - 25) Acetat d. anti-α-Oximido-4-Methyldiphenylmethan. Sm. 123—124° (B. 23, 403). — III, 215.
 - 26) Acetat d. syn-α-Oximido-4-Methyldiphenylmethan. Sm. 118—122° (B. 23, 2777). — III, 215.
 - 27) Amid d. α -Phenyl- β -Benzoylpropionsäure. Sm. 149° (B. 28, 963). - II, 1713.

- $C_{16}H_{15}O_2N$ 28) Amid d. β -Keto- $\alpha\gamma$ -Diphenylpropan- α -Carbonsäure. Sm. $162-164^{\circ}$
 - (J. pr. [2] 55, 354). 29) Amid d. α -Keto- α -Phenyl- β -[4-Methylphenyl]äthan- α ²-Carbonsäure. Sm. 135—140° (B. 24, 3967). — II, 1715.
 - 30) Methylamid d. α -Keto- $\alpha\beta$ -Diphenyläthan- β^2 -Carbonsäure. Sm. 143 bis 144° (B. 20, 2866). — II, 1711.
 - 31) Phenylamid d. α-Oxy-γ-Phenylcrotonsäure. Sm. 150° (B. 24, 4080). - II, 1658.
 - 32) Phenylamid d. β -Benzoylpropionsäure. Sm. 145° (Bl. [3] 19, 392). 33) Acetylbenzylamid d. Benzolcarbonsäure (B. 26, 2279). II, 1170.
 - 34) Benzoylamid d. β -Phenylpropionsäure. Sm. 106° ($\acute{A}m$. 13. 7). —
 - 35) Imid d. Phenylessigsäure. Sm. 1920 (Am. 13, 3). II, 1312
 - 36) Imid d. 1-Methylbenzol-2-Carbonsäure. Sm. 147-1486 (B. 25, 456). - II, 1330.
 - 37) Imid d. 1-Methylbenzol-4-Carbonsäure. Sm. 1550 (B. 25, 454; 26, 2838). — II, *1342*.
 - 38) Aethylimid d. Benzolcarbonsäure. Sm. 101-1020 (Am. 20, 73).
 - 39) 2-Naphtylimid d. fum. Butan-βγ-Dicarbonsäure. Sm. 195-200° (A. **285**, 232).
 - 40) 2-Naphtylimid d. mal. Butan- $\alpha\beta$ -Dicarbonsäure. Sm. 220° (A. 285, 234).
 - 41) 1-Naphtylimid d. β -Methylpropan- $\alpha\beta$ -Dicarbonsäure. Sm. 135 bis 136° (B. 30, 617).
 - 42) 2-Naphtylimid d. β -Methylpropan- $\alpha\beta$ -Dicarbonsäure. Sm. 147 bis 148° (149—150°) (A. 292, 187; B. 30, 617).
 - 43) Nitril d. Säure C₁₆H₁₆O₄ (aus Acetophenon) (B. 20, 389). II, 1882. C 68,3 H 5,3 O 10,8 N 14,9 M. G. 281.

 $C_{16}H_{15}O_{2}N_{8}$

- 1) Cinnamylphenylamidoharnstoff. Sm. 241-242° (B. 29, 1952). IV, 675.
- 2) γ -Phenylhydrazon- α -[3-Nitrophenyl]- α -Buten. Sm. 155° (A. 294, 294). — IV, 774.
- 3) γ -Phenylhydrazon α [3-Nitrophenyl] β -Methylpropen. Sm. 135° (B. 19, 531). — IV, 755.
- γ-Phenylhydrazon-α-[4-Nitrophenyl]-β-Methylpropen. Sm. 196°. - IV, 755.
- 5) β -Phenylhydrazon- β -Acetylamido- α -Keto- α -Phenyläthan. Sm. 143 bis 156°? (B. 26, 2789). — IV, 1166.
- 6) ε -Semicarbazon- α -Furanyl- ε -Phenyl- $\alpha\gamma$ -Pentadiën. Sm. 59—60° (B. 31, 284).
- 7) γ -Phenylallenylphenyluramidoxim. Sm. 158—159° (B. 22, 2398). II, 1409.
- 8) Dimethyläther d. 2,5-Di[4-Oxyphenyl]-1,3,4-Triazol + H₂O. Sm. 183° (A. **298**, 112). — **IV**, 1188.
- 9) P-Nitroso-2-Keto-1, 4-Diphenylhexahydro-1, 4-Diazin. Zers. bei 220 bis 235° (B. 23, 2027). — II, 429.
- 10) 4,6-Diketo-2-Phenyl-5-Benzylhexahydro-1,2,3-Triazin (Benzylmalonsäurephenylazimid). Sm. 258° (Soc. 61, 796). - IV, 711.
- 11) 1[oder 3]-Nitroso-3-[4-Methylphenyl]amido-2-Keto-5-Methyl-2, 3-Dihydroindol. Sm. oberh. 220° u. Zers. (B. 18, 193). — II, 1653.
- 12) 5-Methyl-1-Aethyl-2-[2-Nitrophenyl]benzimidazol. Sm. 170° (B. 26, 202). — IV, 1014.
- 13) 5-Methyl-1-Aethyl-2-[4-Nitrophenyl] benzimidazol. Sm. 176° (B. 26, 202). — IV, 1014.
- 14) Aethylester d. 1-Phenyl-5-Pyrrylpyrazol-3-Carbonsäure. Sm. 168° (B. 23, 2159). - IV, 798.
- 15) Phenylamid d. α-Phenylhydrazon-α-Acetessigsäure. Sm. 98-99° (B. 27, 1170). — IV, 705. 16) Benzylidenhydrazid d. Benzoylamidoessigsäure. Sm. 182° (J. pr.
- [2] 52, 246). III, 39. C 62,1 H 4,8 O 10,4 N 22,7 M. G. 309.
- $\mathbf{C}_{16}\mathbf{H}_{15}\mathbf{O}_{2}\mathbf{N}_{5}$ 1) P-Nitro-1,4-Di[2-Methylphenyl]-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 206—207° (Soc. 57, 54). — IV, 1234.
 - 2) P-Nitro-1, 4-Di[4-Methylphenyl]-1, 4-Dihydro-1, 2, 4, 5-Tetrazin. Sm. 144° (Soc. 57, 51). — IV, 1234.

- $C_{18}H_{15}O_{2}Cl$ 1) Dimethyläther d. β -Chlor- $\alpha\alpha$ -Di[4-Oxyphenyl]äthen. Sm. 76° (A. 279, 338). II, 998.
 - Aethylester d. Diphenylchloressigsäure. Sm. 43—44° (B. 22, 1537).
 II, 1464.

3) Acetochlorid d. Isohydrobenzoin (A. 182, 281). — II, 1102.

C₁₆H₁₅O₂Cl₃ 1) Dimethyläther d. $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[4-Oxyphenyl]äthan. Sm. 92° (*J. pr.* [2] 47, 68). — II, 995. C₁₆H₁₅O₃N C 71,4 — H 5,6 — O 17,8 — N 5,2 — M. G. 269.

 3,4-Methylenäther-1-Aethyläther d. 4-[3,4-Dioxybenzyliden]amido-1-Oxybenzol (Piperonal-p-Phenetidin). Sm. 105° (B. 29, 2328).

2) 4-Acetylamidophenyläther d. Oxymethylphenylketon (Hypnoacetin). Sm. bei 160° (C. 1897 [1] 410).

3) Aethyläther d. Orcirufin. Sm. 269° (B. 23, 721). — II, 965.

4) Aethyläther d. Benzoylhydroxamsäure. Sm. 48—49° (A. 217, 8; B. 16, 874). — II, 1208.

Benzoat d. α-Aethylbenzhydroxamsäure. Sm. 58° (A. 205, 208; 281, 232; B. 16, 874; 26, 1564). — II, 1207.

6) Benzoat d. β -Aethylbenzhydroxamsäure. Sm. 63° (A. 205, 281;

281, 232). — II, 1207. 7) 4-Methylbenzoat d. α-Methylbenzhydroxamsäure. Sm. 108,5° (A.

281, 249). — II, 1344. 8) 4-Methylbenzhydroxamsäure. Sm. 65° (A. 281,

- 251). II, 1344. 9) 3-Methylbenzoat d. 3-Methylbenzhydroxamsäure. Sm. 95,5° (A. 281,
- 222). II, 1336. 10) 4-Methylbenzoat d. 4-Methylbenzhydroxamsäure. Sm. 167° (A. 281,

223). — II, 1345.
11) Formiat d. β-Formylamido-α-Oxy-αβ-Diphenyläthan. Sm. 208° u.

- Zers. (B. 29, 1213).

 12) Acetat d. 4-Phenylacetylamido-l-Oxybenzol. Sm. 120° (B. 17, 2436).
- II, 719. 13) α-Acetat d. anti-α-Oximido-4-Methoxyldiphenylmethan. Sm. 133
- bis 135° (B. 24, 54). III, 194.
 14) α-Acetat d. syn-α-Oximido-4-Methoxyldiphenylmethan. Sm. 52—53° (B. 24, 54). II, 194.

15) Benzoat d. β -Benzoylamido- α -Oxyäthan. Sm. 76° (B. 30, 914).

16) Anthracenäthylnitrat. Sm. bei 160° (Soc. 59, 648; 61, 872). — 11, 260.
 17) α-Benzylidenamido-β-Oxy-β-Phenylpropionsäure. Na (A. 284, 42).

II, 1576.
 18) α-Benzoylamido-β-Phenylpropionsäure. Sm. 182—183° (A. 275, 17).

— II, 1365. 19) 1-[β-Benzoylamidoäthyl]benzol-2-Carbonsäure. Sm. 172°. Ba + 6 H₂O,

Pb + H_2O , $Cu + 2H_2O$, Ag (B. 26, 1214). — II, 1372.

20) 2-[4-Dimethylamidobenzoyl]benzol-1-Carbonsäure + xH₂O. Sm. 199° (205° wasserfrei). Mg + 6H₂O, Ba + 2H₂O, Ag, HCl, (2HCl, PtCl₄ + 2H₂O), + C₂H₆O (B. 27 [2] 665; A. 30O, 229; Bl. [3] 19, 83O).

21) Aethylester d. 3-Benzoylamidobenzol-1-Carbonsäure. Sm. 114º (A. 303, 277).

22) Aethylester d. 4-Benzoylamidobenzol-1-Carbonsäure. Sm. 148° (A. 303, 278).

23) Aethylester d. 4-Benzoylphenylamidoameisensäure. Sm. 189° (A. 210, 273; B. 14, 1839). — III, 184.

24) Aethylester d. α-Oxyphenylmethylenamidoameisenphenyläthersäure. Sm. 91° (B. 26, 928). — II, 1181.

25) Phenylester d. a-Benzoylamidopropionsäure. Sm. 133° (H. 20, 423). 26) Benzylester d. Benzoylamidoessigsäure. Sm. 85,5—86°; Sd. 289,9°

(G. 11, 256; B. 14, 2242). — II, 1184.
27) Phenylamid d. α-Benzoxylpropionsäure. Sm. 153° (Bl. [3] 17, 362).
28) Benzylamid d. 2-Acetoxylbenzol-l-Carbonsäure. Sm. 102° (B. 26,

2628). — II, 1500.
 29) Benzylidenamid d. α-Oxy-4-Methoxylphenylessigsäure. Sm. 1830 (B. 29, 2100).

30) a-Methoxylbenzylamid d. Benzolketocarbonsäure. Sm. 105° (B. 29, 2105).

- C₁₈H₁₅O₃N 31) 4-Methoxylbenzylidenamid d. α-Oxyphenylessigsäure. Sm. 182° (B. 29, 2099).
 - 32) Aethylphenylmonamid d. Benzol-1, 2-Dicarbonsäure (Aethylphenylphtalamidsäure). Fl. Cu (A. 227, 185). — II, 1797. 33) 2-Methylbenzylmonamid d. Benzol-1, 2-Dicarbonsäure (o-Xylylphtal-
 - amidsäure). Sm. 156°. Ag (B. 21, 577). II, 1797. 34) 3-Methylbenzylmonamid d. Benzol-1,2-Dicarbonsäure. Sm. 131°.
 - Ag (B. 21, 2700). II, 1797.
 - 35) 4-Methylbenzylamid d. Benzol-1,2-Dicarbonsäure. Zers. bei 147°. Ag (B. 28, 2988).
 - 36) Diphenylmonamid d. Bernsteinsäure [Diphenylsuccinaminsäure]. Sm. 119° (116,5°). Ag (G. 14, 468; A. 292, 193). — II, 413.
- C 64,6 H 5,0 O 16,2 N 14,1 M. G. 297. $C_{16}H_{15}O_3N_3$
 - 1) Dimethyläther d. 5-Amido-7,8-Dioxy-1-Keto-2-Phenyl-1,2-Dihydro-2,3-Benzdiazin (Amidoopiansäurephenylhydrazid). Sm. 137-1430 (B. 19, 2276). — IV, 717.
- C 67,4 H 5,3 O 22,4 N 4,9 M. G. 285. $C_{16}H_{15}O_4N$
 - 1) Dimethyläther d. β -Oximido- α -Keto- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 133° (130°) (B. 22, 379; A. 279, 340). — III, 296.
 - 2) Monoäthyläther d. 1,1-Dioxy-2-Benzoyl-1,2-Dihydrobenzoxazol. Sm. 75,5° (B. 31, 1062).
 - 3) Benzoat d. α-Methyl-4-Methoxylbenzhydroxamsäure. Sm. 96° (A.
 - **281**, 261). II, 1533. 4) Benzoat d. β-Methyl-4-Methoxylbenzhydroxamsäure. Sm. 89° (A. 281, 261). — II, 1533.
 - 5) 4-Methoxylbenzoat d. anti-Methylbenzhydroxamsäure. Sm. 550 (B. 29, 1156).
 - 6) 4-Methoxylbenzoat d. syn-Methylbenzhydroxamsäure. Sm. 96-98° (B. **29**, 1159).
 - 7) α -Phenylamido α -Phenyläthan $\beta\beta$ Dicarbonsäure (Anilidobenzylmalonsaure). Na₃, K_2 , Ag_2 (B. 28, 1453; 29, 816). — II, 1850.
 - 8) 3,4-Dioxy-1-Phenylimidomethylbenzol-3,4-Dimethyläther-2-Car-
 - bonsäure (Anilidoopiansäure). Sm. 186—187° (B. 19, 2284). II, 1942.

 9) Säure (aus d. Verb. C₁₆H₁₂O₄N₂S). Sm. oberh. 300°; subl. Zn (B. 20, 529). II, 1229.

 10) 1,2-Lakton d. 3,4-Dioxy-1-[4-Methylphenyl]amidooxymethylben-
 - zol-3 [oder 4]-Methyläther-2-Carbonsäure. Sm. 211° u. Zers. (B. **29**, 2034).
 - 11) Methylester d. α-Benzoxyl-β-[2-Pyridyl]propionsäure. Sm. 41°. (2HCl, $PtCl_4$) (A. **265**, 218). — IV, 154.
 - 12) Methylester d. β-Benzoxyl-β-[2-Pyridyl]propionsäure. Sm. 79° (A. 265, 235). IV, 155.
 - 13) Aethylester-4-Benzoylamidophenylester d. Kohlensäure. Sm. 183 bis 184° (C. 1897 [1] 469).
 - 14) Phenylester d. α-Benzoylamido-α-Oxypropionsäure. Sm. 134° (B. 26, 2644). II, 1192.
 - 15) Mono[β-Phenoxyläthylamid] d. Benzol-1, 2-Dicarbonsäure. Sm. 125° (B. **22**, 3255). — **II**, 1796.
- C 61.4 H 4.8 O 20.4 N 13.4 M. G. 313.C18 H15 O4 N8
 - 1) α-Phenylhydrazon-β-[6-Nitro-3-Methylphenyl]propionsäure. Sm. bei 150° u. Zers. (B. 31, 390).
 - 2) α-Phenylhydrazon-β-[2-Nitro-4-Methylphenyl]propionsäure. Sm. bei 170° (B. 30, 1050). — IV, 697.
 - 3) ?-Dimethylamidoazobenzol-3,4'-Dicarbonsäure? (B. 10, 528). IV, 1459.
 - 4) Säure (aus $\alpha\beta$ -Di[Phenylnitrosamido]äthan- $\alpha\beta$ -Dicarbonsäure). Sm. 95° u. Zers. (B. 26, 1765). — II, 438.
 - 5) Dimethylester d. Diazoamidobenzol-3,3'-Dicarbonsäure. Sm. 160°
 - (A. 117, 12). IV, 1577. 6) Aethylester d. β -[2-Nitrobenzyliden]- α -Phenylhydrazidoameisensäure. Sm. 85-86° (B. 32, 12).
 - Aethylester d. α-Phenylhydrazon-2-Nitrophenylessigsäure. Sm. 126 bis 128° (B. 23, 3621). — IV, 695.

C₁₈H₁₅O₄N₈ 8) Verbindung (aus Phenylcarbonimid u. N-Aethyl-syn-3-Nitrobenzaldoxim). Sm. 148° (B. 24, 2816). — III, 48.

9) Verbindung (aus d. Methylenäther d. β-[3,4-Dioxyphenyl]-α-Nitropropionsäurealdehyd). Sm. 86° (\tilde{G} . 23 [2] 130). — II, \tilde{g} 80. C 56,3 — H 4,4 — O 18,8 — N 20,5 — M. G. 341.

 $C_{16}H_{15}O_4N_5$

1) α -[4-Nitrophenyl]azo- β -Phenylhydrazonbuttersäure (B. 32, 209).

C₁₆H₁₅O₄Br 1) Trimethyläther d. ?-Brom-2,4,6-Trioxydiphenylketon (Brommethylhydrocotoïn). Sm. 147° (A. 199, 56). — III, 204. C 63,8 — H 5,0 — O 26,6 — N 4,6 — M. G. 301.

1) Colchicinsäure (M. 9, 17, 22). — III, 875.

2) Methylester d. 2-[3,4-Dimethoxylbenzoyl]pyridin-4-Carbonsäure

 $C_{16}H_{15}O_5N$

(M. d. Pyropapaverinsäure). Sm. 108° (M. 17, 498). — IV, 177.

3) Methylester-4-Phenylglykolylamidophenylester d. Kohlensäure. Sm. 135—136° (C. 1897 [1] 469).

4) Diacetat d. 3-Acetylamido-1,2-Dioxynaphtalin. Zers. oberh. 2000 (A. 295, 15).

5) Diacetat d. 4-Acetylamido-1,2-Dioxynaphtalin. Sm. 193° (B. 27, 3341).

6) Diacetat d. 4-Acetylamido-1,3-Dioxynaphtalin. Sm. 155-156° (B. **28**, 353). 7) Diacetat d. 2-Acetylamido-1,4-Dioxynaphtalin. Sm. 259-260° (B.

8) Diacetat d. 1-Acetylamido-2,7-Dioxynaphtalin. Sm. 1830 (B. 30, 1123).

9) 4-Methoxylbenzoat d. 4-Methoxylbenzhydroxamsäure. Sm. 142 bis 143° (A. 175, 287). — II, 1534.

C 58.4 - H 4.5 - O 24.3 - N 12.8 - M. G. 329. $C_{16}H_{15}O_5N_3$

1) α -Phenylhydrazon- β -[4-Nitro-3-Methoxylphenyl] propionsäure. Sm. 107—108° (B. **31**, 398).

2) ?-Nitro-2,4,6-Trimethylphenylamid d. 3-Nitrobenzol-1-Carbonsäure. Sm. 207° (B. 10, 1711). — II, 1234.

1) Diäthylester d. 2 oder 3-Chlor-1-Ketoinden-3 oder 2-Methyldicar- $C_{10}H_{15}O_5Cl$ bonsäure (B. 32, 262). $C_{15}H_{15}O_5Br$ 1) Diäthylester d. 2 oder 3-Brom-1-Ketoinden-3 oder 2-Methyldicar-

bonsäure (D. d. Bromindonmalonsäure). Sm. 129—130° (B. 31, 2082). C 60,6 — H 4,7 — O 30,3 — N 4,4 — M. G. 317. $C_{16}H_{15}O_6N$

1) Nitropeucedanin. Sm. oberh. 100° u. Zers. (A. 176, 78; J. 1849, 476). **— III**, 641.

 $\mathbf{C}_{16}\mathbf{H}_{15}\mathbf{O}_{6}\mathbf{N}_{8}$ C 55,7 — H 4,3 — O 27,8 — N 12,2 — M. G. 345.

1) ?-Trinitro-2-Benzyl-1,3,5-Trimethylbenzol. Sm. 185° (A. ch. [6] 6, 182). — II, *241*.

2) 6-Nitro-3,4-Dimethoxyl-1-Phenylhydrazonmethylbenzol-2-Carbonsäure (Nitroopiansäurephenylhydrazon). Sm. 184° (B. 19, 764). — IV, 717.

3) 6,6'-Dimethoxyldiazoamidobenzol-3,3'-Dicarbonsäure. Na₂+1¹/₂H₂O,

K₂ + 2H₂O (A. 117, 44). — IV, 1578. 4) Acetat d. 3-Nitro-2,4-Di[Acetylamido]-1-Oxynaphtalin. Sm. 235°

u. Zers. (B. 21, 1197). — II, 866. 5) Acetat d. Di[2-Nitrobenzyl]hydroxylamin. Sm. 134° (B. 30, 59).

 $C_{16}H_{15}O_{6}As$ 1) Dimethylester d. Diphenylarsinsäure-4,4'-Dicarbonsäure. Sm. oberh. $\begin{array}{c} 280^{\circ} \ (A. \ \mathbf{208}, \ 23). \ \mathbf{-IV}, \ 1693. \\ \mathbf{C}_{16}\mathbf{H}_{15}\mathbf{O}_{8}\mathbf{Br}_{5} \ 1) \ \mathbf{Pentabromkolatannin} \ (C. \ \mathbf{1898} \ [1] \ 579). \end{array}$

 $C_{16}H_{15}O_9N$

C 52,6 — H 4,1 — O 39,5 — N 3,8 — M. G. 365.

1) Oxim d. Ketongerbsäure $C_{18}H_{14}O_{9}$ (M. 10, 656). — II, 2091.

 $C_{16}H_{15}O_9N_5$

C 45,6 — H 3,6 — O 34,1 — N 16,6 — M. G. 421. 1) Diäthyläther d. ?-Trinitro-4, 4'-Dioxyazoxybenzol. Sm. 168° (J. pr. 2] **21**, 334). — IV, 1343. 2) Diäthyläther d. isom. ?-Trinitro-4,4'-Dioxyazoxybenzol. Sm. 1870

(J. pr. [2] 21, 334). — IV, 1343.

C16H15NS 1) Benzylchinolinammoniumsulfhydrat. 2 + PtCl₄ (J. pr. [2] 51, 94). - IV, 252.

 $C_{18}H_{15}N_{2}Cl$ 1) δ -Chlor- $\alpha\gamma$ -Di[Phenylimido] butan. Sm. 172° (A. 279, 54). 2) Chlormethylat d. 2-Phenylamidochinolin + 2H₂O. Sm. 99°. 2+ PtCl₄ (A. 282, 378). — IV, 908.

- $C_{16}H_{15}N_2Cl$ 3) Chlorbenzylat d. 5[oder 8]-Amidoisochinolin + $2H_0O$.
 - (wasserfrei) (J. pr. [2] **52**, 20). IV, 915. 4) Verbindung (Base aus d. Phenylamid d. Essigsäure). Sm. 116—117°. HCl, (2 HCl, PtCl₄) (A. **184**, 95). II, 362.
- $C_{16}H_{15}N_2Br$ 1) 1-[4-Bromphenyl]hydrazon-1,2,3,4-Tetrahydronaphtalin. Sm. 117
- bis 118° (Soc. 75, 151).
 1) Jodmethylat d. 2-Phenylamidochinolin. Sm. 118-119° (A. 282, $C_{16}H_{15}N_{2}J$ 378). — IV, 908.
 - 2) Jodmethylat d. 2-[4-Amidophenyl]chinolin. Sm. bei 2200 u. Zers. (M. 7, 358). - IV, 1024.
 - 3) Jodmethylat d. 2-Methyl-4-Phenyl-1,3-Benzdiazin. Sm. 190° (B. **25**, 3084). — IV, 1026.
- C₁₆H₁₅N₃Cl₂ 1) Verbindung (aus d. Verb. C₁₆H₁₆ON₃Cl) (B. 31, 1414).
- 1) α -[γ -Phenylallyliden]amido- β -Phenylthioharnstoff. (B. 27, 617). III, 61. $\mathbf{C}_{16}\mathbf{H}_{15}\mathbf{N}_{3}\mathbf{S}$ Sm. 175—176°
- 1) Methyl-α-Phenyl-c-Phenyldithioalduret. Sm. 168° (B. 28, 1109). $C_{16}H_{15}N_3S_2$
- 1) 4 Aethylamidophenyläther d. 5 Merkapto 2 Thiocarbonyl 3 - $C_{16}H_{15}N_{8}S_{8}$ Phenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 165° (B. 29, 2142). — IV, 683.
- $\mathbf{C}_{16}\mathbf{H}_{15}\mathbf{N}_{5}\mathbf{S}$ 1) 4-Phenylthioharnstoff-1-Phenyl-3-Methyl-1, 2, 5-Triazol. Sm. 195°: Sd. bei 220° u. Zers. (B. 28, 1287). — IV, 1238.
- $C_{16}H_{15}ClBr_2$ 1) α -Chlor- $\alpha\beta$ -Dibrom- $\alpha\beta$ -Diphenylbutan. Sm. 97—99° (Soc. 71, 227). C 76.1 - H 6.4 - O 6.3 - N 11.1 - M. G. 252.C16H16ON2
 - 1) α -Phenylimido- α -Propionylamidophenylmethan. Sm. 138° (Am. 20,
 - 2) α -[4-Methylphenyl]imido- α -Acetylamidophenylmethan. Sm. 136.5° (Am. 20, 574).
 - 3) α -Aethylimido- α -Benzoylamidophenylmethan. Sm. 88° (A. 265, 162; Am. 20, 573). — IV, 848.
 - 4) α -Acetyl- α -[4-Methylphenyl]- β -Benzylidenhydrazin. Sm. 132,5° (B. 27, 1698). – IV, 810.
 - 5) β -Benzoyl- α -Allyl- α -Phenylhydrazin. Sm. 139° (B. 22, 2237). IV, 669.
 - 6) 4-Isopropylidenhydrazidodiphenylketon. Sm. 125° (Soc. 55, 615). - III, 187.
 - 7) γ -Phenylhydrazon- α -[2-Oxyphenyl]- α -Buten. Sm. 159—160° (B. 24, 3182). **— IV**, 774.
 - 8) γ-Phenylhydrazon-α-Keto-α-Phenylbutan. Sm. 105-110° (B. 28, 1149 Anm.). — IV, 784.
 - 9) β-Benzoylphenylhydrazonpropan. Sm. 115,5° (B. 20, 1718). IV, 766.
 - 10) 8-Phenylazo-5-Oxy-1,2,3,4-Tetrahydronaphtalin. Sm. 144-1450 (B. 23, 216; 31, 897). - IV, 1426.
 - 11) 2-Methylamido-4,5-Diphenyl-4,5-Dihydrooxazol. Sm. 158-159°. $2 + (2 \text{HCl}, \text{PtCl}_4)$ (B. 28, 1900).
 - 12) 2-Benzoyl-1-Phenyltetrahydropyrazol. Sm. 790 (A. 274, 325). -IV, 480.
 - 13) 2-Keto-4-Methyl-1,3-Diphenyltetrahydroimidazol (s-Propylen-αβ-Diphenylharnstoff). Sm. 121—122° (B. 25, 3273). — II, 381.
 - 14) **2-Keto-1,3-Diphenylhexahydro-1,3-Diazin** (s-Trimethylen- $\alpha\beta$ -Diphenylharnstoff). Sm. 156° (B. 20, 782). — II, 381.
 - 15) 2-Keto-1,4-Diphenylhexahydro-1,4-Diazin. Sm. 146-147° (B. 22, 1784; **23**, 2026; **25**, 2932). — II, 429.
 - 16) 3-[4-Methylphenylamido]-2-Keto-5-Methyl-2,3-Dihydroindol? (p-Tolylamido-p-Methyloxindol). Sm. 166-167°. HCl (B. 18, 191). -II, 1653.
 - 17) 1-Phenylamido-3, 4, 6-Trimethylbenzoxazol. Sm. 145°. Pikrat (B.
 - 22, 3238). II, 764. 18) Aethyläther d. 6-Oxy-2-Methyl-1-Phenylbenzimidazol. Fl. HNO_3
 - (B. 25, 1001). II, 723.

 19) Aethyläther d. 6-Oxy-5-Methyl-1-Phenylbenzimidazol. Sm. 102°. HCl (A. 287, 149).

- C₁₄H₁₄ON₂ 20) Aethyläther d. 6-Oxy-1-[3-Methylphenyl]benzimidazol. HNO₃ (A. **287**, 173).
 - 21) 1-Nitroso-4-Phenyl-2-Methyl-1,2,3,4-Tetrahydrochinolin, Sm. 97 bis 98° (B. 28, 1045). — IV, 401.
 - 22) Aethyläther d. 3-[4-Oxyphenyl]-3,4-Dihydro-1,3-Benzdiazin. Sm. 109°. HCl, (HCl, SnCl₂), (2 HCl, PtCl₄), (HCl, AuCl₃), Bioxalat + H₂O, Pikrat (J. pr. [2] 48, 557). — IV, 873.

23) 3-Keto-6 oder 7-Methyl-2-Benzyl-1,2,3,4-Tetrahydro-1,4-Benz-

diazin. Sm. 240° u. Zers. (B. 25, 953). — IV, 1018.

24) Amid d. γ-Phenylamido-α-Phenylpropen-γ-Carbonsäure. Sm. 171° (B. 17, 2116). — II, 1425. 25) Phenylamid d. 1, 2, 3, 4-Tetrahydroisochinolin-2-Carbonsäure. Sm.

144° (B. 26, 1212). — IV, 201.

26) 4 - Methylphenylamid d. 4 - Methylphenylimidoessigsäure (B. 28) [2] 613).

27) Benzylidenamid d. α-Phenylamidopropionsäure. Sm. 203° -(B. 31,

28) Benzylidenamid d. 4-Methylphenylamidoessigsäure. Sm. 245° (B. 31, 2711).

29) Benzylidenamid d. α -Methylamido- α -Phenylessigsäure. Sm. 1520 (B. 31, 2717).

30) α-Imido-2-Methylbenzylamid d. 1-Methylbenzol-2-Carbonsäure. Sm. 103° (B. 25, 455). — II, 1330.

31) a-Imido-4-Methylbenzylamid d. 1-Methylbenzol-4-Carbonsäure. Sm. 145° (B. 25, 454). — II, 1342.

32) Verbindung (aus α-Benzildioxim). Sm. $165-166^{\circ}$ (B. 21, 3515). — III, 292.

 $C_{16}H_{16}ON_4$

C 68.6 - H 5.7 - O 5.7 - N 20.0 - M. G. 280.1) $\gamma \delta$ -Di[Phenylhydrazon]- β -Ketobutan. Sm. 218° (B. 21, 1700). IV, 763.

2) α-[4-Methylphenyl]azo-α-Phenylhydrazon-β-Ketopropan. Sm. 126° (B. 25, 3546). - IV, 1230.

3) α -Phenylazo- α -[Acetyl-4-Methylphenyl]hydrazonmethan. Sm. 161°

(B. 27, 1698). — IV, 1227. 4) α -[4-Methylphenyl]azo- α -Acetylphenylhydrazonmethan. Sm. 157,5°

(B. 27, 1697). — $\vec{1}\vec{V}$, 1227. 5) 3-Acetyl-6-Methyl-2-[4-Methylphenyl]-2,3-Dihydro-1,2,3,4-Benz-

tetrazin. Sm. 132—134° (B. 19, 1458). — IV, 1260. 6) Verbindung (aus Diphenyläthanamidin). Sm. 165° u. Zers. (G. 19, 2343). — II, 347. C 71,7 — H 6,0 — O 11,9 — N 10,4 — M. G. 268.

 $C_{16}H_{16}O_{2}N_{2}$

- 1) $\alpha\beta$ -Di[2-Oxybenzylidenamido]äthan. Sm. 125-126° (B. 20, 271). **— III**, 72.
- 2) 3,4-Methylenäther d. 4-[3,4-Dioxybenzyliden]amido-l-Dimethylamidobenzol. Sm. 110° (B. 18, 575). IV, 598.
- 3) $4-[\beta-Ketobutyryl]$ amido-4'-Amidobiphenyl. Zers. bei 300°. HCl, HNO_3 , H_2SO_4 (*M.* **19**, 701).
- 4) 2,2'-Di[Acetylamido]biphenyl. Sm. 161° (B. 24, 199). IV, 959.
- 5) 2,4'-Di Acetylamido biphenyl. Sm. 2020 (A. 207, 356). IV, 959. 6) 3,3'-Di[Acetylamido] biphenyl. Sm. $257-258^{\circ}$ (B. 20, 1029). — IV, 960.
- 7) 4,4'-Di Acetylamido biphenyl. Sm. 317° (B. 5, 236; 31, 662; A. 207, 332). — IV, 964.
- 8) 4,4'-Di[Formylamido]-3,3'-Dimethylbiphenyl. Sm. 254° (B. 21, 1066). - IV, 981.
 9) αα-Di[Benzoylamido] äthan. Sm. 204° (A. 99, 119; 223, 44; B. 7,
- 159; **9**, 1425; *Bl.* [3] **21**, 60). **II**, 1193. 10) αβ-Di[Benzoylamido]äthan. Sm. 249° (B. **5**, 246; **21**, 2334; **28**, 3068;
- A. 223, 43). II, 1169. 11) 2-Acetylamido-1-Benzoylamidomethylbenzol. Sm. 170° (B. 26, 1892).
- IV, 631. 12) α -Phenacetyl- β -[2-Methylphenyl]harnstoff. Sm. 161,5—162° (Soc.
- 13) α -Phenacetyl- β -[4-Methylphenyl]harnstoff. Sm. 189—189,5° (Soc. **69**, 868).

- $C_{16}H_{16}O_{2}N_{2}$ 14) $\alpha\delta$ -Dioximido $\alpha\delta$ -Diphenylbutan. Sm. 203 204° (B. 21, 3057).
 - 15) $\alpha \beta$ -Dioximido $\alpha \beta$ -Di[4-Methylphenyl]äthan. Sm. 217° (B. 22, 382).
 - 16) isom. $\alpha\beta$ -Dioximido- $\alpha\beta$ -Di[4-Methylphenyl]äthan. Sm. 225° (B. 22. 382). — III, *299*.
 - 17) Dimethyläther d. $\alpha\beta$ -Dioximido- $\alpha\beta$ -Diphenyläthan (D. d. α -Benzildioxim). Sm. 109-110°. HCl (B. 21, 3515; 23, 3604). - III, 291.
 - 18) Dimethyläther d. isom. αβ-Dioximido-αβ-Diphenyläthan (D. d. β-Benzildioxim). Sm. 88-89°. HCl (B. 21, 3517; 23, 3591). III, 293.
 19) α-Benzyläther d. αβ-Dioximidopropylbenzol. Sm. 157-158° (A. 291,
 - 295). III, *269*.
 - 20) Glyoxim-N-2-Methylphenyläther. Sm. 188° (B. 31, 559).
 21) Glyoxim-N-4-Methylphenyläther. Sm. 218° (B. 31, 559).

 - 22) Dimethyläther d. Di [3-Oxybenzyliden] hydrazin. Sm. 152° (C. 1896) [2] 380; Bl. [3] 17, 945). 23) Dimethyläther d. Di[4-Oxybenzyliden]hydrazin. Sm. 168° (C. 1896)
 - [2] 380; Bl. [3] 17, 944).
 - 24) αβ-Diacetyl-s-Diphenylhydrazin. Sm. 105° (A. 207, 327). IV, 1496.
 - 25) s-Di[Phenylacetyl]hydrazin. Sm. 231° (B. 30, 1889; A. 298, 24).
 - 26) Methylenäther d. α-Phenylhydrazon-α-[3,4-Dioxyphenyl] propan. Sm. 97° (G. 22° [2] 482). — IV, 773.
 - 27) β -Acetylhydrazon- α -Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 1320 (J. pr. [2] 52, 127). — III, 225.
 - 28) Resorcinazo-α-Tetrahydronaphtalin. Zers. bei 219° (B. 22, 627). IV, 1445.
 - 29) Aethyläther d. 2-Keto-3-[4-Oxyphenyl]-1,2,3,4-Tetrahydro-1,3-
 - Benzdiazin. Sm. 223° (*J. pr.* [2] **52**, 398). IV, 632. 30) **1-[2-Nitrobenzyl]-1,2,3,4-Tetrahydrochinolin.** Sm. 111° (2 HCl, PtCl₄)
 - (A. 259, 51). IV, 192. 31) 1-[3-Nitrobenzyl]-1,2,3,4-Tetrahydrochinolin. Sm. 99° (A. 259, 51). - IV, 192.
 - 32) 1-[4-Nitrobenzyl]-1,2,3,4-Tetrahydrochinolin. Sm. 102° (A. 259, 50). · IV, 192.
 - 33) 4-Phenylamidoformyl-3-Methyl-3,4-Dihydro-1,4-Benzoxazin. Sm. 138° (B. 30, 1638).
 - 34) Acetat d. 6-Oxy-3,4'-Dimethylazobenzol. Sm. 91° (B. 17, 354). IV, 1422.
 - 35) Benzoat d. 2- $[\alpha$ -Oximidobutyl] pyridin. Sm. $56-57^{\circ}$ (B. 24, 2537). - IV, 184.
 - 36) Benzoat d. 2,4-Dimethylbenzenylamidoxim. Sm. 158° (B. 22, 2444). **– II**, *1377*.
 - 37) 2-Methylbenzoat d. 2-Methylbenzenylamidoxim. Sm. 117-1180 (B. **22**, 3156). — **II**, 1331.
 - 38) α-Phenylhydrazon-y-Phenylbuttersäure. Sm. 144-145° (149-151°) (A. 299, 31; B. 31, 555). IV, 697.
 - 39) γ -Phenylhydrazon- γ -Phenylbuttersäure. Sm. 63-65 ° (B. 18, 3326). - IV, 697.
 - 40) α-Aethylphenylhydrazonphenylessigsäure. Sm. 109,5° u. Zers. (A. 227, 346). — IV, 694.
 - 41) α -Benzylidenhydrazido- β -Phenylpropionsäure. Sm. 153° (B. 29, 675).
 - 42) Aethylester d. α -[1-Naphtyl]amido- α -Cyanpropionsäure. Sm. 134° (B. 19, 2968). — II, 614.
 - 43) Aethylester d. α-[2-Naphtyl]amido-α-Cyanpropionsäure. Zers. bei 200° (B. 19, 2969). — II, 622.
 - 44) Aethylester d. β -Benzyliden- α -Phenylhydrazidoameisensäure. Sm. $97-98^{\circ}$ (B. **32**, 11).
 - 45) Amid d. $\alpha\beta$ -Diphenyläthan- α -Carbonsäure- α^2 -Carbonsäure. Sm. 224° u. Zers. (B. 21, 2680). — II, 1889.
 - 46) 4-Methylphenylamid d. Benzoylamidoessigsäure (J. pr. [2] 52, 259). 47) s-Diphenylamid d. Bernsteinsäure. Sm. 226,5—227° (A. 68, 27; 162,
 - 187; B. 30, 1795). II, 414. 48) Di[Methylphenylamid] d. Oxalsäure. Sd. 249—251° (B. 20, 2273). — II, 411.

- $\mathbf{C}_{18}\mathbf{H}_{16}\mathbf{O}_{2}\mathbf{N}_{2}$ 49) s-Di[2-Methylphenylamid] d. Oxalsäure. Sm. 207—208° (210°; 212° bis 213°) (B. 10, 1129; Bl. 41, 129; M. 7, 233; 9, 739; A. 279, 182).— II, 466.
 - 50) s-Di[3-Methylphenylamid] d. Oxalsäure. Sm. 131° (Bl. 41, 130). -II, 479.
 - 51) s-Di[4-Methylphenylamid] d. Oxalsäure. Sm. 263° (269°); Sd. 300° 60° (B. 8, 1196; A. 209, 371; 279, 66; Bl. 41, 127). — II, 501.
 - 52) s-Dibenzylamid d. Oxalsäure. Sm. 216° (218°) (B. 5, 694; R. 13, 413; A. 295, 363). — II, 529.
 - 53) Benzylidenhydrazid d. Oxyessigbenzyläthersäure. Sm. 95° (J. pr. [2] **51**, 365). — **III**, 40.
 - Verbindung (aus $\beta\gamma$ -Diketobutan u. 2-Amido-1-Oxybenzol). Sm. 239 bis 240° u. Zers. (B. 28, 344).
 - 55) Verbindung (aus 4-Amido-1-Methylbenzol- u. Brompropiolsäure). Sm. 241 bis 242° (B. 22, 3307). II, 494.
 - 56) Verbindung (aus Cantharidin u. 1,2-Diamidobenzol). Sm. 1630 (G. 23 [1] 138). — III, 623.

 - 57) Verbindung (aus β-Benzildioxim). Sm. 72—73° (B. 21, 3517). III, 293.
 58) Verbindung (aus Carbanilidoisatinsäure). Sm. 175° (J. pr. [2] 32, 285). **II**, 1604.
 - 59) Verbindung (aus N-Aethyl-syn-Benzaldoxim u. Phenylcarbonimid). Sm. 116-117° (B. 24, 2815). III, 43.
- C 64.8 H 5.4 O 10.8 N 18.9 M. G. 296. $\mathbf{C}_{16}\mathbf{H}_{16}\mathbf{O}_{2}\mathbf{N}_{4}$ 1) Nitrosoäthylidenanilin. α -Modif. Sm. 120°; β -Modif. Sm. 161° (B. **29**, 2977).
 - 2) Aethenyldiphenylureïd. Sm. 169° (B. 23, 2923). II, 378.
 - 3) 1,2-Dioximido-1,2-Dihydronaphtalin + Phenylhydrazin. Sm. 1380
 - (B. 21, 184). IV, 795. 4) α -Nitrosamido- α -[4-Methylbenzoyl]hydrazon- α -[4-Methylphenyl]methan (Nitroso-4-Toluyl-4-Tolenylhydrazidin). HCl + 1/2 H2O (B. 27, 3283; A. 298, 12). — IV, 1139.
 - 5) 2, 4-Di Acetylamido azobenzol. Sm. 250,5° (B. 10, 658). IV, 1360.
 - 6) 3,3'-Di[Acetylamido]azobenzol. Sm. 272° (247°) (Soc. 69, 11; \mathring{A} . 229, 342). — IV, 1360.
 - 7) 4,4'-Di[Acetylamido]azobenzol. Sm. 281-282° (Am. 5, 283). -IV, 1362.
 - 8) 1,4-Di[?-Nitrosophenyl]hexahydro-1,4-Diazin (Dinitrosodiäthylendiphenyldiamin) (B. 12, 1795). — II, 344.
 - 9) $3,6-Di[\alpha-Oxybenzyl]-1,2-Dihydro-1,2,4,5-Tetrazin. Sm. 1930 (B.$ 30, 1890; A. 298, 25). — IV, 1290. 10) 3, 6-Diketo-2-Aethyl-1, 4-Diphenylhexahydro-1, 2, 4,5-Tetrazin.
 - Sm. 137° (B. 21, 2330). IV, 676.
 - 11) $\alpha \beta$ -Di[Phenylhydrazon] buttersäure. Sm. 212° (209°) (A. 238, 195; 247, 206; B. 27, 1172; 32, 201). — IV. 705.
 - 12) Methylester d. α-Phenylazo-α-[4-Methylphenyl]hydrazonessigsäure.
 - Sm. 98° (B. 27, 1688). IV, 1241.
 13) Aethylester d. Formazylcarbonsäure. Sm. 117,5°. Ag (B. 25, 3183,
 - 3202, 3455; **29**, 2163). **IV**, 1228. 14) Phenylamid d. α-Oximido-β-Phenylhydrazonbuttersäure. bis 169°. + C₂H₆O (Sm. 181°) (B. **27**, 1172). **IV**, 707.
 - 15) Phenylamid d. β-Oximido-α-Phenylhydrazonbuttersäure. Sm. 175°
 u. Zers. (B. 27, 1173). IV, 707.
 - 16) 3,4-Methylenäther d. 3,4-Dioxybenzylidendiβ-Amidocrotonsäurenitril]. Sm. 210° (J. pr. [2] 56, 134).
 - 17) Aethylendiphenylhydrazid d. Oxalsäure (Oxalyläthylenphenylhydrazin) (A. 254, 124). - IV, 701.
 - 18) Di[Benzylidenhydrazid] d. Fumarsäure. Sm. 220° u. Zers. (J. pr. [2] **52**, 453).
 - 19) Nitrosoderivat d. Verbindung $C_{17}H_{18}N_2$. Sm. $260-264^{\circ}$ u. Zers. (J. pr. [2] 36, 232). — II, 510.
- u. Zers. (A. 277, 358). II, 993.

 $C_{16}H_{16}O_2Br_2$ 2) Dimethyläther d. $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 145° (A. 277, 358; 279, 341). — II, 993.

 $C_{16}H_{16}O_{9}N_{2}$

- C 67,6 H 5,6 O 16,9 N 9,9 M. G. 284. 1) **6,4'-Di[Acetylamido]-3-Oxybiphenyl.** Sm. 269° (A. **303**, 347).
- 2) 4-Nitro-2-[4-Acetylamidobenzyl]-1-Methylbenzol. Sm. 1740 (B. 26. 1853). — II, *637*.
- 3) 2,4-Dimethylphenylamidomethyl-3-Nitrophenylketon. Sm. 1530 (B. 30, 575).
- 4) 4-Oxy-5-Keto-2-Phenyl-3-[α-Oxybenzyl]tetrahydropyrazol. Sm. 208° (B. 27, 3111). — IV, 709.
- 5) 2-Phenylureïdodihydrozimmtsäure (β-2-Phenylharnstoffphenylpropionsäure). Sm. 168° (B. 28, 3229).
- 6) 3-Phenylureidodihydrozimmtsäure. Sm. 180° (B. 28, 3230). 7) 4-Phenylureïdodihydrozimmtsäure. Sm. 218° (B. 28, 3231).
- 8) \(\beta\)-Phenylamido-\(\alpha\)-Benzylidenamido-\(\alpha\)-Oxypropions\(\alpha\)ure. Sm. 239\(\delta\) (B. **31**, 2709).
- 9) Phenylamidoacetphenylamidoessigsäure. Sm. 129° (J. pr. [2] 40, 432; B. 22, 1803). — II, 430.
- 10) ?-Nitroso-4-Dimethylamidodiphenylmethan-2'-Carbonsäure. 133^d (A. 300, 238).
- 11) α -[2-Oxybenzylíden]hydrazido- β -Phenylpropionsäure. (B. 29, 675).
- 12) γ -Phenylhydrazon- α -Furanyl- α -Buten- β -Methylcarbonsäure (β -Furallävulinsäurephenylhydrazon). Sm. 168° (B. 26, 347). — IV, 733.
- 13) Aethylester d. 4-Benzoylamidophenylamidoameisensäure. Sm. 230° (B. 17, 2627). — IV, 595.
- 14) Aethylester d. 2-Phenylhydrazonmethylphenylkohlensäure. 101—102° (B. 31, 2805).
- 15) Aethylester d. Diphenylallophansäure. Sm. 98°. 2+3 HgO (B. 4,
- 247; J. pr. [2] 32, 266). II, 382. 16) Aethylester d. α -Phenylimido- β -[2-Pyrroyl]propionsäure. Sm. 114 bis 115° (B. 23, 2156). — IV, 89.
- 17) Benzylester d. Benzoylamidoacetylamidoameisensäure. Sm. 1620 (J. pr. [2] **52**, 267).
- 18) Monoacetat d. α-Phenylhydrazon-α-[2,5-Dioxyphenyl]äthan. Sm.
- 147° (B. 31, 1216). 19) 4'-Acetat d. 4,4'-Dioxyazobenzol-4-Aethyläther. Sm. 119° (B. 31, 2120; C. 1897 [2] 549). — IV, 1406. 20) Phenylamid d. Diglykolsäure. Sm. 152° (A. 273, 67). — II, 403.
- 21) Phenylamid d. Oxyessig 4 Acetylamidophenyläthersäure. Sm. 204—205° (J. pr. [2] 55, 117).
 22) Phenylmonamid d. Phenylimidodiessigsäure. Sm. 211—213° u. Zers.
- (G. 17, 234; B. 22, 1798; 23, 1990). II, 431.
- 23) Diphenylmonamid d. Amidobernsteinsäure (Diphenylasparagin). Sm. 230° u. Zers. (G. 16, 14). — II, 414.
- 24) Diphenylamid d. Aepfelsäure. Sm. 1970 (1750) (A. 96, 107; B. 23, 2040; C. 1899 [1] 467). — II, 419.
- 25) 2-Nitrobenzyl-4-Methylphenylamid d. Essigsäure. Sm. 65° (B. 19, 1610). — II, *525*.
- 26) β-Phenylamidoäthylmonamid d. Benzol-1,2-Dicarbonsäure? Sm. 120—130° (B. **22**, 2224). — II, 1800.
- 27) ?-Nitro-?-Dimethylphenylamid d. 1-Methylbenzol-4-Carbonsäure. Sm. 187° (A. 205, 125; 210, 333). — II, 1341.
- 28) 1,3,5-Trimethyl-2-Phenylamid d. 3-Nitrobenzol-1-Carbonsäure. Sm. 205° (B. 10, 1711; J. 1884, 463). — II, 1234.
- 29) ?-Nitro-1, 2, 4-Trimethyl-5-Phenylamid d. Benzolcarbonsäure (J. **1847**/**48**, 663). — **II**, 1167.
- 30) ?-Nitro-1, 3, 5-Trimethyl-6-Phenylamid d. Benzolcarbonsäure. Sm 168,5° (B. 10, 1711). — II, 1167.
- 31) $\beta\beta$ -Diphenylmonohydrazid d. Oxalsäuremonoäthylester. Sm. 131°
- (B. 25, 1553). IV, 701.
 32) Verbindung (aus 2-Methylphenylcarbonimid u. 2-Methoxylbenzaldoxim).
 Sm. 106° (B. 26, 2094). III, 77.

 $\mathbf{C}_{16}\mathbf{H}_{16}\mathbf{O}_{3}\mathbf{N}_{2}$ 33) Verbindung (aus 2-Methylphenylcarbonimid u. anti-4-Methoxylbenzaldoxim). Sm. 127° (B. **26**, 2090). — III, 87.

34) Verbindung (aus 2-Methylphenylcarbonimid u. syn-4-Methoxylbenzaldoxim). 2 Modif. Sm. 81° u. Zers. u. Sm. 98° (B. 26, 2090). — III, 88.

35) Verbindung (aus 4-Methylphenylcarbonimid u. 2-Methoxylbenzaldoxim). Sm. 191° (B. **26**, 2094). — III, 77.

36) Verbindung (aus 4-Methylphenylcarbonimid u. anti-4-Methoxylbenzaldoxim). Sm. 126° (B. 26, 2092). — III, 87.

37) Verbindung (aus 4-Methylphenylcarbonimid u. syn-4-Methoxylbenzaldoxim). 2 Modif. Sm. 106° u. Zers. (B. 26, 2091). — III, 88. C 61,5 — H 5,1 — O 15,4 — N 17,9 — M. G. 312.

 $C_{16}H_{16}O_3N_4$

- 1) 3,3'-Di[Acetylamido]azoxybenzol. Sm. 254° (Soc. 69, 8). IV, 1337. 2) 4,4'-Di[Acetylamido]azoxybenzol. Sm. 275 278° (Am. 5, 2). IV, 1338.
- 3) Diamidohydrindinsäure. Sm. 215 217° u. Zers. (A. 194, 96). II, 1610.
- 4) α -Phenyl- β -Acetylhydrazid d. Phenylnitrosamidoessigsäure. Sm. 98° (A. **301**, 83).

 $C_{16}H_{16}O_4N_2$

C 64,0 — H 5,3 -– O 21,3 – N 9,3 – M. G. 300. 1) Indiretin. Ag₂ (J. 1865, 584). — II, 1617.

- 2) 3,3'-Di[Acetylamido]-4,4'-Dioxybiphenyl. Sm. 210° (B. 21, 3532). **- II**, 989.
- 3) 4,4'-Dimethyläther d. $\alpha\beta$ -Dioximido $\alpha\beta$ Di[4 Oxyphenyl]äthan (Anisildioxim). Sm. 217° (B. 22, 377). III, 296.

4) 4,4-Dimethyläther d. isom. αβ-Dioximido-αβ-Di[4-Oxyphenyl]äthan. Sm. 195° (B. 22, 378). — III, 296.
 5) Aethyläther d. 4-[2-Nitrobenzyl]formylamido-1-Oxybenzol. Sm. 96° (J. pr. [2] 48, 556). — II, 719.

6) 4-Nitrobenzyläther d. α-Aethylbenzhydroxamsäure. Sm. 55-56° (B. 25, 41). — II, 1198.

7) 4-Nitrobenzyläther d. β -Aethylbenzhydroxamsäure. Sm. 66—67° (B. **25**, 42). — II, 1198.

8) P-Diamido - $\alpha\beta$ -Diphenyläthan - $\alpha\alpha$ -Dicarbonsäure. Sm. 280° (B. 14, 1802). — II, *1892*.

9) $\alpha\beta$ -Di[Phenylamido] äthan - $\alpha\beta$ -Dicarbonsäure. Sm. 205°. Na₂, K₂, Ca, Pb (B. 21, 1796; 26, 1763; 27, 1605; Bl. 48, 728; A. 279, 142). — II, 437.

10) αβ-Di[Phenylamido] äthan - 2, 2'-Dicarbonsäure (Aethylendianthranilsäure). Sm. 213-2146 (B. 28, 1687).

11) $\alpha\beta$ - $\dot{D}i[Phenylamido]$ $\ddot{a}than$ - $\dot{3}$, $\dot{3}$ - $\dot{D}icarbons \ddot{a}ure$ (Aethylendibenzamsäure). Sm. $222-225^{\circ}$. Cu + H_2O (A. 226, 244). — II, 1259.

12) α -[β -Phenylhydrazido]- α -Phenyläthan- $\beta\beta$ -Dicarbonsäure. K_2 (B. 28, 1453). **— IV**, 741.

13) α-Phenylhydrazon-3,4-Dimethoxylphenylessigsäure. Sm. 179° (G.

20, 696). — IV, 717. 14) Aethylester d. 3-Nitro-4-[2-Methylphenyl]amidobenzol-1-Carbonsäure. Sm. 106° (B. 23, 3451). — II, 1286.

15) Aethylester d. 3-Nitro-4-[4-Methylphenyl]amidobenzol-1-Carbonsäure. Sm. 115° (B. 23, 3453). — II, 1286.

16) Aethylester d. 3-[2-Nitrobenzyl]amidobenzol-1-Carbonsäure. Sm. 100° (B. 25, 3593). — II, 1259.

17) Aethylester d. α-Phenyl-2-Nitrophenylamidoessigsäure. Sm. 69 bis 69,5° (B. 30, 2765).

18) Aethylester d. α-Phenyl-4-Nitrophenylamidoessigsäure. Sm. 120 bis 120,5° (B. 30, 2768).

19) Aethylenester d. Phenylamidoameisensäure. Sm. 157,5° (B. 18, 2430). — II, 372.

20) Acetat d. 2,4-Di[Acetylamido]-l-Oxynaphtalin. Sm. 280° u. Zers. (B. 21, 1196). — II, 866.

21) Acetat d. 2,6-Di[Acetylamido]-1-Oxynaphtalin. Sm. 261° u. Zers. (B. **27**, 2213).

22) Acetat d. 1,6-Di[Acetylamido]-2-Oxynaphtalin (B. 31, 2413). 23) Acetat d. 7,8-Di[Acetylamido]-2-Oxynaphtalin. Sm. 244—245° (B. 30, 1124).

- C₁₆H₁₆O₄N₂ 24) Acetat d. ?-Di[Acetylamido]-2-Oxynaphtalin. Sm. 203° (B. 23, 2543).
 - II, 886. 25) Amid d. 4-Oxybenzoläthylenäther-1-Carbonsäure. Sm. 280° u. Zers. A. **244**, 70). — II, 1526.
 - 26) Amid d. $\alpha\beta$ -Dioxy- $\alpha\beta$ -Diphenyläthan- $\alpha\beta$ -Dicarbonsäure (A. d. Diphenylweinsäure). Sm. bei 230°. HBr (B. 16, 2232). — II, 2022.
 - 27) Diphenylamid d. Weinsäure (Tartranilid). Sm. 263—264° (A. 93, 352; 279, 138; B. 24, 2959; C. 1899 [1] 467). II, 422.
 - 28) Di[4-Methoxylphenylamid] d. Oxalsäure. Sm. 254° (260°) (G. 25 [2] 534; C. **1897** [1] 49).
- $C_{16}H_{16}O_4S$ 1) Benzoat d. α-Oxy-β-Phenylsulfonpropan. Sm. 71—72° (J. pr. [2] **51**, 289).
 - 2) Benzoat d. β-Oxyäthyl-4-Methylphenylsulfon. Sm. 175-176° (J. pr. [2] **30**, 357). — **II**, 1140.
 - 3) 2,4,6-Trimethyldiphenylketon-?-Sulfonsäure. Ba (B. 19, 2881; J. pr. [2] **35**, 488). — **III**, *237*.
- C₁₆H₁₆O₄Pb 1) Diformiat d. Bleidi[4-Methylphenyl]dioxydhydrat. Zers. bei 2330
- (B. 21, 3427). IV, 1716. 2) Diacetat d. Bleidiphenyldioxydhydrat + 2 H₂O. Sm. 195° wasserfrei (B. 20, 3333). — IV, 1715. C 60,6 — H 5,1 — O 25,3 — N 8,9 — M. G. 316. I) Nitropeucedaninamid (J. 1849, 477). — III, 641.
- $C_{16}H_{16}O_5N_2$
 - 2) Aethylester d. 1-Naphtylazoacetessigsäure. Sm. 93-94° (G. 21 [1] 265). - IV, 1467.
 - 3) Acthylester d. 2-Naphtylazoacetessigsäure. Sm. 198—200° u. Zers. K + 3 H₂O (G. 21 [1] 269). IV, 1467.
 4) Verbindung (aus d. Verb. C₃₁H₂₀O₅N₄). Sm. 210° (J. pr. [2] 33, 29). —
 - II, 1249.
- 1) α -Phenylsulfon- γ -4-Methylphenyl- β -Ketopropan. Sm. 112° (*J. pr.* [2] 36, 427). II, 825. $C_{16}H_{16}O_5S_2$
- C 57,8 H 4,8 O 28,9 N 8,4 M. G. 332. $C_{16}H_{16}O_6N_2$ 1) Diäthyläther d. 3,3'-Dinitro-4,4'-Dioxybiphenyl. Sm. 192-1930 (B.
 - **22**, 336). **II**, 988.
 - 2) 2,2'-Hydrazophenoxylessigsäure. Zers. bei 225-227°. K₂ + 3H₂O, Ba + 2H₂O (*J. pr.* [2] **29**, 172). — IV, *1505*. 3) **Ae**thylenamid d. **2**-Oxyphenylkohlensäure. Sm. 165,5° (*A.* 300, 145).
 - 4) Di [4-Oxyphenylamid] d. $\alpha\beta$ -Dioxyäthan- $\alpha\beta$ -Dicarbonsäure. Sm. 282° (C. 1897 [1] 49).
- C 53.3 H 4.4 O 26.7 N 15.5 M. G. 360. $\mathbf{C}_{16}\mathbf{H}_{16}\mathbf{O}_{6}\mathbf{N}_{4}$
 - 1) 2,4,6-Trinitro-5-Phenylamido-3-Isopropyl-1-Methylbenzol. Sm. 1550 (B. 29, 170).
 - 2) Diäthyläther d. 4,4'-Dinitro-2,2'-Dioxyazobenzol. Sm. 284-285° (J. pr. [2] 21, 323). - IV, 1405.
 - 3) Diåthyläther d. ?-Dinitro-2,2'-Dioxyazobenzol. Sm. 190° (J. pr. [2] 21, 322). — IV, 1405.
 - 4) Dihydrobenzo-1,1,2,2-Tetracety1-3,4-Diisopyrazolon. Sm. oberh. 250° (J. pr. [2] **51**, 67). — IV, 1270.
- C 49.5 H 4.1 O 24.7 N 21.6 M. G. 388. $\mathbf{C}_{16}\mathbf{H}_{16}\mathbf{O}_{6}\mathbf{N}_{6}$ 1) Aethylenamid d. 5-Nitro-2-Amidobenzol-1-Carbonsäure. Sm. oberh.
- $C_{16}\mathbf{H}_{16}O_{6}\mathbf{Cl}_{2}$ 1) Tetramethyläther d. Dichlorhexaoxybiphenyl. Sm. 220°. K_{2} , Ba (B.~9,~929). $\mathbf{II},~1042.$
- $C_{16}H_{16}O_6Br_2$ 1) Tetramethyläther d. Dibromhexaoxybiphenyl. Sm. 262° (B. 9, 930). **II**, 1042.
- 1) Distyroldisulfonsäure. Ba (B. 27, 1413). $\mathbf{C}_{16}\mathbf{H}_{16}\mathbf{O}_{6}\mathbf{S}_{2}$
- $\mathbf{C}_{16}\mathbf{H}_{16}\mathbf{O}_{7}\mathbf{N}_{2}$ C 55,2 - H 4,6 - O 32,2 - N 8,0 - M. G. 348.
 - 1) 2-Formylamidobenzol-1-Carbonsäure + H₂O? Sm. 168° (J. pr. [2]
- **33**, 23). II, 1249. C 51,1 H 4,2 O 29,8 N 14,9 M. G. 376. $C_{16}H_{16}O_7N_4$ 1) ?-Aethyläther d. 4'-Acetylamido-2,4-Dinitro-3,6-Dioxydiphenyl
 - amin. Sm. 206° (B. 24, 3829). II, 949. 2) Phenylhydrazon d. Dinitrocantharidin. Zers. oberh. 250° (B. 26, 141). — III, 624.

C16H17ON

 ${\bf C_{16}H_{16}O_7N_4}$ 3) isom. Phenylhydrazon d. Dinitrocantharidin. Sm. noch nicht bei 320° (G. 23 [1] 123). — III, 624. ${\bf C_{16}H_{16}O_8N_4} \qquad {\bf C} \ 49.0 \ -{\bf H} \ 4.1 \ -{\bf O} \ 32.6 \ -{\bf N} \ 14.3 \ -{\bf M} \ .$ G. 392.

1) ?-Tetranitro-4,4'-Di[Dimethylamido]biphenyl. Zers, oberh. 250° (B. 19, 2125). — IV, 963. C 42.9 — H 3.5 — O 28.6 — N 25.0 — M. G. 448.

 $C_{16}H_{16}O_8N_8$ 1) Tetrapyruvintetraureïd (A. ch. [5] 11, 373). — I, 1346. $\mathbf{C}_{16}\mathbf{H}_{16}\mathbf{O}_8\mathbf{Br}_4$ 1) Tetrabromkolatannin (C. 1898 [1] 579).

- C₁₆H₁₆NCl 1) Di - o - Xylylenammoniumchlorid. $+2 \operatorname{HgCl}_{2}$, $2 + \operatorname{PtCl}_{4}$, $+ \operatorname{AuCl}_{8}$ (B. 24, 2403). - IV, 402.
- Di-o-Xylylenammoniumbromid. + Br₂ (B. 24, 2402). IV, 402.
 Di-o-Xylylenammoniumjodid. + J₂ (B. 24, 2403). IV, 402. $\mathbf{C}_{16}\mathbf{H}_{16}\mathbf{N}\mathbf{Br}$ $\mathbf{C}_{16}\mathbf{H}_{16}\mathbf{NJ}$ 2) Jodmethylat d. 1,3-Dimethyl-β-Naphtochinolin (J. pr. [2] 35, 303). **— IV**, 419.
- 1) α -Phenyl- β - $[\gamma$ -Phenylpropenyl]thioharnstoff. Sm. 116—118° (B. 26, 1860). II, 585. C16H16N2S 2) Phenylimidophenylamidomethylallylsulfid. Sm. 57-58°. HCl, HBr

(Soc. 57, 303). — II, 395. 3) 2-Phenylimido-3-[4-Methylphenyl]tetrahydrothiazol. Sm. 128°

(B. 15, 1315). — II, 499.

4) 2-Methylamido - 4,5-Diphenyl-4,5-Dihydrothiazol. Sm. 155% 2+ (2HCl, PtCl₄) (B. 28, 1900).

5) 2-Phenylamido-5-Benzyl-4, 5-Dihydrothiazol. Sm. 205°. (2HCl, PtCl₄) (B. 26, 1860). — II, 585.

6) 2-Phenylimido - 3 - Phenyltetrahydro - 1, 3-Thiazin. Sm. 123° (B. 21, 1872). **— II**, *396*.

7) Dimethyldehydrothio-p-Toluidin. Sm. 196—1970 (Soc. 55, 230; B. 22, 971). — II, 822.

8) Phenylamid d. 2-Methyl-2, 3-Dihydroindol-1-Thiocarbonsäure. Sm. ·100—101° (A. 239, 246). — IV, 189.

9) Phenylamid d. 1,2,3,4-Tetrahydroisochinolin-2-Thiocarbonsäure.

Sm. 140° (B. **26**, 1212). — IV, 201. 10) Verbindung (aus 4-Amido-1,3-Dimethylbenzol). Sm. 107°; Sd. 282 bis 284°_{18-14} (B. 22, 582). — II, 827.

11) Verbindung (aus 2-Amido-1, 4-Dimethylbenzol). Sm. 144° (B. 22, 585). - II, 827.

12) Verbindung (aus d. Thioameisensäure-2-Methylphenylamid). Sm. 160° (B. 18, 2297). — II, 460.

 $C_{16}H_{16}N_2S_2$ 1) Di[α-Imidobenzyläther] d. αβ-Dimerkaptoäthan, 2HBr (Sm. 233°) (B. 24, 783). — II, 1294.

2) s-Dibenzyldiamid d. Dithiooxalsäure. Sm. 115° (A. 262, 357). -II, 529.

1) Chlormethylat d. 2-Phenylhydrazidochinolin (A. 282, 379). - $\mathbf{C}_{16}\mathbf{H}_{16}\mathbf{N}_{8}\mathbf{C}\mathbf{l}$ IV, 1160.

 $\mathbf{C}_{16}\mathbf{H}_{16}\mathbf{N}_{8}\mathbf{J}$ 1) Jodnethylat d. 2-Phenylhydrazidochinolin. Sm. 230° (A. 282, 379). - IV, 1160.

 $\mathbf{C}_{16}\mathbf{H}_{16}\mathbf{N}_{4}\mathbf{S}$ 1) 4-Allylthioureïdoazobenzol. Sm. 133—134° (G. 28 [1] 244). — IV, 1357.

2) 2,5-Di[2-Methylphenylamido]-1,3,4-Thiodiazol. Sm. 135°. HCl + H₂O, (2HCl, PtCl₄), Pikrat, + AgNO₃ (B. 23, 366). — IV, 1236.

3) 2,5-Di[4-Methylphenylamido]-1,3,4-Thiodiazol. Sm. 127°. HCl, (2HCl, HgCl₂), (2HCl, PtCl₄ + 1¹/₂H₂O), Pikrat, + AgNO₃ + 1¹/₂H₂O (B. 23, 364). — IV, 1236.

4) Verbindung (aus uns-Methylphenylthioharnstoff). Sm. 94-95° (B. 25, 1589). — II, *391*.

1) 2-Thiocarbonyl-5-[2-Methylphenyl]hydrazido-3-[2-Methylphenyl]- $C_{16}H_{16}N_4S_2$ 2,3-Dihydro-1,3,4-Thiodiazol. Sm. 180—184° (B. 24, 4204). — IV, 803. 2) 2-Thiocarbonyl-5-[4-Methylphenyl]hydrazido-3-[4-Methylphenyl]-

2,3-Dihydro-1,3,4-Thiodiazol. Sm. 155° (B. 24, 4197). — IV, 807. C 80,3 - H 7,1 - O 6,7 - N 5,9 - M. G. 239.

1) β -Phenylamido- α -Keto- α -Phenylbutan. Sm. 85—86°. HCl (Bl. [3] 15, 1101).

2) 2-Oxyphenyl-4-Isopropylbenzylidenamin. Sm. 1830 u. Zers. (A. 245, 296). - III, 56.

3) γ -Oximido- $\alpha \alpha$ -Diphenylbutan. Sm. 86—87° (Soc. 71, 678).

- $\mathbf{C}_{16}\mathbf{H}_{17}\mathbf{ON}$
- 4) α -Oximido- $\alpha\beta$ -Diphenylbutan. Sm. 129-130° (B. 21, 1299). III, 234.
- 5) α -Oximido- $\alpha \beta$ -Di[4-Methylphenyl]äthan. Sm. 128° (A. 279, 336). III, 235.
- 6) α -Oximido- β -Phenyl- α -[2,5-Dimethylphenyl] äthan. Sm. 99° (B. 24) 3542). — III, *235*.
- 7) anti-α-Oximido-4-Propyldiphenylmethan. Sm. 104° (B. 24, 4033). III, 236.
- 8) syn- α -Oximido-4-Propyldiphenylmethan. Sm. 130° (B. 24, 4034). III, 236.
- 9) anti-α-Oximido-4-Isopropyldiphenylmethan. Sm. 1320 (B. 24, 4036). **— III**, 236.
- 10) syn- α -Oximido-4-Isopropyldiphenylmethan. Sm. 106° (B. 24, 4036). **— III**, 236.
- 11) α-Phenylamidoisopropylphenylketon. Sm. 136—137°. HCl (Bl. [3] 17, 79).
- 12) α -Methylphenylamidoäthylphenylketon. Sm. 48° (Bl. [3] 17, 73).
- 13) α [2 Methylphenyl] amido athylphenylketon. Sm. 89 $\frac{1}{2}$ 90° (Bl. [3] **17**, 73).
- 14) α-[4-Methylphenyl]amidoäthylphenylketon. Sm. 90-91°. HCl (B/. [3] 17, 73).
- 15) α-Phenylamidoäthyl-4-Methylphenylketon. Sm. 104—105° (C. 1897) [2] 576).
- 16) 2, 4 Dimethylphenylamidomethylphenylketon. Sm. 98° (B. 30,
- 17) 3-Dimethylamido-2-Methyldiphenylketon. Sm. 67°; Sd. 350-360° (A. **206**, 91). — III, 211.
- 18) P-Amido-2, 4, 5-Trimethyldiphenylketon. Sm. 130° (2HCl, PtCl₄) (B. 17, 1805). — III, 236.
- 19) Aethylphenylamidobenzoylmethan. Sm. 94-95° (B. 16, 25). III, 126.
- 20) γ -Benzoylamido- α -Phenylpropan. Sm. 57-58° (B. 27, 2310). **iI**, 1166.
- 21) γ-Keto-γ-[?-Isopropylpyrryl]-α-Phenylpropen (Isopropylpyrrylcinnamylketon). Sm. 142—143° (B. 20, 853). IV, 101.
- 22) Di-o-Xylylenammoniumhydrat. Salze, siehe diese (B. 24, 2402). (V, 402)
- 23) 9-Aethylamido-1-Oxy-9,10-Dihydroanthracen. Sm. 1720 (B. 10, 610; A. 212, 18). — II, 1112.
- 24) Aethyläther d. 2-[4-Oxyphenyl]-1,3-Dihydroisoindol. Sm. 204 bis 205° (B. 31, 592).
- 25) 1-Benzoylhexahydrochinolin. Sm. 119—121° (B. 27, 1479). IV, 139.
- 26) 4-Acetyl-3-Methyl-1,2,3,4-Tetrahydro-β-Naphtochinolin. Sm. 86 bis $86,5^{\circ}$ (B. **24**, 2647). — **IV**, 379.
- 27) Amid d. $\alpha \gamma$ -Diphenylpropan- β -Carbonsäure. Sm. 128—129° (B. 21,
- 1328; G. 26 [2] 225). II, 1470. 28) Phenylamid d. 1-norm. Propylbenzol-4-Carbonsäure. Sm. 138° (B. 24, 4034). II, 1383.
- 29) Phenylamid d. 1-Isopropylbenzol-4-Carbonsäure. Sm. 159° (A. 70, 46; B. **24**, 4037). — II, 1385.
- 30) Phenylamid d. 1,2,4-Trimethylbenzol-5-Carbonsäure.
- (J. pr. [2] 41, 309). II, 1390. 31) Phenylamid d. 1,3,5-Trimethylbenzol-2-Carbonsäure. Sm. 165° (J. pr. [2] 41, 308). — II, 1391.
- 32) Methylphenylamid d. 1,2-Dimethylbenzol-4-Carbonsäure. Sm. 780 (B. 24, 2115). — II, 1375. 33) Methylphenylamid d. 1,3-Dimethylbenzol-4-Carbonsäure. Sm. 54°
- (B. **24**, 2114). **II**, 1376.
- 34) Methylphenylamid d. 1,4-Dimethylbenzol-2-Carbonsäure. Sm. 74° B. 24, 2116). — II, 1380.
- 35) 2,4-Dimethylphenylamid d. 1-Methylbenzol-2-Carbonsäure. Sm. 165° (B. **24**, 4050). — **II**, 1330.
- 36) P-Dimethylphenylamid d. 1-Methylbenzol-4-Carbonsäure. Sm. 1390 (A. 205, 124; 210, 332). — II, 1341.

 $C_{16}H_{17}ON_{3}$

 $C_{16}H_{17}ON_{5}$

- $C_{16}H_{17}ON$ 37) $\alpha\beta$ -Diphenyläthylamid d. Essigsäure. Sm. 148° (B. 22, 1412).
 - II, 636.

 38) Di[3-Methylphenyl]amid d. Essigsäure. Sm. 43°; Sd. 324°₈₀₀ (?) (B. **13**, 1092). — **II**, 478.
 - 39) Di[4-Methylphenyl]amid d. Essigsäure. Sm. 85° (B. 6, 446). -II, 493.
 - 40) Phenyl-[2-Methylphenyl]methylamid d. Essigsäure. Sm. 1240 (B. 24, 2806). — II, *637*.
 - 41) Phenyl-[3-Methylphenyl] methylamid d. Essigsäure. Sm. 97° (B. 24, 2808). — II, 637.
 - 42) Phenyl-[4-Methylphenyl] methylamid d. Essigsäure. Sm. 131° (B. 24, 2802). — II, *637*.
 - 43) 2,4-Dimethylbenzylamid d. Benzolcarbonsäure. Sm. 98° (B. 22, 122). — II, 1167.
 - 44) Methyl-2,6-Dimethylphenylamid d. Benzolcarbonsäure. Sm. 1270 M. 19, 643).
 - 45) 3,5-Dimethylbenzylamid d. Benzolcarbonsäure. Sm. 78° (B. 25, 3014). — II, 1167.
 - 46) 2,4,5-Trimethylphenylamid d. Benzolcarbonsäure. Sm. 1670 (B. 21, 2553). — II, 1166.
 - 47) 2,4,6-Trimethylphenylamid d. Benzolcarbonsäure. Sm. 2040 (B. 10, 1711). — II, 1167.
 - 48) 2-Propylphenylamid d. Benzolcarbonsäure. Sm. 1196 (G. 28 [2] 99).
 - 49) 4-Propylphenylamid d. Benzolcarbonsäure. Sm. 115° (B. 16, 108). - II, 1166.
 - 50) 4-Isopropylphenylamid d. Benzolcarbonsäure. Sm. 114-1150 (B. 16, 113). — II, *1166*.
 - 51) γ -Phenylpropylamid d. Benzolcarbonsäure. Sm. 57–58° (B. 27, 2310). C 71.9 - H 6.4 - O 6.0 - N 15.7 - M. G. 267.
 - 1) α -Amido- α -[4-Methylbenzoyl]hydrazon- α -[4-Methylphenyl]methan (4-Methylbenzoyl-4-Methylbenzenylhydrazidin). Zers. bei 120°. 2 HCl (B. 27, 3283; A. 298, 6, 11). — IV, 1139.
 - 2) 1-Acetyl-4,4'-Dimethyldiazoamidobenzol. Sm. 104-105° u. Zers. (B. 24, 4160). — IV, 1568.
 - 3) 4-Acetylamido-2,3'-Dimethylazobenzol. Sm. 185° (B. 17, 470). IV, 1377.
 - 4) 6-Acetylamido-3,4'-Dimethylazobenzol. Sm. 157° (B. 17, 80). IV, 1378.
 - 5) 5-Amido-3,5-Di[2-Methylphenyl]-4,5-Dihydro-1,2,4-Oxdiazol. Sm. $109-110^{\circ}$ (B. **22**, 3155). — II, 1331.
 - 6) 5-Amido-3,5-Di[4-Methylphenyl]-4,5-Dihydro-1,2,4-Oxdiazol. Sm. 125°. HBr, (HBr, Br₂) (B. 28, 2229).
 - 7) 6-Aethyläther d. 6-Oxy-5-Methyl-1-[3-Methylphenyl]-1,2,3-Benztriazol. Sm. 83-84° (A. 287, 197). - IV, 1550.
 - 8) 6-Aethyläther d. 6-Oxy-5-Methyl-1-[4-Methylphenyl]-1,2,3-Benztriazol. Sm. 131° (A. 287, 201). — IV, 1550.
 9) Amid d. α-Aethylphenylhydrazonphenylessigsäure. Sm. 111,5° (A.
 - 227, 348). IV, 694.
 10) Phenylamid d. β-Phenylhydrazonbuttersäure. Sm. 128° (B. 27, 1170)
 - **IV**, 690.
 - 11) Phenylamid d. 1-Phenyltetrahydropyrrol-2-Carbonsäure. Sm. 114° (A. 274, 327). - IV, 479.
 - 12) 4-Methylphenylamid d. α-Phenylhydrazonpropionsäure. Sm. 2040 (Am. 16, 386). — IV, 689.
 - 13) Verbindung (aus Di[4-Methylphenyl]diimidodimethylen). (2HCl, PtCl₄) (A. 256, 301). — II, 510. C 65,1 — H 5,8 — O 5,4 — N 23,7 — M. G. 295.
- 1) Amid d. α-Phenylazo-β-Phenylhydrazonbuttersäure. Sm. 186-187° (B. **32**, 206).
- $\mathbf{C}_{16}\mathbf{H}_{17}\mathbf{OC1}$ 1) α -Chlor- β -Oxy- $\alpha \alpha$ -Diphenyl- β -Methylpropan. Sd. 239° (J. pr. [2] 37, 366). — II, 1081. $C_{16}H_{17}O_{2}N$
- C 75,3 H 6,6 O 12,6 N 5,5 M. G. 255.1) Methyläther d. α-Acetylamido-4-Oxydiphenylmethan. Sm. 159° (B. **24**, 3513). — **II**, 897.

- $C_{16}H_{17}O_{2}N$ 2) Aethyläther d. 4-Oxy-1-[4-Acetylamidophenyl]benzol. Sm. 2100 (B. **27**, 2631).
 - 3) Aethyläther d. 4-Oxyphenylamidomethylphenylketon. (B. **30**, 576).
 - 4) Aethyläther d. 4-[4-Methylphenyl]imido-6-Oxy-1-Keto-3-Methyl-1,4-Dihydrobenzol (Ae. d. Oxytoluchinon-p-Toluid). Sd. 76° (B. 27. 2710). — III, *361*.
 - 5) Phenyläther d. γ-Benzoylamido-α-Oxypropan. Sm. 118° (B. 24, 2635). **- II**, 1161.
 - 6) 4-Methylphenyläther d. β -Benzoylamido- α -Oxyäthan. Sm. 134° (B. **24**, 193). — II, 1160.
 - 7) β -Benzoylamido- α -Oxy- α -Phenylpropan. Sm. 136 138° (B. 30, 1524).
 - 8) Acetat d. β -Amido- α -Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 196—197° (B. 29, 1214).
 - 9) Acetat d. isom. β -Amido- α -Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 152—1530 (B. 29, 1215).
 - 10) Acetat d. Dibenzylhydroxylamin. Sm. 173° (B. 19, 1627). II, 536.
 - 11) 6-Methyläther d. 6-Oxy-2-[3-Oxyphenyl]-1,2,3,4-Tetrahydrochinolin. Sm. 110-111°. HCl (B. 20, 1923). - IV, 400.
 - 12) 4-Dimethylamidodiphenylmethan 2'-Carbonsäure. Sm. 173° (174°). Ba (A. 300, 238; Bl. [3] 19, 830).
 - 13) Aethylester d. β -[1-Naphtyl]amidocrotonsäure. Sm. 45° (B. 21, 531). **— II**, 611.
 - 14) Aethylester d. β-[2-Naphtyl]amidocrotonsäure. Sm. 66° (B. 21, 532). **– II**, 622.
 - 15) Aethylester d. 4-Biphenylamidoessigsäure. Sm. 95° (B. 13, 1967).
 - 16) Aethylester d. α-Phenylamido-α-Phenylessigsäure. Sm. 83-84°. HBr (J. 1878, 780; B. 30, 2305). — II, 1324.
 - 17) Aethylester d. 2,6-Dimethyl-4-Phenylpyridin-3-Carbonsäure. Sd. 316°_{320} . (2 HCl, PtCl₄) (B. 17, 2912). — IV, 383.
 - 18) 2 Naphtylester d. Hexahydropyridin-1-Carbonsäure. (Bl. [3] **19**, 82).
 - 19) Phenylamidoformiat d. 5-Oxy-1, 2, 4-Trimethylbenzol. Sm. 110-1110 (B. **32**, 19).
 - 20) Phenylamidoformiat d. 2-Oxy-1, 3, 5-Trimethylbenzol. Sm. 140—142° (B. 32, 19).
 - 21) Amid d. β -Oxy- $\alpha\gamma$ -Diphenylpropan- β -Carbonsäure. Sm. 192—193° (B. 14, 1688; A. 219, 45). - II, 1701.
- $\dot{\mathbf{C}}$ 67,9 $\dot{\mathbf{H}}$ 6,0 $\dot{\mathbf{O}}$ 11,3 $\dot{\mathbf{N}}$ 14,8 $\dot{\mathbf{M}}$. G. 283. $C_{16}H_{17}O_{2}N_{3}$ 1) 2-Aethylamido-5-[2-Nitrobenzyliden]amido-1-Methylbenzol. Sm. 80° (A. 286, 164). — IV, 609.
 - 2) 2-Aethylamido-5-[3-Nitrobenzyliden]amido-1-Methylbenzol. Sm. 118° (A. **286**, 165). — IV, 610.
 - 3) 2-Aethylamido-5-[4-Nitrobenzyliden]amido-1-Methylbenzol. Sm. 143° (A. **286**, 165). — IV, 610.
 - 4) 2,4-Di[Acetylamido]diphenylamin. Sm. 188° (B. 28, 2970). IV, 1123. 5) 2,4'-Di Acetylamido diphenylamin. Sm. 203° (B. 12, 1403). — IV, 1169.
 - 6) Di[4-Acetylamidophenyl]amin. Sm. 239° (B. 11, 1099; A. 303, 365). - IV, 1169.
 - 7) 2-Acetylamido-1-[4-Methylphenyl]nitrosamidomethylbenzol. Sm. 115—116° (J. pr. [2] 47, 356). — IV, 631.
 - 8) 4-Methylnitrosamido-4'-Dimethylamidodiphenylketon. Sm. 182 bis 183° (B. 21, 2452; 22, 337; 24, 3198). — III, 185.
 - 9) 2,4-Dimethylbenzenylphenyluramidoxim. Sm. 138° (B. 22, 2448). II, 1377.
 - 10) Di[4-Methylphenyl]biuret. Sm. 216—224° (B. 21, 506). II, 495.
 - 11) Methyläther d. α -[4-Oxybenzoyl]amido- β -Phenylhydrazonäthan. Sm. 126° (B. 27, 3100). IV, 747.
 - 12) α -Phenylamidoacetyl- β -Acetyl- α -Phenylhydrazin. Sm. 141° (A. 301, 82). — IV, 666.
 - 13) α-Phenylhydrazon-α-[3-Nitro-4-Methylphenyl]propan. Sm. 147—149° (G. 21, 98). - IV, 773.

 $C_{16}H_{17}O_{9}N_{9}$ 14) β -Phenylhydrazon- α -[3-Nitro-4-Methylphenyl]propan. Sm. 212—213° (G. 21, 102). — IV, 773. 15) 4-[a-Oxyisobutyryl]amidoazobenzol. Sm. 193° (B. 31, 2852).

- 16) Diäthyldiamidochinoxazon. Sm. 216° (B. 25, 1066). IV, 1180. 17) Phenylamid d. Diglykolamidsäure. Sm. 140,5°. HNO₃ (B. 8, 1155). - II, 363.
- 18) Phenylamid d. β-Acetyl-α-Phenylhydrazidoessigsäure. Sm. 169,5° (A. 301, 63). — IV, 739.

19) Monophenyldiamid d. Phenylamidobernsteinsäure. Sm. 2000 (A.

252, 167). — **II**, 437.

20) 3-Amido-4-Methylphenylamid d. Benzoylamidoessigsäure. Sm. 2050 (J. pr. [2] **52**, 259). — IV, 609. C 61,7 — H 5,5 — O 10,3 — N 22,5 — M. G. 311.

 $C_{16}H_{17}O_{2}N_{5}$

1) Diacetyl-2,4,3'-Triamidoazobenzol. Sm. 229-230° (B. 31, 189). -IV, 1363. C 70,9 — H 6,3 — O 17,7 — N 5,2 — M. G. 271.

 $C_{16}H_{17}O_{3}N$

1) 43-Methyläther-1-Aethyläther d. 4-[3,4-Dioxybenzyliden]amido-1-Oxybenzol + 3H₂O (Vanillin-p Phenetidin). Sm. 97° (102°) (C. 1897) [1] 1120; **1898** [1] 1251).

2) 4,4'-Dimethyläther d. α -Oximido- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 125°

(A. 279, 340). — III, 227.

3) Nitrobenzylidenisophoron. Sm. 159-161° (A. 299, 226).

4) Aethyläther d. 4-Diacetylamido-1-Oxynaphtalin. Sm. 138° (J. pr. [2] **45**, 549). — II, 865.

5) 1-Aethyläther d. 4-Amygdalylamido-1-Oxybenzol. Sm. 140,50 (B. 28 [2] 991).

6) 6-Phenylamido-3-Oxy-5-Isopropyl-2-Methyl-1,4-Benzochinon. Sm. 134—135° (B. 16, 902). — III, 369

7) Cantharidinphenylimid. Sm. 1290 (G. 21 [1] 466). — III, 623.

8) α-[1-Naphtyl]acetylamidoisobuttersäure. Sm. 246° u. Zers. (B. 25, 2347). — II, *614*.

9) α-[2-Naphtyl]acetylamidoisobuttersäure. Sm. 188° (B. 25, 2349). —

10) 2-Naphtylmonamid d. Butan-αγ-Dicarbonsäure. Sm. 115-119° (Gemisch) (A. 292, 213).

11) 2-Naphtylmonamid d. fum. Butan-βγ-Dicarbonsäure. Sm. 209° (A.

285, 232). 12) **2-Naphtylmonamid d.** mal. Butan- $\beta\gamma$ -Dicarbonsäure. Sm. 140° (A.

285, 234). 13) 1-Naphtylmonamid d. β -Methylpropan- $\alpha\beta$ -Dicarbonsäure. Sm. 154

bis 155° (B. 30, 616).

14) 2-Naphtylmonamid d. β -Methylpropan- $\alpha\beta$ -Dicarbonsäure. Sm. 181° (156—157°) (A. 292, 187; B. 30, 617). C 64,2 — H 5,7 — O 16,0 — N 14,0 — M. G. 299. 1) 1,2,6 oder 1,2,7-Tri[Acetylamido]naphtalin. Sm. 280° u. Zers. (B.

 $C_{16}H_{17}O_3N_3$

23, 2545). — IV, 1162.

2) 1-Methyloxydhydratd.?-Nitro-1,5-Dimethyl-2-Phenylbenzimidazol, Sm. 165°. (2HCl, PtCl₄) (A. **210**, 371). — **IV**, 1013. C 66,9 — H 5,9 — O 22,3 — N 4,9 — M. G. 287.

 $C_{16}H_{17}O_4N$

1) 5,5'-Dimethyläther d. 2'-Nitroso-2,5,5'-Trioxy-3,3'-Dimethylbiphenyl (B. 31, 1335).

2) Tetrahydropapaverolin. Sm. 255° u. Zers. $HCl + 2H_2O$, $HJ + 1\frac{1}{2}H_2O$ (M. 19, 329).

3) 3-Aethylester d. 2-Methyl-5-Phenylpyrazol-1-Methylcarbonsäure-

3-Carbonsäure. Sm. 131° (B. 19, 3160). — IV, 357. C 60,9 — H 5,4 — O 20,3 — N 13,3 — M. G. 315. $C_{16}H_{17}O_4N_3$

1) Aethyldi [2-Nitrobenzyl] amin. Sm. 56°. (2 HCl, PtCl₄) (B. 26, 2583), - II, 52Ō.

2) Aethyldi [4-Nitrobenzyl] amin. Sm. 68° (B. 30, 64).

3) Verbindung (aus Phenylhydrazin u. d. Verb. $C_{10}H_{10}O_5N_2$). Sm. 87° (G. **23** [2] 127). — II, 980.

 $\mathbf{C}_{16}\mathbf{H}_{17}\mathbf{O}_{4}\mathbf{N}_{5}$ C 56,0 — H 4,9 — O 18,7 — N 20,4 — M. G. 343. 1) 5,5'-Dinitro-2,2'-Dimethyl-1-Aethyldiazoamidobenzol. Sm. 125° (Soc. 67, 250). — IV, 1568.

- C 63,4 H 5,6 O 26,4 N 4,6 M.G. 303.C₁₆H₁₇O₅N
 - 1) 4-Aethyläther d. 4-Oxyphenylamidomethyl-P-Trioxyphenylketon (p-Amidophenetolacetylpyrogallol). Sm. 144° (J. r. 25, 281). — III, 139.
 - 2) Inn. Anhydrid d. Phenylamidoakonitsäurediäthylester. Sm. 87 bis 88° (Soc. 65, 11). — II, 441.
 - 3) Aethylester d. 1-Keto-5-Methyl-3-[4-Nitrophenyl]-1,2,3,4-Tetrahydrobenzol-2 oder 4-Carbonsäure. Sm. 1190 (A. 303, 237).
 - 4) β -Aethylester 2-Propylester d. β -Cyan- α -Keto- α -Phenyläthan- β , 2-Dicarbonsäure. Sm. 69-70°. Ag (A. ch. [7] 1, 495). — II, 1962.
 - 5) Diäthylester d. 5-Oxy-1-Phenylpyrrol-2, 3-Dicarbonsäure. Sm. 1810 (Soc. 65, 12). — IV, 96.
- C 58.0 H 5.1 O 24.2 N 12.7 M. G. 331. $C_{16}H_{17}O_5N_3$
 - 1) Phenylhydrazon d. Nitrocantharidin. Sm. noch nicht bei 330° (B. **26**, 141). — III, 624. C 60,2 — H 5,3 — O 30,1 — N 4,4 — M. G. 319.
- $C_{16}H_{17}O_6N$
 - 1) Diäthylester d. α -[4-Nitrophenyl]- $\alpha\gamma$ -Butadiën- $\delta\delta$ -Dicarbonsäure. Diäthylester d. α-[4-Ντισορπειγι] ω, Diäthylester d. α-[4-Ντισορπειγι] ω, Diäthylester d. 253, 362). — II, 1876.
 55,3 — H 4,9 — O 27,7 — N 12,1 — M. G. 347.
 Diäthyläther d. 3,5-Dinitro-2-Phenylamido-1,4-Dioxybenzol. Sm. 133° (A. 215, 157). — II, 949.
- $C_{16}H_{17}O_6N_8$
 - - 2) Di[2-Nitrophenyläther] d. Di[β -Oxyäthyl]amin. HCl (J. pr. [2] 24, 248). — II, 680. C 51,2 — H 4,5 — O 25,6 — N 18,7 — M. G. 375.
- $C_{16}H_{17}O_6N_5$
- 1) α -Isobutyl- α -Phenyl- β -[2, 4, 6-Trinitrophenyl]hydrazin. Sm. 105° (B. **30**, 2820). — **IV**, 1498.
- $\mathbf{C}_{16}\mathbf{H}_{17}\mathbf{O}_{6}\mathbf{Cl}$ 1) Tetramethyläther d. Chlorhexaoxybiphenyl. Sm. 141° (B. 31, 617).
- $C_{16}H_{17}O_6P$ 1) Phosphorsäureverbindung d. β -Oxy- $\alpha \gamma$ -Diphenylpropan- β -Carbonsäure. Sm. 160° u. Zers. (B. 13, 2220; A. 219, 43). — II, 1701. C₁₆H₁₇O₈Br₃ 1) Tribromkolatannin (C. 1898 [1] 579).
- C 52.3 H 4.6 O 39.2 N 3.8 M. G. 367. $C_{16}H_{17}O_9N$
 - 1) Tetracetat d. 3-Acetylamido-1, 2, 4, 5-Tetraoxybenzol. Sm. 242° u. Zers. (B. 22, 1661). — II, 1032.
- 1) $\beta\beta$ -Diphenylisopropylamidodithioameisensäure. $+ C_{18}H_{17}N$ (Sm. 141 $C_{16}H_{17}NS_{2}$
- bis 143°) (Am. 14, 226). II, 638.

 1) 1-Chlormethylat d. 1,5-Dimethyl-2-Phenylbenzimidazol + 2H₂O. $\mathbf{C}_{16}\mathbf{H}_{17}\mathbf{N}_{2}\mathbf{C}\mathbf{1}$
- $2 + \text{PtCl}_4$ (A. 210, 370). IV, 1013. C₁₆H₁₇N₂Cl₃ 1) $\beta\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[4-Methylphenylamido]äthan. Sm. 114—115° (A. 173, 279; 302, 364). II, 511.
- 1) 1-Jodmethylat d. 1,5-Dimethyl-2-Phenylbenzimidazol. + J_2 (Sm. $C_{16}H_{17}N_{2}J$ 106°) (A. 210, 368). — IV, 1013.
 - 2) Jodmethylat d. 3-[4-Methylphenyl]-3,4-Dihydro-1,3-Benzdiazin. Sm. 186° (B. 22, 2697). — IV, 875.
- 1) Diäthylthionin. HJ (B. 20, 933; 22, 2066). II, 811. $C_{16}H_{17}N_3S$
 - 2) β-Allylphenylamido-α-Phenylthioharnstoff. Sm. 108° (103°) (B. 22, 2237; **25**, 3114). — IV, 679.
 - 3) α -Isopropylidenamido- $\alpha\beta$ -Diphenylthioharnstoff. Sm. 160° (B. 27., 1514). — IV, 766.
 - 4) Phenylamid d. 1-Phenyltetrahydropyrazol-2-Thiocarbonsäure. Sm. 164-165° (A. **274**, 328). — IV, 480.
- $C_{16}H_{17}N_4Cl$ 1) 2,4,2',4'-Tetramethyl-5-Diazoazobenzolchlorid (B. 21, 541). IV, 1533.
- $\mathbf{C}_{16}\mathbf{H}_{17}\mathbf{N}_4\mathbf{Br}_3$ 1) 2,4,2',4'-Tetramethyl-5-Diazoazobenzoltribromid. Sm. 127—129° u. Zers. (B. 21, 542). — IV, 1533.
- $C 85,\hat{6} H 7,1 O 6,\hat{3} N 11,0 M. G. 254.$ $\mathbf{C}_{16}\mathbf{H}_{18}\mathbf{ON}_{2}$
 - 1) 4-Aethylamido-3-[2-Oxybenzyliden]amido-1-Methylbenzol. Sm. 78°
 - (B. 26, 202). \overrightarrow{IV} , 620. 2) 2-Aethylamido-5-[2-Oxybenzyliden] amido-1-Methylbenzol. Sm. 620
 - (A. 286, 165). IV, 610. 3) Methyläther d. 4-[4-Oxybenzyliden]amido-1-Dimethylamidobenzol. Sm. 148° (139°) (B. 18, 574; A. 241, 343). — IV, 598.
 - 4) 4'-Acetylamido-2, 3'-Diphenylamin. Sm. 122,5° (B. 31, 1519).
 - 5) 2-Acetylamido-1-[4-Methylphenyl]amidomethylbenzol. Sm. 141° (J. pr. [2] 47, 354). - IV, 631.

- 6) 4-[4-Methylphenyl]amido-3-Acetylamido-1-Methylbenzol, Sm. 1260 $C_{16}H_{18}ON_{2}$ (B. 23, 3799). - IV, 613.
 - 7) 2-Amido-1-[Acetyl-4-Methylphenylamido]methylbenzol. Sm. 990 (B. 23, 2191; J. pr. [2] 47, 349). - IV, 630.
 - 8) α -Phenylamido- β -Phenylacetylamido athan. Sm. 128° (B. 22, 1784). **- II,** 368.
 - 9) 5-Benzoylamido-2-Aethylamido-1-Methylbenzol. Sm. 1740 (A. 286, 166). **— IV**, 609.
 - 10) α-Benzoylamido-β-Phenylamidopropan. Sm. 110-111°. (2HCl,PtCl₄) (B. 28, 2935).
 - 11) 4-[4-Dimethylamidophenyl]imido-1-Keto-2-Aethyl-1,4-Dihydrobenzol. Sm. 83—84° (Bl. [3] 11, 1134).
 - 12) 4 [4-Dimethylamidophenyl]imido-1-Keto-2,5-Dimethyl-1,4-Dihydrobenzol. Sm. $125-126^{\circ}$ (Bl. [3] 11, 1134). — III, 363. 13) $\beta\gamma$ -Diphenylpropylharnstoff. Sm. 112° (B. 23, 2862). — II, 637.

 - 14) Di [4 Methylphenyl] methylharnstoff. Sm. 152° (B. **24**, 2799). II, 638.
 - 15) α -Phenyl- β -[2, 4, 5-Trimethylphenyl]harnstoff. Sm. 211—212° (B. 25, 1361). — **II**, *552.*-
 - 16) Phenyl-4-Isopropylbenzylnitrosamin. Sm. 94,5° (A. 245, 292). II, 560.
 - 17) 4-Methylamido-4'-Dimethylamidodiphenylketon. Sm. 203—204° (B. **24**, 3198). — **III**, 185.
 - 18) γ -Phenylhydrazon- α -[2-Oxyphenyl]butan. Sm. 123—1240 (B. 28, 502).
 - 19) 2,4-Dimethylphenyläther d. β -Phenylhydrazon- α -Oxyäthan. Sm. 91 bis 92° (B. 30, 1708). — IV, 755.
 - 20) 3,4-Dimethylphenyläther d. β -Phenylhydrazon- α -Oxyäthan. Sm. 68° (B. 30, 1707). — IV, 755.
 - 21) Polythymochinonphenylhydrazon. Sm. 249° u. Zers. (B. 18, 3197). **– IV**, 795.
 - 22) β -Isobutyryl- $\alpha \alpha$ -Diphenylhydrazin. Sm. 171—172° (B. 25, 1552). —
 - IV, 667. 23) α -Acetyl- $\alpha\beta$ -Dibenzylhydrazin. Sm. 78° (B. 28, 2346; J. pr. [2] 58,
 - 378). IV, 811. 24) β -Acetyl- $\alpha\alpha$ -Di[2-Methylphenyl]hydrazin. Sm. 191° (B. 25, 1078).
 - **IV**, .801. 25) β -Acetyl- $\alpha\alpha$ -Di[4-Methylphenyl]hydrazin. Sm. 176° (170°) (B. 25,
 - 1080, 1555). IV, 805. 26) 4-Oxy-2-Methyl-5-Isopropylazobenzol. Sm. 85-90° (G. 15, 53; B.
 - 27, 959). IV, 1425. 27) 4-Oxy-3-Methyl-6-Isopropylazobenzol. Sm. 80-85° (G. 15, 214). —
 - IV, 1425. 28) Aethyläther d. 4-Oxy-2, 2'-Dimethylazobenzol. Sm. 64° (A. 287, 186).
 - **IV**, 1422. 29) Aethyläther d. 4-Oxy-2, 3'-Dimethylazobenzol. Sm. 73° (A. 287, 188).
 - **IV**, 1422. 30) Aethyläther d. 41-Oxy-2,3'-Dimethylazobenzol. Sm. 35-370 (B. 23, 3259, 3260; A. **287**, 184). — IV, 1422.
 - 31) Aethyläther d. 6'-Oxy-2, 3'-Dimethylazoben ol. Sm. 82-83° (B. 23,
 - 3264). **IV**, 1422. 32) Aethyläther d. 4'-Oxy-2, 4-Dimethylazobenzol. Sm. 97 $^{\circ}$ (A. 287, 211).
 - IV, 1414. 33) Aethyläther d. 4-Oxy-2,4'-Dimethylazobenzol. Sm. 64° (A. 287, 189).
 - IV, 1422. 34) Aethyläther d. 4-Oxy-3, 3'-Dimethylazobenzol. Sm. 46—47° (A. 287, 185). — IV, 1422.
 - 35) Aethyläther d. 6-Oxy-3, 3'-Dimethylazobenzol. Sm. 76° (B. 27, 2704). **– IV**, 1422.
 - 36) Aethyläther d. 4-Oxy-3,4'-Dimethylazobenzol. Sm. 73-74° (B. 23, 3261). — IV, *1422*.
 - 37) Aethyläther d. 6-Oxy-3,4'-Dimethylazobenzol. Sm. 43° (B. 27, 2706). **— IV**, 1422.

- $C_{16}H_{18}ON_2$ 38) 5-[\alpha-Phenylacetylamido\(\alpha\text{thyl}\)]-2-Methylpyridin. Sm. 100\(\gamma\) (B. 28, 1761). — IV, 826.
 - 39) 1-Methyloxydhydrat d. 1,5-Dimethyl-2-Phenylbenzimidazol. Sm. 144°. Chlorid + 2H₂O, 2 Chlorid + PtCl₄, Jodid, Jodid + J₂, Nitrat, Sulfat (A. **210**, 370). — IV, 1013.
 - 40) Methyläther d. 6-Oxy-2-[3-Amidophenyl]-1,2,3,4-Tetrahydrochinolin? Sm. 87° (B. 20, 1921). IV, 995.

 - 41) Aethyläther d. 3-[4-Oxyphenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 129° (124°) (*J. pr.* [2] 48, 560; [2] 52, 399). IV, 637. 42) Paricin + ½ H₂O. Sm. 130°. (2 HCl, PtCl₄ + 4 H₂O) (Berx. J. 27, 338; J. 1852, 536; 1879, 793; A. 166, 263). III, 861.
 - 43) Nitril d. β -Oxy- α -[2-Cyanphenyl]- α -Hexenäthyläther- α -Carbonsäure. Sm. 72° (B. **30**, 896).
 - 44) Nitril d. 6-Keto-2,2,4-Trimethyl-1-Benzyl-1,2,3,6-Tetrahydropyridin-5-Carbonsäure. Sm. 168-169°. - IV, 76.
 - 45) Phenylamid d. Hexahydrochinolin-l-Carbonsäure (Hexahydrochinolyl-
 - phenylharnstoff). Sm. 159—161° (B. 27, 1479). IV, 139. 46) Phenylamid d. α-Phenylamidobuttersäure. Sm. 91—92° (B. 30, 2317).
 - 47) Phenylamid d. β-Phenylamidobuttersäure. (HCl, Sm. 206-207°) (B. 13, 312). — II, 434.
 - 48) Phenylamid d. β-Phenylamidoisobuttersäure. Sm. 155° (B. 30, 2319).
 - 49) Benzylamid d. Benzylamidoessigsäure. HCl (B. 25, 2547). II, 525. 50) 2-Methylphenylamid d. 2-Methylphenylamidoessigsäure. Sm. 91
 - bis 92° (94°) (B. 16, 205; 27, 3254). II, 469. 51) 4-Methylphenylamid d. 4-Methylphenylamidoessigsäure. Sm. 136°
 - (B. 8, 1161). II, 505. 52) α-Phenylhydrazid d. 1-Isopropylbenzol-4-Carbonsäure. Sm. 63—64°.
 - **IV**, 670. 53) β -Phenylhydrazid d. 1-Isopropylbenzol-4-Carbonsäure. Sm. 198°.
- IV, 670. C 68,1 H 6,4 O 5,7 N 19,8 M. G. 282. $\mathbf{C}_{16}\mathbf{H}_{18}\mathbf{ON}_{4}$

 $C_{16}H_{18}O_2N_2$

- 1) Di-[β-Phenylhydrazonäthyl] äther (Di-Phenylhydrazon d. Diglykolsäurealdehyd). Sm. 108° (A. 276, 65). — IV, 763.
- 2) Benzyläther d. β -Oximido- α -Imido- β -Amido- β -[4-Methylphenyl]- äthan. Sm. 165° (B. 24, 818). II, 512.
- 3) 3-Acetylamido-3'-Dimethylamidoazobenzol. Sm. 1840 (A. 234, 363). · IV, 1361.
- 4) Nitril d. 4-Methoxylbenzylidendi [β -Amidocrotonsäure]. Sm. 188 bis
- 192° (155—160°) (J. pr. [2] 56, 131).

 5) Phenylhydrazid d. γ-Phenylhydrazonpropan-α-Carbonsäure. Sm. 192º (Soc. 75, 15, 16).
- 6) Verbindung (aus Formaldehyd u. Phenylhydrazin). Sm. 139—140° (Soc. 69, 1284). — IV, 745.
- 7) isom. Verbindung (aus Formaldehyd u. Phenylhydrazin). Sm. 128° (B. 29, 1361). — $\overline{1V}$, 745. C 61,9 — H 5,8 — O 5,2 — N 27,1 — M. G. 310.
- $\mathbf{C}_{16}\mathbf{H}_{18}\mathbf{ON}_{6}$ 1) 4-[1, 3, 5-Trimethylpyrazolyl-4-]hydrazon-5-Keto-1-Phenyl-3-
 - Methyl-4,5-Dihydropyrazol. Sm. 156° (B. 28, 718). IV, 1111. C 71,1 H 6,7 O 11,8 N 10,4 M. G. 270. 1) 4-[4-Isopropylbenzyl] nitrosamido-1-Oxybenzol (A. 245, 299). —
 - 2) 1,2-Di[Propionylamido]naphtalin. Sm. 191-1920 (B. 23, 1880). -IV. 918.
 - 3) Aethyläther d. α -Oxy- β -Phenyl- α -Benzylharnstoff. Sm. 74° (J. pr. [2] **56**, 77).
 - 4) Aethyläther d. 4-Acetylamido-4'-Oxydiphenylamin. Sm. 134° (B. **26**, 693). — IV, 584.
 - 5) 4-Methyläther d. α-Phenylhydrazon-α-[2,4-Dioxyphenyl] propan. Sm. 101° (B. 25, 1297). IV, 772.
 6) Dimethyläther d. 6,6'-Dioxy-3,3'-Dimethylazobenzol. Sm. 178—179°

 - (B. 24, 1963). IV, 1419. 7) Diäthyläther d. 2,2'-Dioxyazobenzol. Sm. 131°; Sd. 240° u. Zers. (B. 10, 1653; J. pr. [2] 18, 200). — IV, 1405.

- $C_{16}H_{18}O_{2}N_{2}$ 8) Diäthyläther d. 2,4-Dioxyazobenzol. Sm. 70,5° (B. 20, 1123). IV, 1442.
 - 9) Diáthyläther d. 2,4'-Dioxyazobenzol. Sm. 77-78° (A. 287, 214). -IV, 1407.
 - 10) Diäthyläther d. 2,6-Dioxyazobenzol. Sm. 90° (B. 20, 1147). -IV, 1442.
 - 11) Diäthyläther d. 3,3'-Dioxyazobenzol. Sm. 91° (J. pr. [2] 29, 299). - IV, 1405.
 - 12) Diäthyläther d. 3,4'-Dioxyazobenzol. Sm. 70-71° (A. 287, 215). IV, 1407.
 - 13) Diáthyläther d. 4,4'-Dioxyazobenzol. Sm. 160° (157°) (B. 10, 1652; J. pr. [2] 18, 199; [2] 19, 313; [2] 21, 320, 333). — IV, 1406.
 - 14) Di[2-Methylphenylamido]essigsäure. Sm. 239-240°. Ag + 2 AgNO₃ (B. 16, 925). — II, 471.
 - 15) Phenyl- β -Phenylamidoäthylamidoessigsäure. Sm. 116° u. Zers. (B.
 - 23, 2026). II, 429. 16) Aethylester d. 3-Amido-4-[2-Methylphenyl]amidobenzol-l-Carbonsäure. Sm. 115° (B. 23, 3452). — II, 1275.
 - 17) Aethylester d. 3-Amido-4-[4-Methylphenyl]amidobenzol-1-Carbonsäure. Sm. 145° (B. 23, 3454). — II, 1275.
 - 18) Benzoat d. d-Ecgoninnitril. (2 HCl, PtCl₄), HBr, Pikrat (B. 26, 971). — III, 865.
 - 19) Benzoat d. 1-Ecgoninnitril. Sm. 105°. HCl, (HCl, AuCl, + H₂O) (B. 26, 966). — III, 865.
 - 20) polym. 2-Methylphenylamid d. Ameisensäure. Sm. 211° (B. 10, 1129; A. 279, 180).

C 64.4 - H 6.0 - O 10.7 - N 18.8 - M. G. 298. $C_{18}H_{18}O_{2}N_{4}$

- 1) $\alpha\beta$ -Di[2-Methylphenylnitrosamido] äthan. Sm. 94—95° (Soc. 71, 425). 2) $\alpha\beta$ -Di[3-Methylphenylnitrosamido] äthan. Sm. 112° (Soc. 71, 427).
- 3) αβ-Di[4-Methylphenylnitrosamido] äthan. Sm. 1830 (Soc. 71, 428).
- 4) αβ-Di 4-Nitroso-2-Methylphenylamido äthan. 2 HCl (Soc. 71, 425). 5) $\alpha\beta$ -Diphenyläthylen- $\alpha\beta$ -Diharnstoff. Sm. oberh. 360° (B. 28, 3178). –
- IV, 979. 6) Aethylenäther d. Benzenylamidoxim. Sm. 155-156° (161°) (B. 19,
- 1485; **29**, 1162). **II**, 1200. 7) 2,2'-Di[Acetylhydrazido]biphenyl. Sm. 250-260° (B. 28, 2272). -
- IV, 1276. 8) Di[Phenylhydrazon] d. Erythrit. Sm. 166—1676 (B. 20, 1090; Soc.
- 75, 8). IV, 789.
- 9) Di[Phenylhydrazon] d. Tetrose. Sm. 166-168° (B. 25, 2554). -IV, 790.
- 10) 4-Nitro-4'[?]-Diäthylamidoazobenzol. Sm. 151° (B. 28, 843).
- 11) 5-Nitro-4'-Aethylamido-2, 3'-Dimethylazobenzol. Sm. 156° (Soc. 67, 249). - IV, 1377.
- 12) Amid d. 3-Aethylidenamidobenzol-1-Carbonsäure (A. 218, 186). -II, 1270.
- 13) Aethylenamid d. 2-Amidobenzol-l-Carbonsäure. Sm. 245° (J. pr. [2] **48**, 92). — II, *1246*.
- 14) 4-Dimethylamidophenylamid d. Phenylnitrosamidoessigsäure. Sm. 165° (B. **30**, 1101; A. **301**, 78).
- 15) Di[2-Amido-4-Methylphenylamid] d. Oxalsäure. Sm. oberh. 300° u. Zers. $2HCl + H_2O$, $(2HCl, PtCl_4)$, $H_2SO_4 + 5H_2O$ (B. 15, 2691). IV, 615.
- 16) Di[Phenylhydrazid] d. Bernsteinsäure. Sm. 2010 u. Zers. (2070) (B. **21**, 2462; **22**, 2734; **30**, 1795, 1796; *G.* **19**, 117; *A.* **280**, 185; *C.* **1897** [2] 276). — **IV**, 703.
- 17) α -Phenyl- β -Acetylhydrazid d. α -Phenylhydrazidoessigsäure. Sm. 176° (A. 301, 84).
- 1) Di[4-Aethylphenyl]sulfon. Sm. 1020 (980) (Bl. [3] 11, 512; B. 26, 2944). C16H18O2S **- II**, 826.
 - 2) Di[1, 2-Dimethylphenyl]sulfon. Sm. 158-159° (C. 1895 [1] 334). 3) Di[1,3-Dimethylphenyl]sulfon (B. 11, 2069; 26, 2942). — II, 827
 - 4) Di[2,5-Dimethylphenyl]sulfon. Sm. 141—142° (B. 26, 2943; C. 1895 [1] 334). — II, 827.

- 5) Diäthyläther d. Di[?-Oxyphenyl]sulfid (Thiophenetol). Sm. 55° (B. C16H18O2S **27**, 2543).
- 1) Dimethyläther d. Di[4-Oxybenzyl]disulfid (B. 24, 1445). II, 1110. C18H18O8S 2) Diathyläther d. Di [3-Oxyphenyl]disulfid. Sm. 42-430 (B. 25, 2983).
 - **II**, 934.
 - 3) Benzyläther d. α-Benzylsulfon-α-Merkaptoäthan. Sm. 151° (B. 25, 359). — II, *1053*.
 - 4) 1,3-Dimethylphenylester d. 1,3-Dimethylbenzol-?-Thiolsulfonsäure. Fl. (A. 146, 239). — II, 826.
- C₁₆H₁₈O₂Hg 1) Diathyläther d. Quecksilberdi[2-Oxyphenyl]. Sm. 85° (B. 32, 763). **IV**, 1709.
 - 2) Diäthyläther d. Quecksilberdi [4-Oxyphenyl]. Sm. 135° (B. 27, 258). - IV, 1709.
- Diäthyläther d. Di[?-Oxyphenyl]selenid. Sm. 56° (B. 28, 611). $C_{16}H_{18}O_{2}Se$ C 67,1 - H 6,3 - O 16,8 - N 9,8 - M. G. 286.
- $\mathbf{C}_{16}\mathbf{H}_{18}\mathbf{O}_{3}\mathbf{N}_{2}$ 1) Dimethyläther d. Di [4-Oxybenzyl] nitrosamin. Sm. 80° (A. 241, 335).
 - 2) δ -Phenylhydrazon- $\alpha\beta\gamma$ -Trioxy- α -Phenylbutan. Sm. 154° (B. 25, 2560). - IV, 764.
 - 3) β , 4-Dimethyläther d. α -Phenylhydrazon- β -Oxy- α -[2, 4-Dioxyphenyl]-
 - äthan. Sm. 55-57° (M. 14, 41). III, 139. 4) α , 4-Dimethyläther d. α -Oxy- β -Phenyl- α -[4-Oxybenzyl]harnstoff. Sm.
 - 105° (J. pr. [2] **56**, 81).
 - 5) Aethyläther d. 3,4-Di[Acetylamido]-l-Oxynaphtalin. Sm. 254° (B.
 - 25, 3067). II, 866. 6) Dimethyläther d. 6,6'-Dioxy-3,3'-Dimethylazoxybenzol. Sm. 148 bis 149° (B. 24, 1962). IV, 1343.
 - 7) Diäthyläther d. 2,2'-Dioxyazoxybenzol. Sm. 102° (J. pr. [2] 18, 200). — IV, 1342. 8) Diäthyläther d. 4,4'-Dioxyazoxybenzol. Sm. 134° (B. 23, 1742). —
 - IV, 1343.
 - 9) Phenylhydrazon d. Chantharidin. Sm. 237—238° (G. 19, 455; M. 18, 402). — III, 624.
 - 10) Bilirubin. Ca, Ba, Zn, Pb, Ag (Z. 1868, 554; J. 1875, 882; A. 132, 327; 175, 76; 181, 253; J. Th. 1878, 129; 1882, 302; 1885, 322; 1887, 444; 1892, 535; Fr. 23, 275; J. pr. [2] 53, 314; H. 26, 315). III, 662. 11) Hämatoporphyrin. HCl, Na + H₂O, Zn + H₂O, Ag₂ + ½ H₂O (B. 17, 2272; 29, 2848; 30, 105; A. 290, 307; H. 15, 286; M. 9, 115). —
 - IV, 1619.
 - 12) Methylester d. $\alpha\alpha$ -Di[Phenylamido]- α -Oxyessigmethyläthersäure. Fl. 2 HCl (B. 28, 61).
 - 13) Aethylester d. 6-Oxy-4-Methyl-2-Phenyl-1, 3-Diazin-5-Aethyl-β-Carbonsäure. Sm. 145° (B. 22, 2620). — IV, 990.
 - 14) Aethylester d. 2-Keto-4-[β-Phenyläthenyl]-6-Methyl-1, 2, 3, 4-Tetrahydro-1, 3-Diazin-5-Carbonsäure. Sm. 243-2440 (G. 23 [1] 385). -II, 1693.
 - 15) Aethylester d. 1-Naphtylamidoisosuccinaminsäure. Sm. 159° (B. 19, 2969). — II, 615.
 - 16) 3-Phenylamid d. 2,4-Dimethylpyrrol-3,5-Dicarbonsäure-5-Aethylester. Sm. 216° (A. 236, 327). — IV, 93.
 - 17) 5-Phenylamid d. 2,4-Dimethylpyrrol-3,5-Dicarbonsäure-3-Aethylester. Sm. 180° (A. 236, 330). — IV, 93.
 - 18) Phenylhydrazid d. αβ-Dioxy-γ-Phenylbuttersäure? Sm. 161-162°
- (B. 25, 2563). IV, 709. C 61,2 H 5,7 O 15,3 -- N 17,8 M. G. 314. $\mathbf{C}_{16}\mathbf{H}_{18}\mathbf{O}_{3}\mathbf{N}_{4}$
- 1) Di[Phenylhydrazid] d. Aepfelsäure. Sm. 220—223° (A. 236, 195; B. 22, 2734). IV, 712. B. 22, 2734). — IV, 712. C 56,1 — H 5,3 — O 14,0 — N 24,6 — M. G. 342.
- $\mathbf{C}_{16}\mathbf{H}_{18}\mathbf{O}_{3}\mathbf{N}_{6}$ 1) 4,4'-Di[Aethylnitrosamido]azoxybenzol. Sm. 171° (A. 286, 158). 1) Diäthyläther d. Di[?-Oxyphenyl]sulfoxyd. Sm. 116° (B. 27, 2544). $C_{16}H_{18}O_3S$
- 2) 2-Methyl-5-Isopropylphenylester d. Benzolsulfonsäure. Sm. 55 bis
- 56° (B. 24, 417). II, 767. C₁₆H₁₈O₃Hg₂1) Anhydrid d. 4-Aethoxylphenylquecksilberoxydhydrat. Sm. 202° (B. 27, 259). — IV, 1710.

 $C_{16}H_{18}O_4N_2$ C 63,6 - H 5,9 - O 21,2 - N 9,3 - M. G. 302.

1) Tetramethyläther d. 2,5,2',5'-Tetraoxyazobenzol. Sm. 140° (B. 17, 2124). **— IV**, *1446*.

2) 2,4-Diäthyläther d. 2,4,2',4'-Tetraoxyazobenzol. Sm. 193,5° (B. 20,

1144). — IV, 1441. 3) 2', 6'-Diäthyläther d. 2,4,2',6'-Tetraoxyazobenzol. Sm. 182,5° (B. **20**, 1151). — IV, 1441.

4) Säure (aus Brucin) + 2H₂O. Sm. 263-264° u. Zers. (2HCl, PtCl₄) (B.

17, 2850; 18, 777, 1917; 20, 453; M. 7, 615). — III, 948. 5) Aethylester d. Phenylhydrazonmethronsäure. Sm. 133—134° (A. 250, 187). — IV, 716.

6) Phenylhydrazid d. $\alpha\beta\gamma$ -Trioxy- γ -Phenylbuttersäure. Sm. 167° u. Zers. (B. **25**, 2559). — **1v**, 716. C 58,2 — H 5,4 — O 19,4 — N 17,0 — M. G. 330.

 $C_{16}H_{18}O_4N_4$

1) $\alpha\beta$ -Di[3-Nitro-4-Methylphenylamido]äthan. Sm. 195° (B. 17, 779). II, 487.

2) ?-Dinitro-4,4'-Di[Dimethylamido]biphenyl. Sm. 1880 (B. 14, 2164; 17, 118). — IV, 963.

3) α -Isobutyl- α -Phenyl- α -[2, 4-Dinitrophenyl]hydrazin. Sm. 151° (B. **30**, 2820). — IV, 1498.

4) Di[Phenylhydrazid] d. Weinsäure. Sm. bei 240° u. Zers. (A. 236, 195; B. **22**, 2734). — IV, 721.

 $C_{16}H_{18}O_4S$ 1) 3,6-Dioxy-5-Isopropyl-2-Methyldiphenylsulfon. Sm. 136° (B. 28,

2) Diäthyläther d. Di[?-Oxyphenyl]sulfon. Sm. 159° (A. 172, 52). II, 840.

3) Diäthyläther d. Di[?-Oxyphenyl]sulfon. Sm. 263° (B. 27, 2544).

C16H18O4S2

1) $\beta\gamma$ -Diphenylsulfonbutan. Fl. (J. pr. [2] 51, 303). 2) $\alpha\beta$ -Diphenylsulfon- β -Methylpropan. Sm. 152° (J. pr. [2] 51, 297). 3) $\alpha\beta$ -Di[2-Methylphenylsulfon]äthan. Sm. 94-95° (J. pr. [2] 54, 527). 4) $\alpha\beta$ -Di[3-Methylphenylsulfon]äthan. Sm. 200-201° (J. pr. [2] 30, 354; [2] **40**, 534). — **II**, 824.

 $C_{16}H_{18}O_4S_3$ 1) Di[β -Phenylsulfonäthyl] sulfid. Sm. 123—124° (J. pr. [2] 30, 348). — II, 782.

 $C_{16}H_{18}O_4S_4$ 1) Aethylenester d. 1-Methylbenzol-4-Thiosulfonsäure. Sm. 76-77° (B. **20**, 2088; **25**, 1478). — **II**, 162. C 60,4 — H 5,6 — O 25,2 — N 8,8 — M. G. 318.

 $C_{16}H_{18}O_5N_2$

1) Base "(aus Cinchonin). HCl, (2 HCl, PtCl₄), HNO₃, H₂SO₄ (J. 1875, 771). III, 840.

2) Diathylester d. 5-Keto-1-Phenyl-4,5-Dihydropyrazol-3-Carbonsäure-4-Methylcarbonsäure. Sm. 128-130° (B. 22, 888). — IV, 727.

3) Diäthylester d. 2-Keto-4-Phenyl-1,2,3,4-Tetrahydro-1,3-Diazin-5,6-Dicarbonsäure (D. d. Benzuramidofumarsäure). Sm. 176-177° (G. **23** [1] 398). — **II**, 1955.

4) Verbindung (aus 1,3-Dioxybenzolmonoäthyläther)? Sm. 176° (M. 19, 554).

 $C_{18}H_{18}O_{5}S_{2}$ 1) Di[Phenylsulfonäthyl]äther. Sm. 69-70° (J. pr. [2] 30, 202, 323; B. 26, 944). — II, 782.

2) polym. Diphenyldisulfondiäthyläther = $(C_{16}H_{18}O_5S_2)_x$. Sm. 87,5 bis 88,5° (*J. pr.* [2] **30**, 321). — **II**, 782. C 53,0 — H 5,0 — O 26,5 — N 15,5 — M. G. 362.

 $\mathbf{C}_{16}\mathbf{H}_{18}\mathbf{O}_{6}\mathbf{N}_{4}$

1) Diäthyläther d. ?-Dinitro-s-Di[2-Oxyphenyl]hydrazin. Sm. 201 bis 202° (J. pr. [2] **21**, 325). — IV, 1505.

2) Phenylamidoimid d. ?-Dinitrocamphersäure. Sm. 192º u. Zers. (B. 25, 2567). — IV, 708.

C 52,4 - H 4,9 - O 35,0 - N 7,6 - M. G. 366. $C_{16}H_{18}O_8N_2$

1) Diacetat d. Methylendimethyläther d. 2,3,4,5-Tetraoxy-1- $[\alpha\beta$ -Dioximidopropyl]benzol. Sm. 137-138° (G. 22 [2] 502). — II, 1035.

C₁₆H₁₈O₈S₃ 1) Diäthylester d. Diphenylsulfondisulfonsäure. Sm. 81—82° (B. 19, 3127). — II, 815.

 $C_{16}H_{18}N_2Br_2$ 1) ?-Dibrom- $\alpha\beta$ -Di[Phenylamido]- β -Methylpropan. Sm. 62° (J. 1887, 745). — II, 345.

 $C_{16}H_{18}N_2S$ 1) α -Propyl- $\alpha\beta$ -Diphenylthioharnstoff. Sm. 104,3° (B. 21, 109). — II, 397. 2) α -Phenyl- β -[γ -Phenylpropyl]thioharnstoff. Sm. 103° (95—96°) (B. 26, 2161; 27, 2310). — II, 550.

- C16H18NS
- 3) α -Phenyl- β -[2,4,6-Trimethylphenyl]thioharnstoff. Sm. 193° (B. 15, 1014). — II, 555.
- 4) α-Benzyl-β-[2,4-Dimethylphenyl]thioharnstoff. Sm. 84—85° (Soc. 59, 558). — II, 544.
- 5) α -Methyl- β -Aethyl- $\alpha\beta$ -Diphenylthioharnstoff. Sm. 49.5° (B. 20, 1632). **— II**, 397.
- 6) α-Aethyl-α-Phenyl-β-[4-Methylphenyl]thioharnstoff. Sm. 90° (B. 17, 2091). — II; 498.
- Aethylphenylbenzylthioharnstoff. Sm. 91° (Soc. 61, 540). II, 528.
- 8) isom. Aethylphenylbenzylthioharnstoff. Sm. 91° (Soc. 61, 540). —
- 9) isom. Aethylphenylbenzylthioharnstoff. Sm. 94—95° (Soc. 61, 541). - II, 528.
- 10) 2-Methylphenylimido-2-Methylphenylamidodimethylsulfid. Sm. 60° (B. 15, 1316). — II, 465.
- 11) 4-Methylphenylimido 4 Methylphenylamidodimethylsulfid. Sm. 128°. HCl, H_2SO_4 (B. 15, 1309). — II, 498.
- 12) Benzylimidobenzylamidodimethylsulfid. Fl. HCl, (2 HCl, PtCl.), HJ B. 19, 2348). — II, 528.
- 13) Phenylamid d. Hexahydrochinolin-l-Thiocarbonsäure (Hexahydrochinolylphenylthioharnstoff). Sm. 127,5° (B. 27, 1479). - IV, 139.
- $C_{16}H_{18}N_{3}C1$ 1) 1-Chlormethylat d. ?-Amido-1,5-Dimethyl-2-Phenylbenzimidazol. $2 + \text{PtCl}_4$ (A. 210, 372). — IV, 1184.
- 1) $\alpha \alpha'$ -Aethylen $\beta \beta'$ -Diphenyldithioharnstoff. Sm. 193° (A. 228, 234). C₁₆H₁₈N₄S₂ **— II**, 393.
 - 2) αβ-Diphenyläthylen-αβ-Dithioharnstoff. Sm. 192° u. Zers. (B. 28, 3178). — IV, 979.
 - 3) Aethylenester d. Phenylimidothiocarbaminsäure. Sm. 139° u. Zers. HCl, (2 HCl, PtCl₄), HBr, Pikrat (B. 25, 59). — II, 391.
- $C_{16}H_{18}N_4S_3$ $\mathbf{C}_{16}\mathbf{H}_{19}\mathbf{ON}$
- 1) Thiotolyldithioharnstoff. Sm. 120—1216 (B. 20, 669). II, 821. C 79.7 - H 7.9 - O 6.6 - N 5.8 - M. G. 241.
- 1) β -Dimethylamido- α -Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 108—110°. (2 HCl, $PtCl_4 + \frac{1}{2}H_2O$ (B. 20, 494). — II, 1080.
- 2) 4-[4-Isopropylbenzyl]amido-l-Oxybenzol. Sm. 107—108° u. Zers. (A. **245**, 297). — **II**, 718
- Methyläther d. γ-Amido-α-[4-Oxyphenyl]-β-Phenylpropan. Fl. Zers. bei 253°. (2 HCl, PtCl₄), (HCl, AuCl₃) (B. 23, 2864). II, 899.
- 4) Aethyläther d. 4-Aethylphenylamido-1-Oxybenzol. Sd. 318-320° (B. 17, 2434). — II, 717.
- 5) Isobutyläther d. 4-Phenylamido-1-Oxybenzol. Sm. 68° (B. 17, 2435). - II, 717.
- 6) 2,4-Dimethylphenyläther d. β -Phenylamido- α -Oxyäthan. Fl. HCl (B. 29, 2402). C 71,4 — H 7,1 — O 5,9 — N 15,6 — M. G. 269. 1) β -Isopropylphenylamido- α -Phenylharnstoff. Sm. 230°. — IV, 674.
- C16H19ON3

 - 2) β -[2,4,5-Trimethylphenyl]amido- α -Phenylharnstoff. Sm. 21 $\acute{8}^{0}$. -IV, 813.
 - 3) Methyläther d. α -[4-Oxybenzyl]amido- β -Phenylhydrazonäthan. Fl. HCl (B. 27, 3099). — IV, 747.
 - 4) 4'-Dimethylamido-2'-Oxy-2, 4-Dimethylazobenzol. Sm. 166-168° (B. **31**, 494). — **IV**, 1414.
 - 5) 1-Methyloxydhydrat d. ?-Amido-1,5-Dimethyl-2-Phenylbenzimidazol? (2 Chlorid + PtCl₄) (A. 210, 371). IV, 1184.
 6) 4-Dimethylamidophenylamid d. Phenylamidoessigsäure. Sm. 132
 - bis 134° (B. 30, 1101; A. 301, 78). C 74,7 H 7,4 O 12,4 N 5,4 M. G. 257.
- $C_{16}H_{19}O_2N$
 - 1) Dimethyläther d. Di[4-Oxybenzyl]amin. Sm. 34°. HCl, (2HCl, PtCl₄+ $2 H_2(0)$ (A. 117, 240; 241, 333). — II, 755.
 - 2) Diphenyläther d. Di[β -Oxyäthyl]amin. Fl. HCl, HBr, HNO $_3$ (J. pr. [2] **24**, **24**3; *B*. **30**, 810). — II, 653.
 - Sm. 85° (B. **27**, 1474). 3) 1-Benzoyl-2-Ketodekahydrochinolin.
 - 4) Methylammoniumbase (aus Methylphenylamidobenzoylmethan) (B. 13, 843).

C₁₆H₁₉O₂N 5) Benzoat d. 1-Oximido-3, 3, 5-Trimethyl-1, 2, 3, 4-Tetrahydrobenzol (B. d. Phoronoxim). Sm. 99° (A. 297, 190).

6) Aethylester d. α-[1-Naphtylamido]buttersäure. Sm. 80° (B. 25, 2322). **— II**, 614.

7) Aethylester d. α-[2-Naphtyl]amidobuttersäure. Sm. 69°; Sd. 264°, (B. 25, 2324). — II, 622.

8) Aethylester d. α-[1-Naphtyl]amidoisobuttersäure. Sm. 76,5°: Sd. 200 bis 220°₁₅ (B. **25**, 2345). — II, 614.

9) Aethylester d. α-[2-Naphtyl]amidoisobuttersäure. Sm. 58° (B. 25, 2348). — II, *622*.

10) 1-Naphtylamid d. norm. α-Oxybutteräthyläthersäure. Sm. 79-80° (B. **25**, 2925). — **II**, *611*.

11) 1-Naphtylamid d. α-Oxyisobutteräthyläthersäure. Sm. 74—76° (B. **25**, 2929). — II, 611.

12) 2-Naphtylamid d. α-Oxyisobutteräthyläthersäure. Sm. 50° (B. 25, 2930). — II, *620*.

13) Phenylimid d. Camphersäure. Sm. 116° (A. 68, 35). — II, 419.
C 67,4 — H 6,7 — O 11,2 — N 14,7 — M. G. 285.
Dimethyläther d. m-Amidoazo-p-Kresol. Sm. 156° u. Zers. (B. 22, $C_{16}H_{19}O_{2}N_{3}$

352). — IV, 1419. 2) Diäthyläther d. 4,4'-Dioxydiazoamidobenzol. Sm. 89—91° (B. 25,

3064). — IV, 1575. 3) Verbindung (aus Benzenyldioxytetrazotsäure). Fl. (A. 297, 339).

C 67,4 - H 6,7 - O 11,2 - N 14,7 - M.G. 285. $C_{16}H_{19}O_{2}N_{5}$ 1) Dimethyläther d. Di[2-Oxyphenylazo]äthylamin. Sm. 130° (B. 22,

940). **— IV**, 1575. 2) Dimethyläther d. Di[4-Oxyphenyl]äthylamin. Sm. 114-115° (B. 22, 941). — IV, 1575.

3) 2,4-Dimethylphenylamidokaffein. Sm. 210—212° (B. 27, 3092). III, 960.

1) Di[4-Aethylphenyl]phosphinsäure. Fl. Cu, Ag (A. 293, 321). — $C_{16}H_{19}O_{2}P$ IV. 1674. C 70.3 - H 7.0 - O 17.6 - N 5.1 - M. G. 273.

C16H19O3N 1) β -[2-Benzoylamidohexahydrophenyl]akrylsäure? Sm. 153,5° (B.

27, 1472). 2) Anhydrid d. Oxycampherphenylaminsäure. Sm. 126° (B. 26, 1530).

– II, 420. 3) Aethylester d. γ-Cyan-α-Keto-α-Phenylhexan-γ-Carbonsäure. Sm. 48-49° (Bl. [3] 17, 410 Anm.).
 C 66,4 — H 6,6 — O 22,1 — N 4,8 — M. G. 289.

C16H19O4N

1) Phenylglykolylscopolein (Homoscopolamin). Fl. (HCl, AuCl₃) (C. 1898

2) β -[3-Diacetylamido-4-Isopropylphenyl]akrylsäure. Sm. 236° (B. 19, 417). — II, 1434.

3) Säure (aus Hydroxybenzylursäure). Sm. 70-75°. Ca + 3H₂O (A. 134, 324). — II, 1189.

4) Methylester d. Cocaylbenzoxylessigsäure. Fl. (HCl, AuCl₃), HJ (B.

21, 3032, 3441). — III, 863.
 5) Diäthylester d. β-Cyan-α-Phenylpropan-αβ-Dicarbonsäure. Sd. 320 bis 330° (B. 24, 1877). — II, 1855.
 6 Grove Phenylpropan-βγ-Dicarbonsäure. Sd. 220

6) Diäthylester d. β-Cyan-α-Phenylpropan-βγ-Dicarbonsäure. Sd. 220 bis 228°₂₀ (A. ch. [6] 27, 261). — II, 1854.
7) Benzoat d. Ecgonin + 4H₂O. Sm. 86—87° (92°). (HCl, AuCl₃) (B. 18, 1594; 21, 48, 3198; M. 6, 556; A. 271, 182). — III, 866.

8) Benzoat d. α -Eegonin $+ \frac{1}{2}$ H₂O. Sm. 209° u. Zers. (wasserfrei) (B. 29, 2223). — III, 873.

9) Benzoat d. d-Ecgonin. HCl, HNO₈ (B. 23, 510, 927, 984). — III, 867.

 10) 4-Methylphenylimid d. γ-Acetoxyl-β-Methylbutan-βγ-Dicarbonsäure. Sm. 131° (B. 29, 1546, 1624).
 C 60,6 — H 6,0 — O 20,2 — N 13,2 — M. G. 317. C18 H19 O4 N3 1) Aethylester d. 5-Semicarbazon-3-Keto-1-Phenylhexahydrobenzol-

2-Carbonsäure. Sm. 208° u. Zers. (A. 294, 281). 2) Phenylamidoimid d. P-Nitrocamphersäure. Sm. 157° (B. 25, 2567). **– IV**, 708.

- $C_{16}H_{19}O_4P$ 1) Aethylester d. Di[α -Oxybenzyl] phosphinsäure (Bl. 50, 604). — IV, 1664. C 62,9 — H 6,2 — O 26,2 — N 4,6 — M. G. 305.
- $C_{16}H_{19}O_5N$
 - 1) Methylester d. β -[4,5-Dioxy-2, β -Acetylmethylamidoäthylphenyl]akryl-4,5-Methylenäthersäure. Sm. 147° (A. 271, 390). — II, 1784. C 59,8 — H 5,9 — O 29,9 — N 4,4 — M. G. 321.
- $\mathbf{C}_{16}\mathbf{H}_{19}\mathbf{O}_{6}\mathbf{N}$ 1) Acetylhydrocotarninessigsäure. Sm. 201°. Ca, Ag (B. 20, 2431). — III, 917.
- C 50.9 H 5.0 O 25.5 N 18.6 M. G. 377. $C_{16}H_{19}O_6N_5$
 - 1) 1, 3, 5 Trinitrobenzol + 1, 3 Di Dimethylamido benzol. Sm. 1210 (R. 7, 3). - IV, 571.
- $C_{16}H_{19}O_{10}Cl_31$) Tetracetat d. Chloralose. Sm. 145° (Bl. [3] 11, 38).
 - Tetracetat d. β-Galaktochloral. Sm. 125° (C. 1896 [2] 83).
 Tetracetat d. Parachloralose. Sm. 106°; Sd. 250°₂₆ (Bl. [3] 11, 40).
- $C_{16}H_{19}N_2Cl$ 1) Chlormethylat d. α -Phenylimido- α -Methylphenylamido athan (J. 1865, 416). — II, 347
- 1) Dijodmethylat d. 3-[3-Amidophenyl]-3,4-Dihydro-1,3-Benzdiazin. $C_{16}H_{19}N_3J_2$ Sm. 153° (J. pr. [2] 48, 567). — IV, 873.
- 1) β -Isopropylphenylamido- α -Phenylthioharnstoff. Sm. 116° (A. 252, C16H19N8S 281). — IV, 680.
 - 2) α -Methylphenylamido- β -Aethyl- β -Phenylthioharnstoff. Sm. 83-84°
 - (B. 27, 867). IV, 680.
 3) α-Phenyl-β-[6-Dimethylamido-3-Methylphenyl]thioharnstoff. Sm. 153—154° (B. 28, 3043). IV, 615.
 4) Tetramethylindaminsulfid (A. 251, 73; B. 22, 2067). II, 801.

 - 5) Tetramethyldiamidothiodiphenylamin. (2HCl, ZnCl₂) (A. 230, 147; **251**, 79; B. **16**, 2728; **17**, 102). — **II**, 807.
- C 75,0 H 7,8 O 6,2 N 10,9 M. G. 256. $\mathbf{C}_{16}\mathbf{H}_{20}\mathbf{ON}_{2}$
 - 1) s-Tetramethyldiamidophenyläther. Sm. 119°. (2HCl, PtCl₄), Pikrat (B. 21, 2056). — II, 657.
 - 2) Methyläther d. 4-Dimethylamido-1-[4-Oxybenzyl]amidobenzol. Sm. 104° (A. 241, 343). — IV, 584.
 - 3) Aethyläther d. 5-Amido-4-[2-Methylphenyl]amido-2-Oxy-1-Methylbenzol. Sm. 78° (A. 287, 190).
 - 4) Aethyläther d. 5-Amido-4-[3-Methylphenyl]amido-2-Oxy-1-Methylbenzol. Sm. 91-91,5° (A. 287, 196)
 - 5) Aethyläther d. 5-Amido-4-[4-Methylphenyl]amido-2-Oxy-l-Methyl-
 - benzol. Sm. 76° (A. 287, 201).
 6) Aethyläther d. 5-Amido-2-[4-Methylphenyl]amido-4-Oxy-1-Methyl-
 - benzol. Sm. 108—109° (B. 27, 2707).
 7) Aethyläther d. 6-Amido-5-[4-Methylphenyl]amido-3-Oxy-1-Methyl-
 - benzol? Sm. 175—177° (A. 287, 209). 8) Aethyläther d. 5-[4-Amido-2-Methylphenyl]amido-2-Oxy-1-Methyl-
 - benzol. Sm. 99-100° (A. 287, 199).
 - 9) Aethyläther d. 5-[4-Amido-3-Methylphenyl]amido-2-Oxy-1-Methylbenzol. Sm. 86° (A. 287, 193).
 10) Aethyläther d. 6-[4-Amido-2-Methylphenyl]amido-3-Oxy-1-Methylphenylphe
 - benzol. Sm. 95-96°; Sd. 270-275° (A. 287, 207).
 - 11) Aethyläther d. 6-[4-Amido-3-Methylphenyl]amido-3-Oxy-1-Methylbenzol. Sm. 86°; Sd. 285—295°, d. H₂SO₄ (A. 287, 204). 12) Aethyläther d. 4,4'-Diamido-6-Oxy-2,2'-Dimethylbiphenyl? 2 HCl
 - (B. **27**, 2704).
 - 13) Aethyläther d. 4,4'-Diamido-5-Oxy-2,3'-Dimethylbiphenyl. Sm. 75°
 - (B. 23, 3264). IV, 983. 14) Aethyläther d. 4'-Oxy-2,3'-Dimethyl-s-Diphenylhydrazin. Sm. 78°
 - (B. 23, 3260). IV, 1506. 15) Aethyläther d. 6'-Oxy-2,3'-Dimethyl-s-Diphenylhydrazin. Sm. 138° (B. 23, 3264). — IV, 1506.
 - 16) Aethyläther d. 4-Oxy-3,4'-Dimethyl-s-Diphenylhydrazin. Sm. 87° (B. 23, 3261). — IV, 1506.
 - 17) Aethyläther d. 6-Oxy-3,4'-Dimethyl-s-Diphenylhydrazin. Sm. 153° (B. 23, 3265). — IV, 1506.
 - 18) 6-Oxy-4-Phenyl-2-Hexyl-1, 3-Diazin. Sm. 167°. Ag (B. 28, 477). IV, 985.

- C₁₆H₂₀ON₂ 19) Monophenylhydrazon d. Campherchinon. Sm. 169—170° (170—171°) (A. 274, 87; 281, 347). — IV, 796. 20) Phenylamid d. α-Camphersäuremononitril. Sm. 197° (Bl. [3] 15, 986).
- C 67,6 H 7,0 O 5,6 N 19,7 M. G. 284. $\mathbf{C}_{16}\mathbf{H}_{20}\mathbf{ON}_{4}$ 1) 3,3'-Di[Dimethylamido]azoxybenzol. Sm. 88-89°. 2 HCl, (2 HCl, PtCl.),

 - 2 H₂SO₄, Bioxalat, Pikrat, Ferroeyanid (B. **30**, 2932). **1V**, 1338. 2) **4**, 4'-Di[Dimethylamido]azoxybenzol. Sm. 243°. (2 HCl, PtCl₄ + H₂O) (B. **8**, 619; **21**, 2611; **27**, 607, 608; **29**, 1481; Bl. [3] **13**, 1069). IV. 1338.
 - 3) 4-Dimethylamidophenylamid d. α-Phenylhydrazidoessigsäure. Sm. 134—135° (B. 30, 1101; A. 301, 76).
- 4) Phenylamid d. 5-Methyl-2, 4-Diathyl-1, 3-Diazin-6-Amidoameisensäure (Carbanilidokyanäthin). Sm. 184° (*J. pr.* [2] **30**, 118). — **IV**, 1133. C₁₆ \mathbf{H}_{20} OCl₁₂ 1) Cetylchloral. Fl. Hydrat, Aethylalkoholat (*J. pr.* [2] **43**, 150). — **I**, 957.
- Cetylentoral, Fr. Hydrat, Achylarkonolat (g. pr. [2] 45, 150). 1, 301.
 C 70,6 H 7,3 0 11,8 N 10,3 M. G. 272.
 Dioxydimethylanilin. Sm. 90,4° (B. 12, 681; 19, 1573). II, 657.
 P-Diamido-P-Dioxybiphenyl. Sm. 117°. 2HCl, (2HCl, 2SnCl₂), (2HCl, PtCl₄), 2HNO₃, H₂SO₄ (J. pr. [2] 19, 383). II, 990.
 βγ-Dioxy-βγ-Di[2-Amidophenyl] butan. Sm. 169—170° (B. 30, 1131).
 αδ-Di[Phenylamido]-βγ-Dioxybutan. 2HCl (B. 17, 1095). II, 427.
 Dimethyläther d. 5, 5′-Diamido-6, 6′-Dioxy-3, 3′-Dimethylbiphenyl. C16H20O,N.

 - Sm. 156—157° (B. 24, 1965). IV, 982.
 - 6) Diäthyläther d. 2-Amido-5-[4-Oxyphenyl]amido-1-Oxybenzol. Sm. 84,5°. HCl (A. 287, 216).
 - 7) 1,4-Di[γ -Keto- α -Methylbutylidenamido] benzol (p-Phenylendiimidomethylpropylketon). Sm. 175° (A. 274, 367). - IV, 598.
 - 8) Diäthyläther d. s-Di[2-Oxyphenyl]hydrazin. Sm. 890 (J. pr. [2] 18, 203). - IV, 1505.
 - 9) Diäthyläther d. s-Di[3-Oxyphenyl]hydrazin. Sm. 85° (J. pr. [2] 29, 300). - IV, 1505.
 - 10) $\gamma \delta$ -Dioxy- $\gamma \delta$ -Di[2-Pyridyl]hexan. Sm. 135—136°. (2HCl, PtCl₄ + H_2O) (B. **24**, 2532). — IV, 985.
 - 11) Phenylhydrazonketopinsäure. Sm. 1460 (Soc. 69, 1401).
 - 12) Phenylamidoimid d. Camphersäure. Sm. 118-119° (B. 25, 2566;
- 25 [2] 665; Bl. [3] 9, 27). IV, 709. C₁₆H₂₀O₂Sn 1) Diäthyläther d. Zinndiphenyldioxydhydrat. Sm. 124° u. Zers. (A. 194, 172). — IV, 1714.
- C 66,7 H 6,9 O 16,7 N 9,7 M. G. 288. $C_{16}H_{20}O_{3}N_{2}$
 - 1) 4-Diacetylamido-6-Isopropyl-1, 3-Dimethylbenzoxazol. Sm. 92-94° (G. 20, 421). - II, 774.
 - 2) 4-Diacetylamido-3-Isopropyl-1, 6-Dimethylbenzoxazol. Sm. 123 bis
 - 125° (G. 21 [2] 156). II, 768. 3) Phenylhydrazid d. Camphansäure. Sm. 193° (B. 26, 1531). —
- C 63.2 H 6.6 O 21.0 N 9.2 M. G. 304. $\mathbf{C}_{16}\mathbf{H}_{20}\mathbf{O}_{4}\mathbf{N}_{2}$
 - 1) 1,4-Di[Diacetylamidomethyl]benzol. Sm. 194° (B. 28, 2993). — IV. 644.
 - 2) Tetramethyläther d. ?-Diamido-l, 4, 1', 4'-Tetraoxybiphenyl. Sm. 210°. 2HCl, (2HCl, PtCl₄) (B. 17, 2126). — II, 1037.
 - 3) Tetramethyläther d. s-[2,5-Dioxyphenyl]hydrazin (B. 17, 2126). IV, 1506.
 - 4) Cantharidinphenylhydrazonhydrat. Sm. 194° (B. 25, 1469, 2960; *M.* 18, 402). — III, 623.
 - 5) Phenylhydrazid d. Cantharidinsäure. Sm. 100° (B. 25, 2960; M. 18, 402). — III, *623*.
 - 6) Phenylhydrazon d. Pinoylameisensäure. Sm. 192,5° u. Zers. (B. 29, 1915). - IV, 715.
- C 57,8 H 6,0 O 19,3 N 16,9 M. G. 332. $C_{16}H_{20}O_4N_4$
 - 1) 1,3-Dinitrobenzol + 1,3-Di[Dimethylamido]benzol. Sm. 58° (R. 7, 3).
- IV, 571.
 1) Phenylsulfonat d. Oxycampher (aus Campherchinon). Sm. 95—96° C16H20O4S (B. **30**, 669).
 - 2) Phenylester d. Camphersulfonsäure. Fl. (Bl. [3] 19, 125).

 $C_{16}H_{20}O_4Se$ 1) Diäthyläther d. Di[?-Oxyphenyl]selendioxydhydrat. Sm. 145° (B. **28**, 612).

C₁₆H₂₀O₄Te 1) Diäthyläther d. Di[?-Oxyphenyl]telluridhydroxyd. Chlorid, Bromid, Nitrat (B. **30**, 2831). C 57,1 — H 5,9 — O 28,6 — N 8,3 — M. G. 336.

 $\mathbf{C}_{16}\mathbf{H}_{20}\mathbf{O}_{6}\mathbf{N}_{2}$

1) Diäthylester d. 6-Oxy-2-Keto-4-Phenylhexahydro-1, 3-Diazin-5, 6-Dicarbonsäure (D. d. Benzuramidoäpfelsäure). Sm. 1830 (G. 23 [1] 396). - II, 1954.

 $C_{16}H_{20}O_8N$

 $C_{16}H_{20}O_8N_2$

Verbindung (aus Acetessigsäureäthylester, Glykose u. NH₃) = (C₁₆H₂₀O₈N)_x. Sm. 189-190° (G. 19, 217). — I, 593.
 C 52,2 — H 5,4 — O 34,7 — N 7,6 — M. G. 368.
 Diäthylester d. Diacetyldiamidodihydrochinondicarbonsäure. Sm. 236° (B. 21, 1764). — II, 2004.
 C 42,5 — H 4,4 — O 28,3 — N 24,8 — M. G. 452.
 Vernin + 3H₂O. Ag₂ (H. 9, 420; 10, 80, 326; J. pr. [2] 32, 433; B. 29, 2653) — III 951.

 $\mathbf{C}_{16}\mathbf{H}_{20}\mathbf{O}_{8}\mathbf{N}_{8}$

2653). — III, *951*.

C 43,6 - H 4,5 - O 32,7 - N 19,1 - M. G. 440. $\mathbf{C}_{16}\mathbf{H}_{20}\mathbf{O}_{9}\mathbf{N}_{6}$

 Verbindung (aus Malonyldiäthylharnstoff). Sm. 180° u. Zers. (B. 30, 1820).
 Dimethyldibenzylammoniumchlorid. 2 + PtCl₄ (Am. 9, 80). — $C_{16}H_{20}NC1$

II, 520.

1) Di[2-Dimethylamidophenyl] sulfid. Sm. 125° (123,5°). 2 HCl, (2 HCl, $C_{16}H_{20}N_2S$ PtCl₄), Rhodanid, Pikrat (B. 17, 586; 20, 1641; 23, 554; A. 274, 214). **– II**, 804.

2) Di[4-Dimethylamidophenyl] sulfid. Sm. 178°. 2 HCl (C. 1898 [1] 1029). 1) Tetramethyldiamidodiphenyldisulfid. Sm. 118°. 2 + PtCl₄ (B. 10, $C_{16}H_{20}N_2S_2$

403; **19**, 1571; *J. pr.* [2] **41**, 208). — **II**, 816. $C_{16}H_{20}N_2As_21$) Di[4-Dimethylamidophenyl]diarsenid. Sm. 2020 (A. 270, 144). — IV, 1686.

 $C_{16}H_{20}N_{2}Hg$ 1) Quecksilberdi[4-Aethylamidophenyl]. Sm. 166° (G. 23 [2] 547). — IV, 1706.

2) Quecksilberdi [4-Dimethylamidophenyl]. Sm. 169° (B. 21, 1501; A. **260**, 7; G. **23** [2] 522; **24** [2] 462). — IV, 1706.

C₁₆H₂₀N₂Se 1) Tetramethyldiamidodiphenylselenid. Sm. 124°. H₂SO₄, Pikrat (B. **24**, 765). — II, 819.

 $C_{16}H_{20}ClP$ 1) Diathyldiphenylphosphoniumehlorid. 2 + PtCl₄ (A. 207, 215). -IV, 1658.

2) Dimethylbenzyl-4-Methylphenylphosphoniumchlorid. 2 + PtCl₄

 $\mathbf{C}_{16}\mathbf{H}_{20}\mathbf{JP}$

1) Diäthyldiphenylarsoniumjodid. Sm. 184° (A. 201, 236). — IV, 1688. $\mathbf{C}_{16}\mathbf{H}_{20}\mathbf{JAs}$ C 79,0 — H 8,6 — O 6,6 — N 5,8 — M G 243. $\mathbf{C}_{16}\mathbf{H}_{21}\mathbf{ON}$

1) 1-Acetyl-3,5-Diisopropylindol. Sm. 185—186° (B. 21, 3436). — IV, 234.

2) 1-Benzoyldekahydrochinolin. Sm. 96°; Sd. 352-354°₇₁₄ (B. 23, 1150;

27, 1469). — IV, 56. 3) 4-Acetyl-3-Methyl-1,2,3,4,7,8,9,10-Oktohydro- β -Naphtochinolin.

Sm. 92° (B. **24**, 2664). — **1V**, 234. C 70,8 — H 7,7 — O 5,9 — N 15,5 — M. G. 271.

1) Phenylhydrazon d. Isonitrosocampher. Sm. 130° (A. 274, 78). -

 $C_{16}H_{21}O_2N$

C₁₆H₂₁ON₈

IV, 796. C 74,1 — H 8,1 — O 12,3 — N 5,4 — M. G. 259. 1) 1-Oximido-5-Methyl-3-[4-Isopropylphenyl]-1,2,3,4-Tetrahydrobenzol. Sm. 124° (A. 303, 243).

2) Homohydroapoatropin. Fil. (2HCl, PdCl₂), (2HCl, PtCl₄), (HCl, AuCl₃), $H_2SO_4 + xH_2O$ (G. 12, 287). — III, 785.

3) Phenylacettropein. Fl. (2 HCl, PtCl₄), (HCl, AuCl₃), HBr, H₂SO₄ (B.

15, 1026; A. 217, 98). — III, 787. 4) Piperovatin (Pellitorin). Sm. 123° u. Zers. (Soc. 67, 98; C. 1896 [1] 208). — III, 926.

5) Benzoyl-n-Methylgranatolin. Fl. (B. 26, 2742). — IV, 53.

6) Lakton d. Cyandihydroalantolsäure (Hydroalantolaktonitril). Sm. 1320 (A. 293, 355).

 $C_{16}H_{21}O_2N$ 7) Aethylester d. α -Piperidyl- β -Phenylakrylsäure. Sd. 220—221°, (Soc. 73, 726).

8) Oktylimid d. Benzol-1,2-Dicarbonsäure. Sm. 48-49°; Sd. 216°, (A. **298**, 145).

9) Phenylimid d. $\beta \varepsilon$ -Dimethylhexan- $\gamma \delta$ -Dicarbonsäure. Sm. 95—960 (A. **292**, 173).

10) 4-Methylphenylimid d. Heptan-ye-Dicarbonsäure. Sm. 76-820 (A. **292**, 209).

 $C_{16}H_{21}O_2N_3$

C 66,9 — H 7,3 — O 11,1 — N 14,6 — M. G. 287. 1) Diäthyläther d. 2,4-Diamido-3,6-Dioxydiphenylamin. Sm. 77°. 2 HCl (B. **24**, 3825). — II, 950.

2) Dimethyloxydhydrat d. 3-[3-Amidophenyl]-3,4-Dihydro-1,3-Benzdiazin. Sm. 185° (J. pr. [2] 48, 567). — IV, 873.

3) Limonennitrolnitrosanilin. α-d-Derivat, Sm. 142° u. Zers.; α-i-Derivat, Sm. 147° u. Zers.; β-d-Derivat, Sm. 136° u. Zers.; β-i-Derivat, Sm. 129° u. Zers. (A. 270, 183, 185). — III, 525. C 69,8 — H 7,6 — O 17,4 — N 5,1 — M. G. 275.

1) Oxytoluylatropein (Homoatropin; Phenylglykolyltropein). Sm. 95,5 bis

 $C_{16}H_{21}O_{3}N$

98,5°. HCl, (HCl, AuCl₃), HBr, Pikrat (B. **13**, 107, 1086, 1340; A. **217**, 82). — III, 788.

2) Mandelsäurepseudotropin (Pseudohomoatropin). (2 HCl, PtCl₄), H₂SO₄ (B. **25**, 931). — III, 795.

3) Campherphenylaminsäure. Ag (A. 68, 36). — II, 419.

4) malenoïde β -[2-Benzoylamidohexahydrophenyl] propionsäure. Sm.

196°. Pb, Ag (B. 27, 1470). — II, 1128.
5) fumaroïde β-[2-Benzoylamidohexahydrophenyl] propionsäure. Sm. 205°. Ag (B. 27, 1475). — II, 1129.
6) Aethylester d. 2-Benzoylamidohexahydrobenzol-1-Carbonsäure.

Sm. 131º (A. 295, 202).

- Phenylmonamid d. Pseudocamphersäure. Sm. 208° (Soc. 73, 41). 8) Monopiperidid d. β -Phenylpropan- $\alpha \gamma$ -Dicarbonsäure. Sin. 120° (C. 1899 [1] 730).
- 9) Mono-2-Propylpiperidid d. Benzol-1,2-Dicarbonsäure (Conylen-phtalamidsäure). Sm. 105°. Cu (A. 227, 200). IV, 34.
- 10) Benzoat d. 1-Oxy-4-Keto-2, 2, 6, 6-Tetramethylhexahydropyridin (Benzoyltriacetonbydroxylamin). Sm. 117° (B. 30, 2737). C 66,0 — H 7,2 — O 22,0 — N 4,8 — M G. 291.

 $C_{16}H_{21}O_4N$

1) Hydrobenzylursäure (A. 134, 303, 311). — II, 1189.

- 2) Cineolphenylaminsäure. Fl. Ag (A. 271, 23). II, 420. 3) Oxycampherphenylaminsäure. Sm. 151° (B. 26, 1530). II, 420. 4) Acetat d. 5-Diacetylamido-2-Oxy-4-Isopropyl-1-Methylbenzol. Sm.
- 75,5° (B. **28**, 1661). 5) Acetat d. 6-Diacetylamido-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 91° (88—90°) (B. **28**, 1663; G. **25** [2] 388). C 62,5 — H 6,8 — O 26,1 — N 4,6 — M. G. 307.

 $C_{16}H_{21}O_5N$

- 1) Hydroxybenzylursäure. Sm. 60—70°. Ca+3H₂O (A.134,324).—II, 1189.
- 2) γ -Diäthylamid d. β -Phenylpropan- $\alpha\alpha\gamma$ -Tricarbonsäure. Sm. 147° u. Zers. (C. 1899 [1] 730).

3) 4-Methylphenylmonamid d. γ -Acetoxylpentan- $\beta\delta$ -Dicarbonsäure. Sm. 129—130° (C. 1898 [2] 886).

4) 4-Methylphenylmonamid d. isom. γ-Acetoxylpentan-βδ-Dicarbonsäure. Sm. 181,5—182° (C. 1898 [2] 886).
5) 4-Methylphenylmonamid d. γ-Acetoxyl-β-Methylbutan-βγ-Dicarbon-

säure. Sm. 156—157° (B. 29, 1547). C 57,3 — H 6,3 — O 23,9 — N 12,5 — M. G. 335.

 $C_{16}H_{21}O_5N_3$

- 1) 2,4-Dinitrophenyläther d. d-Menthonoxim. Sm. 72° (B. 27, 1657). **- III**, 479.
- 2) 2,4-Dinitrophenyläther d. 1-Menthonoxim. Sm. 112º (B. 27, 1657).

 $\mathbf{C}_{16}\mathbf{H}_{21}\mathbf{O}_{5}\mathbf{N}_{5}$

— III, 479. C 52,9 — H 5,8 — O 22,0 — N 19,3 — M. G. 363. 1) Penta[Acetylamido] benzol (B. 21, 1547). — IV, 1317. C 59,4 — H 6,5 — O 39,7 — N 4,3 — M. G. 323.

 $C_{16}H_{21}O_6N$ 1) 1-Monacetat d. 2-Diacetylamido-1, 3, 5-Trioxybenzol-3, 5-Diäthyläther. Sm. 110-1120 (M. 18, 361).

- $\mathbf{C}_{16}\mathbf{H}_{21}\mathbf{O}_{6}\mathbf{N}$ 2) 1-Monacetat d. 4-Diacetylamido-1, 3, 5-Trioxybenzol-3, 5-Diäthyläther. Sm. 81-83° (M. 18, 363).
 - 3) Diäthylester d. α -[2-Nitrophenyl]butan- $\beta\beta$ -Dicarbonsäure (B. 20. 440). — II, 1857.
 - 4) Diäthylester d. α-[4-Nitrophenyl] butan-ββ-Dicarbonsäure. Sm. 520 (B. **20**, 440). — **II**, 1857.
- $C_{16}H_{21}O_7N$
- C 56,6 H 6,2 O 33,0 N 4,1 M. G. 339. 1) Oxim d. Methylglyko-o-Cumarketon. Sm. 173° (B. 18, 1966). III, 162.
- Diäthylester d. Tropinondioxalsäure. Sm. 176° u. Zers. (B. 30, 2714).
 C 54,1 H 5,9 O 36,0 N 3,9 M. G. 355.
 Oxim d. Glykoferulaldehyd. Sm. 163° (B. 18, 3484). III, 107. $C_{16}H_{21}O_8N$
- C 49.6 H 5.4 O 41.3 N 3.6 M. G. 387. $\mathbf{C}_{16}\mathbf{H}_{21}\mathbf{O}_{10}\mathbf{N}$
- 1) Nitril d. d-Pentacetylgalaktonsäure. Sm. 135° (B. 30, 3103).
 - 2) Nitril d. Pentaacetylglykonsäure. Sm. 80-81° (B. 26, 732). -I, 1482.
- C₁₆H₂₁N₂Cl 1) Phenylhydrazinverbindung d. Carvolhydrochlorid. Sm. 137° (B. **20**, 489). — II, 769.
- $C_{16}H_{21}N_2Br$ 1) 4-Bromphenylhydrazon d. d-Campher. Sm. 101° (B. 28, 2191). IV, 796.
 - 2) Verbindung (aus d-Hydrobromcarvoxim). Sm. 119° (B. 20, 2072). -
- $\mathbf{C}_{16}\mathbf{H}_{22}\mathbf{ON}_{2}$ C 74,4 - H 8,5 - O 6,2 - N 10,8 - M. G. 258.1) Dipentinnitrolanilin. α-Derivat Sm. 125—126°; β-Derivat Sm. 149° (A. 252, 126). - III, 529.
 - Limonennitrolanilin. α-Derivat Sm. 112—113°, HCl; β-Derivat Sm. 153—154°, HCl (A. 252, 118; 270, 181, 187). III, 525.
 - 3) Phenylhydrazon d. Oxycampher (aus Campherchinon). Sm. 137,5° (B. 30, 668). IV, 796.
 - 4) Benzoylbenzoacetodinitril? Sm. 250° (J. pr. [2] 47, 119). II, 1216.
 - 5) Phenylamid d. Dekahydrochinolin-l-Carbonsäure (α-Phenyl-β-Dekahydrochinolylharnstoff). Sm. 148° (B. 23, 1149). — IV, 55.
- $\mathbf{C}_{16}\mathbf{H}_{22}\mathbf{ON}_{4}$ C 67.1 - H 7.7 - O 5.6 - N 19.6 - M. G. 286.1) $\beta\zeta$ -Di[Phenylhydrazon]- δ -Ketoheptan. Sm. 142° u. Zers. (A. 257, 279). – IV, 787.
- C 70,1 H 8,0 O 11,7 N 10,2 M. G. 274. $C_{16}H_{22}O_2N_2$
 - 1) Pinolnitrolanilin. Sm. 174—175°. HCl (A. 253, 266). III, 508. 2) P-Dipiperidyl-1,4-Benzochinon. Sm. 178° (M. 9, 506). IV, 23. 3) Phenylhydrazon d. Säure C₁₀H₁₆O₃ (aus Campherchinon). Sm. 123 bis

 - 124° (B. 30, 3159): IV, 693.
 4) Verbindung (aus 4-Amido-1-Methoxylbenzol). α-Modif. Sm. 122°, HCl; β-Modif. Sm. 170°, HCl (C. 1897 [2] 39).
- $C_{16}H_{22}O_3N_3$ 1) Verbindung (aus Dimethylamidobenzol) (B. 13, 2141). — II, 329. $\mathbf{C}_{16}\mathbf{H}_{22}\mathbf{O}_4\mathbf{N}_2$ C 62.7 - H 7.2 - O 20.9 - N 9.1 - M. G. 306.
 - 1) Acetat d. 3,5-Di[Aethylacetylamido]-1-Oxybenzol. Sm. 80-85° (92) bis 95°) (M. 14, 407). — II, 724.
 - 2) 2,6-Triacetyldiamido-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 238 bis 240° (G. 20, 425). — II, 773.
 - 3) Diäthylester d. γ-Phenylhydrazonbutan-αβ-Dicarbonsäure. Sm. 84 bis 85° (80°) (Soc. 71, 331; B. 17, 2051). IV, 714.
 4) Diäthylester d. α-Phenylhydrazon-β-Methylpropan-αβ-Dicarbon-
 - säure. Sm. 90—91° (B. 31, 199).
- 5) Phenylmonohydrazid d. Cineolsäure. Sm. 110° (A. 271, 24). IV, 715. C 57,5 — H 6,6 — O 19,1 — N 16,8 — M G 334. $C_{16}H_{22}O_4N_4$ 1) 2,4-Dinitrophenyldipiperidyl. Sm. 72-76°. (2HCl, PtCl₄) (B. 24,
- 2107). **IV**, 492.
- $\mathbf{C}_{16}\mathbf{H}_{22}\mathbf{O_4}\mathbf{Cl_2}$ 1) Diisoamyläther d. 3,6-Dichlor-2,5-Dioxy-1,4-Benzochinon. Sm. 530 (Am. 18, 9). — III, 351.
- C 59,6 H 6,8 O 24,8 N 8,7 M. G. 322. $\mathbf{C}_{16}\mathbf{H}_{22}\mathbf{O}_{5}\mathbf{N}_{2}$ 1) Propyl-3,5-Dinitro-4-Pseudobutyl-2,6-Dimethylphenylketon. Sm.
 - 128° (B. 31, 1349). 2) Diäthylester d. β-Oxy-α-Phenylhydrazonäthanäthyläther-αβ-Dicarbonsäure. Sm. 52—54° (B. 24, 4211). IV, 722.

C 56,8 — H 6,5 — O 28,4 — N 8,3 — M. G. 338. Biliprasin (A. 132, 339). — III, 664. C 52,5 — H 6,0 — O 26,2 — N 15,3 — M. G. 366. $\mathbf{C}_{16}\mathbf{H}_{22}\mathbf{O}_{6}\mathbf{N}_{2}$

 $C_{16}H_{22}O_6N_4$

1) Diäthylester d. 2,2'-Diketo-6,6'-Dimethyl-1,2,3,4,1',2',3',4'-Oktohydro-4,4'-Bi-1,3-Diazin-5,5'-Dicarbonsäure. Sm. 139° (G. 23) [1] 393).

 $C_{48,2} - H_{5,5} - O_{32,2} - N_{14,1} - M.G.$ 398. $C_{16}H_{22}O_8N_4$ 1) Tetraäthylalloxanthin. Sm. 1620 u. Zers. (B. 30, 1821).

C₁₆H₂₂O₈Cl₂ 1) ?-Dichlor-6-Isopropyl-3-Methylphenylglykuronsäure. Sm. 125—126° (118°). Ba (H. 16, 515; B. 31, 2583). — II, 771. C 40,2 — H 4,6 — O 43,5 — N 11,7 — M. G. 478. 1) Tetraspartsäure. Cu₂, Ag₂ (J. 1876, 777; B. 30, 2452; A. 303, 197).

 $\mathbf{C}_{16}\mathbf{H}_{22}\mathbf{O}_{13}\mathbf{N}_{4}$

- I, 1211.

 Verbindung (aus Chlorfenchenhydrochlorid). Sm. 120° (Soc. 73, 705).
 Triäthyl-l-Naphtylammoniumbromid (Soc. 41, 180). — II, 599. $\mathbf{C}_{16}\mathbf{H}_{22}\mathbf{NCl}$

 $\mathbf{C}_{16}\mathbf{H}_{22}\mathbf{NBr}$ 1) Triäthyl-1-Naphtylammoniumjodid. Sm. 98-100° (B. 21, 3130). $\mathbf{C}_{16}\mathbf{H}_{22}\mathbf{NJ}$ II. 599.

 $\mathbf{C}_{16}\mathbf{H}_{22}\mathbf{N}_{2}\mathbf{S}$ 1) Phenylamid d. Dekahydrochinolin-1-Thiocarbonsäure (α-Phenyl- β -Dekahydrochinolylthioharnstoff). Sm. 134,5° (B. 23, 1149). $\stackrel{\bullet}{-}$ IV, 55.

1) 2,5-Dimethyl-1,3-Phenylendi [β -Allylthioharnstoff]. Sm. 112,5° (A. $\mathbf{C}_{16}\mathbf{H}_{22}\mathbf{N}_{4}\mathbf{S}_{2}$ **228**, 252). — IV, 643.

2) Di[2-Amido-5-Dimethylamidophenyl]disulfid. Fl. Pikrat (A. 251, 34).

— II, 817. 1) Triäthyl-1-Naphtylphosphoniumjodid. Sm. 209° (B. 11, 1502). — $\mathbf{C}_{16}\mathbf{H}_{22}\mathbf{JP}$ IV, 1681. C 78,4 — H 9,4 — O 6,5 — N 5,7 — M. G. 245.

 $\mathbf{C}_{16}\mathbf{H}_{28}\mathbf{ON}$

1) 4-Keto-2, 2, 6, 6-Tetramethyl-1-Benzylhexahydropyridin (Benzyltriacetonamin). Fl. HCl, (2HCl, PtCl₄) (B. 28 [2] 161).

2) 3-Acetylamido-?-Benzyliden-l-Methylhexahydrobenzol. Sm. 168° (B. 29, 2961).

3) 5-Benzoylamido-1,1,3-Trimethylhexahydrobenzol. Sm. 122° (A. 297, 192).

4) Phenylamid d. 1-Isopropylhexahydrobenzol-4-Carbonsäure. Sm.

204-205° (*J. pr.* [2] 57, 101). 5) Phenylamid d. Campholsäure. Sm. 91° (*Bl.* [3] 11, 611). 6) Camphelylamid d. Benzolcarbonsäure. Sm. 96-97° (*G.* 23 [2] 503). - II, 1162.

C 73.6 - H 8.8 - O 12.2 - N 5.4 - M. G. 261. $C_{16}H_{23}O_{2}N$

1) Aethylester d. β -[2,3,4,6-Tetramethylphenyl]amidocrotonsäure. Sm. 101° (B. 21, 1656). — II, 562.

C 66,4 - H 8,0 - O 11,1 - N 14,5 - M. G. 289. $C_{16}H_{23}O_{2}N_{3}$

 4-Nitrophenyldipiperidyl. Fl. (B. 24, 2106). — IV, 492.
 C 69,3 — H 8,3 — O 17,3 — N 5,1 — M. G. 277. $C_{16}H_{23}O_3N$

1) Methylamidopipitzahoïnsäure (Methylamidoperezon). Sm. 112-1140 (B. **18**, 940). — **II**, 1673.

2) Cyandihydroalantolsäure (Hydroalantsäurenitril). Na, Ca, Ba, Ag (A. 293, 356).

3) Guajakolconicinurethan. Sd. 277° (Bl. [3] 19, 189).

4) Phenylglykolat d. 1-[γ-Oxypropyl]hexahydropyridin. (HCl, AuCl₃) (B. **15**, 1143). — **IV**, 19.

5) Phenylmonamid d. $\beta \varepsilon$ -Dimethylhexan- $\gamma \delta$ -Dicarbonsäure. Sm. 179 bis 180° (A. 292, 173).

6) 4-Methylphenylmonamid d. Heptan-γε-Dicarbonsäure. Sm. 179 bis 180° (A. **292**, 208). C 62,9 — H 7,5 — O 15,7 — N 13,8 — M. G. 305.

 $C_{16}H_{23}O_3N_3$

1) 3,4,5-Tri[Acetylamido]-1-Pseudobutylbenzol. Sm. 220° (J. pr. [2]) 48, 103). — IV, 1134. C 65,5 — H 7,8 — O 21,8 — N 4,8 — M. G. 293.

 $C_{16}H_{23}O_4N$

1) Methylester d. Metasantonsäureoxim. Sm. 171° (G. 25 [2] 469). 2) Diäthylester d. 2,6-Dimethyl-4-Propylpyridin-3,5-Dicarbonsäure.

Sd. $308^{\circ}_{714,5}$. $(2\,\mathrm{HCl},\,\mathrm{PtCl}_4)$ $(A.\,\mathbf{246},\,36)$. — IV, 170. $\mathbf{C_{16}H_{23}O_4N_2}$ 1) Ptomain (aus Käse) = $(\mathbf{C_{16}H_{23}O_4N_2})_x$ $(Bl.\,[3]\,\mathbf{11},\,287)$. $\mathbf{C_{16}H_{23}O_4Br}$ 1) Acetat d. 5-Brom-6-Oxy-2,4-Diketo-1,1,3,3-Tetraäthyl-1,2,3,4-**Tetrahydrobenzol.** Sm. $66-68^{\circ}$ (M. 10, 744). — II, 1025.

C 44.7 - H 5.4 - O 33.6 - N 16.3 - M. G. 429. $C_{16}H_{23}O_{9}N_{5}$

1) Verbindung (aus Diacetylaceton) (B. 28, 1822).

C₁₈H₂₃O₁₀Cl 1) Dulcitpentacetochlorhydrin. Sm. 160° u. Zers. (A. ch. [4] 27, 154).

— I, 418. C 73,8 — H 9,2 — O 6,1 — N 10,8 — M. G. 260. $\mathbf{C}_{16}\mathbf{H}_{24}\mathbf{ON}_{2}$

1) 6-Oxy-4-Methyl-5-Aethyl-2-Camphryl-1, 3-Diazin. Sm. 1070 (Pinner,

Imidoäther 290). — IV, 890. 2) Phenylhydrazid d. Campholsäure. Sm. 171° (Bl. [3] 11, 612). — IV, 667.

 $C_{16}H_{24}O_2N_2$ C 69,6 - H 8,7 - O 11,6 - N 10,1 - M. G. 276.

- 1) Terpineolnitrolanilid. Sm. 155-156° (A. 277, 121). III, 482. 2) Base (aus 1-Aethylpyrrol). Sm. 165-170° (B. 11, 1811). - IV, 66.
- 3) Phenylhydrazon d. d-Ketoterpin. Sm. 150-160° u. Zers. (B. 31, 3216). 4) ε -Phenylhydrazon - β -Isopropylhexan - α -Carbonsäure. Sm. 102° (\dot{B} .

29, 32). — IV, 692. 1) P-Diacetyl-2-Oktylthiophen. Fl. (B. 19, 646). — III, 768. C 65,7 — H 8,2 — O 16,4 — N 9,6 — M. G. 292. $C_{16}H_{24}O_{2}S$

 $C_{16}H_{24}O_3N_2$

1) Aethyläther d. 3,5-Di[Aethylacetylamido]-1-Oxybenzol. Sm. 65-67° (M. 14, 411). — II, 724. C 62,3 — H 7,8 — O 20,8 — N 9,1 — M. G. 308.

 $\mathbf{C}_{16}\mathbf{H}_{24}\mathbf{O}_{4}\mathbf{N}_{2}$

- 1) Säure (aus d. Phenylamidoimid d. Camphersäure). Sm. 91-92° (B. 25,
- 2566). IV, 708.
 2) Diäthylester d. βζ-Dicyan-γ-Methylheptan-βζ-Dicarbonsäure. Sd. 232—233°₂₀ (B. 28, 2943).
- C₁₈H₂₄O₄Cl₂ 1) 1,4-Diisoamyläther d. 3,6-Dichlor-1,2,4,5-Tetraoxybenzol. Sm. 128° (Am. 18, 10).

C 56.5 - H 7.1 - O 28.2 - N 8.2 - M. G. 340. $C_{16}H_{24}O_6N_2$

- 1) Verbindung (aus Aethoxyloxalessigsäurediäthylester u. Phenylhydrazin). Sm. 111° (B. 24, 4210). IV, 722. C 51,6 - H 6,4 - O'34,4 - N 7,5 - M. G. 372 $C_{16}H_{24}O_8N_2$
- 1) Tetraäthylester d. s-Diäthenylhydrazin- $\beta\beta\beta'\beta'$ -Tetracarbonsäure.
- Sm. 82°. Na₂ (Soc. 67, 1010). C₁₆H₂₄O₈Cl₂ 1) Diisobutylester d. $\alpha\beta$ -Di[Chloracetoxyl]äthan- $\alpha\beta$ -Dicarbonsäure. Sd. 210—215°₁₈ (Bl. [3] 13, 1057).
- 1) s-Phenylcamphelylthioharnstoff. Sm. 105-106° (G. 23 [2] 504). C16H24N2S C 77,7 — H 10,1 — O 6,5 — N 5,7 — M. G. 247. $\mathbf{C}_{16}\mathbf{H}_{25}\mathbf{ON}$

1) α-Oximido-α-[4-Oktylphenyl]äthan. Sm. 42-43° (B. 31, 939).

- 2) Phenylamid d. $\beta\zeta$ -Dimethylheptan- δ -Carbonsäure. Sm. 111° (Soc.
- 3) 4-Oktylphenylamid d. Essigsäure. Sm. 93° (B. 18, 135). II, 566.
 4) Isobutyl-4-Isobutylphenylamid d. Essigsäure. Sm. 73—74°; Sd. oberh. 300° (A. 211, 241; B. 14, 1473, 2187). II, 557.
 C 69,8 H 9,1 O 5,8 N 15,3 M. G. 275.
- C16H25ON8 1) β -Phenylamido- α -Camphelylharnstoff. Sm. 67—69° (G. 23 [2] 518).
- C 73,0 H 9,5 O 12,2 N 5,3 M. G. 263. $\mathbf{C}_{16}\mathbf{H}_{25}\mathbf{O}_{2}\mathbf{N}$ 1) Oxim d. bim. Dimethylcyklohexenon. Sm. 1970 (B. 32, 424).
 - 2) Lakton d. Amidomethyldihydroalantolsäure? Sm. 171° u. Zers. (2 HCl, PtCl₄) (A. 293, 358).
- 1) Aethyläther d. 5-Jod-6-Oxy-2, 3-Diketo-1, 1, 3, 3-Tetraäthyl-1, 2, 3, 4- $C_{16}H_{25}O_{3}J$ Tetrahydrobenzol. Sm. 51—52° (M. 10, 748). — II, 1026. C 65,1 — H 8,5 — O 21,7 — N 4,7 — M. G. 295.
- $\mathbf{C}_{16}\mathbf{H}_{25}\mathbf{O}_4\mathbf{N}$ 1) Diäthylester d. m-Propyldihydrolutidindicarbonsäure. (A. 246, 34). — IV, 95.
 - 2) Diäthylester d. Isopropyldihydrolutidindicarbonsäure. Sm. 97° (A. 231, 47). — IV, 95.
- 1) Enolform d. Verbindung $C_{16}H_{25}O_4Cl$ (aus Carvon). Fl. (B. 32, 89). 2) Ketoform d. Verbindung $C_{16}H_{25}O_4Cl$ (aus Carvon). Sm. 146° (B. 20, $\mathbf{C}_{16}\mathbf{H}_{25}\mathbf{O}_{4}\mathbf{C}\mathbf{I}$
- 489; **32**, 89). **II**, 768. C 58,7 H 7,6 O 29,3 N 4,3 M. G. 327. 1) Sinapin. Salze, siehe diese u. (HCl, HgCl₂), H₂SO₄ + 2(5)H₂O, HNO₃ + 2 H₂O, CHNS (A. 84, 10; **199**, 163; Am. 6, 52; C. **1897** [1] 821; B. 30, $C_{16}H_{25}O_6N$
 - 2328). III, *931*. 2) Nitrohederasäure (J. 1878, 960). — I, 733.

3) Triäthylester d. ε-Cyanhexan-ααε-Tricarbonsäure. Fl. (B. 29, 730). C16H25O6N 1) Tetraäthylester d. α -Chlorbutan- $\alpha \alpha \beta \beta$ -Tetracarbonsäure. Fl. (B. 17, C16H25O8Cl 2786). — I, 860. 1) Phenyldi[I-Piperidyl]phosphin. Sm. 78° (B. 31, 1041). — IV, 1682. $\mathbf{C}_{16}\mathbf{H}_{25}\mathbf{N}_{2}\mathbf{P}$ 1) Dipropylamid d. Dimethylphenyldithioallophansäure (Dimethyldi-C16 H25 N3 S2 propylphenyldithiobiuret). Sm. 80,5-81° (B. 26, 1686). — II, 400. C 73.3 - H 9.9 - O 6.1 - N 10.7 - M. G. 262. $\mathbf{C}_{18}\mathbf{H}_{26}\mathbf{ON}_{2}$ 1) s-Phenylnonylharnstoff. Sm. 636 (B. 24, 3359). — II, 378. 1) Pentaäthylbenzolsulfonsäure. NH₄ + H₂O, Na + 4H₂O, K + 2H₂O, Ba + 9H₂O (B. 21, 2815). — II, 160. C 61,9 — H 8,4 — O 20,7 — N 9,0 — M. G. 310. Diäthylester d. Piperazin-1,4-Dicrotonsäure. Sm. 140° (J. pr. [2] 53,24). $\mathbf{C}_{16}\mathbf{H}_{26}\mathbf{O}_3\mathbf{S}$ C16H26O4N2 Verbindung (Säure) (Z. 1865, 564).
 Stärkeschwefelsäure (A. 55, 13). — I, 1087. $\mathbf{C}_{16}\mathbf{H}_{26}\mathbf{O}_4\mathbf{Br}_4$ $\mathbf{C}_{16}\mathbf{H}_{26}\mathbf{O}_{16}\mathbf{S}$ 1) Chlorisobutylat d. 2-Isobutyl-1, 3-Dihydroisoindol. 2+PtCl₄, +AuCl₃ $C_{16}H_{26}NCl$ (B. 31, 426). 1) Bromisobutylat d. 2-Isobutyl-1,3-Dihydroisoindol. Sm. 2730 (B. $\mathbf{C}_{16}\mathbf{H}_{26}\mathbf{NBr}$ 31, 426). 1) s-Phenylnonylthioharnstoff. Sm. 58-60° (B. 24, 3359). — II, 392. C 72,5 — H 10,2 — O 12,0 — N 5,3 — M. G. 265. $\mathbf{C}_{16}\mathbf{H}_{26}\mathbf{N}_{2}\mathbf{S}$ $\mathbf{C}_{16}\mathbf{H}_{27}\mathbf{O}_{2}\mathbf{N}$ 1) Verbindung (aus l-Fenchylamin) (A. 269, 365). - IV, 58. 1) Brompalmitolsäure. Sm. 31° (A. 143, 31). — I, 535. C 68,3 — H 9,6 — O 17,1 — N 5,0 — M. G. 281. 1) Aethylester d. 1-Oximido-3-Hexyl-5-Methyl-1,2,3,4-Tetrahydro- $\mathbf{C}_{16}\mathbf{H}_{27}\mathbf{O}_{2}\mathbf{Br}$ $C_{16}H_{27}O_3N$ benzol-4-Carbonsäure. Sm. 109-1110 (A. 288, 343). C 61,4 - H 8,6 - O 25,6 - N 4,4 - M. G. 313.C16H27O5N 1) Diäthylester d. δ -Diäthylamido- δ -Oxy- $\alpha\gamma$ -Butadiënäthyläther- $\alpha\gamma$ -Dicarbonsäure. Fl. (A. 285, 99). C 49,3 - H 6,9 - O 32,9 - N 10,8 - M. G. 389. $C_{16}H_{27}O_8N_3$ 1) Verbindung (aus Guanidin u. Dicarboxyglutakonsäurediäthylester). Sm. 163° u. Zers. (Soc. 67, 1008). C 68,6 — H 10,0 — O 11,4 — N 10,0 — M. G. 280. 1) Azocamphanon. Sm. 222° (G. 24 [2] 48). 2) Tropinpinakon. Sm. 188°. (2HCl, PtCl₄ + 2H₂O), (HCl, AuCl₃), Pikrat $C_{16}H_{28}O_2N_2$ (B. 31, 1672). (B. 31, 1672).
3) Lupaninmethyloxydhydrat. Fl. Salze siehe (A. 230, 379).

C₁₈H₂₈O₂N₉ 1) Protamin. (2HCl, PtCl₄) (C. 1896 [2] 101).

C₁₆H₂₈O₂Br₂ 1) Dibromhypogäsäure (A. 143, 29). — I, 525.

C₁₆H₂₈O₂Dr₄ 1) Tetrabrompalmitinsäure (A. 143, 29). — I, 488.

C₁₆H₂₈O₂N₂ 1) Säure (aus Palmitolsäure). Sm. 51° (B. 27, 3400).

C₁₆H₂₈O₃N₂ 10 C 64,8 — H 9,5 — O 16,2 — N 9,5 — M. G. 296.

1) Verbindung (aus Dialdan u. NH₃). 2HCl (J. 1880, 524). — I, 964.

C₁₆H₂₈O₄N₂ 1 Diäthylester d. Aethylendi[β-Amido-α-Methylerotonsäure]. Sm. 103 bis 104° (Soc. 63, 1310). C 58.5 - H 8.5 - O 24.4 - N 8.5 - M. G. 328. $C_{16}H_{28}O_5N_2$ 1) Verbindung (aus Aethanoxyd u. Phenylhydrazin). Sd. 230-2400 (M. 15, 671). — IV, 660. C 76,5 — H 11,5 — O 6,4 — N 5,6 — M. G. 251. $\mathbf{C}_{16}\mathbf{H}_{29}\mathbf{ON}$ 1) Tetrabutyraldin. (2HCl, PtCl₄) (A. 157, 354). — I, 944. C 71.9 — H 10.9 — O 12.0 — N 5.2 — M. G. 267. 1) Aethylcarpain. Sm. 91°. (2HCl, PtCl₄ + 3H₂O), (HCl, AuCl₈), HJ. — $C_{16}H_{29}O_2N$ 1) Bromhypogäsäure (A. 143, 26). — I, 524. $C_{18}H_{29}O_{2}Br$ 2) Säure (aus Palmitinsäure). Ba (B. 25, 485). C₁₆H₂₉O₂Br₃ 1) Tribrompalmitinsäure. Sm. 39° (A. 143, 27). — I, 488.

 $\mathbf{C}_{16}\mathbf{H}_{30}\mathbf{O}_{2}\mathbf{N}_{2}$ C 68,1 — H 10,6 — O 11,3 — N 9,9 — M. G. 282. 1) s-Diacetoncamphelylharnstoff. Sm. 115° (G. 23 [2] 518).

2) 3,5-Diketo-2,6-Dihexylhexahydro-1,4-Diazin (Imid d. Imidocaprylsäure). HCl (A. 177, 139). — I, 1205.
3) Bis-Epipiperidinhydrin. Sm. 109°; Sd. bei 350°. (2HCl, PtCl₄) (M. 15,

1) Jodmethylat d. Spartein. Sm. 222-2256 (A. 235, 375; M. 16, 603).

123). — IV, 19.

 $C_{16}H_{29}N_2J$

- $\mathbf{C}_{16}\mathbf{H}_{80}\mathbf{O}_2\mathbf{Br}_2$ 1) Dibrompalmitinsäure (aus Gaïdinsäure) (A. 143, 39). I, 488. 2) Dibrompalmitinsäure (aus Hypogäsäure). Sm. 29° (A. 143, 24). —
- 1) Jodmethylat d. 6-Amido-5-Isopropyl-2,4-Diisobutyl-1,3-Diazin $C_{16}H_{90}N_{9}J$ (J. pr. [2] 37, 409). — IV, 1135.
- 1) Chlorid d. Palmitinsäure. Sm. 12°; Sd. 192,5°, (B. 9, 1932; 17, 1319). C₁₆H₈₁OCl - I, 460.
- $\begin{array}{c} \mathbf{C_{16}H_{31}O_{2}Br} & 1) & \alpha\text{-Brompalmitins\"{a}ure.} & \text{Sm. } 51,5-52^{\circ} & (B.\ 24,\ 938;\ 25,\ 484). \mathbf{I},\ 488. \\ \mathbf{C_{16}H_{31}O_{3}N_{9}} & C & 48,4 H & 7,8 O & 12,1 N & 31,7 M & G. & 397. \\ 1) & \mathbf{Protamin} & (Salmin); & \text{siehe auch } \mathbf{C_{30}H_{57}O_{6}N_{17}}. & (2HCl,\ PtCl_{4}),\ H_{2}SO_{4} & (B.\ 7,\ 376,\ 1714;\ H.\ 22,\ 179;\ 25,\ 169;\ C.\ 1896\ [2]\ 103). \mathbf{III},\ 926. \\ \mathbf{C_{16}H_{31}O_{4}N} & C & 63,8 H\ 10,3 O\ 21,3 N\ 4,6 M & G.\ 301. \end{array}$
- 1) Imidocaprylsäure. Sm. 210 215° u. Zers. Ca (A. 177, 136). I, 1205.
- C16H82ON8
- Nitrostearinsäure? siehe C₁₈H₃₅O₄N (Bl. 24, 449).
 C 54,5 H 9,1 O 4,5 N 31,8 M. G. 352.
 Azoxyverbindung (aus 3-Phenyl-2-m-Nitrophenyl-2,3-Dihydro-1,2,4-Naphtisotriazin) (Soc. 59, 700). IV, 1395.
 C 67,6 H 11,3 O 11,3 N 9,8 M. G. 284.
- $C_{16}H_{32}O_{2}N_{2}$ 1) α -Oktanoyl- β -Heptylharnstoff. Sm. 101—102° (B. 15, 760; 17, 1409).
- **I**, 1304. 1) α-Hexadeken-?-Sulfonsäure (Cetensulfonsäure). Sm. 18°. K (B. 7, 125). $C_{16}H_{32}O_3S$
- $\mathbf{C}_{16}\mathbf{H}_{33}\mathbf{ON}$
- I, 125. C 75,3 H 12,9 O 6,3 N 5,5 M. G. 255. 1) Laurinimidoisobutyläther. HCl (Sm. 65-66°) (B. 26, 2840). 2) Amid d. Palmitinsäure. Sm. 104—105° (101,5°); Sd. 235—236°₁₂ (152 bis 153°₀) (J. 1859, 367; B. 15, 1730; 24, 991; 26, 2840; 29, 1324; J. pr.
- [2] **52**, 60). **I**, 1249. Chloreetylalkohol. Sd. 300° (A. 126, 201). — I, 248.
 C 70,8 — H 12,1 — O 11,8 — N 5,2 — M. G. 271. $C_{16}H_{33}OC1$ C16H33O2N
- $C_{16}H_{33}O_{2}B$
- 1) Nitrit d. Cetylalkohol (G. 24 [2] 25).
 2) \(\alpha\)-Amidopalmitinsäure (B. 24, 941). I, 1205.
 1) Cetylborat. Sm. 58\(^{\alpha}\) (A. Spl. 5, 198). I, 345.
 C \(^{\alpha}\)-66,9 H 11,5 O 16,7 N 4,9 M. G. 287.
 1) Nitrat d. Oxyhexadekan (Salpetersäurecetylester) (Z. 1871, 469). $C_{16}H_{33}O_{3}N$
- I, 325. C 71,1 H 12,6 O 5,9 N 10,4 M. G. 270. $\mathbf{C}_{16}\mathbf{H}_{34}\mathbf{ON}_{2}$
 - 1) Pentadekylharnstoff. Sm. 109° (B. 30, 901). 2) Triisoamylharnstoff. Sm. 260° (B. 12, 1331). I, 1300.
- 3) Palmitinamidoxim. Sm. 101,5—102° (B. 26, 2845). C 61,1 H 10,8 O 10,2 N 17,8 M. G. 314. 1) αα'-Aethylidendi[ββ-Dipropylharnstoff]. Sm. 113° (R. 8, 237). $C_{16}H_{34}O_{2}N_{4}$
 - 2) $\alpha'\alpha'$ -Aethylidendi [$\beta\beta$ -Diisopropylharnstoff]. Sm. 147° (R. 8, 237). I. 1313.
- C16H34O4S 1) Cetylschwefelsäure. K (A. 19, 293; J. 1856, 579; 1857, 445; C. 1897 [1] 1037). — **I**, *333*.
- 1) Glykoseamylmerkaptal (Gemisch?). Sm. 138—1420 (B. 27, 678). C₁₆H₃₄O₅S₂ 1) Säure (aus Isobutyraldehyd). Sm. 140-142°. Ba + 2H₂O (A. ch. [6] 23, $C_{16}H_{35}O_6P$
- 343). I, 1504. 1) Kieselsäuretetraisobutylester. Sd. 256-260° (J. 1874, 349). — I, 346. C16H36O5Si
- 1) Unterphosphorsäuretetraisobutylester. Fl. (A. 232, 14). I, 339. $\mathbf{C}_{16}\mathbf{H}_{36}\mathbf{O}_{6}\mathbf{P}_{2}$ $C_{16}H_{36}NJ$
- 1) Tetrabutylammoniumjodid (A. 165, 114). Î, 1132. 1) Tetraisobutylphosphoniumjodid (B. 6, 297). I, 1503. $\mathbf{C}_{16}\mathbf{H}_{36}\mathbf{JP}$
- $C_{16}H_{40}O_{12}Si_4$ 1) polym. Diäthylkieselsäure. Sd. 270—290° (A. ch. [5] 7, 472). I, 346.

C₁₆-Gruppe mit vier Elementen.

C₁₈H₇O₂NCl₄ 1) 5,6,7,8-Tetrachlor-2-Phenylamido-1,4-Naphtochinon. Sm. 240°

. (B. 19, 1169). — III, 378. $\mathbf{C}_{16}\mathbf{H}_7\mathbf{O}_3\mathbf{N}_2\mathbf{Cl}_3$ 1) Verbindung (aus 2,3,7,8-Tetrachlor-5,6-Dioxy-1,4-Diketo-1,4-Dihydronaphtalin u. 1,2-Diamidobenzol). Sm. noch nicht bei 250° (A. 286, 53). - IV, 1059.

 $C_{16}H_7O_3N_3Br_4$ 1) Tetrabromimasatin (J. pr. [1] 25, 468). — II, 1608.

1) 2,4,5,6,7-Pentachlor-3-[2-Methylphenyl]amido-1-Ketoinden. Sm. C16H8ONCL 243° (A. **272**, 257). — III, 169.

1) 5,5-Dichlor-6-Keto-5,6-Dihydro-αβ-Naphtophenazin. Sm. 196 C₁₆H₈ON₂Cl₂ bis 197° (A. 295, 20). — IV, 1057.

1) ?-Chlorketonaphtophenoxazin. Sm. 194-195° (B. 28, 355). -C16H8ONCI IV, 460.

 $C_{16}H_8O_9N_9Cl_2$ 1) m-Dichlorindigo. subl. (A. 284, 156). — II, 1620.

2) Dichlorindin (J. pr. [2] 22, 263). — II, 1616.

 $C_{16}H_8O_2N_2Br_2$ 1) m-Dibromindigo. subl. (B. 12, 1315; 17, 968; A. 284, 155). II, 1620.

1) 3,7,8-Trichlor-2-Phenylamido-5,6-Dioxy-1,4-Diketo-1,4-Dihydro-C₁₆H₈O₄NCl₃ naphtalin. Sm. 224° (A. 286, 48). — III, 387. C₁₆H₈O₄N₂Cl₄ 1) Tetrachlorisatyd (J. pr. [1] 22, 262; [1] 25, 442). — II, 1615. C₁₆H₈O₁N₂Cl₄ 1) Tetrabromisatyd (J. pr. [1] 22, 262). — II, 1615. C₁₆H₉ON₂Cl 1) 5-Chlor-6-Oxy-αβ-Naphtophenazin. Sm. 199—200° (A. 286, 56;

295, 21). — IV, 1057.

1) Acetyldibromindophenazin (B. 29, 202). - IV, 1189. $C_{16}H_9ON_3Br_2$

1) 7,8-Dichlor-?-Phenylamido-1,4-Naphtochinon. Sm. 254-2550 C₁₆H₉O₂NCl₂ (B. 21, 3270). - III, 378.

2) ?-Dichlor-?-Phenylamido-1,4-Naphtochinon. Sm. 228° (B. 19, 3178). **– III**, 378.

1) ?-Brom-2-[4-Bromphenyl] amido-1,4-Naphtochinon. Sm. 238 bis C₁₆H₉O₂NBr₂ 240° (B. 14, 1901). — III, 379.

2) 2, 6-Dibrom-4-[4-Oxy-1-Naphtyl]imido-1-Keto-1, 4-Dihydrobenzol (Oxynaphtodibromdiphenazon). Zers. bei 201°. Na (A. 289, 104). -IV, 599.
1) 1-[1,3-Diketo-2,3-Dihydroindenyl-2-]benzthiazol. Sm. oberh. 3200

C, H, O, NS (B. 21, 2630). — III, 278.

 $C_{16}H_9O_2N_2Br$ 1) Bromindirubin (B. 14, 1745). — II, 1622.

1) 3-Chlor-2-Phenylnitrosamido-1,4-Naphtochinon. α-Modif. Sm. $\mathbf{C}_{16}\mathbf{H}_9\mathbf{O}_3\mathbf{N}_2\mathbf{C}\mathbf{1}$ 126°; β -Modif. Sm. 155° (B. 15, 486; 16, 895; 18, 3075). — III, 377.

 $C_{16}H_9O_3N_3Cl_2$ 1) Dichlorimasatin (J. pr. [1] 25, 467). — II, 1608.

 $C_{16}H_9O_3N_3Br_2$ 1) Dibromimasatin (Z. 1865, 593). — II, 1608.

1) 3-Chlor-2-[3-Nitrophenyl] amido-1,4-Naphtochinon. $C_{16}H_9O_4N_2Cl$ (B. 15, 485). — III, 377.

2) 3-Chlor-2-[4-Nitrophenyl]amido-1,4-Naphtochinon. Sm. 2820 (B. 15, 485; 16, 895). — III, 377.

 $C_{16}H_9O_4N_2Br$ 1) 3-Nitro-1,2-Naphtochinon-4-Bromphenylimid. Sm. 245—246° (B. 17, 1136). — III, 392.

 $C_{15}H_{2}O_{4}N_{3}Cl_{4}$ 1) Tetrachlorisamsäure. Ag (J. pr. [1] 35, 120). — II, 1609.

1) ?-Chlor-?-Trinitro-2-Phenylamidonaphtalin. Sm. 2300 (B. 23, 957). $\mathbf{C}_{16}\mathbf{H}_{9}\mathbf{O}_{6}\mathbf{N}_{4}\mathbf{C}\mathbf{1}$ **- II**, 602.

1) 2[oder 3]-Chlor-3[oder 2]-Oxy-1,4-Naphtochinonphenyläther-7-Sulfonsäure. Sm. 121° u. Zers. Ba + 2C₆H₆O, Pb, Ag + C₆H₆O C18HOCCIS (J. pr. [2] 37, 186). - III, 389.

C₁₆H₁₀ON₂Cl₂ 1) 3,4-Dichlor-2-Phenylimido-5-Keto-1-Phenyl-2,5-Dihydropyrrol (Dichlormale indianil). Sm. 186-1870 (B. 28, 58; A. 279, 132, 139;

 $\begin{array}{c} \textbf{295, } 34). \\ \textbf{C}_{16}\textbf{H}_{10}\textbf{ON}_{2}\textbf{Br}_{2} \textbf{ 1)} \textbf{ 1[?]-[2,4-Dibromphenyl]} \textbf{azo-2-Oxynaphtalin.} & Sm. \ 197^{0} \ (B. \ \textbf{30}, \ 78). \end{array}$ 2) ?-Dibrom-1-Oxy-2-Phenylazonaphtalin. Sm. 215-2190 (B. 17, 3031). **- IV**, 1429.

3) ?-Dibrom-6-Benzoylamidochinolin. Sm. 1590 (J. pr. [2] 53, 126). **- IV**, 913.

1) Acetyl-m-Chlorisatohydrophenazin. Sm. 2150 (B. 28, 2530). — C₁₆H₁₀ON₈Cl IV, 1189.

C₁₆H₁₀O₂NCl 1) 3-Chlor-2-Phenylamido-1,4-Naphtochinon. Sm. 2020 (B. 15, 485; 21, 893, 1039; A. 210, 189). — III, 377.

- $C_{16}H_{10}O_{2}NCl$ 2) 5-Chlor-8-Phenylamido-1, 4-Naphtochinon? Sm. 183—185° (B. 19, 1156). — III, *372*.
 - 3) 3-Chlor-4-Phenylimido-2-Oxy-1-Keto-1, 4-Dihydronaphtalin. Sm. 253° (B. 19, 2499). — III, 383.
- C₁₆H₁₀O₂NBr 1) 3-Brom-2-Phenylamido-1, 4-Naphtochinon. Sm. 194° (J. r. 16, 420; B. **27**, 2758). — III, *378*.
 - 2) ?-Brom-?-Phenylamido-1,4-Naphtochinon. Sm. 165-1660 (B. 14, 1902; **21**, 389). — III, 378.
 - 3) 2-[4-Bromphenyl]amido-1,4-Naphtochinon. Sm. 266-269° (B. 14, 1902). — III, *375*.
 - 4) 4-[4-Bromphenyl]imido-2-Oxy-1-Keto-1, 4-Dihydronaphtalin.
- Sm. 252° (B. 27, 243). III, 393. C₁₆ $\mathbf{H}_{10}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{Cl}_{2}$ 1) 3,6-Dichlor-2,5-Diketo-1,4-Diphenyl-1,2,4,5-Tetrahydro-1,4-Diazin. Sm. 247° (J. pr. [2] 41, 84). — II, 430.
- $C_{16}H_{10}O_2N_2S_2$ 1) Dibenzoat d. 2,5-Dimerkapto-1,3,4-Thiodiazol. Sm. 184-1850 (B. 27, 2519). — II, 1291.
- $C_{16}H_{10}O_2N_4S_2$ 1) Disulfid d. 5-Merkapto-2-Keto-3-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 78-79° (B. 27, 2516). — IV, 683.
- 1) Chlorisaphensäure. Sm. 220° (B. 26, 2485). II, 1898. $\mathbf{C}_{16}\mathbf{H}_{10}\mathbf{O}_{3}\mathbf{NCI}$
- 1) Bromisaphensäure. Sm. oberh. 310° (B. 26, 2484). II, 1898. C16H10O8NBr
- $C_{16}H_{10}O_3N_2S$ 1) $\alpha\beta$ -Naphtophenazin-l-Sulfonsäure. K (B. 27, 2366). — IV, 1052. 2) $\alpha\beta$ -Naphtophenazin-?-Sulfonsäure. Sm. oberh. 290°. Na $+2H_2O$ (B. **20**, 2661). — **IV**, 1052.
- $C_{16}H_{10}O_3N_4Cl_4$ 1) Tetrachlorisamid (J. pr. [1] 35, 119). II, 1609.
- $C_{16}H_{10}O_4N_2Cl_2$ 1) Dichlorisatyd. Zers. bei 220—240° (*J. pr.* [1] **22**, 261; [1] **24**, 6; [1] **25**, 442). II, 1615.
- $C_{16}H_{10}O_4N_2Br_61$) $\alpha\beta$ -Di[?-Tribromphenylamido] $\alpha\beta$ -Dicarbons $\alpha\beta$ -Dicarbons β -Dicarbon
- u. Zers. Na₉, K₂, Ba (B. 21, 1800).— II, 438. C₁₆H₁₀O₄N₄S₂ 1) Di[4-Nitrobenzyliden]dithiooxamid? Sm. 269° (B. 24, 1028).— III. 35.
- 1) Indigosulfonsäure (Phönicinschwefelsäure). 'K + H₂O (Berz. J. 4, $\mathbf{C}_{16}\mathbf{H}_{10}\mathbf{O}_{5}\mathbf{N}_{2}\mathbf{S}$ 189, 190; **7**, 262; A. **48**, 340; Gm. **6**, 462). — II, 1621.
- $\mathbf{C}_{16}\mathbf{H}_{10}\mathbf{O}_{6}\mathbf{N}_{2}\mathbf{S}$ 1) 3-Phenylazo-2-Oxy-1, 4-Naphtochinon-3⁴-Sulfonsäure. Na (B. 30, 2129). — IV, 1481.
- $C_{16}H_{10}O_6N_3Cl$ 1) Chlortrinitrobenzol + Naphtalin. Sm. 95 96° (B. 8, 378). -II, 182.
- $C_{16}H_{10}O_8N_2S_2$ 1) Indigodisulfonsäure (Cörulinschwefelsäure). Na₂, K₂, Ba (A. 22, 73; B. 11, 1365; 24, 1477; Berz. J. 4, 189, 190; 7, 262; 14, 316). II, 1621.
 - 2) Indindisulfonsäure. $K_2 + 5H_2O$, $Ba + 2H_2O$, Ag_2 (A. 120, 23). **- II**, 1616.
- $C_{16}H_{10}O_{14}N_2S_4$ 1) Indigotetrasulfonsäure. $Na_4 + 10H_2O$, $Ba_2 + 6H_2O$ (Bl. [3] 7, 619). **– II**, *1622*.
- C₁₆H_{.1}ONCl₂ 1) 2,4-Dichlor-1-Phenylamido-3-Oxynaphtalin. Sm. 62° (B. 21, 3546). - III, 171.
- $\mathbf{C}_{16}\mathbf{H}_{11}\mathbf{ONBr_2}$ 1) Verbindung (aus d. Nitril d. α -[4-Bromphenyl]- β -[4-Methoxylphenyl]-akrylsäure). Sm. 186° (A. 250, 162). II, 1707.
- C₁₈H₁₁ON₂Cl 1) 3-Chlor-5-Keto-4-Benzyliden-1-Phenyl-4,5-Dihydropyrazol. Sm. 108—109° (B. **31**, 3008).
 - 2) 2-Oxy-1-[4-Chlorphenylazo]naphtalin. Sm. 162,5° (Soc. 53, 676). **- IV**, 1429.
 - 3) Nitril d. α [oder β] Chlor- β Oxy- β -Phenyl- α -[2-Cyanphenyl] propionsäure. Sm. 270° (B. 27, 833). II, 1974.
- C₁₆H₁₁ON₂Br 1) 5-Brom-4-Oxy-1-Phenylazonaphtalin. Sm. 197^o (Soc. 63, 1058). **- IV**, 1429.
 - 2) **2**-Oxy-1-[4-Bromphenylazo]naphtalin. Sm. 167—168° (172—173°) (G. 13, 439; B. 17, 3032; **28**, 1222. IV, 1429.
 - 3) 4-Oxy-l-[4-Bromphenylazo]naphtalin. Sm. 237—238° (G. 14, 271; B. 28, 1896). — IV, 1429.
- 1) 4-Thionylamido-1-Phenylazonaphtalin. Sm. 136° (B. 28, 2197). C16H11ON3S · IV, 1392.
- 1) Chlorderivat d. Anhydro-5-Keto-1-Phenyl-4,5-Dihydro-1,2,4- $\mathbf{C}_{16}\mathbf{H}_{11}\mathbf{ON}_{6}\mathbf{Cl}$ Triazol (C. 1897 [1] 593).

- C₁₆H₁₁O₂NBr₂ 1) 4-[3,5-Dibrom-4-Oxyphenyl]amido-1-Oxynaphtalin. Zers. bei 152° (A. 289, 108).
- $C_{16}H_{11}O_{2}N_{3}C_{1}$ 1) 7-Chlor-8-[4-Methylphenyl]imido-6-Oxy-5-Keto-5,8-Dihydrochinolin. Sm. 178-180° (A. 290, 369). - IV, 279.
 - 2) 2-Chlor-4-Phenylazo-1, 3-Dioxynaphtalin. Sm. bei 190° (A. 300,
 - 194). IV, 1450. 3) Phenylimid d. Phenylamidochlormaleïnsäure. Sm. 188—189° (B. 28, 58; A. 295, 36).
- C₁₆H₁₁O₂N₂Br 1) 4, 5 Diketo 2 Brommethylen 1, 3 Diphenyltetrahydroimidazol (Bromvinylidenoxanilid). Sm. 1890 (B. 30, 2793, 2879).
 - 2) ?-Brom-I-Phenylazo-2, 4-Dioxynaphtalin. Sm. 196-1980 (B. 17,
 - 1813). IV, 1449. 3) Phenylimid d. Phenylamidobrommaleïnsäure. Sm. 182—183° u. Zers. (Am. 9, 190). — II, 441.
- 1) Oxalyldiphenyldithiobiuret. Sm. 215° (J. pr. [2] 32, 16). II, 411.
 1) Diphenyläther d. 3,4-Dichlor-5,5-Dioxy-2-Keto-2,5-Dihydro- $C_{16}H_{11}O_2N_3S_2$ $\mathbf{C}_{16}\mathbf{H}_{11}\mathbf{O}_{3}\mathbf{NCl}_{2}$ pyrrol (Dichlormaleïnimiddiphenyläther). Sm. 170° (A. 295, 81).
- $C_{16}H_{11}O_3NBr_2$ 1) Bromverb. d. Benzoylimidocumarin (G. 19, 54). II, 1633. $\mathbf{C}_{16}\mathbf{H}_{11}\mathbf{O}_{3}\mathbf{N}_{3}\mathbf{S}$ 1) 1-Phenylnaphttriazol-14-Sulfonsäure (Phenylazimidonaphtalinsulfon-
- säure). K (B. 27, 2375). IV, 1170. $C_{16}H_{11}O_1N_2Cl$ 1) 1-Chlor-2, 4-Dinitrobenzol + Naphtalin. Sm. 78° (B. 11, 603). -
- II, 182.
- $\mathbf{C}_{16}\mathbf{H}_{11}\mathbf{O}_4\mathbf{N}_3\mathbf{Cl}_2$ l) Dichlorisamsäure (*J. pr.* [1] **35**, 118). II, 1609. $\mathbf{C}_{16}\mathbf{H}_{11}\mathbf{O}_4\mathbf{N}_3\mathbf{Br}_2$ l) Dibromisamsäure. K (*Z.* 1865, 594). II, 1609.
- 1) 1-Keto-4-Phenylimido-2-Oxy-1,4-Dihydronaphtalin-6-Sulfon- $C_{16}H_{11}O_5NS$ säure. K (B. 27, 3053). — III, 397.
 - 2) 1-Keto-4-Phenylimido-2-Oxy-1,4-Dihydronaphtalin-7-Sulfonsäure. K (B. 27, 3054). — III, 397.
 - 3) 4-Phenylimido 2 Oxy 1 Ketonaphtalin 4⁴-Sulfonsäure. Na (B. **27**, 27).
 - 4) 2-Phenylamido-1,4-Naphtochinon-7-Sulfonsäure. Ba, Anilinsalz (B. **32**, 239).
- 1) 2-Nitrophenolazonaphtionsäure. Na (Am. 2, 243). IV, 1415. C16H11O6N3S 2) 2-Oxy-1-[4-Nitrophenylazo] naphtalin-13-Sulfonsäure. Na (B. 22, 848). — IV, 1432.
- 1) 4-[4-Nitrophenyl]hydrazon-5-Keto-1-Phenyl-4,5-Dihydropyrazol- $C_{16}H_{11}O_8N_5S$ 3-Carbonsäure-1⁴-Sulfonsäure. Na + H₂O, Ba, Ag₂ (B. 29, 2018;
- A. **299**, 100). **IV**, 730. 1) 2-Oxy-?-[3-Nitrophenyl]azonaphtalin-?-Disulfonsäure. Na₂ (J. $C_{16}H_{11}O_{9}N_{3}S_{2}$
- 1881, 489). IV, 1433.

 1) 3-Chlor-1-Keto-4-Benzyl-1, 2-Dihydroisochinolin. Sm. 234° (B. 21, $\mathbf{C}_{16}\mathbf{H}_{12}\mathbf{ONCl}$
 - 2683). IV, 437. 2) 4-Chlor-1-Keto-2-Methyl-3-Phenyl-1,2-Dihydroisochinolin? Sm. 76° (B. 19, 2357). — IV, 432.
 - 3) 1-Chlor-3-Keto-4-Benzyl-3, 4-Dihydroisochinolin. Sm. 1950 (B. 21, 2683). — IV, 437.
- 1) 3- $[\gamma\gamma\gamma$ -Trichlor- β -Oxypropyl]- β -Naphtochinolin (β -Naphtochinaldinchloral). Sm. 185° (B. 22, 266). IV, 420. C₁₆H₁₂ONCl₃
 - 2) 3-[γγγ-Trichlor-β-Oxypropyl]akridin (3-Methylakridinchloral) (B. 20, 1543). IV, 420.
 1) Nitril d. α-[4-Bromphenyl]-β-[4-Methoxylphenyl]akrylsäure. Sm.
- $\mathbf{C}_{16}\mathbf{H}_{12}\mathbf{ONBr}$ 135° (A. **250**, 162). — II, 1707.
- C16H12O2NC1 1) ?-Chlor-?-Phenylamido-1,4-Dioxynaphtalin. Sm. 170—1710 u. Zers. (A. 210, 190). — II, 983.
- 2) 2-Chlormethylbenzylimid d. Benzol-1, 2-Dicarbonsäure. Sm. 140° (B. 21, 580). — II, 1805. $C_{16}H_{12}O_2N_2Cl_2$ 1) Verbindung (aus Diphenyläthanamidin) (B. 18, 2427; 19, 2341). —
- $C_{16}H_{12}O_2N_2Br_2$ 1) Diphenylamid d. Dibrommaleïnsäure. Sm. 138—140° (Am. 9, 189).
- **II**, 417. $C_{16}H_{12}O_2N_2J_2$ 1) Diphenylamid d. Dijodfumarsäure. Zers. bei 230° (B. 26, 848). —
- II, 416. $\mathbf{C}_{16}\mathbf{H}_{12}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{S}$ 1) 1-Phenylsulfondiazonaphtalin. Sm. 95° (B. 30, 315). — IV, 1540.
- $C_{16}H_{12}O_2N_2S_2$ 1) Dithioisatyd (Disulfisatyd) (J. pr. [1] 24, 16; [1] 25, 438). II, 1616.

- $\mathbf{C_{16}H_{12}O_2N_2S_2}$ 2) $\mathbf{Di[2\text{-}Oxybenzyliden]}$ dithioxamid (B. 24, 1028). III, 74.
- C₁₆H₁₂O₂N₃Br 1) Acetat d. ?-Brom-3-Phenylhydrazon-2-Oxypseudoindol (Phenylhydrazon d. Acetylbromisatin). Sm. 224° (B. 28, 546). — IV, 695.
 - 2) 3-Brom-4-Aethoxylphenylimid d. Benzol-1, 2-Dicarbonsäure. Sm. 195—196° (B. 30, 1173).
- 1) Thioisatyd (Sulfisatyd) (J. pr. [1] 25, 444). II, 1615. $C_{16}H_{12}O_3N_2S$
- $\mathbf{C}_{16}^{\bullet}\mathbf{H}_{12}^{\bullet}\mathbf{O}_{3}\mathbf{N}_{2}^{\bullet}\mathbf{S}_{2}$ 1) 2-Merkapto-1-Phenylazonaphtalin-1-Sulfonsäure. Na $(J.\ pr.\ [2]$ 41, 220). — IV, 1432. $C_{16}H_{12}O_3N_4Cl_2$ 1) Dichlorisamid (J. pr. [1] 35, 119). — II, 1609. $C_{16}H_{12}O_3N_4Br_2$ l) Dibromisamid (Z. 1865, 594). — II, 1609.

- 1) 2-Oxy-1-Phenylazobenzol-1 3 -Sulfonsäure. Ba + 5 H₂O (B. 11, 2197). $\mathbf{C}_{16}\mathbf{H}_{12}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{S}$ **IV**, 1431.
 - 2) 2-Oxy-1-Phenylazonaphtalin-14-Sulfonsäure (B. 11, 2198; Soc. 51,
 - 187). IV, 1432. 3) 2-Oxy-1-Phenylazonaphtalin-?-Sulfonsäure. Ba (B. 11, 2197). IV, 1432.
 - 4) 3-Oxy-1-Phenylazonaphtalin-4-Sulfonsäure. Ag (B. 10, 1380; 11,
 - 2197). IV, 1432. 5) 4-Oxy-1-Phenylazonaphtalin-13-Sulfonsäure (B. 11, 2197). —
 - IV, 1431.
 - 6) 4-Oxy-1-Phenylazonaphtalin-14-Sulfonsäure. Na (B. 14, 1796; A.
 - 211, 60; Soc. 51, 184). IV, 1431. 7) 1-Oxy-2-Phenylazonaphtalin-24-Sulfonsäure. Na (B. 24, 1597). IV, 1431.
 - 8) 1-Oxy-2-Phenylazonaphtalin-3-Sulfonsäure. Na (B. 30, 54). IV, 1432.
 - 9) 1-Oxy-2-Phenylazonaphtalin-4-Sulfonsäure. Na + 3H₂O (B. 23, 809). **— IV**, *1432*.
 - 10) 1-Oxy-2-Phenylazonaphtalin-5-Sulfonsäure. Na (B. 30, 51). IV, 1432
 - 11) Säure (aus 3-Cyanbenzol-1-Carbonsäure). Sm. 1990 (B. 20, 528). II, 1229.
 - 12) Phenylamid d. 1-Nitronaphtalin-7-Sulfonsäure. Sm. 172-1730 (A. **275**, 252). — II, 213.
 - 13) Phenylamid d. 1-Nitronaphtalin-8-Sulfonsäure. Sm. 173° (A. 275, 244). — II, 214.
- 1) 1-[2,4-Dioxyphenyl]azonaphtalin-4-Sulfonsäure. Na. IV, 1446. $C_{16}H_{12}O_5N_2S$ 1) 2-[4-Nitrophenyl]azo-1-Amidonaphtalin-3-Sulfonsäure (B. 30, 54). $C_{16}H_{12}O_5N_4S$
- · IV, 1399. $\mathbf{C}_{16}\mathbf{H}_{12}\mathbf{O}_{6}\mathbf{N}_{2}\mathbf{Br}_{2}\mathbf{1}$) Verbindung (aus Diisatinsäure) (C. 1898 [2] 203). $C_{16}H_{12}O_6N_2S_2$ 1) Aethylenimid d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm. 245
- bis 246° (B. 30, 1265; C. 1897 [1] 236). $C_{16}H_{12}O_7N_2S_2$ 1) 4-Oxyphenylazonaphtalindisulfonsäure (J. 1881, 490). — IV, 1415.
- 2) 2-Oxy-1-Phenylazonaphtalin-1⁴,?-Disulfonsäure. Ba + 7¹/₂H₂O (B. 11, 2198). -- IV, 1432.
 - 3) isom. 2-Oxyphenylazonaphtalindisulfonsäure. Na2, Ba (Soc. 51,
- 196). IV, 1432. C₁₆H₁₂O₉N₂S₂ 1) Flavindindisulfonsäure? (A. 120, 30).
- C₁₆H₁₂O₉N₄S₂ 1) 5-Keto-4-Phenylhydrazon-1-Phenyl-4,5-Dihydropyrazol-3-Carbonsäure-14,44-Disulfonsäure (Tartrazinsäure; Tartrazin). Na₂, Na₃ (Tartrazin), Ba, Ba₃ + 6H₂O (A. 294, 226; 299, 127; B. 20, 840). IV, 729.
 - 2) ?-[2-Nitro-4-Amidophenyl]azo-2-Oxynaphtalin-3, 6-Disulfonsäure. Na₂ (B. 30, 986). — IV, 1551.
- $\mathbf{C}_{18}\mathbf{H}_{12}\mathbf{O}_{10}\mathbf{N}_2\mathbf{S}_3$ 1) 2-Oxyphenylazonaphtalintrisulfonsäure. Na₃. IV, 1433.
- 1) γ -Rhodan- α -Keto- $\alpha \gamma$ -Diphenylpropan. Sm. $88-89^{\circ}$ (B. 28, 959). C₁₆H₁₃ONS
- III, 228. $\mathbf{C_{16}H_{18}ON_{2}Br} \quad 1) \ \, \textbf{4-Brom-3-Keto-1-Methyl-2,5-Diphenyl-2,3-Dihydropyrazol.} \quad \mathbf{Sm.}$
- $110-120^{\circ}$ (B. **20**, 2549). **IV**, 906.
 - 2) 3-[3-Brom-4-Methylphenyl]imido-2-Keto-5-Methyl-2, 3-Dihydroindol (4-Methylisatin-3-Brom-4-Tolylimid). Sm. 210° (B. 19, 2267). II, 1652.
- 1) 5-Acetylphenylamido-2-Phenyl-1,2,4-Thiodiazol. Sm. 1960 (B. 24, C1. H1. ON. S 397). **— IV**, 847.

2) 3-Acetyl-2-Phenylimido-5-Phenyl-2, 3-Dihydro-1, 3, 4-Thiodiazol. C16H13ON3S

Sm. 140° (B. 29, 2916). — IV, 1159. 1) Phenylamid d. Naphtalin-1-Sulfonsäure. Sm. 112° (Bl. 27, 360). C₁₆H₁₈O₂NS - II, 425.

- 2) Phenylamid d. Naphtalin-2-Sulfonsäure. Sm. 132° (Bl. 27, 360). II. 425.
- 3) 1-Naphtylamid d. Benzolsulfonsäure. Sm. 166—167° (163°) (B. 27, 2371; A. 287, 230; Am. 19, 764).
- 4) 2-Naphtylamid d. Benzolsulfonsäure. Sm. 102-1030 (970) (B. 27, 2371; Am. 19, 765).
- 5) Acetat d. Verbindung C₁₄H₁₁ONS. Sm. 131—132° (B. 22, 334). II, 822.
- C₁₆H₁₃O₂N₂Cl 1) Chlorbenzylat d. 5 [oder 8]-Nitroisochinolin. Sm. 205° (M. 14, 154). — IV, 302.
 - Di[Phenylamid] der Chlorfumarsäure. Sm. 186° (A. 279, 143). Verbindung (aus Dicyanoxystilben). Sm. 1960 (B. 27, 833). II, 1974.
- $C_{16}H_{13}O_{2}N_{2}Cl_{3}$ 1) $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[Benzoylamido]äthan. Sm. 267° (257°) (B. 9.
- 1428; A. ch. [6] 26, 33). II, 1194.

 1) Verbindung (aus Toluylenoxamäthan). Sm. 198° (A. 268, 310). $C_{16}H_{13}O_{2}N_{3}S$ IV, 605.
- C₁₈H₁₈O₂N₄Cl 1) Aethylester d. Cyklodiphenyltetrazoliumchloridearbonsäure (A. **295**, 335). — IV, 1291.
- $C_{16}H_{13}O_{3}NBr_{2}$ 1) $\alpha\beta$ -Dibrom- β -[2-Benzoylamidophenyl] propionsäure. Zers. bei 210 bis 220° (B. **25**, 1266). — II, 1367.
- 1) 2-Phenylamidonaphtalin-5-Sulfonsäure (B. 27, 2364). 2) 2-Phenylamidonaphtalin-8-Sulfonsäure (B. 27, 2364). $C_{16}H_{18}O_{3}NS$
 - 3) Benzylester d. Chinolin-6-Sulfonsäure + 2H₂O. (+ J₂, KJ) (B. 19, 920). — IV, 292.
 - 4) Benzylester d. Chinolin-8-Sulfonsäure. Sm. 84° (A. 282, 133). IV, 293.
- $C_{16}H_{13}O_3N_2Br$ 1) Dimethyläther d. 5-Brom-7,8-Dioxy-1-Keto-1,2-Dihydro-2-Phenyl-2, 3-Benzdiazin (Bromopianylphenylhydrazid). Sm. 160° (B. **25**, 1999). — **IV**, 716.
- 1) 1-Amido-2-Phenylazonaphtalin-5-Sulfonsäure. Na (B. 30, 53). $C_{16}H_{13}O_{3}N_{3}S$ IV, 1399.
 - 2) 2-Amido-1-Phenylazonaphtalin-14-Sulfonsäure. $K + 7\frac{1}{2}H_2O$ (B. 15, 2191). — IV, 1398.
 - 3) 4-Amido-1-Phenylazonaphtalin-14-Sulfonsäure. $K + 3H_2O$, Ba + $3 H_2 O$ (B. 12, 427; 15, 2190; 22, 2069). — IV, 1398.
 - 4) 2-Methyl-4, 6-Diphenyl-1, 3, 5-Triazin-?-Sulfonsäure. Na+31/9, H₂O,
- $\begin{array}{c} \text{Ba} + 6\,\text{H}_2\text{O} \cdot \text{Briefly1-4}, 3, 3, 3-1\,\text{Hazin-1-SuitoBattle} \cdot \text{Na} + 5^{\prime}_2\,\text{H}_2\text{O}, \\ \text{Ba} + 6\,\text{H}_2\text{O} \cdot \text{Ag} \; (\text{Pinner}, \, \text{Imidoäther} \; 163). & \quad \text{IV}, \, 1191. \\ \textbf{C}_{16}\,\textbf{H}_{13}\,\textbf{O}_4\textbf{N}_2\textbf{Cl}_3 \; 1) \; \text{P-Trichlor-}\alpha\,\alpha\text{-Di}\,[\text{P-Nitrophenyl}]\,\text{butan} \; (B. \; 7, \; 1421). & \quad \text{II}, \; 240. \\ \text{2)} \; \beta\beta\beta\text{-Trichlor-}\alpha\,\alpha\text{-Di}\,[\text{P-Nitro-4-Methylphenyl}]\,\text{äthan}. \; \text{Sm. } 121-122^{\circ} \\ \text{(B. \; 7, \; 1192).} & \quad \text{II}, \; 239. \\ \textbf{C}_{16}\,\textbf{H}_{13}\,\textbf{O}_6\textbf{N}_3\textbf{S}_2 \; 1) \; \text{4-Amido-2-Phenylazonaphtalin-2}^4, \text{4-Disulfonsäure}\, \text{P} \; \text{Ba} + 7^{1/}_2\,\text{H}_2\text{O}. \\ \end{array}$
- (B. 15, 2194). IV, 1399.
- C₁₆H₁₃O₆N₆Cl 1) Aethylester d. 2-Chlor-1,2-Di[3-Nitrophenyl]-2,2-Dihydro-1,2,3,5-Tetrazol-4-Carbonsäure. Sm. 175-176° (B. 28, 1695). - IV, 1240.
- $C_{16}H_{13}O_7N_3S_2$ 1) 2-Oxy-1-[4-Amidophenyl]azonaphtalin-3, 6-Disulfonsäure (B. 17, 344, 1350). — IV, 1433.
- 1) 2-Phenylamidonaphtalin -? Trisulfonsäure. Ba (A. 209, 160; $\mathbf{C}_{16}\mathbf{H}_{18}\mathbf{O}_{9}\mathbf{NS}_{8}$ Ph. Ch. 11, 632). — II, 632.
- C₁₆H₁₃O₁₉NS₄ 1) 1-Phenylamidonaphtalin-?-Tetrasulfonsäure. Ba₂ (A. **209**, 156). II, 632.
- 1) Chlorbenzylat d. ?-Bromisochinolin. Sm. 115°. 2 + PtCl₄ (J. pr. C₁₆H₁₃NClBr [2] 43, 193). — IV, 301. 1) Chlorbenzylat d. 6-Oxychinolin + $1\frac{1}{2}$ H₂O. Sm. 235-237° u. Zers.
- C₁₆H₁₄ONCl
 - 2 + PtCl₄ (J. pr. [2] 43, 526). IV, 27J.

 2) Chlorbenzylat d. 8-Oxychinolin + 1½ H₂O. Sm. 182° (wasserfrei) (J. pr. [2] 47, 429; [2] 54, 7). IV, 27J.

 3) Chlorbenzylat d. 8-Oxyisochinolin + 2H₂O. Sm. 202° (wasserfrei)
 - (J. pr. [2] 52, 14). IV, 303.
 1) 9-[α-Brombutyryl]carbazol. Sm. 110° (B. 31, 2850).
- C₁₆H₁₄ONBr

- 1) Jodmethylat d. 2,5-Diphenyloxazol. Sm. 196° u. Zers. (B. 29, 208). $C_{16}H_{14}ONJ$ **– IV**, 433.
- 1) s-Cinnamoylphenylthioharnstoff. Sm. 165-166° (Soc. 67, 1046). $\mathbf{C}_{16}\mathbf{H}_{14}\mathbf{ON}_{2}\mathbf{S}$ 2) 2-[Phenylbenzylamido]-4-Keto-4, 5-Dihydrothiazol. Sm. 118—1190
 - (Soc. **71**, 631).
 - 3) Carbonyl-4-Ditolylthioharnstoff (s-Carbonyl-p-Ditolylpseudothioharnstoff). Sm. 116° (B. 14, 1487). — II, 500.
 - 4) Acetyldehydrothio-p-Toluidin. Sm. 227° (225°) (B. 22, 582, 970).
 - 5) Aethyläther d. 2-Merkapto-4-Keto-3-Phenyl-3,4-Dihydro-1,3-Benzdiazin. Sm. 114° (B. 30, 1689; Am. 21, 149). — IV, 898.
- C₁₆H₁₄ON₄Cl₂ 1) Verbindung (aus s-Tetrachlordiacetyl u. Phenylhydrazin). Sm. 180° u. Zers.) (A. 249, 95). — IV, 780.
- C₁₀H₁₄ON₄Br₂ 1) Verbindung (aus s-Tetrabromdiacetyl u. Phenylhydrazin). Sm. 190° u. Zers. (B. 23, 36). — IV, 780.
- $C_{16}H_{14}ON_4S$ 1) 2-Thiocarbonyl-5-[4-Methylphenyl]azo-3-[4-Methylphenyl]-2,3-Dihydro-1,3,4-Oxdiazol. Sm. 215° (B. 24, 4197). — IV, 806.
 - 2) 2-Acetylphenylamido-5-Phenylamido-1, 3, 4-Thiodiazol. Sm. 2230 (B. **22**, 1179). — IV, 1236.
 - 3) 2-Keto-5-[2-Methylphenyl]azo-3-[4-Methylphenyl]-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 144⁶ (B. 24, 4202). — IV, 802
 - 4) 2-Keto-5-[4-Methylphenyl]azo-3-[4-Methylphenyl]-2, 3-Dihydro-1,3,4-Thiodiazol. Sm. 1746 (B. 24, 4195). — IV, 806.
- 1) 4-Aethylnitrosamidophenyläther d. 5-Merkapto-2-Thiocarbonyl- $C_{16}H_{14}ON_4S_3$ 3-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 136-138° (B. 29, 2143). — IV, 683.
- 1) 3-Chlorphenylacetylamidobenzoylmethan. Sm. 82° (B. 25, 2868). C₁₆H₁₄O₂NCl **- III**, 127.
 - 2) 2-Chlorphenylester d. 1,2,3,4-Tetrahydrochinolin-1-Carbonsäure. Sm. 61° (Bl. [3] 21, 12).
- C₁₀H₁₄O₂NBr₃ 1) Phenylamidoformiat d. 4,6-Dibrom-2-Oxy-5-Brommethyl-1,3-Dimethylbenzol? Sm. 226° (A. 302, 80).
- $\mathbf{C}_{16}\mathbf{H}_{14}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{Cl}_{2}$ 1) Aethylenäther d. Benzenylchloroxim. Sm. $59-60^{\circ}$ (B. 29, 1162). 2) Verbindung (aus Aethylendiphenyldiamin). Sm. 1830 (1670) (B. 14, 2183; **20**, 784). — II, 380.
- $C_{16}H_{14}O_2N_2Br_21$) Aethylenäther d. Benzenylbromoxim. Sm. 100° (B. 29, 1163). 2) isom. Aethylenäther d. Benzenylbromoxim. Sm. 81-82° (B. 29,
 - 3) s-Diphenylamid d. Dibrombernsteinsäure. Sm. noch nicht bei 300° (A. **239**, 139). — **II**, 414.
- $C_{16}H_{14}O_2N_2Br_3$ 1) Phtalimidinbromid? Sm. 150° u. Zers. (A. 247, 295). II, 1557.
- 1) β -[2-Phenylthioharnstoffphenyl]akrylsäure. Sm. 235—237° u. Zers. $C_{16}H_{14}O_{9}N_{9}S$ (B. **23**, 3343). — **II**, 1418.
 - 2) Aethylester d. 3 oder 5-Thiënyl-1-Phenylpyrazol-5 oder 3-Carbonsäure. Sm. 81° (G. 21 [2] 273). — IV, 893.
- $C_{16}H_{14}O_2N_3Cl$ 1) γ -Phenylhydrazon- α -[5-Chlor-2-Nitrophenyl]- α -Buten. Sm. 161° (A. 262, 147). — IV, 774.
- C₁₆H₁₄O₂N₄Br₂1) 4,4'-Dibrom-2,2'-Di[Acetylamido]azobenzol. Sm. 280—282° (Am. 8, 347). — IV, 1359.
 1) s-Phenyl-4-[2-Keto-5-Methyl-2, 3-Dihydro-1, 3, 4-Oxdiazolyl-3]-
- $\mathbf{C}_{16}\mathbf{H}_{14}\mathbf{O}_{2}\mathbf{N}_{4}\mathbf{S}$ phenylthioharnstoff. Sm. 170° (B. 26, 1320). — IV, 1127.
- $\mathbf{C}_{16}\mathbf{H}_{14}\mathbf{O}_{2}\mathbf{Cl}_{2}\mathbf{Se}$ 1) Dichlorselenacetophenon. Sm. 122° (B. 30, 2826).
- $\mathbf{C_{16}H_{14}O_{2}Cl_{2}Te~1)~Dichlortelluroacetophenon.~Sm.~186-187^{o}~(B.~30,~2833).}$
- $C_{16}H_{14}O_{2}Br_{4}S$ 1) Diäthyläther d. Di[?-Dibrom-?-Oxyphenyl]sulfid. Sm. 1420 (B. **27**, 2544).
- C₁₆H₁₄O₃NCl 1) Phenylester d. α-Chlor-α-Benzoylamidopropionsäure. Sm. 137° (H. 20, 425).
- $\mathbf{C}_{16}\mathbf{H}_{14}\mathbf{O}_{3}\mathbf{N}_{2}\mathbf{Br}_{2}\mathbf{1})$ $\alpha\beta$ -Dibrom- β -[2-Phenylharnstoffphenyl] propionsäure. Sm. 227° (B. **28**, 3229).
 - 2) $\alpha\beta$ -Dibrom- β -[3-Phenylharnstoffphenyl] propionsäure. Sm. 240° (B. 28, 3230).
 - 3) $\alpha\beta$ -Dibrom- β -[4-Phenylharnstoffphenyl]propionsäure. Sm. oberh. 200° (B. 28, 3231).

C₁₆H₁₄O₃N₂Br₂4) Aethylester d. Di[4-Bromphenyl]allophansäure. Sm. 153^o (B. 13, 229). — II, 382.

1) 5-Benzolsulfonat d. 5-Oxy-3-Methyl-1-Phenylpyrazol. Sm. 91 bis $C_{16}H_{14}O_3N_2S$ 92° (J. pr. [2] 54, 205). — IV, 511.

2) 2-Phenylamido-1-Amidonaphtalin-5-Sulfonsäure. Na + H₂O (B.

27, 2367). — **IV**, 920.

3) 2-Phenylamido-1-Amidonaphtalin-8-Sulfonsäure (B. 27, 2368). — IV, 921.

4) s-Diphenylacetylthioharnstoff-3-Carbonsäure. Sm. 159-160° (B. **17**, 429—430). — **II**, *1263*.

5) 5-Methyl-1,3-Diphenylpyrazol-14-Sulfonsäure (A. 278, 300). IV, 936.

6) p-Toluylsulfo-p-Tolenylamidinsäureanhydrid. Sm. 161,5—162° u. Zers. (B. 26, 2837). — IV, 852.

1) 1-Aldehyd-2-Phenylamid d. 6-Brom-3,4-Dioxybenzoldimethyl- $\mathbf{C}_{16}\mathbf{H}_{14}\mathbf{O}_{4}\mathbf{NBr}$ äther-1, 2-Dicarbonsäure. Sm. 191° (B. 25, 1997). — II, 1943. 1) Dibenzolsulfondihydroaldin. Sm. 163° (B. 26, 99). — II, 115.

 $\mathbf{C}_{16}\mathbf{H}_{14}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{S}$ 1) 5-Keto-4-Phenylhydrazon-3-Methyl-1-Phenyl-4,5-Dihydropyra- $C_{16}H_{14}O_4N_4S$

zol-14-Sulfonsäure. Sm. 262° u. Zers. (B. 25, 1945). — IV, 736. C₁₆H₁₄O₄Br₂S 1) Diäthyläther d. Di[?-Brom-?-Oxyphenyl]sulfon. Sm. 183° (A. 172, 53). — II, 840.

1) Indolindisulfonsäure. Na. (J. 1880, 587). — II, 1624. $C_{16}H_{14}O_6N_2S_2$

1) 2,4,6-Trinitrophenyläther d. 6-Jod-3-Oxy-4-Isopropyl-1-Methyl- $C_{16}H_{14}O_7N_3J$ benzol. Sm. 155° (*J. pr.* [2] **39**, 295). — II, 772. 1) Hydrindindisulfonsäure. Ba + 4 H₂O (*A.* 120, 20). — II, 1617.

 $C_{16}H_{14}O_8N_2S_2$

1) 5,5'-Dinitro-4,4'-Di[Acetylamido]biphenyl-3-Sulfonsäure. K (B. $C_{16}H_{14}O_9N_4S$ **23**, 3460). — **IV**, 968.

 $C_{16}H_{14}NClBr_2$ 1) Bromid d. Chinolinchlorbenzylat. Sm. 91—92° (B. 18, 1306). — IV, 252. C₁₆H₁₄NCl₂Br 1) Chlorid d. Chinolinbrombenzylat. Sm. 80° (B. 18, 1306). — IV, 252.

1) Jodid d. Chinolinbrompropylat. Sm. 109-1100 (B. 18, 1306). - $\mathbf{C}_{16}\mathbf{H}_{14}\mathbf{NBrJ}_{2}$

IV, 252. 1) 5-Methyl-1-[4-Aethoxylphenyl]benzthiazol. Sm. 170° (B. 25, 3530). $C_{16}H_{15}ONS$ - II, 1541.

C16H15ONS 1) Dibenzylester d. Imidothiolameisensäure-Dithioameisensäure. Sm. 144—145° (B. 28, 1112).

 $C_{16}H_{15}ON_2Cl_3$ 1) $\delta\delta\delta$ -Trichlor- γ -Oxy- α -Phenylhydrazon- α -Phenylbutan. Sm. 156 bis 158° (141—142°) (B. 26, 556, 911). — IV, 771.

1) 2-[2-Methylphenylnitrosamido]-5-[2-Methylphenylamido]-1,3,4- $\mathbf{C}_{16}\mathbf{H}_{15}\mathbf{ON}_{5}\mathbf{S}$ Thiodiazol. Sm. 135° (B. 23, 368). — IV, 1236.

2) 2-[4-Methylphenylnitrosamido]-5-[4-Methylphenylamido]-1,3,4-Thiodiazol. Sm. 247° u. Zers. (B. 23, 366). — IV, 1236.

1) Dibenzylester d. Imidodi[thiolcarbonsäure]. Sm. 146° (A. 275, $C_{16}H_{15}O_{2}NS_{2}$ 38). — II, *1054*.

C₁₈H₁₅O₂N₂Cl 1) 5-Chlor-2, 4'-Di [Acetylamido] biphenyl. Sm. 204° (A. 303, 318). 2) Phenylamid d. 7-Chlor-3-Methyl-3, 4-Dihydro-1, 4-Benzoxazin-4-Carbonsäure. Sm. 148° (B. 31, 757). 3) Verbindung (aus Essigsäurechlorid u. 3-Phenylimido-3, 4-Dihydro-2, 4-Benzoxia).

Benzoxazini. Sm. 119° (B. 27, 2423). — IV, 874. C₁₆ $\mathbf{H}_{15}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{Br}$ 1) 5-Brom-2, 4'-Di[Acetylamido] biphenyl. Sm. 223° (A. 303, 328). 1) α -Benzylidenamido- β -Phenylthioharnstoff- α -Methylcarbonsäure C₁₆H₁₅O₂N₃S

(Phenylthiobenzylidenamidohydantoïnsäure). Sm. 245° (B. 31, 169). C₁₆H₁₅O₂N₄Cl 1) Aethylester d. 2-Chlor-1, 2-Diphenyl-2, 2-Dihydro-1, 2, 3, 5-Tetrazol-4-Carbonsäure. Sm. 195—198° u. Zers. $+ C_2H_3O$ (B. 27, 2924).

– IV, 1240. C₁₆H₁₅O₃NBr₂ 1) 2-Phenylamidoformiat d. 3,6-Dibrom-5-Oxy-2-Oxymethyl-1,4-Dimethylbenzol. Sm. 135° (B. 28, 2916).

C₁₈H₁₅O₃N₂Br 1) Aethylester d. 2-Brom-4'-Oxy-4-Methylazobenzol-3'-Carbonsäure.

Sm. 116° (B. 31, 1785). — IV, 1469. 1) β -Phenylhydrazonpropylimid d. Benzol-1-Carbonsäure-2-Sulfon- $C_{16}H_{15}O_3N_3S$ säure. Sm. 166° (B. 29, 330). — IV, 767.

C₁₆H₁₅O₄N₂Cl₃ 1) Verbindung (aus Trichlormethyldichloroformiat). Sm. 95° (J. pr. [2] 36, 477). — I, 466.

- C16H15O6NS 1) 4-Dimethylamidodiphenylketon-2-Carbonsäure-?-Sulfonsäure. Ba (Bl. [3] 17, 582). $C_{16}H_{15}O_6Cl_3S_2$ 1) ?-Trichlor- $\alpha\alpha$ -Diphenylbutan-?-Disulfonsäure. Ba (B. 7, 1421). — II, 240. C₁₆H₁₆ONBr 1) Diphenylamid d. α-Brombuttersäure. Sm. 85° (B. 31, 2682) 2) Diphenylamid d. α-Bromisobuttersäure. Sm. 82° (B. 31, 2682).
 3) Phenylbenzylamid d. α-Brompropionsäure. Sm. 78° (B. 31, 2676). 4) Verbindung (aus d. Methyläther d. 3-Brom-4-Oxy-1-[αβ-Dibrompropyl]benzol). Sm. 75° (J. pr. [2] 52, 196).
 1) Verbindung (aus Tribromxylenolbromid). Sm. 121—122° (B. 29, 2352). $\mathbf{C}_{16}\mathbf{H}_{16}\mathbf{ONBr}_{3}$ $\mathbf{C}_{16}\mathbf{H}_{16}\mathbf{ON}_{2}\mathbf{S}$ 1) α -Aethyl- α -Phenyl- β -Benzoylthioharnstoff. Sm. 133—1340 (Soc. 55. 305). — II, *1172*. 2) α -Phenacetyl- β -[2-Methylphenyl]thioharnstoff. Sm. 149—150° (Soc. 69. 866). 3) α -Phenacetyl- β -[4-Methylphenyl]thioharnstoff. Sm. 150—151° (Soc. **69**, 867). 4) 3-Methyläther d. 2-Phenylimido-3-[2-Oxyphenyl]tetrahydrothiazol. (2HCl, PtCl₄), HJ (B. 21, 1868). — II, 712. 5) 6-Aethyläther d. 2-Merkapto-6-Oxy-5-Methyl-1-Phenylbenzimidazol. Sm. 238—240° (A. 287, 150). 6) Aethyläther d. 2-Thiocarbonyl-3-[4-Oxyphenyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 238° (J. pr. [2] 52, 398). — IV, 634. 7) 4-Phenylamidothioformyl-3-Methyl-3,4-Dihydro-1,4-Benzoxazin. Sm. 125° (B. 30, 1638). C16H16ON2S 1) Oxyd d. Methylphenylamidothioameisensäure. Sm. 116,5° (B. 20, 1631). — II, 385. $\mathbf{C}_{16}\mathbf{H}_{16}\mathbf{ON}_{3}\mathbf{Cl}$ 1) Verbindung (aus Butyrchloralhydrat u. salzs. Phenylhydrazin). Ag
- (B. **31**, 1413). $C_{16}H_{16}ON_3Cl_3$ 1) 4-Butyrchloralamidoazobenzol. Sm. 96-97° (G. 28 [1] 242). IV, 1355. $\mathbf{C}_{16}\mathbf{H}_{16}\mathbf{ON}_{3}\mathbf{Br}$ 1) 4-[α-Brombutyryl]amidoazobenzol. Sm. 170° (B. 31, 2852, 3239). 2) 4- $[\alpha$ -Bromisobutyryl]amidoazobenzol. Sm. 167–168° (B. 31, 2852). 1) 2-Keto-5-[2-Methylphenyl]hydrazido-3-[2-Methylphenyl]-2,3-Di-C16H16ONS hydro-1,3,4-Thiodiazol. Sm. 159-160° (B. 24, 4203). - IV, 803. 2) 2-Keto-5-[4-Methylphenyl] hydrazido-3-[4-Methylphenyl]-2, 3-Dihydro-1,3,4-Thiodiazol. Sm. 168° (B. 24, 4196). — IV, 806. 1) Aethylester d. α -Chlor- β -[1-Naphtyl] imidobuttersäure. Sm. 75° $\mathbf{C}_{16}\mathbf{H}_{16}\mathbf{O}_{2}\mathbf{NC1}$
- (B. **20**, 2750). **II**, 611. 2) Aethylester d. α-Phenyl-2-Chlorphenylamidoessigsäure. Sm. 53 bis 54° (B. 30, 2761). 3) Aethylester d. α-Phenyl-3-Chlorphenylamidoessigsäure. Sm. 88
- bis 88,5° (B. 30, 2762). $\mathbf{C}_{16}\mathbf{H}_{16}\mathbf{O}_{2}\mathbf{NBr}$
- Verbindung (aus d. Methyläther d. α-Bromäthyl-3-Brom-4-Oxyphenylketon). Sm. 119° (J. pr. [2] 52, 198). III, 142.
 Di [2-Formylamidobenzyl]sulfid. Sm. 163° (B. 27, 3522).
 Di [2-Acetylamidophenyl]sulfid. Sm. 160° (B. 29, 2774).
 Di [4-Acetylamidophenyl]sulfid. Sm. 213,5—215° (B. 4, 390; 27, 2774). C16H16O2N2S
 - 2812, 3262). II, 805. 4) Diff - Acetylamidophenyl] sulfid. Sm. 185° (180°) (B. 27, 2812;
 - 29, 2775).
 5) Di [β-Oximido-β-Phenyläthyl]sulfid (Dioxim d. Phenacylsulfid). Sm. 151⁶ (B. **23**, 3475). — III, 129.
 - 6) Aethylester d. Diphenylthioallophansäure. Sm. 95° (J. pr. [2] 32, 263). — II, *398*. 7) Phenylamid d. Dimethylsulfid-α, α'-Dicarbonsäure (Ph. d. Thiodi-
- glykolsäure). Sm. 165° (168°) (G. 28 [1] 361; A. 273, 71). II, 403. C₁₆ $\mathbf{H}_{16}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{S}_{2}$ 1) Di[4-Acetylamidophenyl]disulfid. Sm. 213—214° (215—217°) (B. 11,
- 1170; 27, 2815; J. pr. [2] 41, 203). II, 817. 2) Phenylamid d. Dimethyldisulfid-αα'-Dicarbonsäure (Ph. d. Dithio-
- glykolsäure). Sm. $160-161^{\circ}$ (G. 28 [1] 361). C₁₈H₁₆O₂N₂S₃ 1) Di[4-Acetylamidophenyl]trisulfid. Sm. $213-214^{\circ}$ (B. 11, 1171). —
- $\mathbf{C_{16}H_{16}O_{2}N_{2}Hg~1)}$ Quecksilberdi[4-Acetylamidophenyl]. Sm. $244-246^{\circ}$ (G. 24 [2] 451). — IV, 1708.

 $C_{18}H_{16}O_3NBr$ 1) Phenylamid d. β -Brom- $\alpha\gamma$ -Dioxy- γ -Phenylbuttersäure. Sm. 167 bis 168° (B. 27, 3111). — II, 1767.

 $\mathbf{C_{18}H_{16}O_{3}N_{3}Cl~1)}~\gamma - \mathbf{Phenylhydrazon} - \alpha - \mathbf{Oxy} - \alpha - [\mathbf{5-Chlor-2-Nitrophenyl}] \\ \mathbf{butan.}~~\mathbf{Sm.}$

157—158° (A. 262, 146). — IV, 773.

2) Verbindung (aus Phenylimidomucooxychlorsäure u. Phenylhydrazin) (Am. 9, 169). — II, 417.

 $\textbf{C}_{16}\textbf{H}_{16}\textbf{O}_{3}\textbf{N}_{3}\textbf{Br} \hspace{0.1cm} 1) \hspace{0.1cm} \textbf{Verbindung} \hspace{0.2cm} \textbf{(aus Phenylimidomucooxybromsäure u. Phenylhydrazin)}$ (Am. 9, 156). — II, 417. 1) 1,4-Di[2-Methylphenyl]-1,4-Dihydro-1,2,4,5-Tetrazin-?-Sulfon-

 $C_{16}H_{16}O_{8}N_{4}S$ säure (Soc. 57, 53). — IV, 1234.

 $C_{16}H_{16}O_4N_2Br_21$) Tetramethyläther d. ?-Dibrom-2,5,2',5'-Tetraoxyazobenzol. Sm. 220° (B. 17, 2125). — IV, 1446.

 $\mathbf{C}_{16}\mathbf{H}_{16}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{S}$ 1) Di[?-Acetylamidophenyl]sulfon. Sm. 211° (J. 1885, 1590; J. pr. [2] **16**, 460). — **II**, 814.

2) 8-Phenylazo-5-Oxy-1,2,3,4-Tetrahydronaphtalin-8⁴-Sulfonsäure. Na (B. 23, 217). — IV, 1426.

1) 4,4'-Di[Acetylamido] biphenyl-3-Sulfonsäure. Na (B. 23, 3460). — $C_{16}H_{16}O_5N_2S$ IV, 968

1) 2,4-Di[Acetylamido]-1-Acetoxylnaphtalin-7-Sulfonsäure. Ba + $C_{16}H_{16}O_7N_2S$ $3^{1}/_{2}$ H₂O (B. **32**, 233).

1) Diäthyläther d. Di[?-Dinitro-?-Oxyphenyl]sulfon. Sm. 1920 (A. $C_{16}H_{16}O_8N_2S$ **172**, 53). — **II**, 840.

1) Anhydro-β-Oxyäthyl-3-Nitrophenylsulfon. Sm. 133° (A. 294, 247). $C_{16}H_{16}O_{9}N_{2}S_{2}$ C₁₆H₁₆N₂Br₂S 1) Bromid d. Verbindung C₁₆H₁₆N₂S (aus 4-Amido-1, 2-Dimethylbenzol) (B. 22, 584). — II, 827. $\mathbf{C}_{18}\mathbf{H}_{17}\mathbf{ONBr}_{2}$ 1) Methylphenyl-3,6-Dibrom-4-Oxy-2,5-Dimethylbenzylamin. Sm.

99°. HBr (B. 29, 1121). $\mathbf{C}_{16}\mathbf{H}_{17}\mathbf{ONBr}_{4}$ 1) Dimethylphenyl - 2,5,6-Tribrom - 4-Oxy - 3-Methylbenzylammo-

niumbromid. Sm. 225-226° (231-233°) (B. 29, 2352).

1) Benzyläther d. β -Benzoylamido- α -Merkaptoäthan. Sm. 78-80° C₁₆H₁₇ONS (B. **25**, 3051). — II, 1160. 2) 2-Methylphenylamid d. 4-Oxybenzoläthyläther-1-Thiocarbon-

säure. Sm. 106° (B. 25, 3530). — II, 1541.

3) 4-Methylphenylamid d. 4-Oxybenzoläthyläther-1-Thiocarbonsäure. Sm. 151° (B. 25, 3530). — II, 1541.

 $C_{16}H_{17}ON_2Br$ 1) α -Brombutyryl-s-Diphenylhydrazin. Sm. 123° (B. 31, 3243). — IV, 1496.

 $\mathbf{C}_{16}\mathbf{H}_{17}\mathbf{ON}_{3}\mathbf{S}$ 1) 2,4-Dimethylbenzenylphenylthiouramidoxim. Sm. 150° (B. 22, 2448). — II, 1377.

2) Verbindung (aus d. Aethyläther d. α-[4-Oxyphenyl]-α-[2-Amidobenzyl]hydrazin). Sm. 198° (B. 27, 2904). — IV, 1131.

 $C_{16}H_{17}O_2N_2Cl$ 1) 4-Methylphenylimid d. α -Chlor- β -[1-Piperidyl]maleïnsäure. Sm.

 130° (A. 295, 49).
 Gem. Imid d. Benzolsulfonsäure u. 1-Isopropylbenzol-4-Carbonsäure. Sm. 164°. Ag, Ag + NH₃ (J. 1856, 505). — II, 1386.
 Butyrylphenylamid d. Benzolsulfonsäure. Sm. 89—90° (Am. 19, 762). C16H17O3NS

C₁₆H₁₇O₃N₂Br 1) Phenylhydrazid d. β -Brom- $\alpha\gamma$ -Dioxy- γ -Phenylbuttersäure. Sm. 168—169° u. Zer. (B. **27**, 3111). — IV, 709.

1) ?-[4-Sulfophenyl]azo-5-Amido-1,2,3,4-Tetrahydronaphtalin. C16H17O3N3S (B. 22, 626, 2069). - IV, 1389.

2) 1-Phenylazo-6-Methyl-1, 2, 3, 4-Tetrahydrochinolin-14-Sulfonsäure. Ba (B. 24, 2073). — IV, 1581. 3) S-Phenylazo-6-Methyl-1,2,3,4-Tetrahydrochinolin-84-Sulfonsäure

(B. 24, 2069). — IV, 1484.

4) 6-Phenylazo-8-Methyl-1,2,3,4-Tetrahydrochinolin-64-Sulfonsäure (B. **24**, 2064). — IV, 1484.

1) 1, 2, 3, 4-Tetrahydro-1, 5-Amidonaphtolazobenzolsulfonsäure (B. $\mathbf{C}_{16}\mathbf{H}_{17}\mathbf{O}_4\mathbf{N}_3\mathbf{S}$ 22, 961). — IV, 1426.

1) Diäthyläther d. ?-Oxyphenyl-?-Brom-?-Oxyphenylsulfon. Sm. 1850

C16H17O4BrS (B. **27**, 2544).

 $C_{18}H_{17}O_5N_2Cl_3$ 1) 2-Acetyl-?-Trichloräthyliden-5-Pseudobutyl-1, 3-Dimethylbenzol. Sm. 179° (B. 31, 1346).

 $C_{16}H_{17}O_8N_3S_2$ 1) Di[β -3-Nitrophenylsulfonäthyl]amin. Sm. 125°. HCl, HNO₃ (A. 294, 251).

- 1) Jodmethylat d. Methylphenylamidobenzoylmethan (B. 13, 843). C18H18ONJ - III, 126.
 - 2) Jodnethylat d. 4-Dimethylamidodiphenylketon. Sm. 1810 u. Zers. (B. 14, 1837; A. 210, 269). — III, 183.
- 1) s-Valeryl-1-Naphtylthioharnstoff. Sm. 129-130° (Soc. 67, 1044). C₁₆H₁₈ON₂S 2) α -Methyl- β - $[\beta$ -Oxy- $\alpha\beta$ -Diphenyläthyl]thioharnstoff. Sm. 136° (B. 28, 1899).
- 1) Tetramethylamidodiphenoxazimiumjodid + H₂O (A. 289, 119). - $C_{16}H_{18}ON_3J$
- IV, 1178.
 1) α -Phenyl- β -[2-Methylnitrosamido-3, 5-Dimethylphenyl]thioharn-C16H18ON4S stoff. Sm. 132—132,5° (B. 31, 2934).
- 1) Methyläther d. 2-Methoxylphenylamido-2-Methoxylphenylimido-C₁₆H₁₈O₂N₂S merkaptomethan. Sm. 87°. HCl, (2 HCl, PtCl₄) (B, 21, 1861). — II, 711.
- 1) Thiodi[4-Methylphenyl]diharnstoff. $+ C_aH_a$ (Sm. 150–151°) (B. 20, $C_{16}H_{18}O_{2}N_{4}S$ 669). — II, 821.
 - 2) Di [4-Acetylhydrazidophenyl] sulfid. Sm. 170—171° u. Zers. (A. 270, 153). **— IV**, 816.
- C₁₆H₁₈O₂Cl₂Se 1) Diäthyläther d. Di[? Oxyphenyl]selenidehlorid. Sm. 140° (B. 28, 611).
- C₁₈H₁₈O₂Cl₂Te 1) Diäthyläther d. Di[?-Oxyphenyl]telluriddichlorid. Sm. 185° (B. **30**, 2831).
- C₁₆H₁₈O₂Br₂Se 1) Dimethyläther d. Di[?-Oxyphenyl]selenidbromid. Sm. 123° (B. 28, 612).
- C₁₆H₁₈O₂Br₂Tel) Diäthyläther d. Di[?-Oxyphenyl]telluriddibromid. Sm. 1830 (B. 30, 2831).
- C₁₆H₁₈O₂J₅Se 1) Diäthyläther d. Di[?-Oxyphenyl]selenidjodid. Sm. 96° (B. 28, 612).
- 1) Chlormethylat d. Dimethylamidomethyl-3,4-Dioxyphenylketon. $\mathbf{C}_{16}\mathbf{H}_{18}\mathbf{O}_{3}\mathbf{NCl}$ Sm. 162° u. Zers. (J. r. 25, 280). — III, 138.
- $C_{16}H_{18}O_3N_2Br_21$) Phenylhydrazon d. Cantharidindibromid. Sm. 245° (B. 26, 140). - III, 624.
- 1) Phenylamid d. β -Acetylphenylamidoäthan- α -Sulfonsäure. 152° (Am. 19, 747). $\mathbf{C}_{18}\mathbf{H}_{18}\mathbf{O}_{9}\mathbf{N}_{9}\mathbf{S}$

- 1) 4-Oxy-2-Methyl-5-Isopropylazobenzol-?-Sulfonsäure. Sm. 215,80 $C_{16}H_{18}O_4N_9S$ u. Zers. Na, Ba (B. 14, 2795). — IV, 1425.
- C₁₆H₁₈O₄N₂S₂ 1) 1,4-Diphenylsulfonhexahydro-1,4-Diazin (Diphenylsulfonpiperazin). Sm. 282—283° (J. pr. [2] 53, 22; B. 31, 3261).
- C₁₈H₁₈O₄N₂Hg₂1) Diquecksilberdi[4-Acetylamidophenyloxydhydrat]. Zers. bei 270°
- $K_0 + 4H_0O$ (B. 16, 194). — IV, 1387.
 - 2) Diäthylester d. Azobenzol-3,3'-Disulfonsäure. Sm. 100° (A. 202, 336). **— IV**, *1365*.
- $C_{16}H_{18}O_{10}N_2S_2$ 1) Leukindindisulfonsäure. Ba + 5 H₂O (A. 120, 34). II, 1617.
- 1) Methylenblau + 3 H₂O (Tetramethylthioninchlorid). 2 + ZnCl₃ + H₂O (B. 12, 593; 16, 2729; 17, 224; 28, 1697; 31, 2181; A. 230, 137; 251, 79). II, 809. $\mathbf{C}_{16}\mathbf{H}_{18}\mathbf{N}_{3}\mathbf{ClS}$
- Methyläther d. s-β-[2-Oxyphenyl] amidoäthyl-Phenylthioharn-stoff. Sm. 117—118° (B. 27, 930). II, 712. $\mathbf{C}_{16}\mathbf{H}_{19}\mathbf{ON}_{3}\mathbf{S}$
- 1) Benzaldehyd-γ-Phenylpropylthionaminsäure. Sm. 105-106° (B.26, C16H19O8NS 2162). — III, 7.
- 1) Jodmethylat d. a-Oxy-4-Nitrophenyl-P-Dimethylamidophenyl- $C_{16}H_{19}O_3N_2J$ methan. Sm. 175° u. Zers. (B. 21, 3295). — II, 1078. 1) Tetramethylindaminthiosulfonat $+ \frac{1}{2} \text{H}_2\text{O}$ (A. 251, 69). — II, 801.
- C16H19O3N3S2
- 1) $Di[\beta$ -Phenylsulfonäthyl]amin. Sm. 77 78°. HCl, (2 HCl, PtCl₄) (J. pr. [2] 30, 324; [2] 40, 531). II, 781. $C_{16}H_{19}O_4NS_2$ 2) Isobutylimid d. Benzolsulfonsäure. Sm. 76° (C. 1897 [2] 848). $\mathbf{C_{16}H_{20}O_3NBr}$ 1) Benzoat d. Bromoxytriacetonamin. Sm. 114° (B. 31, 672).
- 1) Diphenylmonamid d. Phosphorsäurediäthylester. Sm. 1750 (B. C₁₆H₂₀O₃NP **28**, 614).

 $\mathbf{C}_{16}\mathbf{H}_{20}\mathbf{O}_{3}\mathbf{N}_{4}\mathbf{S}$ 1) 2,4-Di[Dimethylamido]azobenzol-4'-Sulfonsäure. Sm. 1890 (B. 30. 3116). — IV, 1370. 1) Acetat d. 6-Brom-2-Diacetylamido-3-Oxy-4-Isopropyl-1-Methyl- $\mathbf{C}_{16}\mathbf{H}_{20}\mathbf{O}_{4}\mathbf{NBr}$ benzol. Sm. 136-137° (G. 19, 66). - II, 774. 1) Diathyläther d. Di[?-Amido-?-Oxyphenyl]sulfon. 2HJ (A. 172, 54). $C_{16}H_{20}O_4N_2S$ **– II**, 841. 1) Aethylendimethylamid d. Benzolsulfonsäure. Sm. 131° (B. 28, $\mathbf{C}_{16}\mathbf{H}_{20}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{S}_{2}$ 3074). C₁₆H₂₀N₂Cl₂Si 1) Di-1, 3-Dimethyl-4-Phenyldiamido-Dichlorsilicium (Soc. 51, 44). **- II**, 543. $\mathbf{C}_{16}\mathbf{H}_{21}\mathbf{O}_{2}\mathbf{NBr}_{2}$ 1) Acetat d. 4,6-Dibrom-2-Oxy-5-Piperidylmethyl-1,3-Dimethylbenzol. Sm. 122-123° (A. 302, 83). 1) 2,4-Di[Dimethylamido] phenylamid d. Benzolsulfonsäure. Sm. $\mathbf{C}_{16}\mathbf{H}_{21}\mathbf{O}_{2}\mathbf{N}_{3}\mathbf{S}$

 $C_{16}H_{21}O_2N_3S$ 1) 2,4-Di[Dimethylamido] phenylamid d. Benzolsulfonsäure. Sm. 84° (B. 30, 3115). — IV, 1123. C₁₆H₂₁O₃NS 1) Phenylamid d. Camphersulfonsäure. Sm. 119° (Bl. [3] 19, 125).

(A. 271, 209). — III, 795. C₁₈H₂₂O₂NJ 1) Jodmethylat d. Benzoylpseudotropin (A. 271, 209). — III, 795.

 $C_{16}^{10}H_{22}^{20}O_2N_2S$ 1) Aethylester d. α -Phenyl- β -Hexahydrophenylthioharnstoff- β ²-Carbonsäure. Sm. $162-163^{\circ}$ (A. 295, 205). $C_{16}H_{22}O_2N_2Hg_2$ 1) p-Diquecksilberäthylanilin. Zers. bei 145° . Salze siehe (G. 23 [2]

545; 24 [2] 463). — IV, 1706.
2) p-Diquecksilberdimethylanilin. Sm. 179° u. Zers. Salze siehe

(G. 23 [2] 522; 24 [2] 462). — IV, 1706.

1) Phenylhydrazoncamphersulfonsäure. Sm. 235° u. Zers. (Bl. [3]

C₁₆H₂₂O₃N₂S 1) Phenylhydrazoncamphersulfonsäure. Sm. 235° u. Zers. (Bl. [3] 19, 126). — IV, 796. C₁₆H₂₂O₄N₄S 1) Di[4-Aethoxylphenylhydrazid] d. Schwefelsäure. Zers. bei 130

bis 140° (B. 25, 1851). — IV, 876. C₁₆H₂₃O₈NCl₂ 1) 3,6-Dichlor-5-Diisoamylamido-2-Oxy-1,4-Benzochinon. Diiso-

amylaminsalz (Am. 20, 419). 1) Jodbenzylat d. Piperidylessigsäureäthylester. Sm. 193—195° (B. 32, 515).

 $C_{16}H_{24}O_2N_2^*Cl_2$ 1) 3,6-Dichlor-2,5-Di[Isoamylamido]-1,4-Benzochinon. Sm. 224 bis 225° (B. 30, 531; Am. 20, 416).

C₁₆H₂₄O₂N₃J 1) Jodmethylat d. Eserin. Sm. bei 100° u. Zers. (*Bl.* [3] 9, 1014). — — III, 882.

 $\mathbf{C}_{16}\mathbf{H}_{24}\mathbf{O}_{5}\mathbf{NCl}$ 1) Sinapinchlorid (C. 1897 [1] 822).

 $C_{16}H_{24}N_2CIP$ 1) 4-Chlorphenyldi [1-Piperidyl]phosphin. Sm. 95° (B. 31, 1047). $C_{16}H_{25}ON_2P$ 1) Phenyldi [1-Piperidyl]phosphinoxyd. Sm. 68° (B. 31, 1041). IV, 1682.

 $C_{16}H_{25}O_{12}N_3P_2$ 1) Thyminsäure. Ba (H. 22, 79, 323). — IV, 1623.

 $C_{16}H_{25}N_2SP$ 1) Phenyldi[1-Piperidyl]phosphinsulfid. Sm. 92° (B. 31, 1042). — IV, 1682. $C_{16}H_{27}ON_2Cl$ 1) Chlormethylat d. d-Lupanin. + AuCl. (C. 1897 [1] 1232).

 $C_{16}H_{27}ON_2Cl$ 1) Chlormethylat d. d-Lupanin. + AuCl₈ (C. 1897 [1] 1232). 2) Chlormethylat d. flüssigen Lupanin + $2H_2O$. (HCl, PtCl₄ + H_2O), + $1^{1}/2$ AuCl₈ (A. 230, 381).

Chlormethylat d. Oxyspartein. (HCl, PtCl₄ + H₂0) (B. 25, 3608).
 — III, 933.

 $C_{16}H_{27}ON_2J$ 1) Jodmethylat d. d-Lupanin. Sm. 239° (G. 23 [1] 164; C. 1897 [1] 1232). — III, 891.

2) Jodmethylat d. i-Lupanin. Sm. 239—240° u. Zers. (C. 1897 [1] 1233).
3) Jodmethylat d. festen Lupanin. Sm. 237—238° (G. 23 [1] 163).
— III, 891.

4) Jodmethylat d. flüssigen Lupanin. Sm. 248—249° u. Zers. (A. 230, 379). — III, 891.

5) Jodmethylat d. Oxysparteïn. Sm. 191—193° (B. 25, 3608). — III, 933.

C₁₆H₂₇O₂NS 1) Diisoamylamid d. Benzolsulfonsäure. Fl. (C. 1898 [2] 888).

- $\mathbf{C}_{16}\mathbf{H}_{29}\mathbf{ON}_{2}\mathbf{J}$ 1) Jodäthylat d. Camphersäureäthylimid-Aethylimidin. Sm. 244 bis 245° u. Zers. (B. 14, 163; A. 214, 246). — I, 1393.
- 1) Di[Jodmethylat] d. Base $C_{14}H_{24}ON_2$ (B. 22, 679). III, 878. $C_{16}H_{30}ON_{2}J_{2}$ C16H30O4NJ 1) Jodnethylat d. i-Methyltropinsäuredipropylester. Sm. 116-1170
- (B. 28, 3291). III, 794. 1) Chloramid d. Palmitinsäure. Sm. 70—71° (B. 30, 899). $\mathbf{C}_{16}\mathbf{H}_{32}\mathbf{ONCl}$
- C₁₆H₃₃N₃ClP 1) Methyl-1-Tripiperidylphosphoniumchlorid. 2 + PtCl. (B. 28.
- 2209). IV, II.

 1) Methyl-1-Tripiperidylphosphoniumbromid (B. 28, 2209). IV, II. $\mathbf{C}_{16}\mathbf{H}_{33}\mathbf{N}_{3}\mathbf{BrP}$ $\mathbf{C}_{16}\mathbf{H}_{33}\mathbf{N}_{3}\mathbf{JP}$ 1) Methyl-1-Tripiperidylphosphoniumjodid. Sm. 251-255° (B. 28,
- 2208). IV, 11. 1) Methyl-1-Tripiperidylphosphoniumhydrat. Salze, siehe diese. $C_{16}H_{34}ON_3P$
- (B. 28, 2209). IV, 11.
- $\mathbf{C}_{16}\mathbf{H}_{34}\mathbf{O}_{3}\mathbf{N}_{2}\mathbf{Cl}_{2}$ 1) Di[Chlormethylat] d. Chrysanthemin. 2 + PtCl₄ (G. 21 [1] 523). **- III**, 862.
- $C_{16}H_{34}O_{3}N_{2}S$ 1) Palmitinamidoximschwefligesäure. NH₄ (B. 26, 2845).
- $\mathbf{C}_{16}\mathbf{H}_{36}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{J}$ 1) Verbindung (aus α-Trimethylamido-norm. Valeriansäure)? (G. 23 [2] 211).

C₁₆-Gruppe mit fünf Elementen.

- C₁₆H₉O₂NClBr 1) 3-Chlor-2-[4-Bromphenyl]amido-1,4-Naphtochinon. Sm. 2620
- $\begin{array}{c} \text{(B. 15, 486).} \text{III, } 377. \\ \mathbf{C_{16}H_{10}ON_2Br_2S_3} \text{ 1) Dibromtrithioisatyd } (Z. 1865, 595).} \text{II, } 1616. \end{array}$
- $\mathbf{C}_{16}\mathbf{H}_{10}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{Br}_{2}\mathbf{S}_{2}\mathbf{1}$) Dibromdithioisatyd (Z. 1865, 595). II, 1616. $\mathbf{C}_{16}\mathbf{H}_{10}\mathbf{O}_4\mathbf{N}_2\mathbf{Br}_2\mathbf{S}$ 1) **2-Oxy-1-**[2,6-Dibromphenylazo|naphtalin-14-Sulfonsäure. $oldsymbol{-}$
- IV, 1432. C₁₆H₁₀O₅NClS 1) 2[oder 3]-Chlor-3[oder 2]-Phenylamido-1,4-Naphtochinon-7-Sulfonsäure. Sm. 190°. Ba, $Ag + Ag_2SO_4$ (J. pr. [2] 37, 190). —
- III, *388*. $C_{18}H_{10}O_{5}N_{8}Br_{8}S$ 1) Dioxynaphtalinazodibrombenzolsulfonsäure (B. 11, 2199). — IV, 1450.
- 1) Phenylamid d. 4-Chlor-1-Nitronaphtalin-7-Sulfonsäure. Sm. $\mathbf{C}_{16}\mathbf{H}_{11}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{ClS}$ 151°. — II, 425.
- 1) Anhydro-α-Benzoylamido-α-Merkaptopropion-4-Bromphenyl-C₁₆H₁₂O₂NBrS äthersäure. Sm. 153-155° (H. 20, 432).
- III, 677.
- C₁₆H₁₅O₂N₂BrS 1) Acetat d. s-[2-Methyl-3-Bromphenyl]-4-Oxyphenylthioharnstoff. Sm. 156° (B. 16, 1832). — II, 720.
 - 2) Amid d. α-Benzoylamido-α-Merkaptopropion-4-Bromphenyl-
- athersaure. Sm. 201° (191°) (H. 20, 431, 441).

 C₁₆H₁₆NCl₂JS₃ 1) Dichlormethylenblaujodid (B. 19, 2012). II, 810.

 C₁₆H₁₈O₂NClS 1) Phenylamid d. 6-Chlor-4-Isopropyl-1-Methylbenzol-3-Sulfonsaure. Sm. 181° (B. 29, 316).

 C₁₆H₁₈O₂N₂S₄As₂1) Verbindung (aus Thiolessigsaure) (G. 27 [2] 162).
- $\mathbf{C}_{16}\mathbf{H}_{18}\mathbf{O}_{2}\mathbf{N}_{3}\mathbf{J}\mathbf{S}$ 1) Methylenazur (A. 230, 175). — II, 810.
- C₁₆H₂₀O₂NClS 1) Phenylamid d. α-Chloreamphensulfonsäure. Sm. 234° u. Zers. (Soc. 69, 1557). — III, 536.
 - 2) Phenylamid d. β -Chloreamphensulfonsäure. Sm. 103—105° (Soc.
- 69, 1562). III, 536. 1) Diäthylmonamid d. Thiophosphorsäurediphenylester. Sm. 58° C₁₆H₂₀O₂NSP (B. 31, 1102).
- C18H25ON3ClP 1) 4-Chlorphenylmonamid d. Dipiperidylphosphinsäure. Sm. 1750 (B. 28, 620).

C₁₇-Gruppe mit einem Element.

C 94,4 — H 5,6 — M. G. 216. 1) Chrysofluoren. Sm. 187—188° (B. 18, 1934; 27, 954; 29, 828). — C17H12 II, 286.

 $C_{17}H_{16}$

- 12) Isochrysofluoren. Sm. 76°. Pikrat (B. 27, 953).
 C 93,6 H 6,4 M. G. 218. $\mathbf{C}_{17}\mathbf{H}_{12}$ $\mathbf{C}_{17}\mathbf{H}_{14}$
 - 1) 1-Benzylnaphtalin. Sm. 59°; Sd. 350°. Pikrat (Bl. 26, 2; J. 1873, 390; A. ch. [6] 12, 326; J. pr. [2] 35, 504). II, 281.
 2) 2-Benzylnaphtalin. Sm. 35,5°; Sd. 350°. Pikrat (A. ch. [6] 12, 326).
 - **II**, 281.
 - 3) Trimethylanthracylen. Sm. 64°. Pikrat (J. pr. [2] 41, 124). II, 282. C 92,7 H 7,3 M. G. 220.
 - 1) 1,2,4-Trimethylanthracen. Sm. 243° (A. 234, 239; B. 20, 868).
 - II, 375.
 - 2) 1, 3, 6-Trimethylanthracen. Sm. 222° (*J. pr.* [2] 41, 142). II, 375. 3) 1, 4, 6-Trimethylanthracen. Sm. 227° (*J. pr.* [2] 35, 482). II, 375.
- C 91,9 H 8,1 M. G. 222. $C_{17}H_{18}$ 1) α -Phenyl- β -[4-Isopropylphenyl]äthen. Sm. 83–84° (Am. 1, 314). — II, 253.
 - 2) 1,2-Diphenyl-R-Pentamethylen. Sm. 108° (A. 302, 222).
 - 3) isom. 1,2-Diphenyl-R-Pentamethylen? Sm. 47°; Sd. 305° u. ger. Zers. (Soc. 51, 423; 71, 131). — II, 253. 4) Retenfluoren. Sm. 96,5—97° (A. 229, 142). — II, 253.
 - C 91,1 H 8,9 M. G. 224.
- $C_{17}H_{20}$ 1) ?-Benzyl-4-Isopropyl-1-Methylbenzol. Sd. 296—297° (308°) (J. 1878, 402). — II, 241.
 - 2) 3-Benzyl-1, 2, 4, 5-Tetramethylbenzol. Sm. 60,5°; Sd. 310° (J. 1879,
 - 373; A. ch. [6] 1, 516). II, 241.
 3) isom. Benzyl-P-Tetramethylbenzol. Sm. 145°; Sd. 325—327° (Bl. 50, 678). — II, 241.
 - 4) $\alpha [3, 5 Dimethylphenyl] \beta Phenylpropan. Sd. 324° (B. 23, 3273).$
- C 90,3 H 9,7 M. G. 226. $\mathbf{C}_{17}\mathbf{H}_{22}$ 1) Kohlenwasserstoff(aus Benzyldihydrocarvol). Sd. 166—169°₁₀ (A. 305, 269).
- 2) Kohlenwasserstoff (aus Benzylpulegol). Sd. 162-164°₁₀ (A. 305, 268). $C_{17}H_{24}$ C 89,5 — H 10,5 — M. G. 228
- 1) 1-Methyl-4-Isopropylhexahydrofluoren. Sd. 153—155°₁₀ (A. 305, 264). C.85,7 - H 14,3 - M.G. 238 $C_{17}H_{34}$
- C17 H36
- Heptadeken. Sd. 160°_{9.5} (B. 22, 2135). I, 125.
 C 85,0 H 15,0 M. G. 240.
 norm. Heptadekan. Sm. 22,5°; Sd. 303° (81°₀) (B. 15, 1702; 21, 2261; **22**, 2133; **29**, 1323). — **I**, 106.

C_{1/2}-Gruppe mit zwei Elementen.

- $\mathbf{C}_{17}\mathbf{H}_5\mathbf{O}_6$ 1) Verbindung (aus Dibromeichenrindengerbsäure) = (C₁₇H₅O₆)_x (A. 240, 335). — III, 588.
- C 60,0 H 2,3 O 37,6 M. G. 340. $C_{17}H_8O_8$ 1) 9,10-Diketo-9,10-Dihydroanthracen-1, 2, 4-Tricarbonsäure. Sm. noch nicht bei 320°. Na + 2 H₂O, Na₂ + 3 H₂O, Ag₃ (J. pr. |2] 41, 126). - II, 2086.
 - 2) 9,10-Diketo-9,10-Dihydroanthracen-1, 3, 6-Tricarbonsäure. Sm. oberh. 300°. Ba₃ (*J. pr.* [2] **41**, 144). — II, 2087. C 89,9 — H 3,9 — N 6,2 — M. G. 227.
- $\mathbf{C}_{17}\mathbf{H}_{9}\mathbf{N}$ 1) Nitril d. Pyrencarbonsäure. Sm. 149-150°. Pikrat (M. 4, 253-254). - II, *1480*.
- C 80,0 H 3,5 N 16,5 M. G. 255. $\mathbf{C}_{17}\mathbf{H}_{9}\mathbf{N}_{3}$ 1) Nitril d. $\alpha\beta$ -Naphtophenazin-?-Carbonsäure. Sm. 236—237° (B. 20,
- 2662). IV, 1052. C 88,7 H 4,3 O 6,9 M. G. 230. 1) Chrysoketon. Sm. 132,5° (B. 18, 1933; 23, 2439; 29, 826). III, 257. 2) Verbindung (aus Isophenanthroxylenacetessigsäure). Sm. noch nicht bei $C_{17}H_{10}O$
 - 310° (Soc. **59**, 13). II, 1909. C 82,9 H 4,0 O 13,0 M. G. 246.
- $\mathbf{C}_{17}\mathbf{H}_{10}\mathbf{O}_{2}$ 1) Phenylen-α-Naphtylenketonoxyd. Sm. 155° (B. 19, 2612; 25, 1643). - III, 256.

- $\mathbf{C}_{17}\mathbf{H}_{10}\mathbf{O}_{2}$ 2) Phenylen- β -Naphtylenketonoxyd. Sm. 140° (B. 25, 1643). — III, 256. 3) Pyrencarbonsäure. Sm. 267°. Ca + H₀O, Ba + $2^{1}/_{9}$ H₀O (M. 4, 257). $C_{17}H_{10}O_3$ C 77,9 — H 3,8 — O 18,3 — M. G. 262. 1) α -Oxy- α -Phenonaphtoxanthon. Sm. 270° (B. 25, 1646). — III, 256. 2) β -Oxy- β -Phenonaphtoxanthon. Sm. 290° (B. 25, 1646). — III, 256. 3) 5-Benzoyl-1,4-Naphtochinon. Sm. 1520 (A. 247, 182). — III, 254.
 - 4) 6-Benzoyl-1,4-Naphtochinon. Sm. 130—1320 (A. 247, 186). III, 255. 5) Verbindung (aus Oxalyldibenzylketon). Sm. 237—2390 u. Zers. Na + $3\,\mathrm{H}_2\mathrm{O}$ (A. **284**, 272). — III, 320. C 73,4 — H 3,6 — O 23,0 — M. G. 278.
- $C_{17}H_{10}O_4$ 1) 3,4-Methylenäther d. 1,3-Diketo-2-[3,4-Dioxybenzyliden]-2,3-Dihydroinden. Sm. 209° (B. 30, 1185). 2) 3-Oxy-5-Benzoyl-1,4-Naphtochinon. Sm. 220-2220 u. Zers. (A. 247,
- 185). III, 255. C 69,4 H 3,4 O 27,2 M. G. 294. C17H10O5 Säure (aus Phenol) (G. 14, 103). — II, 649.
 C 65,8 — H 3,2 — O 31,0 — M. G. 310. $C_{17}H_{10}O_6$

 $C_{17}H_{11}N_{9}$

 $C_{17}H_{12}O$

- 1) Anthracen-1, 2, 4-Tricarbonsäure. Ag₈ (J. pr. [2] 41, 129). II, 2037. C 89,1 H 4,8 N 6,1 M. G. 229. $C_{17}H_{11}N$
 - Anthrachinolin. Sm. 170°; Sd. 446°. HCl, (2 HCl, PtCl₄), HJ, H₂SO₄, Pikrat (A. 201, 344; B. 17, 170). IV, 461.
 β-Anthrachinolin (B. 29, 708). IV, 463.
 - 3) α -Chrysidin. Sm. 108°. (2 HCl, PtCl₄ + 2H₂O), (HCl, AuCl₃) (A. 266, 163). — IV, 463.
 - 4) β-Chrysidin. Sm. 131°. (2 HCl, PtCl₄ + 2 H₂O), HNO₃, H₂Cr₂O₇ + 2H₂O (A. 266, 166). IV, 464.
 5) Phenonaphtakridin. Sm. 225—226°. (2 HCl, PtCl₄) (B. 27, 2843). —
 - IV, 464.
 - 6) 3-Furfuryl-β-Naphtochinolin. Sm. 94° (B. 27, 2028).
 C 79,4 H 4,3 N 16,3 M. G. 257.
 - 1) Nitril d. $\alpha\beta$ -Di[2-Cyanphenyl] propionsäure. Sm. 114° (B. 27, 835,
 - 2492). II, 2025.

 C 88,0 H 5,1 O 6,9 M. G. 232.

 1) Chrysofluorenalkohol. Sm. 166—167° (B. 18, 1934). II, 1083.

 2) 1-Methylphenanthrenfuran (Methylbiphenylenfuran). Sm. 123—124° (B. 17, 2829; 21, 2933). III, 447.
 - 3) β-Phenylennaphtylenmethanoxyd. Sm. 80° (A. 257, 89). II, 1002. 4) Phenyl-1-Naphtylketon. Sm. 75,5°; Sd. 385° (B. 6, 541, 1238, 1246; A. ch. [6] 12, 338; A. 264, 196; Bl. 40, 166; [3] 15, 71; J. pr. [2] 35, 508). III, 254.
 - 5) Phenyl-2-Naphtylketon. Sm. 82°. Pikrat (B. 6, 541, 1239, 1246; A. ch. [6] 12, 341; J. pr. [2] 35, 503; Bl. [3] 15, 71). III, 255.
 6) Verbindung (aus Phenanthroxylencrotonsäureäthylester). Sm. 215° (B. 16, 280; Soc. 59, 10). II, 1906.
 C 82,2 H 4,8 O 12,9 M. G. 248.
- $C_{17}H_{12}O_2$
 - 1) 2,6-Diphenyl-1,4-Pyron. Sm. 138,5—139,5° (B. 23, 3735). III, 304. 2) Dehydrophenanthrenacetonchinon. Sm. 195° (B. 17, 2827). — III, 447.
 - 3) 2-Phenylnaphtalin-1-Carbonsäure (Chrysensäure). Sm. 186,5%. Ba (B. **23**, 2440). — II, 1480.
 - 4) Lakton d. Cornicularsaure. Sm. 141° (B. 15, 1547; A. 219, 23). II, 1720. 5) 1-Naphtylester d. Benzolcarbonsäure. Sm. 56° (Z. 1869, 216). —

 - 6) 2-Naphtylester d. Benzolcarbonsäure. Sm. 107°. + AlCl₃ (Z. 1869, 216; Bl. [3] 9, 1050; C. 1896 [2] 429). II, 1149. 7) Verbindung (aus Phenanthroxylenacetessigsäureäthylester). Sm. 276 bis
 - 277° u. Zers. (Soc. 59, 18). II, 1908. 8) Verbindung (aus 2-[2-Oxynaphtoyl]benzol-1-Carbonsäure). Sm. 1140 (B. **16**, 306). — II, 1909. C 77,3 — H 4,5 — O 18,2 — M. G. 264.
- $C_{17}H_{12}O_3$ 1) 2,4,5-Triketo-1,3-Diphenyl-R-Pentamethylen (B. 27, 1353). 2) 5-Oxy-1, 3-Diketo-2, 4-Diphenyl-2, 3-Dihydro-R-Penten (Oxalyldibenzylketon). Sm. 192—193°. Ag (A. 284, 250). — III, 319.

 $C_{17}H_{12}O_5$

- 3) 1,4-Dioxy-5-Benzoylnaphtalin. Sm. 190—191° u. Zers. (A. 247, 183). $C_{17}H_{12}O_3$ – III, 255.
 - 4) ?-Oxy-2-[2-Oxybenzoyl]naphtalin. Sm. 103-106° (A. 257, 93). III, 255.
 - 5) P-Oxy-2-[2-Oxybenzoyl]naphtalin. Sm. 168—169°. K₂ (A. 257, 90). - III, 255.
 - 6) Methyläther d. 3-Oxy-2-Phenyl-1,4-Naphtochinon. Sm. 122-1230 (A. **296**, 20).
 - 7) δ -Keto- $\alpha\delta$ -Diphenyl- α -Butin- γ -Carbonsäure. Sm. 135 °. K + 2 ${
 m H}_2{
 m O}$ (B. **21**, 1488). — **II**, 1720.
 - 8) 2,5-Diphenylfuran-3-Carbonsäure. Sm. 217°. Na, Ag (B. 21, 1489, 3059; Soc. 57, 951). — III, 713.
 - 9) Lakton d. γ -Keto- β -Oxy- α δ -Diphenyl- α -Buten- δ -Carbonsäure. Sm. 231—233° (A. 282, 20).
 - 10) $\alpha\gamma$ -Lakton d. $\beta\gamma$ -Dioxy- $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadiën- α -Carbonsäure (Pulvinon). Sm. 248 249°. Na + 4 H₂O, K + 4 H₂O, Ba + 8 H₂O, Ag A. 284, 277). — II, 1899.
 - 11) Phenylester d. 1-Oxynaphtalin-2-Carbonsäure. Sm. 96° (B. 20, 2700). - II, 1687.
- $C_{17}H_{12}O_4$ C 72.9 - H 4.3 - O 22.8 - M. G. 280.1) 3-Methyläther d. 1,3-Diketo-2-[3,4-Dioxybenzyliden]-2,3-Dihydrobenzol. Sm. 2120 (B. 30, 1186).
 - 2) Acetat d. 3-Oxy-1-Methyl-9,10-Anthrachinon. Sm. 134-135° (B. 31, 2795).
 - 3) Acetat d. 4-Oxy-l-Methyl-9,10-Anthrachinon. Sm. 179-180° (B. 20, 2069). — III, 449.
 - 4) Acetat d. P-Oxy-2-Methyl-9,10-Anthrachinon. Sm. 177° (B. 16, 702). **- III**, 451.
 - 5) Acetat d. 7-Oxy-4-Phenyl-1, 2-Benzpyron (A. d. β-Phenylumbelliferon). Sm. 123° (B. 27, 1999). — II, 1889.
 - 6) Acetat d. 6-Oxy-2-Phenyl-1,4-Benzpyron. Sm. 157—158° (B. 32, 332).
 - 7) Acetat d. 7-Oxy-2-Phenyl-1,4-Benzpyron. Sm. 129-130° (B. 31, 704).
 - 8) 7-Benzoat d. 7-Oxy-4-Methyl-1,2-Benzpyron. Sm. 159-160° (B. 16, 2124). — II, 1780.
 - 9) 5,6-Dioxy-2-Keto-1-Cinnamyliden-1,2-Dihydrobenzfuran (Dioxycinnamylidencumaranon) (B. 30, 2951).
 - 10) ?-Dimethyl-9,10-Anthrachinon-?-Carbonsäure. Sm. 239—240° (A. 234, 241). — II, 1905.
 - 11) $\alpha \gamma$ -Lakton d. α -Oxy- γ -Keto- β -Benzoyl- α -Phenylpropan- γ -Carbonsäure (Ketophenylparakophenon). Sm. 2120 u. Zers. (A. 281, 47). II, 1978.
 - 12) Aethylester d. 9,10-Anthrachinon-l-Carbonsäure. Sm. 169° (A. 290, 232; B. 30, 1116).
 - 13) Aethylester d. 9,10-Anthrachinon-2-Carbonsäure. Sm. 1470 (B. 17, 890). — II, 1904. C 68,9 — H 4,0 — O 27,0 — M. G. 296.
 - 1) Alpinin $+ H_2O$. Sm. 172-1740 (B. 14, 2810). III, 632.
 - 2) 3,4,5-Trioxyphenyl-4-Oxy-l-Naphtylketon. Sm. 246° u. Zers. Na (A. 269, 313). - III, 256.
 - 3) 2, 3, 4-Trioxyphenyl-3-Oxy-2-Naphtylketon. Sm. 287—289° (B. 30, 2594).
 - 4) 3,4-Methylenäther-7-Methyläther d. 7-Oxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron. Sm. 175° (176°) (B. 29, 1755; 30, 302; 32, 311, 313).
 - 5) Monacetat d. 2,4-Dioxy-1-Methyl-9,10-Anthrachinon (M. d. Rubiadin). Sm. 225° (Soc. 65, 184). — III, 449.
 - 6) 2-Acetat-1-Methyläther d. 1,2-Dioxy-9,10-Anthrachinon. Sm. 186
 - bis 187° (Soc. 65, 185). III, 422. 7) 1-Acetat-2-Methyläther d. 1,2-Dioxy-9,10-Anthrachinon. Sm. 209 bis 210° (Soc. 63, 1175). — III, 422.
 - 8) Monacetat d. ?-Dioxyphenanthrenchinonmonomethyläther (Acetylmethylmorpholchinon). Sm. 205-207° (B. 31, 52, 2924, 3200).
 - 9) γ-Keto-βγ-Diphenylpropen-αα-Dicarbonsäure (Desylenmalonsäure). Sm. 130°. Ag₂ (Soc. 67, 136). — II, 1981.

10) Dimethylester d. 9-Ketofluoren-1,4-Dicarbonsäure. Sm. 1840 (A. $C_{17}H_{12}O_5$ **229**, 154). — II, 1979. 11) Citrakonfluorescein $+4H_2O$. Zers. bei 230-240°. Na₂, Ca $+8H_2O$, Pb, Pb + 2 PbO (Soc. 59, 303; 63, 677; B. 29, 2824). — II, 2026. 12) Verbindung (aus d. Wurzel von Ventilago madraspatana) (Soc. 65, 938). — III, 454. C 65,4 — H 3,8 — O 30,8 — M. G. 312. C17H12O6 1) Lupigenin. $NH_4 + H_2O(B. 11, 2201)$. — III, 597. 2) α , 2-Lakton d. 4,5-Dioxy-1-[α -Oxy- β -Benzoxyläthyl] benzol-4,5-Methylenäther-2-Carbonsäure. — II, 1992. 3) α , 2-Lakton d. $\alpha\beta$ -Diphenyläthan- α , 2, 2'-Tricarbonsäure. Sm. 204 bis 207°. Ba + H₂O, Ag₂ (B. 27, 2502). — II, 2056.
4) Monacetat d. Emodin. Sm. 179—180° (A. 183, 162). — III, 454.
5) Acetat d. Pseudobaptigenin. Sm. 173° (C. 1897 [2] 1077). 6) Diacetat d. 1,3-Dioxyxanthon. Sm. 144° (B. 24, 3981). — III, 204. 7) Diacetat d. 1,7-Dioxyxanthon. Sm. 185° (B. 10, 1402). — III, 206. 8) Diacetat d. 3,4-Dioxyxanthon. Sm. 161° (B. 24, 969). — III, 204. 9) Diacetat d. 3,6-Dioxyxanthon. Sm. 124—130° (4. 254, 302). — III, 205. 10) Diacetat d. β -Isoxanthon. Sm. 175° (A. 254, 301). — III, 206. C 62,2 - H 3,6 - O 34,2 - M. G. 328. $C_{17}H_{12}O_7$ 1) Acetylaloëxantin (J. 1877, 910). — III, 618. 2) Monacetat d. Rhein. Sm. 262—265° (B. 28 [2] 1058). 3) Diacetat d. 7,8-Dioxy-2-[2-Furanyl]-1,4-Benzpyron. Sm. 2010 (B. **29**, 2435). — III, 728. C 83,6 — H 4,9 — N 11,5 — M. G. 244. $C_{17}H_{12}N_2$ 1) 2-Phenyl- β -Naphtimidazol. Sm. 214° (210°). HCl + $1^{1}/_{2}$ H₂O, HNO₃, H₂SO₄ (A. 208, 328; 263, 314; Soc. 59, 705). — IV, $106\overline{1}$. 2) 9-Methyl-αβ-Naphtophenazin (αβ-Tolunaphtazin). Sm. 139—141° (A. 237, 343). — IV, 1062. 3) 2-Methyl- $\beta\beta$ -Naphtophenazin (m- $\beta\beta$ -Tolunaphtazin). Sm. 179,8° (B. 19, 917). — IV, 1063. 4) Tolunaphtazin (Naphtomethylphenazin). Sm. 169° (B. 20, 578; 27, 2778). **- IV**, 1063. 5) Verbindung (aus Phenanthrenchinon). Sm. 127-128°. (2HCl, PtCl₄) (B. 21, 2362). — III, 445. C 75,0 — H 4,4 — N 20,6 — M. G. 272. $C_{17}H_{12}N_4$ 1) Nitril d. 5-[β -Phenyläthenyl]-1-Phenyl-1, 2, 4-Triazol-3-Carbonsäure. Sm. $167,5^{\circ}$. — IV, 1170. 1) Trimethyldibromanthracylen. Sm. 105° u. Zers. (J. pr. [2] 41, 126). $\mathbf{C}_{17}\mathbf{H}_{12}\mathbf{Br}_{2}$ **–** II, 282. $\mathbf{C}_{17}\mathbf{H}_{13}\mathbf{O}_{2}$ 1) Verbindung (aus d. Verb. $C_{17}H_{12}O_2Br_2 = (C_{17}H_{18}O_2)_x$. Sm. 127° (B. 15, 20). — II, 1412. C 88,3 — H 5,6 — N 6,1 — M. G. 231. $\mathbf{C}_{17}\mathbf{H}_{13}\mathbf{N}$ 1) 1-Benzylidenamidonaphtalin. Sm. 73° (A. 171, 138; M. 9, 698). — 2) 2-Benzylidenamidonaphtalin. Sm. 102—103° (M. 9, 698; A. 237, 273). · III, 31. 3) 1-Phenylimidomethylnaphtalin (α-Naphtobenzylidenanilin). Sm. 71° (B. 22, 2149). - III, 63.4) 2,6-Diphenylpyridin. Sm. 81°; Sd. 396—398° u. ger. Zers. (HCl, AuCl₃), (2HCl, PtCl₄ + 2H₂O), H₂Cr₀, H₂Cr₂O₇, Pikrat (B. 20, 2764; 28, 1731; 29, 798; 30, 1499; A. 249, 122). — IV, 455. 5) $2-[\beta-Phenyläthenyl]$ chinolin (Benzylidenchinaldin). Sm. 100°. HCl, $(2 \text{HCl}, \text{PtCl}_4 + 2 \text{H}_2 \text{O}), \text{H}_2 \text{Cr}_2 \text{O}_7 + 2^{1/2} \text{H}_2 \text{O} (B. 16, 2006, 2008; 22, 3008).}$ • IV, 454. 6) 4-[β -Phenyläthenyl]chinolin. Sm. 92° (B. 18, 1646; 21, 2172). — IV, 455. 7) Dihydrophenonaphtakridin. Sm. 287° (B. 26, 2597; 27, 2840). — IV, 456.

8) Nitril d. αδ-Diphenyl-αγ-Butdien-α-Carbonsäure. Sm. 118-119°

1) 5-Amido-10-Methyl- $\alpha\beta$ -Naphtophenazin (Eurhodin). HCl + H₂O (B.

(B. **23**, 2856). — II, 1479. C 78,8 — H 5,0 — N 16,2 — M. G. 259.

18, 1119; 19, 442; 23, 2454). — IV, 1209.

 $\mathbf{C}_{17}\mathbf{H}_{13}\mathbf{N}_{3}$

- $C_{17}H_{13}N_3$
- 2) 2-Phenyl-2,3-Dihydro-1,2,4-Naphtisotriazin $+ \frac{2}{3}$ H₂O. Sm. 164°. $HCl, (2HCl, PtCl_4) (B. 24, 1003). - IV, 1393.$
- 3) Methylrosindulin. Zers. bei 100°. HCl + H₂O, (2HCl, PtCl₄), HJ,
- HNO₃ (B. 30, 394). IV, 1205. 4) Nitril d. 3-Methyl-1,5-Diphenylpyrazol-4-Carbonsäure. Sm. 188 bis 189° (*J. pr.* [2] **47**, 115). — **IV**, 783. 1) P-Brom-1-Benzylnaphtalin (*Bl.* **26**, 4; *J.* **1873**, 390). — **II**, 281.

 $\mathbf{C}_{17}\mathbf{H}_{13}\mathbf{Br}$ $C_{17}H_{14}O$

- C 87,2 H 6,0 O 6,8 M. G. 234.
 1) 1-[α-Oxybenzyl]naphtalin. Sm. 86,5°; Sd. oberh. 360° (B. 13, 359). II, 1082
- 2) Benzyläther d. 1-Oxynaphtalin. Sd. 320° u. Zers. (A. 217, 48).
- 3) Benzyläther d. 2-Oxynaphtalin. Sd. 990 (A. 217, 47; B. 14, 899). II, 1050.
- 4) 4-Methylphenyläther d. 2-Oxynaphtalin. Sm. 135° (B. 30, 884).
- 5) ε -Keto- $\alpha \varepsilon$ -Diphenyl- $\alpha \gamma$ -Pentadiën. Sm. 102—103° (B. 28, 1730). —
- 6) γ -Keto- $\alpha \varepsilon$ -Diphenyl- $\alpha \delta$ -Pentadiën (Dibenzylidenaceton). Sm. 112—112,5° (A. Spl. 5, 82; B. 14, 350, 1460, 2461, 2470; 30, 2802; A. 223, 141; Ph. Ch. 10, 420). — III, 252.
- 7) 2-Keto-4, 5-Diphenyl-2, 3-Dihydro-R-Penten. Sm. 110°; Sd. 250 bis 260°_{18-20} (Soc. 51, 422; 71, 131, 141). — III, 251. C 81,6 — H 5,6 — O 12,8 — M. G. 250.

 $C_{17}H_{14}O_{2}$

- 1) γ -Keto- ε -Phenyl- α -[2-Oxyphenyl]- α δ -Pentadiën. Sm. 139° (B. 31, 728).
- 2) 3-Oxy-1-Keto-3, 4-Diphenyl-2, 3-Dihydro-R-Penten (Anhydroaceton-benzil). Sm. 147° (149°) (B. 18, 182; Soc. 51, 429; 71, 130). III, 251.
- 3) 1,3-Diketo-2-Aethyl-2-Phenyl-2,3-Dihydroinden. Sm. 103-103,50 (B. **26**, 2579). — III, 303.
- 4) 1,3-Diketo-2,5-Dimethyl-2-Phenyl-2,3-Dihydroinden. Sm. 123,50 (B. **29**, 2377).
- 5) 1,3-Diketo-2-Methyl-2-[3-Methylphenyl]-2,3-Dihydroinden. Sm. 97° (B. 28, 1391). — III, 303. 6) 1,2,4-Trimethyl-9,10-Anthrachinon. Sm. 162—163° (A. 234, 241;
- J. pr. [2] 41, 123). III, 457.
- 7) 1,3,6-Trimethyl-9,10-Anthrachinon. Sm. 190° (J. pr. [2] 41, 143). III, 458.
- 8) 1,4,6-Trimethyl-9,10-Anthrachinon. Sm. 1840 (J. pr. [2] 41, 140; B. 19, 409). — III, 458.
- 9) Atronsäure. Sm. 164°. $Ca + 6H_2O$, $Ba + 4H_2O$ (A. 206, 50). -II, 1479.
- 10) Isoatronsäure. Sm. 156-157°. Ca, Ba+6H₂O (A. 206, 57). II, 1479.
- 11) $\beta\delta$ -Diphenyl- $\alpha\gamma$ -Butadiën- α -Carbonsäure (Phenylcinnamenylakrylsäure). Sm. 187—188°. Ag (G. 15, 105). II, 1479.
- 12) Lakton d. α-Oxy-αγ-Diphenyl-α-Buten-δ-Carbonsäure (A. 294, 333).
- 13) Lakton d. Dihydrocornicularsäure. Sm. 116-117° (B. 14, 1691; A. **219**, 27). — II, 1717.
- 14) Lakton d. Isodihydrocornicularsäure. Sm. 102-105° (A. 219, 35;
- B. 15, 1547). II, 1717. 15) Aethylester d. Anthracen-2-Carbonsäure (vom Sm. oberh. 280°). Sm. 134° (B. 13, 49). — II, 1478.
- 16) Monacetat d. Dioxyphenanthrenmonomethyläther. Sm. 1300 (B. 27, 1148). — II, 1000. C 76.7 - H 5.2 - O 18.1 - M. G. 266.

 $C_{17}H_{14}O_{3}$

- 1) γ -Keto- αs -Di[2-Oxyphenyl]- $\alpha \delta$ -Pentadiën. Sm. 160° (B. 18, 1968). III, 252.
- 2) β -Oxy- $\alpha \alpha$ -Dibenzoylpropen. Sm. 80-85°. Fe + 3H₂O (B. 18, 2133; **27**, 114; A. **277**, 189; **291**, 56, 62, 73). — III, 318.
- 3) αα-Dibenzoyl-β-Ketopropan (Dibenzoylaceton). Sm. 107—110° (A. 277, 66, 193; 278, 136; 291, 78; B. 27, 114). III, 319.
 4) Aethyläther d. 6-Oxy-2-Phenyl-1,4-Benzpyron. Sm. 98—99° (B. 32,
- 5) Aethyläther d. 7-Oxy-2-Phenyl-1,4-Benzpyron. Sm. 138-139° (B. 31, 703).
- 6) Acetat d. γ -Keto- γ -[2-Oxyphenyl]- α -Phenylpropen. Sm. 51—520 (B. **31**, 1758).

 $C_{17}H_{14}O_{3}$

 $C_{17}H_{14}O_4$

- 7) Acetat d. γ-Keto-γ-Phenyl-α-[2-Oxyphenyl]propen. Sm. 68—69° (B. 29, 234). III, 247.
 8) Acetat d. γ-Keto-γ-Phenyl-α-[8-Oxyphenyl]propen. Sm. 102—103° (B. 29, 235). III, 247.
- Acetat d. γ-Keto-γ-Phenyl-α-[4-Oxyphenyl]propen. Sm. 129—131° (B. 29, 236). III, 247.
- 10) Acetat d. 2-Oxy-1-Keto-2-Phenyl-2,3-Dihydroinden? Sm. 167°
- (B. 25, 2100). III, 249. 11) Monacetat d. Dioxyphenanthrenmonomethyläther. Sm. 130° (131°) (B. 19, 794; 27, 1148; 31, 52, 2924). — II, 1000; III, 908.
- 12) Benzoat d. γ-Keto-α-[2-Oxyphenyl]-α-Buten. Sm. 87-88° (B. 24, 3182). — III, *161*.
- 13) Phenanthrenacetonchinon. Sm. 89,5—90° (Soc. 41, 274; B, 17, 2828). III, 447.
- 14) Thebenol. Sm. 186° (186—188°). Na (B. 27, 2962; 30, 1379).
- 15) γ -Keto- $\alpha\delta$ -Diphenyl- α -Buten- α -Carbonsäure (Cornicularsäure). 123° (A. **219**, 23; B. **15**, 1547, 1549). — II, 1720.
- 16) γ -Keto- $\alpha\delta$ -Diphenyl- α -Buten- δ -Carbonsäure. Sm. 220—221° (A. 284, 283). II, 1720.
- 17) Lakton d. β -Oxy- δ -Keto- $\alpha\beta$ -Diphenylbutan- δ -Carbonsäure. Sm. 171°. Na (B. **16**, 2818; **27**, 2222). — **11**, 1894. C 72,3 — H 4,9 — O 22,7 — M. G. 282.
 - 1) β -Methyläther d. $\alpha\beta$ -Dioxy- $\gamma\delta$ -Diketo- $\alpha\delta$ -Diphenyl- α -Buten (B. 27, 715). **— III**, *31*7.
 - 2) Dimethyläther d. 5,7-Dioxy-4-Phenyl-1,2-Benzpyron. Sm. 166 bis 167° (M. 18, 743).
 - 3) Dimethyläther d. 7,8-Dioxy-2-Phenyl-1,4-Benzpyron. Sm. 148 bis 149,5° (B. **29**, 2433).
 - 4) Dimethyläther d. 3,5-Dioxy-2-Keto-1-Benzyliden-1,2-Dihydrobenzfuran. Sm. 150—152° (B. 30, 2154).
 5) Monäthyläther d. Chrysin. Sm. 146° (B. 10, 177). — III, 628.

 - 6) Nepalin. Sm. 136° (A. 291, 308). III, 453. 7) Acetat d. β -Oxy- $\alpha\gamma$ -Diketo- $\alpha\gamma$ -Diphenylpropan. Sm. 94° (B. 23, 3377). — III, 297.
 - 8) 4-[a-Oxyisopropyl]-9-Ketofluoren-1-Carbonsäure. Sm. bei 190°. Ba + 2 H₂O, Ag (A. 229, 146). II, 1900.
 - 9) $\beta\gamma$ -Diketo- $\alpha\delta$ -Diphenylbutan- α -Carbonsäure (Dibenzyloxalylcarbonsäure). Sm. 231—233° (A. 282, 20). II, 1899.
- 10) α -Phenyl- β -[2-Acetoxylphenyl]akrylsäure. Sm. 170—180°. Ag (J. 1879, 731). — II, *1707*.
- 11) αα-Diphenylpropen-βγ-Dicarbonsäure (Diphenylitakonsäure). Sm. 168 bis 1690 u. Zers. (A. 282, 318; B. 28, 3192).
- 12) Gem. Anhydrid d. Essigsäure u. d. 2-[4-Methylbenzoyl]benzol-1-Carbonsäure. Sm. 1020 (A. 299, 308).
- 13) α , 2-Lakton d. α -Oxy- $\alpha\alpha$ -Diphenylmethan-2, 4-Dicarbonsäure-4-Aethylester (L. d. Benzhydrylisophtalsäure). Sm. 114-1150 (B. 9, 1764). — II, 1973.
- 14) α , 2-Lakton d. α -Oxy- $\alpha\alpha$ -Diphenylmethan-2, 2'-Dicarbonsäure-2'-Aethylester (L. d. Benzhydroldicarbonsäure). Sm. 99,50 (A. 242, 241). - II, 1973.
- 15) Benzoat-3,4-Methylenäther d. 3,4-Dioxy-1- $[\gamma$ -Oxypropyl] benzol (Benzoylcubebin). Sm. 147,5° (M. 9, 324). — II, 1114.
- 16) Verbindung (aus 6-Phenyl-1,2-Pyron u. 1,2-Dioxybenzol). Sm. 64-66°
- (B. 28, 1553). II, 1680. 17) Verbindung (aus 6-Phenyl-1,2-Pyron u. 1,3-Dioxybenzol). Sm. 110° (B. 28, 1554). II, 1680.
- 18) Verbindung (aus 6-Phenyl-1,2-Pyron u. 1,4-Dioxybenzol). Sm. 108° (B. 28, 1554). II, 1680. C 68,4 - H 4,7 - O 26,8 - M. G. 298.

 $C_{17}H_{14}O_{5}$

- 1) $\alpha^{3,4}$ -Methylenäther- γ^4 -Methyläther d. γ -Keto- γ -[2,4-Dioxyphenyl]α-[3,4-Dioxyphenyl] propen (Piperonalpaeonol). Sm. 148,5° (B. 32,
- 2) 5,6,7-Trioxy-1,2,4-Trimethyl-9,10-Anthrachinon. Sm. 244° (A. 240, 290). — **III**, 457.

 $C_{17}H_{14}O_{6}$

 $C_{17}H_{14}O_{7}$

 $C_{17}H_{14}O_{8}$

 $\mathbf{C}_{17}\mathbf{H}_{14}\mathbf{O}_{10}$

 $C_{17}H_{14}N_2$

- III, 661.

3) 5,6[oder 7,8]-Dimethyläther d. 4,5,6[oder 4,7,8]-Trioxy-1-Methyl-9,10-Anthrachinon (A. 240, 303). — III, 450. C₁₇H₁₄O₅

4) Trimethyläther d. 1,2,6-Trioxy-9,10-Anthrachinon. Sm. 225° (B. 31,

5) Monomethyläther d. Brasilein (B. 27, 526). — III, 654. 6) Dimethyläther d. Apigenin. Sm. 171-1720 (Soc. 71, 812).

7) α-Methylphyseion. Sm. 205° (J. pr. [2] 57, 438).
 8) β-Methylphyseion. Sm. 178° (J. pr. [2] 57, 438).

9) Monacetat d. 1,7-Dioxyxanthon-α-Monäthyläther. Sm. 180—1820

(M. 12, 164). — III, 206. 10) Monacetat d. 1,7-Dioxyxanthon-β-Monäthyläther. Sm. 164—166° (M. 13, 419). — III, 206.

11) Diacetat d. 2,2'-Dioxydiphenylketon. Sm. 96° (83°) (J. pr. [2] 28, 287; B. 14, 657; 19, 2611). — III, 195.

12) Diacetat d. 2,4'-Dioxydiphenylketon. Sm. 84—85° (Am. 5, 83). — III, 198.

- 13) Diacetat d. 3,3'-Dioxydiphenylketon. Sm. 89-90° (B. 13, 836; A. 218, 357). — III, 198. 14) Diacetat d. 4,4'-Dioxydiphenylketon. Sm. 152° (148°) (A. 194, 336;
- 202, 130). III, 199.

15) 2-Benzoyl-1,3-Dimethylbenzol-4,6-Dicarbonsäure? (Benzoylcumidinsäure). Sm. 85°. Ba $+ 2^{1}/_{2}$ H₂O (J. 1879, 562). — II, 1978.

16) Dimethylester d. 4[?]-Benzoylbenzol-1, 3-Dicarbonsäure. bis 118° (B. 9, 1763). — II, 1975. Sm. 117

17) Dimethylester d. 2-Benzoylbenzol-1,4-Dicarbonsäure. Sm. 100 bis 101° (J. 1878, 403). — II, 1975. 18) Dimethylester d. Diphenylketon-2, 2'-Dicarbonsäure.

Sm. 85-86° (A. **242**, 246). — II, 1975.

19) Dimethylester d. Diphenylketon-2,4'-Dicarbonsäure. Sm. 107° (B. 28, 1135). — II, 1976.

20) Dimethylester d. Diphenylketon-4,4'-Dicarbonsäure. Sm. 138° (B. 20, 523). — II, 1976.

21) Verbindung (aus Phloretin). Sm. 213° (B. 27, 1632). C 65,0 — H 4,4 — O 30,6 — M. G. 314.

1) αα-Diphenyläthan-α??-Tricarbonsäure. Sm. 253-255°. Ba₃, Ag₃ (B. 15, 1479). — II, 2025.

2) $\alpha \alpha$ -Diphenyläthan- β ??-Tricarbonsäure (β -Phenyl β -Dicarboxyphenylpropionsaure). Sm. 218° u. Zers. Ca₃, Ba₃ (B. 26, 1582). — II, 2025 3) Monacetat d. 3,4,5-Trioxy-1,2-Dibenzoylbenzol. Sm. 165° (J. r. 25,

115). — III, 297.

4) 1-Acetat d. 1,3,7-Trioxyxanthon-3,7-Dimethyläther. Sm. 1890 (M.

12, 320). — III, 210. C 61,8 — H 4,2 — O 33,9 — M. G. 330. 1) Dimethyläther d. Morin. Sm. 225—227° (Soc. 69, 797). — III, 683. 2) Dimethyläther d. Quercetin (Rhamnazin). Sm. 214—215°. H₂SO₄

(Soc. 67, 497, 651; 71, 819). — III, 604. C 59,0 — H 4,0 — O 37,0 — M. G. 346. 1) Triacetat d. Verb. $C_{11}H_8O_5$. $+ C_2H_4O_2$ (Sm. 137—138°) (Soc. 63, 1084).

C 54,0' - H 3,7 - O 42,3 - M. G. 378.1) Monacetat d. Verb. $C_{15}H_{12}O_9$ (aus Sordidin). Sm. 149—150° (G. 24 [2] 333). — II, 2059. C 82,9 — H 5,7 — N 11,4 — M. G. 246.

1) 1[oder 2]-Amido-2[oder 1]-Benzylidenamidonaphtalin.

bis 157° (B. 29, 1499). — IV, 920. 2) α-Imido-α-[1-Naphtyl]amido-α-Phenylmethan. Sm. 141°. HCl, Chromat, Oxalat (B. 11, 1757). — IV, 845.

3) Phenylamido-1-Naphtylimidomethan. Sm. 1420 (Am. 13, 516). -II, 604.

- 4) 1-Naphtophenylamidin. Sm. 128—130° (*J. pr.* [2] **54**, 131). IV, 955. 5) 2-Naphtophenylamidin. Sm. 162—163° (*J. pr.* [2] **54**, 130). IV, 956. 6) 1-[2-Methylphenyl]azonaphtalin. Sm. 52° (*B.* 26, 145). IV, 1400. 7) 1-[3-Methylphenyl]azonaphtalin. Sm. 43—44° (*B.* 31, 995). IV, 1400.

 $C_{17}H_{14}N_{2}$

C17H15N

 $C_{17}H_{15}N_3$

- 8) 2-Methyl-5,6-Diphenyl-1,4-Diazin. Sm. 86-87°. Pikrat (Soc. 63, 1285). **— IV**, 1040.
- 9) α -[3-Amidophenyl]- β -[2-Chinolyl] äthen. Sm. 158—159° (B. 23, 3648). IV, 1040.
- 10) α -[4-Amidophenyl]- β -[2-Chinolyl]äthen. Sm. 171—173° (B. 22, 285). • IV, 1040.
- 11) α -[3-Amidophenyl]- β -[4-Chinolyl]äthen. Sm. 141° (B. 21, 2169). - IV, 1040.
- 12) 4-Methyl-2-[Phenyläthenyl]-1,3-Benzdiazin. Sm. 96°. HCl (B. 26,
- 1394). IV, 1040.
 13) Base (aus p-Toluidin u. Benzonitril). Sm. 121 123°. (2 HCl, PtCl₄) (J. pr. [2] 54, 125). IV, 844.
 14) Nitril d. αγ-Diphenylpropan-αγ-Dicarbonsäure. Sm. 70—71° (B. 22, 125).
- 3290). II, 1894.
- 15) Nitril d. $\alpha \gamma$ -Diphenylpropan- $\beta \beta$ -Dicarbonsäure. Sm. 130°; Sd. ca. 360° (G. 26' [2] 221).
- 16) Verbindung (aus d. Nitril d. β -Imido- β -[4-Methylphenyl] propionsäure).
- Sm. 215° u. Zers. (*J. pr.* [2] **52**, 113). III, 37. C 74,4 H 5,1 N 20,5 M. G. 274. $C_{17}H_{14}N_4$ 1) 3,5-Di[Benzylidenamido]pyrazol. Zers. bei 170° (B. 27, 690; J. pr.
- [2] **52**, 46). **IV**, 1238. 1) **9,10**-Dibrom-1, **3**, **6**-Trimethylanthracen. Sm. 142° (J. pr. [2] **41**, 143). $\mathbf{C}_{17}\mathbf{H}_{14}\mathbf{Br}_{2}$
- C17 H148 1) 2-Methylphenyläther d. 1-Merkaptonaphtalin. Sd. 227,5% (B. 24, 2267; **28**, 2328). — **II**, 867. 2) 3-Methylphenyläther d. 1-Merkaptonaphtalin. Sd. 229°, (B. 24, 2266;
 - **28**, 2328). **II**, 867. 3) 4-Methylphenyläther d. 1-Merkaptonaphtalin. Sm. 40,5°; Sd. 233°₁₂
 - (B. 24, 2265; 28, 2328). II, 867. 4) 2-Methylphenyläther d. 2-Merkaptonaphtalin. Sd. 232°₁₂ (B. 24,
 - 2266; **28**, 2328). II, 887.
 - 5) 3-Methylphenyläther d. 2-Merkaptonaphtalin. Sm. 60°; Sd. 236°, (B. 24, 2266; 28, 2328). — II, 887.
 - (B. 24, 2265; 28, 2328). — II, 887.
 - 7) Diphenylthiënylmethan. Sm. 63°; Sd. $330-340^{\circ}$. $+ C_6H_6$ (Sm. 48°) (B. 19, 1624). — III, 749. C 87,6 — II 6,4 — N 6,0 — M. G. 233.
 - 1) 1-[2-Methylphenyl]amidonaphtalin. Sm. 94-95° (B. 16, 2084). II. 600.
 - 2) 1-[4-Methylphenyl]amidonaphtalin. Sm. 78°; Sd. 360°, 18, 68; B. 14, 2344; 16, 2084). — II, 600.
 - 3) **2-[2-Methylphenyl]amidonaphtalin.** Sm. 95—96°. Pikrat (B. **16**, 2082). - II, 603.
 - 4) 2-[4-Methylphenyl]amidonaphtalin. Sm. 102—103° (B. 14, 2344; 16, 2078; J. pr. [2] 51, 328). II, 603.
 5) 1-Benzylamidonaphtalin. Sm. 66—67° (Bl. 20, 68). II, 600.
 6) 2-Benzylamidonaphtalin. Sm. 68° (A. 241, 360). II, 602.
 7) 5-Methyl-1, 2-Diphenylpyrrol. Sm. 84° (B. 18, 2596). IV, 333.

 - 8) 6-Benzylidenamido-2-Methylinden. Sm. 73° (B. 19, 1251). III, 71.
 - 9) 2-[β-Phenyläthyl]chinolin (2-Benzylchinaldin). Sm. bei 30°. Pikrat (B. 21, 1426). — IV, 444.
 - 10) **4-**[β -Phenyläthyl]chinolin. Sm. 100 101° (B. **21**, 1427, 2171). IV, 444.
 - 11) 3-Crotonyl- β -Naphtochinolin. Fl. $(2 \text{HCl}, \text{PtCl}_4 + 3 \text{H}_2 \text{O})$ (B. 27, 2024). **- IV**, 444.
 - 12) Base (aus Isochinolinroth). Sm. 86-86,5°. (2 HCl, PtCl₄) (B. 20, 16). · IV, 444.
 - C 78,1 H 5,7 N 16,1 M. G. 261.1) 2-Benzylamidodiazonaphtalin. Sm. 110° (B. 21, 1019). — IV, 1575.
 - 2) 2-[4-Methylphenyl]amidodiazonaphtalin. Sm. 131—132° (B. 21, 2567). **- IV**, 1574.
 - 3) 4-Amido-1-[4-Methylphenyl]azonaphtalin. Sm. 145°. HCl, H₂SO₄ $+3 H_{2}O$ (B. 12, 229; 30, 885). - IV, 1400. 108
 - RICHTER, Lex. d. Kohlenstoffverb.

C17H15N3

- 4) 2,6-Di[?-Amidophenyl] pyridin. Sm. 75-76°. 3HCl (B. 30, 1501). **- IV**, *1192*.
- 5) 6-Amido-5-Methyl-2,4-Diphenyl-1,3-Diazin. Sm. 172-173°. HCl, (2 HCl, PtCl₄), H₂SO₄, H₂Cr₂O₇, 3 H₂Cr₂O₇ (*J. pr.* [2] **39**, 195; [2] **42**, 8).
- 6) 6-Phenylamido-4-Methyl-2-Phenyl-1, 3-Diazin. Sm. 160 161° (150 bis 153°). HCl, HBr, HNO₃ (Pinner, Imidoather 248; Am. 20, 485). IV, 1167.
- 7) 2-Aethyl-4, 6-Diphenyl-1, 3, 5-Triazin. Sm. 67°; Sd. 233-234° (2HCl, PtCl₄) (B. 22, 806). — IV, 1191.
- 8) 6-Phenylhydrazonmethyl-2-Methylchinolin. Sm. 160° (B. 18, 3238). **- IV**, 372.
- 9) 7-Phenylhydrazonmethyl-2-Methylchinolin. $3 + 2H_2SO_4 + 9H_2O$
- (B. 22, 280). IV, 373. 10) Base (aus Aceton u. 4-Amidoazobenzol). Sm. 204—205°. (2HCl, PtCl₄), H_2SO_4 , $H_2Cr_2O_7$ (B. **20**, 480). — IV, 1192. C 70,6 — H 5,2 — N 24,2 — M. G. 289.

 $C_{17}H_{15}N_5$ $\mathbf{C}_{17}\mathbf{H}_{16}\mathbf{O}$

- 1) ?-Di[Phenylazo]-l-Methylpyrrol. Sm. 1960 (B. 19, 2253). IV, 1483. C 86.4 - H 6.8 - O 6.8 - M. G. 236.
- 1) 9-Keto-4-Isopropyl-1-Methylfluoren (Retenketon). Sm. 90° (A. 229, 136; B. 17, 692). — III, 249.
- 2) ε -Keto- $\delta \varepsilon$ -Diphenyl- α -Penten (Allyldesoxybenzoïn). Sd. 335-337° (B. 23, 2067). — III, 249. C 81.0 - H 6.3 - O 12.7 - M. G. 252.

C17H16O2

- 1) $\alpha \varepsilon$ -Diketo- $\alpha \varepsilon$ -Diphenylpentan ($\alpha \gamma$ -Dibenzoylpropan). Sm. 62—63° (67,5°) (A. ch. [6] 22, 358; A. 302, 217). - III, 299.
- 2) $\alpha \gamma$ -Diketo- $\alpha \gamma$ -Diphenyl- β -Aethylpropan ($\alpha \alpha$ -Dibenzoylpropan). 87°; Sd. 230°₂₅ (A. ch. [6] **22**, 351). III, 300.
- 3) $\alpha \gamma$ -Diketo- $\alpha \gamma$ -Di[4-Methylphenyl] propan. Sm. 126° (Bl. [3] 9, 699).
- 4) Aethyläther d. γ -Keto- γ -[4-Oxyphenyl]- α -Phenylpropen. Sm. 74 bis 75° (B. 25, 3535). III, 247.
- 5) Aethyläther d. γ -Keto- γ -Phenyl- α -[3-Oxyphenyl]propen. (B. **29**, 1891).
- 6) Aethyläther d. γ -Keto- γ -Phenyl- α -[4-Oxyphenyl] propen. (B. **29**, 1892).
- 2,6-Diphenyltetrahydro-1,4-Pyron. Sm. 131° (B. 30, 2802).
- 8) Propyloxanthranol. Sm. 164° (B. 22, 1071). III, 250.
 9) Distyrensäure. Sm. bei 50°. Ca, Ba, Ag (A. 216, 182). II, 1476.
 10) Lakton d. γ-Οxy-αδ-Diphenylbutan-α-Carbonsäure (L. d. Tetrahydrocornicularsaure). Sm. 69-71° (B. 14, 1692; A. 219, 35). — II, 1702.
- 11) Lakton d. α -Oxy- α' -Phenyl- α^2 -[2, 3, 5-Trimethylphenyl]methan- α' 2-Carbonsäure (Pseudocumylphtalid). Sm. 140° (A. 234, 238). — II, 1702.
- 12) Lakton d. α -Oxy- α' -Phenyl- α^2 -[2, 4, 6-Trimethylphenyl] methan- α' 2-Carbonsäure (Mesitylphtalid). Sm. 163—164° (A. 234, 237). — II, 1702.
- 13) Aethylester d. $\alpha\beta$ -Diphenylakrylsäure. Fl. (J. 1878, 821). II, 1474.
- 14) 1,2,3,4-Tetrahydro-2-Naphtylester d. Benzolcarbonsäure. Fest. Sd. $254-255_{40}^{0}$ (B. **23**, 209). — II, 1148.
- 15) Verbindung (aus ααγγ-Tetraacetyl-β-Phenylpropan). Sm. 152° (A. 281, 87). **— III**, *324*.
- 16) Verbindung (aus d. Phenylester d. 4-Oxy-1-Isobutylbenzol-3-Carbonsäure). Sm. 158° (J. pr. [2] 36, 397). — II, 1588. C 76,1 — H 6,0 — O 17,9 — M. G. 268.

C17H16O2

- 1) β -Oxy- α δ -Diketo- α β -Diphenylpentan (Acetonbenzil). Sm. 78° (B. 18, 179; Soc. **57**, 673). — III, 299.
- 2) 4-Aethyläther d. γ -Keto- γ -[2, 4-Dioxyphenyl]- α -Phenylpropen. Sm. 104° (B. 31, 698).
- 3) α^2 -Aethyläther d. γ -Keto- $\alpha\gamma$ -Di[2-Oxyphenyl]propen. Sm. 61° (B. **32**, 320).
- 4) Aethyläther d. 6-Oxy-2-Phenyl-2, 3-Dihydro-1, 4-Benzpyron. Sm. 103° (B. **32**, 330).
- 5) Acetat d. γ -Keto- γ -Phenyl- α -[2-Oxyphenyl] propan. Sm. 65—66° (B. 31, 719).

 $C_{17}H_{16}O_{3}$

 $C_{17}H_{16}O_4$

- 4-Benzoat d. 3,4-Dioxy-1-Allylbenzol-3-Methyläther. Sm. 69-70°; Sd. oberh. 360° (A. 108, 322; B. 15, 2067; Ph. Ch. 10, 421). II, 1151.
 4-Benzoat d. 3,4-Dioxy-1-Propenylbenzol-3-Methyläther. Sm. 103 bis 104° (B. 24, 2874; Ph. Ch. 10, 421; A. 301, 103). II, 1151.
 Benzoylacetat d. Dracoresinotannol (C. 1896 [2] 713).
- 9) γ-Keto-αα-Diphenylbutan-β-Carbonsäure. Sm. 90° (Soc. 71, 677).
- 10) α-Keto-αγ-Diphenylbutan-δ-Carbonsäure (β-Phenyl-γ-Benzoylbuttersäure). Sm. 155-156° (A. 294, 332).
- 11) α -Keto- $\alpha\delta$ -Diphenylbutan- γ -Carbonsäure. Sm. 170° (Bl. [3] 17, 411).
- 12) γ-Keto-αδ-Diphenylbutan-α-Carbonsäure (Dihydrocornicularsäure). Sm. 134°. Ag (B. 14, 1690; 15, 1548; A. 219, 25). II, 1717.
 13) α-Benzoyl-α-Phenylpropan-β-Carbonsäure. Sm. 213—215°. Ag (B.
- **21**, 1353). **II**, 1716.
- 14) α-Benzoyl-α-Phenylpropan-γ-Carbonsäure (γ-Benzoyl-γ-Phenylbutter-
- säure). Sm. 136°. $Zn + xH_2O$, Cu + xH_2O , Ag (B. 21, 1351). Π , 1716. 15) 2-[2, 3, 5-Trimethylbenzoyl]benzol-1-Carbonsäure? Sm. 146,5° (B. 15, 638; J. pr. [2] 41, 122). — II, 1716.
- 16) **2-[2,4,6-Trimethylbenzoyl]** benzol-1-Carbonsäure. Sm. 212—212,5° (B. 15, 639). II, 1717.
- 17) Isodihydrocornicularsäure (A. 219, 35). II, 1717.
- 18) Gem. Anhydrid d. Benzolcarbonsäure u. 1-Isopropylbenzol-4-Carbonsäure. Fl. (A. 87, 79). — II, 1385.
- 19) Lakton d. α-Aethoxyl-6-Oxy-3-Methyldiphenylessigsäure. Sm. 122° (B. **31**, 2819).
- 20) Lakton d. α-Aethoxyl-2-Oxy-4-Methyldiphenylessigsäure. Sm. 91 bis 93° (B. 31, 2821).
- 21) Methylester d. 2-Oxy-1, 2-Diphenyl-R-Trimethylen-3-Carbonsäure. Sm. 89° (B. 31, 2229).
- 22) Methylester d. α -Oxy- β -Phenylakryl[2-Methylphenyläther]säure. Sm. 61° (G. 20, 505). II, 1637.
- 23) Methylester d. β-Keto-αγ-Diphenylpropan-α-Carbonsäure. Sm. 66 bis 67° (J. pr. [2] 55, 353).
 24) Methylester d. β-Phenyl-α-Benzoylpropionsäure. Sd. 250—255° 50
- (Soc. 49, 155). II, 1713.
- 25) Methylester d. α-Phenyl-β-Benzoylpropionsäure. Sm. 104—105° (A.
- **284**, **4**; *B*. **28**, 963). II, 1713. 26) Aethylester d. α -Phenyl- β -[3-Oxyphenyl]akrylsäure. Sm. 183° (*B*. 28, 1999).
- 27) Aethylester d. Benzoylphenylessigsäure. Sm. 90° (J. pr. [2] 55, 318).
- 28) Aethylester d. 2-[4-Methylbenzoyl] benzol-1-Carbonsäure. Sm. 68
- bis 69° (Bl. 35, 505). II, 1712. 29) Verbindung (Dibenzoylaceton?). Sm. 156—157,5° (A. 278, 138). C 71,8 H 5,6 O 22,5 M. G. 284.
- 1) $\alpha^4 \gamma^4$ -Dimethyläther d. γ -Keto- γ -[2,4-Dioxyphenyl]- α -[4-Oxyphenyl]-propen (Anisalpaeonol). Sm. 113—114° (B. 32, 322). 2) Trimethyläther d. 2,5,6-Trioxy-9-Keto-9,10-Dihydroanthracen.
- Sm. 169-170° (B. 31, 2799).
- 3) Diäthyläther d. 1,7-Dioxyxanthon. Sm. 126° (B. 15, 1678). III, 206.
- 4) Diäthyläther d. 3,6-Dioxyxanthon. Sm. 185° (Soc. 67, 996). -III, 205.
- 5) 4-Acetat d. 3,4-Dioxy-?-Benzoyl-1-Methylbenzol-3-Methyläther. Sm. 77,5° (G. 28 [2] 287).
- 6) Methylätheracetat d. ?-Dioxy-?-Methyldiphenylketon (M. d. Benzo-
- methylresorein). Sm. 86° (B. 28, 2307 Anm.). III, 216.

 7) Acetat d. Lapachol. Sm. 82—83° (G. 12, 357). III, 399.

 8) Acetat d. Iso-β-Lapachol. Sm. 74° (Soc. 69, 1364). III, 403.
- 9) Diacetat d. 4,4'-Dioxydiphenylmethan. Sm. 69-70° (A. 194, 324). - II, 993.
- 10) Dibenzoat d. $\alpha\beta$ -Dioxypropan. Sd. 240°_{12-14} (Z. 1871, 490; A. 133, 255). — II, 1141.
- 11) Dibenzoat d. αγ-Dioxypropan. Sm. 53° (A. ch. [5] 14, 500). II, 1141.
 12) Dibenzoat d. ββ-Dioxypropan. Sm. 69—71°; Sd. 230—240°₁₀ (A. Spl. 6, 361; A. 145, 195). II, 1141.

 $C_{17}H_{18}O_{6}$

C17 H16 O7

 $C_{17}H_{16}O_{9}$

 $\mathbf{C}_{17}\mathbf{H}_{16}\mathbf{N}_{2}$

- 13) $\alpha \gamma$ -Diphenylpropan- $\alpha \gamma$ -Dicarbonsäure. Sm. 164° (B. 22, 3290). II, 1894. C17 H16 O4
 - 14) $\alpha \gamma$ -Diphenylpropan- $\beta \beta$ -Dicarbonsäure (Dibenzylmalonsäure). Sm. 170 bis 172° (162° u. Zers.) (A. 239, 97; Soc. 47, 821; B. 24, 1062; R. 6, 88; Ph. Ch. 8, 452). — II, 1892.
 - 15) α -Phenyl- α -[2-oder 4-Methylphenyl]äthan- β -Carbonsäure-4-[oder 2-] Carbonsäure (Phenylcarboxyltolylpropionsäure). Sm. 252°. Ca, Ag, (B. **26**, 1582). — II, 1894.
 - 16) Methylester d. α Oxy β [4 Oxyphenyl] akryl α Phenyläther-4-Methyläthersäure. Sm. 100° (G. 14, 149). — II, 1778.
 - 17) Methylester d. α-Acetoxyl-αα-Diphenylessigsäure. Sm. 122° (B. 22, 1539). — II, *1697*.
 - 18) Dimethylester d. Diphenylmethan-2, 2'-Dicarbonsäure. Sm. 43-44° (A. **242**, 254). — II, 1888. C 68,0 — H 5,3 — O 26,7 — M. G. 300.
- $C_{17}H_{16}O_{5}$ 1) Lobarsäure (J. 1872, 806). — II, 1974.
 - 2) β -Oxy- α γ -Diphenylpropan- α β -Dicarbonsäure? Sm. 197—198°. Ag₂ (A. 284, 288). II, 1974. 3) α ,2-Lakton d. α -Oxy-4′,5,6-Trimethoxyldiphenylmethan-2-Carbon-

 - säure (4-Methoxylphenylpseudomekonin). Sm. 111—113° (B. 31, 2797). 4) α,2'-Lakton d.α,4-Dioxy-3',4'-Dimethoxyl-2-Methyldiphenylmethan-2'-Carbonsäure (Kresylmekonin) (B. 27, 2640; 31, 2792). — II, 2021.
 - 5) Monacetat d. 2,3,4[oder 3,4,5]-Trioxydiphenylketondimethyläther. Sm. 98° (104—105°) (A. 269, 302; G. 27 [2] 20). III, 202.
 - 6) 6-Acetat d. 2,4,6-Trioxydiphenylketondimethyläther (A. d. Hydro-

 - 6) 6-Restat d. 2,4,6-Trioxydiphenylkeolidinatilyladic (R. d. 11) discretion). Sm. 83° (A. 199, 60). III, 203.
 7) Acetat d. Oxy-α-Lapachon. Sm. 179,5° (Soc. 69, 1372).
 8) Dibenzoat d. αβγ-Trioxypropan. Sm. 70° (B. 19, 3221). II, 1142. C 64,5 H 5,1 O 30,4 M. G. 316.
 1) Santalin, siche auch C_{1,5}H₁₄O₅. Sm. 104-105° (B. 12, 14). III, 672.
 2) A Dibete and Di 2 A Discretional de Mothylbutan (Psyctosyntylldungs).
 - 2) $\alpha \delta$ -Diketo- $\alpha \delta$ -Di[2,4-Dioxyphenyl]- β -Methylbutan (Pyrotartrylfluores-
 - ceïn) (B. 17, 1280). III, 299.
 3) 3,4-Methylenäther-2',4',6'-Trimethyläther d. 3,4,2',4',6'-Penta-
 - oxydiphenylketon (Oxyleucotin; Methylprotocotoïn). Sm. 134—135° (A. 199, 48; B. 24, 2984; 26, 779; C. 1896 [1] 312). III, 208.
 - 4) Triacetat d. 2-Oxy-1-Dioxymethylnaphtalin. Sm. 124° (B. 16, 684). - III, 96.
 - 5) 3-Benzoxyl-4,5-Dioxybenzol-4,5-Dimethyläther-1-Methylcarbonsäure. Sm. 131° (B. 26, 2017). — II, 1927.
 - 6) $\alpha\beta$ -Dioxy- $\alpha\beta$ -Diphenylpropan- $\alpha\gamma$ -Dicarbonsäure. Sm. 120°. Ag₂ (Soc. 71, 133).
 - 7) Di[4-Oxy-3-Methylphenyl]methan-5,5'-Dicarbonsäure? (Methylendikresotinsäure). Sm. 276-2770 (B. 31, 149).
 - 8) 4',5,6-Trimethoxyldiphenylketon-2-Carbonsäure. Sm. 215-216°. Ag (B. 31, 2796).
 - 9) Aethylester d. 1,3-Diacetoxylnaphtalin-2-Carbonsäure. Sm. 640 (A. **298**, 384).
 - 10) 2 [oder 5]-Aethylester d. 1,3,4-Trimethyl-p- β -Benzdifuran-2,5-Dicarbonsäure. Sm. 220°. Na + 4H₂O, K (A. 283, 266). — III, 736. 11) Diäthylester d. 1,2-Naphtochinon-3 oder 4-Methyldicarbonsäure.
 - Sm. 107—108° (B. 32, 264).
 - C 61,4 H 4,8 O 33,7 M. G. 332.

 1) Evernsäure. Sm. 168—169°. K + 2 H₂O, Ba + H₂O (A. 68, 84; 117, 297; 155, 55; 297, 301; J. pr. [2] 57, 249). II, 1766.

 2) Ramalsäure. Sm. 179°. K (B. 30, 364; A. 297, 306; J. pr. [2]

 - 57, 254). C 56,0 H 4,4 O 39,6 M. G. 364. I) Eichengerbsäure (A. 63, 205; 145, 1; 202, 270; M. 1, 268; 4, 514; Fr. **20**, 208; B. **14**, 1598, 1826; **17**, 1820). — **III**, 586. C 82,2 — H 6,4 — N 11,3 — M. G. 248.
 - 1) ?-Amido-1-[?-Amido-2-Methylphenyl]naphtalin. Sm. 76°. HCl (B. 26, 145). — IV, 1034. 2) 1-Amido-2-[4-Methylphenyl]amidonaphtalin. Sm. 146—147° (B. 25,
 - 2846; **27**, 2777). IV, 918.

- $C_{17}H_{16}N_{2}$
- 3) 1-Methylamido-2-Phenylamidonaphtalin. Sm. 85° (B. 26, 189). IV, 918.
- 4) 1-[2-Amidobenzyl]amidonaphtalin. Sm. 134°. 2HCl, 2H₂SO₄ (J. pr. [2] **52**, 406). — \mathbf{IV} , 628.
- 5) 2-[2-Amidobenzyl]amidonaphtalin. Sm. 99° (J. pr. [2] 52, 411). IV, 628.
- 6) α -[2-Methylphenyl]- β -[1-Naphtyl]hydrazin. Sm. 107° (B. 26, 145). IV, 1504.
- 7) 5-Methyl-3-Benzylpyrazol. Fl. (B. 18, 2137). 4 IV, 1034.
- 8) 5,6-Diphenyl-2-Methyl-2,3-Dihydro-1,4-Diazin. Sm. 111-1120 (B. 21, 2663). — III, 284.
- 9) 7-Dimethylamido-2-Phenylchinolin. Fl. (2HCl, PtCl₄ + 1¹/₂H₂O), $H_2Cr_2O_7$, Pikrat (A. 281, 23). — IV, 1025.
- 10) 2-Propyl-4-Phenyl-1,3-Benzdiazin. Sm. 99-100°. (HCl, HgCl, + H₂O), (2 HCl, PtCl₄), Pikrat (B. 25, 3087). — IV, 1034.
- 11) 2-Isopropyl-4-Phenyl-1, 3-Benzdiazin. Sm. 99°. (2HCl, PtCl₄), Pikrat
- (B. 25, 3089). IV, 1034.12) N-Methyltetrahydro-α-Naphtinolin. Sm. 114° (B. 27, 2255). IV, 1032.
- 13) Verbindung (aus αδ-Diketo-α-Phenylpentan). Sm. 154—155° (B. 17, 914). **– III**, 273.
- $C_{17}H_{16}N_4$
- C 73.9 H 5.8 N 20.3 M. G. 276.1) 4-[α-Phenylhydrazonäthyl]-l-Phenylpyrazol. Sm. 142—1440 u. Zers. (G. 19, 198). - IV, 550.
- 2) 4-Phenylazo-3, 5-Dimethyl-1-Phenylpyrazol. Sm. 63° (B. 21, 1702). **– IV**, 1477.
- $C_{17}H_{17}O_{9}$ $C_{17}H_{17}N$
- 1) Gerbstoff (aus Persea lingua) = $(C_{17}H_{17}O_9)_x$ (G. 11, 245). III, 688. C 86.8 - H 7.2 - N 6.0 - M. G. 235.
- 1) 2-Benzylidenamido-1, 2, 3, 4-Tetrahydronaphtalin. Sm. 51,5-52° (B. 23, 879). — III, 31.
- 2) 2-Methylen-3, 3-Dimethyl-1-Phenyl-2, 3-Dihydroindol. Sd. 183 bis HJ, Pikrat (B. 31, 1948).
- 3) 2-Methylen-1,3-Dimethyl-3-Phenyl-2,3-Dihydroindol. Sm. 104 bis 105°. (2 HCl, PtCl₄), HJ (G. 28 [2] 395).
- 4) 3-Isobutyl-β-Naphtochinolin. Sm. 55° (B. 27, 2022).
- 5) 5-Isobutylakridin. HCl, HNO₃, H₂CrO₄ (A. 224, 41). IV, 421.
 6) Nitril d. α-Phenyl-α-[2,4,6-Trimethylphenyl]essigsäure. Sm. 91°; Sd. 220—230°₄₀ (B. **25**, 1617). — II, 1472.
- C 77,6 H 6,5 N 15,9 M. G. 263. $C_{17}H_{17}N_{8}$ 1) uns-2-Amidobenzyl-2-Naphtylhydrazin. Sm. 76° (J. pr. [2] 52, 416).
 - **IV**, 1130. 2) 3- $[\alpha$ -Phenylhydrazonäthyl]-2-Methylindol. Sm. 134-138° (A. 242) 380). **— IV**, 242.
- C 70,1 H 5,8 -N 24,0 — M. G. 291. $C_{17}H_{17}N_5$
 - 1) Cyanid d. Di 2-Methylphenyl guanidin. Sm. 173,5—174,5° (B. 12, 1855). — II, 459.
 - 2) Cyanid d. Di[4-Methylphenyl]guanidin. Zers. bei 70-80° (B. 10, 1587). — II, 489.
- C 85,7 H 7,5 O 6,7 M. G. 238. $C_{17}H_{18}O$
 - Sm. 133—134° (A. 229, 141; 1) Oxyretenfluoren (Retenfluorenalkohol). B. 17, 694). — II, 1082.
 - 2) Methyläther d. ?-Oxyphenyltetrahydronaphtalin. Sm. 71° (B. 25, 2657). — II, 900.
 - α-Keto-α β-Diphenylpentan (Propyldesoxybenzoïn). Sm. 33°; Sd. 328 bis 331° (B. 22, 346). III, 238.
 - 4) γ -Keto- αs -Diphenylpentan. Sd. 280—285 $^{0}_{180}$ (A. 261, 187, 188). III, 237.

 - 6) β -Keto- $\alpha \gamma$ -Di[4-Methylphenyl] propan. Sm. 54° (G. 21, 102). —
 - Sd. 340° 7) 5-Isopropyl-2-Methyldiphenylketon (Phenylcymylketon). (B. 6, 546, 1244; 19, 2880; J. pr. [2] 35, 494). — III, 238.

 $C_{17}H_{18}O$

- 8) Di[2,5-Dimethylphenyl]keton. Sd. 325—327° (J. pr. [2] 35, 481). III, 238.
 - 9) Di[?-Dimethylphenyl]keton (Dixylylketon). Sd. 340° (B. 11, 399). III, 238.
- 10) 2, 3, 5, 6-Tetramethyldiphenylketon (Benzoyldurol). Sm. 119°; Sd. 343 bis $343,5^{\circ}_{725}$ (J. 1879, 372, 562; A. ch. [6] 1, 511). — III, 238.
- 11) ?-Tetramethyldiphenylketon (Benzoylisodurol). Sm. 62—63°; Sd. 300° (Bl. 42, 171). — III, 238.
- 12) Benzylideneucarvon. Sm. 112-1130 (B. 29, 1600; A. 305, 242). C 80,3 - H 7,1 - O 12,6 - M. G. 254.

 $C_{17}H_{18}O_2$

- 1) 1,2-Dioxy-1,2-Diphenyl-R-Pentamethylen. Fl. (A. 302, 221).
- 2) Methyläther d. α -Keto- α -Phenyl- β -[4-Oxyphenyl] butan. Sm. 47° (B. **21**, 2453). — III, 234.
- 3) Dimethyläther d. αα-Di[?-Oxyphenyl]propen. Sm. 100-101° (B. 22, 1130). — II, *999*.
- 4) 3-Methyläther-4-Benzyläther d. 3,4-Dioxy-1-Allylbenzol (Benzyleugenol). Sd. 235° u. Zers. (C. 1897 [2] 1183).
- 5) 3-Methyläther-4-Benzyläther d. 3,4-Dioxy-1-Propenylbenzol(Benzylisoeugenol). Sm. 48º (C. 1897 [2] 1183).

- 6) αδ-Diphenylvaleriansäure. Fl. (B. 15, 1548). II, 1472.
 7) αα-Di[4-Methylphenyl] propionsäure. Sm. 151—152°. NH₄, Ca, Ba, Pb, Cu, Ag (B. 14, 1596; 15, 1474; J. 1882, 367). II, 1471.
- 8) β-Phenyl-β-[2,4-Dimethylphenyl]propionsäure. Sm. 111—112°. Ca, Ag (B. 25, 959; 26, 1581). II, 1472.
- 9) 1-[2,4,6-Trimethylbenzyl]benzol-2-Carbonsäure. Sm. 221° (A. 234, 238). — II, 1472.
- 10) 1-[2,4,5-Trimethylbenzyl]benzol-2-Carbonsäure. Sm. 184—186° (A. 234, 238). — II, 1472.
- 11) Methylester d. β -Phenyl- β -[4-Methylphenyl] propionsäure. Fl. (B. **26**, 1580). — **II**, 1469.
- 12) Aethylester d. $\alpha\beta$ -Diphenylpropionsäure. Sd. 325° (B. 21, 1313). II, 1467.
- 13) Aethylester d. $\beta\beta$ -Diphenylpropionsäure. Sm. 63° (Soc. 59, 734). II, 1468.
- 14) Aethylester d. 4-Methyldiphenylessigsäure. Sm. 34° (B. 10, 997). **— II**, 1469.
- 15) Benzylester d. α-Benzylpropionsäure. Sd. 320—325° (A. 193, 313). **– II**, *1382*.
- 16) Benzoat d. 4-Oxy-1-tert. Butylbenzol. Sm. 83° (79-80°); Sd. 335° (A. 211, 246; B. 14, 2187; 18, 1717). — II, 1147.
- 17) Benzoat d. 6-Oxy-3-Isopropyl-1-Methylbenzol. Sm. 73° (A. 210, 42). **— II**, 1147.
- 18) Benzoat d. 2-Oxy-4-Isopropyl-1-Methylbenzol. Sd. oberhalb 260°
- (B. 19, 13). II, 1147. 19) Benzoat d. 3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 32° (Z. 1869, 44; J. pr. [2] 36, 9; G. 28 [1] 215). — II, 1148. C 75,6 — H 6,6 — O 17,8 — M. G. 270.

 $C_{17}H_{18}O_{8}$

- 1) Diäthyläther d. 2,2'-Dioxydiphenylketon. Sm. 109° (B. 19, 2611). - III. 195.
- 2) Diäthyläther d. 4,4'-Dioxydiphenylketon. Sm. 131° (A. 194, 330; B. **28**, 2871). — **III**, 199.
- 3) 3-Methyläther-4-Benzyläther d. Aethyl-3,4-Dioxyphenylketon. Sm. 93° (C. 1897 [2] 1183).
- 4) γ -Oxy- $\alpha\delta$ -Diphenylbutan- α -Carbonsäure (Tetrahydrocornicularsäure). Fl. (B. 14, 1692; A. 219, 35). — II, 1702.
- 5) α -Oxypropion-[?-Methyl-4-Benzylphenyl]äthersäure. Sm. 115°. Pb $+ \frac{1}{2}$ H₂O (G. **12**, 264; B. **15**, 1758). — II, 898.
- 6) Methylester d. β-Oxy-αγ-Diphenylpropan-β-Carbonsäure. Sm. 71°
 (B. 14, 1687; A. 219, 47; 284, 285). II, 1701.
- 7) Aethylester d. α -Oxy- $\beta\beta$ -Diphenylpropionsäure. Sm. 66° (A. 248, 43). - II, 1699.
- 8) Phenylester d. 4-Oxy-1-Isobutylbenzol-3-Carbonsäure. Sm. 68° (J. pr. [2] 36, 395). — II, 1588.

- $C_{17}H_{18}O_4$
- C 71,3 H 6,3 O 22,4 M. G. 286.
- 1) αγ-Diphenyläther d. αβγ-Trioxypropan-β-Acetat. Sm. 70—71° (B. 19, 65). — II, 662.
- 2) α-Aethoxyl-6-Oxy-3-Methyldiphenylessigsäure. Sm. 131-134° (B. 31, 2820).
- 3) Aethylester d. 6-Oxy-4-Keto-2- $[\beta$ -Phenyläthenyl]-1,2,3,4-Tetrahydrobenzol-3-Carbonsäure. Sm. 1380 (A. 294, 298).
- 4) Aethylester d. 4-Oxybenzol- β -Phenoxyläthyläther-1-Carbonsäure.
- Sm. 81° (*J. pr.* [2] **27**, 227). II, 1527. 5) **2**-Oxybenzoat d. 3-Oxy-4-Isopropyl-1-Methylbenzol (Salicylat d. Thymol) (C. 1895 [1] 801).

C17 H18 O5

- C 67,6 H 5,9 O 26,5 M. G. 302.

 1) Toluresitannol. K (C. 1895 [1] 353).

 2) Isovalerylchinhydron. Sm. 103° (B. 24, 1344). III, 345.
- 3) 4', 5, 6-Trimethoxyldiphenylmethan 2-Carbonsäure. Sm. 122-124° (B. 31, 2798).
- 4) Diäthylester d. 1-Keto-4-Phenyl-2,3-Dihydro-R-Penten-3,5-Dicarbonsäure (D. d. Phenythronsäure). Sm. 44,5° (A. 250, 218). -II, 1970.

 $C_{17}H_{18}O_6$

- C 64,2 H 5,6 O 30,2 M. G. 318.
- 1) Dimethyläther-Aethyläther d. 3,4,2',4',6'-Pentaoxydiphenylketon.
- Sm. 150—151° (B. 25, 1137). III, 208.
 Tetramethyläther d. 3,4,2',4',6'-Pentaoxydiphenylketon (Vanilloylphloroglucintrimethyläther). Sm. 180° (B. 25, 1134). III, 208.
 Decarbousnin. Sm. 175° (178°) (J. 1875, 613; G. 12, 234; A. 288, 52;
- J. pr. [2] 57, 237). II, 2057. 4) Decarbusneïn. Sm. 175° (A. 284, 165). II, 2057. 5) Acetyldecarbousninsäure. Sm. 147—148° (G. 12, 236). II, 2058.

- 6) Diäthylester d. α -[3,4-Dioxyphenyl]- $\alpha\gamma$ -Butadiën-3,4-Methylenäther-δδ-Dicarbonsäure (D. d. Piperonylenmalonsäure). Sm. 106—107° (B. 28, 1191). — II, 2019.
- 7) Monacetat d. Osthin. Sm. 171—180° (C. 1896 [1] 561). C 61,1 - H 5,4 - O 33,5 - M. G. 334.

 $C_{17}H_{18}O_{7}$

1) Aloïn + ${}^{1}/_{2}$ H, O. Zers. bei 100° (*J.* 1849, 330; 1850, 545; 1856, 679; *A.* 77, 208; 134, 241, 287; 138, 186; *B.* 1, 105; *Fr.* 5, 309; 21, 165, 226). — III, 616.

 $C_{17}H_{18}O_{10}$

- C 53,4 H 4,7 O 41,9 M. G. 382.
- 1) γ -Ampelochroïnsäure (B. 25 [2] 478; Bl. [3] 7, 828). 2) Carminsäure. Na₂, K₂ + $\frac{1}{2}$ H₂O, Ba, Cu (A. 64, 22; 141, 329; J. 1864, 410; B. 27, 2980). Π , 2097. C 81.6 - H 7.2 - N 11.2 - M. G. 250.

 $C_{17}H_{18}N_2$

- 1) $\alpha\beta$ -Di[Benzylidenamido] propan. Fl. (B. 21, 2361). III, 29.
- 2) 4-Cinnamylidenamido-1-Dimethylamidobenzol. Sm. 141° (B. 18, 575). **– IV**, 597.
- 3) α -Allyl- α -[4-Methylphenyl]- β -Benzylidenhydrazin. Sm. 61° (B. 26, 2180). — IV, 810.
- 4) γ-Phenylhydrazon-γ-[2,5-Dimethylphenyl]propen. Sm. 132-133° (A. ch. [7] 2, 205). — IV, 774.
- 5) Nitril d. α-Phenylamido-α-[4-Isopropylphenyl]essigsäure. Sm. 86° (B. **31**, 2705).
- 6) Verbindung (Base aus 4-Amido-1-Methylbenzol). Sm. 134°. HCl + 2H₂O, (2HCl, PtCl₄), $H_2SO_4 + H_2O$, Pikrat (*J. pr.* [2] 36, 227). — II, 510. C 73,4 — H 6,5 — N 20,1 — M. G. 278.

C17 H18 N4

- 1) 1,2-Diphenylhydrazon-R-Pentamethylen. Sm. 146° (B. 30, 1472).
- IV, 782.
 Nitril d. Cinnamylidendi[β-Amidocrotonsäure]. Sm. 155—160° (J. pr. [2] **56**, 135).

 $C_{17}H_{19}N$

- C = 86.1 H = 8.0 N = 5.9 M. G. = 237.1) 4-Methylphenyl-4-Isopropylbenzylidenamin. Sm. 51° (A. 245, 292). - III, 56.
- 2) 2-Methyl-5-Isopropylbenzylidenamidobenzol. Sd. 210 ° (Bl. [3] **17**, 942).

C17 H20 O2

C17H20O2

C17H20O4

C17H20O5

3) 2,6-Diphenylhexahydropyridin. Sm. 69°; Sd. 367-368°. HCl, (2HCl, $C_{17}H_{19}N$ PtCl₄ + $2H_2O$), (HCl, AuCl₃), Pikrat (B. **20**, 2765; **28**, 1733; **29**, 800; **30**, 1503).

4) 1, 2, 3-Trimethyl-3-Phenyl-2, 3-Dihydroindol. HJ (G. 28 [2] 401).

5) 5-Isobutyl-?-Dihydroakridin. Sm. 98-100° (A. 224, 44). — IV, 421. C 77,0 — H 7,2 — N 15,8 — M. G. 265. C17H19N8

1) 1-Phenylazo-6, 8-Dimethyl-1, 2, 3, 4-Tetrahydrochinolin. Sm. 88-89° (B. 24, 2076). — IV, 1581. 2) 7-Methyl-3-Aethyl-2-[4-Methylphenyl]-2,3-Dihydro-1,2,4-Benz-

triazin. Sm. 168° (B. 24, 1009). — IV, 1152.

3) 2,8-Di[Dimethylamido]akridin. Sm. 181-1820. HCl, (2HCl, PtCl, (J. pr. [2] **54**, 243). — **IV**, 1182. C 69,6 — H 6,5 — N 23,9 — M. G. 293.

 $\mathbf{C}_{17}\mathbf{H}_{19}\mathbf{N}_{5}$

1) Di[4-Methylphenylazo]allylamin. Sm. 85—87° (B. 22, 941). — IV, 1569. $C_{17}H_{20}O$ C 85,0 — H 8,3 — O 6,7 — M. G. 240.

1) 3-Oxy-P-Benzyl-4-Isopropyl-1-Methylbenzol. Sd. 255% (G. 11, 347). **— II**, 899.

2) α-Oxy-2-Methyl-5-Isopropyldiphenylmethan. Sd. 327° (B. 18, 1798). - II, 1081.

3) \alpha-Oxy-2, 3, 4, 6-Tetramethyldiphenylmethan. Sd. oberh. 360° (Bl. 42, 172). — II, 1081.

4) α-Oxy-2, 5, 2', 5'-Tetramethyldiphenylmethan. Sm. 131° (J. pr. [2] 35, 483). — II. 1081.

5) Benzylidencampher. d- u. l-Modif. Sm. 95-96°; i-Modif. Sm. 78° (B. **24** [2] 732; C. **1895** [2] 364; **1896** [2] 381). — III, 514

24 [2] 132; C. 1886 [2] 304; 1886 [2] 301; — 111, 314.

6) Benzylidendihydrocarvon. Sd. 187—190°₁₀ (A. 305, 269).

7) Benzylidenparapulegon. Sd. 202—203°₁₂ (B. 29, 1600; A. 305, 267).

8) Benzyliden-synth. Pulegon. Sm. 83—84° (B. 29, 2958; A. 300, 271).

C 79,7 — H 7,8 — O 12,5 — M. G. 256.

1) γγ-Di[4-Oxyphenyl]pentan. Sm. 198—200° (J. r. 23, 499). — II, 996.

2) Dimethyläther d. αγ-Di[4-Oxyphenyl]propan. Sm. 68-69° (Bl. [3] 19, 401).

3) Dimethyläther d. $\beta\beta$ -Di[4-Oxyphenyl]propan. Sm. 60.5° ; Sd. 371° (J. r. 23, 498). - II, 996.

4) Diäthyläther d. αα-Dioxydiphenylmethan. Sm. 51,5-52°; Sd. 294 bis 295° (Soc. 69, 990).

5) Diathyläther d. 4,4'-Dioxydiphenylmethan. Sm. 38-39° (A. 194, 323). **— II**, *993*.

6) Diphenyläther d. αδ-Dioxypentan. Sm. 48-49° (C. 1899 [1] 248).

7) Di[4-Methylphenyläther] d. αγ-Dioxypropan. Sm. 94°; Sd. oberh. 300° (B. 25, 3045). - II, 749.

8) Phenyläther d. Oxymethylencampher. Sd. 320° (A. 281, 370). III, 115. C 75,0 — H 7,3 — O 17,7 — M. G. 272.

1) Di [4-Methylphenyläther] d. $\alpha\beta\gamma$ -Trioxypropan. Sm. 88° (B. 24,

2148). — II, 749. 2) Benzoat d. Oxycampher (aus Campherchinon). Fl. (B. 30, 669). C 70,8 — H 6,9 — O 22,2 — M. G. 288.

1) Di[2-Methoxylphenyläther] d. αγ-Dioxypropan. Sm. 116-118° (C. **1896** [1] 543).

2) ααγγ-Tetraacetyl-β-Phenylpropan. Sm. 166° (167-168°) (A. 281, 81; B. 31, 1393, 2775). — III, 324. 3) Aethylester d. 6-Oxy-4-Keto-2-Phenyl-1, 2, 3, 4-Tetrahydrobenzol-

äthyläther-3-Carbonsäure. Sd. 250-260% u. Zers. (A. 294, 277).
4) Acetat d. Desmotroposantonin. Sm. 156% (G. 25 [1] 471). — II, 1790.
5) Acetat d. l-Desmotroposantonin. Sm. 154% (B. 31, 3132; G. 28 [2] 538).

6) Acetat d. rac. Desmotroposantonin. Sm. 1450 (B. 31, 3133; G. 28 [2] 540).

7) Acetat d. Iso-Desmotroposantonin. Sm. 154° (G. 25 [1] 479). — II, 1791.

C 67,1 - H 6,6 - O 26,3 - M. G. 304. 1) Acetat d. α-Oxysantonin. Sm. 164-165° (G. 27 [2] 92).

2) Diäthylester d. α -Oxy- α -Phenyl- $\alpha\gamma$ -Pentadiën- $\beta\gamma$ -Dicarbonsäure. Sd. 195—200°₁₀ (Soc. 71, 327).

C 60.7 - H 5.9 - O 33.3 - M. G. 336. $C_{17}H_{20}O_{7}$

1) α, 2-Lakton d. αα-Dioxy-α-Phenyläthanäthyläther-ββ2-Tricarbon-säure-ββ-Diäthylester (Diäthylester d. Phtalyloxymalonäthyläthersäure). Fl. Na, Cu + 2H₂O (A. 242, 46). — II, 2070. C 58,0 — H 5,7 — O 36,3 — M. G. 352.

1) Acetylpikrotid. Sm. 2020 (B. 12, 685 f. 11, 51). — III, 644.

C17H20O8

2) Anhydrodiacetylpikrotin. Sm. oberh. 300° (B. 31, 2973). 3) Monoacetat d. Pikrotin. Sm. 244-245° (B. 31, 2972).

4) Diäthylester d. Acetylbenzoylweinsäure. Fl. (A. Spl. 5, 282). — II, 1155.

 $\mathbf{C}_{17}\mathbf{H}_{20}\mathbf{O}_{10}$

C 53,1 — H 5,2 — O 41,7 — M. G. 384.

1) Patellarsäure. Sm. oberh. 100° (J. 1869, 768). — II, 2096.

2) Tetraäthylester d. 1,4-Pyron-2,3,5,6-Tetracarbonsäure. Sm. 940 (G. **21**, 302). — **II**, 2094.

 $\dot{\mathbf{C}}$ 80,9 $\dot{\mathbf{-}}$ $\dot{\mathbf{H}}$ 7,9 $\dot{\mathbf{-}}$ N 11,1 $\dot{\mathbf{-}}$ M. G. 252. $\mathbf{C}_{17}\mathbf{H}_{20}\mathbf{N}_{2}$

1) δ -Phenylimido- δ -Phenylamido- β -Methylbutan(Diphenylpentanamidin). Sm. 111° (J. 1865, 416). — II, 347.

2) α -Phenylhydrazon- α -[4-Propylphenyl]äthan. Sm. 92° (B. 21, 2226). **— IV**, 773.

3) α -Phenylhydrazon- α -[4-Isopropylphenyl]äthan. Sm. $81-82^{\circ}$ (B. 21,

2226). — IV, 773. 4) 2-Methyl-1,4-Diphenylhexahydro-1,4-Diazin. Sm. 100° (B. 25, 3274).

5) Verbindung (aus Oxymethylencampher). Sm. 124-1250 (A. 281, 352).

— III, 116. C 72,9 — H 7,1 — N 20,0 — M. G. 280. $\mathbf{C}_{17}\mathbf{H}_{20}\mathbf{N}_{4}$

- 1) $\alpha\beta$ -Di[Phenylhydrazon]pentan. Sm. 162—163° (B. 22, 528). IV, 759. 2) $\beta\gamma$ -Di[Phenylhydrazon]pentan. Sm. 166—167° (B. 21, 1414; 22, 528;
- A. 247, 221). IV, 781. 3) $\gamma \delta$ -Di[Phenylhydrazon]- β -Methylbutan. Sm. 115° (B. 30, 862). IV, 759.
- 4) Verbindung (aus Formaldehyd u. uns-Methylphenylhydrazin). Sm. 217° (B. **29**, 1473). — **IV**, 745.

C 60,7' - H' 5,9 - N 33,3 - M. G. 336.

1) Bisdiazobenzolpentamethylentetramin. Sm. 228° u. Zers. (A. 288, 242). — IV, 1493. C 85,3 — H 8,8 — N 5,8 — M. G. 239.

 $C_{17}H_{21}N$

 $\mathbf{C}_{17}\mathbf{H}_{20}\mathbf{N}_{8}$

 $C_{17}H_{21}N_8$

 $C_{17}H_{22}O$

1) 1-Oenanthylidenamidonaphtalin (A. 171, 139). — II, 623.
 2) Isoamyldiphenylamin. Sd. 330—340° (Bl. 23, 3). — II, 342.

3) 4-Methylphenyl-4-Isopropylbenzylamin. Sm. 36°. HCl (A. 245, 293).

4) Benzylidenamidopinen. Sm. 52—55° (A. 268, 205). — IV, 79. C 76,4 — H 7,9 — N 15,7 — M. G. 267.

- α-Imidodi[4-Dimethylamidophenyl]methan (Auramin). Sm. 136°. HCl
 + H₂O, (2 HCl, PtCl₄), HJ, Rhodanat, Oxalat, Pikrat (B. 20, 2847, 3263;
 J. pr. [2] 50, 401, 440). IV, 1172.
 2) 4-Dimethylamido-1-[4-Dimethylamidobenzyliden]amidobenzol. Sm.
- 229°. $2HCl + 5H_2O$ (B. 26, 1041; 28, 111, 326; 31, 2252). IV, 596.
- 3) Allyldi[2-Amidobenzyl]amin. Sm. 104° (B. 26, 2587). IV, 628. 4) Di[4-Aethylphenyl]guanidin. Sm. 137—138°. (2HCl, PtCl₄) (B. 17, 2804). **— IV**, *1139*.
- 5) Di[2,4-Dimethylphenyl]guanidin. Sm. 156-158° (B. 9, 1296). -
- 6) β-Phenylamido-γ-Phenylhydrazon-β-Methylbutan. Sm. 96—97° (A. 262, 337). IV, 769.
 7) 4-Methyl-1-[4-Isopropylbenzyl]amidodiazobenzol. Sm. 79° (B. 22,
- 930). IV, 1573. C 84,3 H 9,1 O 6,6 M. G. 242.

- 1) Benzylcampher. Sm. 51—52°; Sd. 220—225°₇₀ (B. 24 [2] 731; C. 1895 [2] 365; 1896 [2] 590). III, 514.
- $\mathbf{C}_{17}\mathbf{H}_{22}\mathbf{O}_{2}$

1) Benzoat d. d-Borneol. Sm. 25,5° (B. 22 [2] 575). — III, 471.

C₁₇H₂₂O₂

 $\mathbf{C}_{17}\mathbf{H}_{22}\mathbf{O}_{11}$

 $C_{17}H_{22}N_{2}$

2) Benzoat d. 1-Borneol. Sm. 25,5° (B. 22 [2] 575). — III, 471. 3) Benzoat d. d-Fenchylalkohol. Sd. 183—188°₂₀ (Bl. [3] 19, 414).

4) Benzoat d. Geraniol (B. d. Rhodinol). Sd. 194-195° (J. pr. [2] 56, 14).

C 74,4 — H 8,0 — O 17,5 — M. G. 274. 1) Aethyläther d. Desmotroposantonin. Sm. 168° (G. 25 [1] 474). — $\mathbf{C}_{17}\mathbf{H}_{22}\mathbf{O}_3$ II, 1790. 2) Aethyläther d. 1-Desmotroposantonin. Sm. 820 (B. 31, 3132; G. 28 [2] 536). 3) Aethyläther d. rac. Desmotroposantonin. Sm. 106° (B. 31, 3133; G. **28** [2] 540). 4) Aethyläther d. Iso-Desmotroposantonin. Sm. 82° (G. 25 [1] 482). **– II**, 1791. 5) Podocarpinsäure. Sm. 187—188°. $NH_4 + H_9O$, $Na + 7H_9O$, $K + 3(4)H_9O$, $Ca + 5H_9O$, $Ba + 3(8,9,15)H_9O$, $Ba + 8H_9O$, $Pb + H_9O$, $Cu + 10H_9O$, $Ag + 2^{1/2}H_9O$ (A. 170, 213; R. 4, 172). — II, 1685. 6) Aethylester d. 2-Acetyl-1-Phenylhexahydrobenzol-2-Carbonsäure. Fl. (Soc. 57, 319). — II, 1685. 7) Aethylester d. γ -Keto- δ -Aethyl- α -Phenyl- α -Penten- δ -Carbonsäure (Ae. d. Diathylcinnamylessigsaure). Sm. 101—102° (A. 218, 184; Soc. 55, 39). — II, 1685. C 70,3 — H 7,6 — O 22,1 — M. G. 290. $C_{17}H_{22}O_4$ 1) Acetylhydrosantonid. Sm. 204—205,5° (J. 1878, 827). — II, 1770. 2) Phenyloxycamphocarbonsäure. Sm. 148° (A. ch. [7] 2, 277). — II, 1871. 3) Acetylpipitzahoïnsäure. Sm. 115° (A. 237, 98). — II, 1673. 4) Diäthylester d. α -[4-Isopropylphenyl]äthen- $\beta\beta$ -Dicarbonsäure. Sd. 205—208°_{11,5} (B. **31**, 2592). C 66,7 - H 7,2 - O 26,1 - M. G. 306. $\mathbf{C}_{17}\mathbf{H}_{22}\mathbf{O}_{5}$ 1) Acetylsantonsäure. Sm. 197—198° (G. 25 [2] 462). 2) isom. Acetylsantonsäure. Sm. 139—140° (J. 1875, 608). — II, 1789.
 3) Acetylmetasantonsäure. Sm. 202—203° (G. 25 [2] 470). 4) Diäthylester d. α-Keto-α-Phenylpentan-γγ-Dicarbonsäure. Fl. (B. **21**, 3453). — **II**, 1967. 5) Diäthylester d. γ -Keto- α -Phenylbutan- β -Carbonsäure- β -Methylcarbonsäure (D. d. Benzylacetsuccinsäure). Sd. 310° (B. 11, 1058). — II, 1967. 6) Propylester d. Filixsäure. Sm. 158° (B. 21, 2964). — II, 1967. C 63,3 — H 6,8 — O 29,8 — M. G. 322. $\mathbf{C}_{17}\mathbf{H}_{22}\mathbf{O}_{6}$ 1) Triäthylester d. α -Phenyläthan- $\alpha\beta\beta$ -Dicarbonsäure. Sm. 45-46° (A. **258**, 71; B. **29**, 1868). — II, 2013. 2) Triäthylester d. α -Phenyläthan- $\beta\beta$ 2-Tricarbonsäure. Sd. 250°_{45} (A. **242**, 36). — **II**, 2014. $C_{17}H_{22}O_7$ C 60.4 - H 6.5 - O 33.1 - M. G. 338.1) η -Oxy- β -Methylheptanphenyläther- $\gamma \varepsilon \varepsilon$ -Tricarbonsäure. Sm. 179 bis 180° u. Zers. (Soc. 69, 1504). 2) Diäthylester d. α -Oxy- α -[3,4-Dioxyphenyl]äthan- α -Aethyläther-3,4-Methylenäther- $\beta\beta$ -Dicarbonsäure (D. d. β -Aethoxylpiperonylmalonsäure). Na (B. 26, 1878). — II, 2044.
3) Diäthylester d. βζ-Diketo-δ-[2-Furanyl]heptan-γε-Dicarbonsäure. Sm. 75° (72°) (A. 303, 244).
C 57,6 — H 6,2 — O 36,2 — M. G. 354. $C_{17}H_{22}O_8$ 1) Glykoferulasäuremethylketon $+ 2 H_2 O$. Sm. 207 $^{\circ}$ (wasserfrei) (B. 18, 3491). — III, *162*. C 55.1 - H 5.9 - O 38.9 - M. G. 370. $\mathbf{C}_{17}\mathbf{H}_{22}\mathbf{O}_{9}$ 1) Verbindung (aus α -Buten- $\alpha\beta\gamma\gamma\delta$ -Pentacarbonsäurepentaäthylester). Fl. (B. **31**, 49). C 52,8 — H 5,7 — O 41,4 — M. G. 386. $\mathbf{C}_{17}\mathbf{H}_{22}\mathbf{O}_{10}$

Gerbsäure (aus d. Samen v. Pharbitis Nil) (C. 1896 [2] 632).
 Verbindung (aus Cap-Aloë) (J. 1863, 596, 597). — III, 618.

1) $\alpha \beta$ -Di-[2-Methylphenylamido] propan. Sd. 250-265 $^{\circ}_{70}$ (B. 25, 3276).

C 50,7 — H 5,5 — O 43,8 — M. G. 402.

— II, 459.

Ilixanthin. Sm. 198° (A. 102, 346). — III, 633.
 C 80,3 — H 8,7 — N 11,0 — M. G. 254.

- 2) $\alpha\beta$ -Di[4-Methylphenylamido] propan. Sd. 276—278°₄₈ (B. 25, 3277). $C_{17}H_{22}N_2$ - II, 488
 - 3) ay-Di[4-Methylphenylamido]propan. Sm. 73° (B. 31, 3247).
 - 4) Di[Amidodimethylphenyl]methan (aus 2-Amido-1, 3-Dimethylbenzol). Sm. 126° (M. 19, 640).
 - 5) Di[3-Methylamido-4-Methylphenyl]methan? Sm. 87° (A. 304, 114). 6) Di[4-Dimethylamidophenyl] methan. Sm. 90—91°. (2HCl, PtCl₄), 2HJ,
- Pikrat. Lit. bedeutend. IV, 974. C 72,3 H 7,8 N 19,9 M. G. 282. $C_{17}H_{22}N_4$
 - 1) α -[α -Phenylhydrazido]- β -[α -Phenyl- β -Isopropylidenhydrazon] äthan. Sm. 71—72° (A. 254, 127). IV, 766. C 84,6 H 9,5 N 5,8 M. G. 241. 1) Benzylidenbornylamin. HCl, (2 HCl, PtCl₄) (A. 269, 353). IV, 57.
- C17 H23 N
 - 2) d-Benzylidenfenchylamin. Sm. 42° (4. 272, 106). IV, 59. 3) 1-Benzylidenfenchylamin. Sm. 42°. HCl, (2 HCl, PtCl₄) (4. 269, 363;
 - 276, 320). IV, 58.
 - 4) i-Benzylidenfenchylamin. Fl. (A. 272, 108). IV, 59.
 C 75,8 H 8,5 N 15,6 M. G. 269.
- $C_{17}H_{23}N_3$ 1) α-Amidodi[4-Dimethylamidophenyl]methan (Leukauramin). Sm. 135°
- (B. 20, 3265). IV, 1169. 2) Propyldi[2-Amidobenzyl]amin. Sm. 112° (B. 26, 2586). — IV, 628. C 83,6 — H 9,8 — O 6,5 — M. G. 244.
 1) Benzyldihydrocarvol. Sd. 182—183°₁₀ (A. 305, 269). C17H24O
 - - 2) Benzylpulegol. Sd. 192-195°₁₀ (A. 305, 268).
 - 3) Benzyläther d. d-Borneol. Sm. $50-52^{\circ}$; Sd. $215-216^{\circ}_{70}$ (B. 24 [2] 431). — III, 470.
 - 4) 3-Keto-4-Isopropyl-2-Benzyl-1-Methylhexahydrobenzol (Benzylmenthon). Sd. 177—179°₁₀ (A. 305, 266). C 78,5 — H 9,2 — O 12,3 — M. G. 260.
 - 1) 2,4-Dibutyryl-1,3,5-Trimethylbenzol. Sm. 36°; Sd. 338-339° (B. 30, 1285).
 - 2) 2,4-Diisobutyryl-1,3,5-Trimethylbenzol. Sd. 331—332° (B. 30, 1285). 3) Aethyläther d. Verb. $C_{15}H_{20}O_2$ (aus Camphersäureanhydrid). Sm. 48
 - bis 50° (Bl. [3] 13, 903). III, 167. 4) Benzoat d. Menthol. Sm. 54° (54,5°); Sd. 180°₁₅ (A. ch. [6] 7, 479; J. pr.
- [2] **55**, 16; *B*. **31**, 1778). III, 467. C 73,9 H 8,7 O 17,4 M. G. 276. $C_{17}H_{24}O_{3}$

 $C_{17}H_{24}O_{2}$

- 1) d-7-Aethoxyl-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Aethylα-Carbonsäure (d-Aethyläthersantonige Säure). Sm. $115,5-116^0$ (118^0). Ba (J. 1880, 895; G. 12, 398; B. 12, 1574; 16, 428). — II, 1670.
- 2) 1-7-Aethoxyl-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Aethylα-Carbonsäure (l-Aethyläthersantonige Säure). Sm. 120—121° (B. 28 [2] 393). — II, 1671.
- 3) i-7-Aethoxyl-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Aethylα-Carbonsäure (Aethylisosantonige Säure). Sm. 144—145° (B. 16, 428;
- 28 [2] 393). II, 1671. 4) isom. 7-Aethoxyl-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Aethyl-α-Carbonsäure (Aethylätherdesmotroposantonige Säure). Sm. 127° (B. **28** [2] 393). — II, 1672.
- 5) Säure (aus Benzylidencampher). Sm. 206° (Bl. [3] 15, 988).
- 6) Gem. Anhydrid d. Oenanthsäure u. 1-Isopropylbenzol-4-Carbonsäure. Fl. (A. 91, 103). — II, 1385.
- 7) Methylester d. isom. 7-Methoxyl-5, 8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Aethyl- α -Carbonsäure (M. d. Methylätherdesmotroposantonigen Säure). Sd. 300 -305°_{80} (G. 23 [2] 480; 25 [1] 531). — II, 1672.
- 8) Aethylester d. d-7-Oxy-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Aethyl-α-Carbonsäure (Ae. d. d-Santonigen Säure). Sm. 116—117° (J. 1880, 895; G. 12, 395; B. 12, 1574; 16, 427). — II, 1670.
- 9) Aethylester d. i-7-Oxy-5, 8-Dimethyl-1, 2, 3, 4-Tetrahydronaphtalin-2-Aethyl-α-Carbonsäure (Ae. d. i-Santonigen Säure oder d. Isosantonigen Säure). Sm. 125° (G. 12, 400; J. 1880, 895; B. 16, 428). — II, 1671.
- 10) Aethylester d. ζ-Benzoyl-β-Methylhexan-ε-Carbonsäure (Ae. d. β-Benzoyl-α-Isoamylpropionsäure). Sd. 260° (B. 23, 1505). II, 1670.
 11) Aethylester d. Pipitzahoïnsäure. Sm. 141° (A. 237, 98). II, 1673.

C17 H24 O10

 $C_{17}H_{24}N_{2}$

C17 H25 O7

 $C_{17}H_{25}N$

 $C_{17}H_{25}N_3$

C17H26O

C17H24O4 C 69.9 - H 8.2 - O 21.9 - M. G. 292.1) Diisoamyläther d. Dioxymethylbenzol. Fl. (A. 102, 369). — III, 12.

 2) Methylenbisdimethylhydroresorcin. Sm. 189° (A. 294, 316).
 3) Aethylester d. Santonsäure. Sm. 88-89° (J. 1876, 619; B. 13, 2210; G. 8, 332). — II, 1788.

4) Aethylester d. Isosantonsäure. Sm. 76° (G. 25 [2] 473).

Aethylester d. Parasantonsäure. Sm. 172° (J. 1878, 826; B. 13, 2210; G. 8, 343). — II, 1790.

6) α-Aethylester d. Photosantonsäure (Photosantonid). Sm. 68-69° (J. 1876, 619; B. 18, 2861). — II, 1932.
7) β-Aethylester d. Photosantonsäure. Sm. 154—155° (B. 18, 2861). —

II, 1932.

8) Farbstoff (aus Baumwollsamenöl) (J. 1861, 943). — III, 651. C 66,2 — H 7,8 — O 26,0 — M. G. 308.

C17H24O5

1) Acetylisophotosantonsäure. Sm. 1830 (B. 18, 2859; 19, 2262). -II, 1933.

2) Aethylester d. α-Aeskuletintriäthyläthersäure. Sm. 51° (B. 16, 2110). - II, 1950.

3) Aethylester d. β -Aeskuletintriäthyläthersäure. Sm. 75°; Sd. oberh. 360° (B. 16, 2108). — II, 1951.

4) Diäthylester d. ε -Oxypentanphenyläther- $\beta\beta$ -Dicarbonsäure. Sd. 268

bis 270°₁₈₀ (B. 26, 2569). — II, 667.
5) Acetat d. Laserpitin. Sm. 113° (J. 1883, 1361). — III, 635. C 62,9 — H 7,4 — O 29,6 — M. G. 324.

C17 H24 O6

1) Diäthylester d. Campherylmalonsäure. Sm. 82°; Sd. 274°₄₀ (A. 257, 299). — II, 2041.

C 54.8 - H 6.4 - O 38.7 - M. G. 372.1) Syringin + H_2O . Sm. $191-192^{\circ}$ (A. 40, 320; J. 1862, 484; 1863, 592; C17H24O9

G. 18, 210). — II, 1117. C 52,6 — H 6,2 — O 41,2 — M. G. 388.

1) Aethylester d. Tetracetylchinasäure. Sm. 135° (A. 193, 195; B. 22, 1462). — I, 805.

2) Monäthylester d. Tripropionylschleimsäurelakton. Sm. 59°(M. 15, 203). C 79.7 - H 9.4 - N 10.9 - M. G. 256.

1) 1-Phenylhydrazon-3-Isobutyl-5-Methyl-1, 2, 3, 4-Tetrahydrobenzol. Sm. 149—151° (A. 288, 338). — IV, 770.

2) 4-Methylphenylcamphenylamidin. Sm. 114-115° (B. 18, 1633). -IV, 533.

3) Base (aus Dimethylamidobenzol u. αα-Dichlordiphenylmethan). HCl, (2 HCl, PtCl₄) (A. 187, 213). — III, 188.
 C 71,8 — H 8,4 — N 19,7 — M. G. 284.

 $C_{17}H_{24}N_4$ 1) Di[2-Amido-4-Dimethylamidophenyl]methan. Sm. 1420 (B. 27, 3163;

J. pr. [2] 54, 241). — IV, 1277. 1) Choloidansäure? (Bl. 38, 133; siehe auch C₁₀H₁₆O₄ Cholecamphersäure).

C 83,9 - H 10,3 - N 5,8 - M. G. 243.1) 3-Amido-2-Benzyliden-4-Isopropyl-1-Methylhexahydrobenzol. Sd. $200-205^{\circ}_{10}$ (A. **305**, 265).

2) Benzylbornylamin. Sd. 1840, HCl, (2HCl, PtCl₄) (A. 269, 352). — IV, 56.

3) Benzyl-l-Fenchylamin. Sd. 190—191%. HCl, (2HCl, PtCl₄) (A. 269, 362). - IV, 58.

4) d-Benzylidenmenthylamin. Sm. 42-43° (A. 276, 311). — IV, 43. 5) 1-Benzylidenmenthylamin. Sm. 69-70° (A. 276, 305). — IV, 42.

C 75,3 — H 9,2 — N 15,5 — M. G. 271. 1) α -Phenylimido- $\alpha\alpha$ -Dipiperidylmethan (s-Phenyldipiperidylguanidin). Sm. 84° (B. **28**, 983). — **IV**, 11. C 82,9 — H 10,6 — O 6,5 — M. G. 246.

1) 3-Oxy-4-Isopropyl-2-Benzyl-1-Methylhexahydrobenzol (Benzylmenthol). Sm. 111—112°; Sd. 181—183°₁₀ (A. 305, 263).

2) Isobutyläther d. Turmerol. Fl. (Am. 4, 368; 6, 81). — III, 546.

3) Methyl-2-Methyl-5-Oktylphenylketon. Fl. (B. 31, 941).

4) Butyl-4-Pseudobutyl-2, 6-Dimethylphenylketon. Sd. 185—190°₁₄ (B.

31, 1349).

- C 77,9 H 9,9 O 12,2 M. G. 262. $C_{17}H_{26}O_2$
 - 1) Isocaprinester d. Benzolcarbonsäure. Sd. über 280° (J. 1864, 338).
- $\mathbf{C}_{17}\mathbf{H}_{26}\mathbf{O}_{3}$
- C 73,4 H 9,3 O 17,3 M. G. 278.

 1) Aethylester d. Alantolsäure. Sm. 79—80° (A. 285, 362). II, 1594.
 - 2) Acetat d. Verb. $C_{15}H_{24}O_2$ (aus Santelöl). Sm. $68.5-69.5^{\circ}$ (J. r. 24, 688). — III, *549*.
- C 69.4 H 8.8 O 21.8 M. G. 294.C17H26O4
 - 1) Acetyldigitogenin. Sm. 1780 (B. 24, 342). III, 581.
- 2) Isoamylester d. Campheroxalsäure. Sm. $98,5-99,5^{\circ}$ (Am. 20, 337). $C_{17}H_{26}O_5$
- C 65,8 H 8,4 O 25,8 M. G. 310. 1) Diäthylester d. 1-Keto-3-Isobutyl-5-Methyl-1,2,3,4-Tetrahydrobenzol-2,4-Dicarbonsäure. Sd. 186—188°₂₀ (A. 288, 332). C 57,0 — H 7,2 — O 35,8 — M. G. 358. 1) Tetramethylester d. α-Säure C₁₈H₁₈O₈ (aus Santonsäure) (G. 23 [2] $C_{17}H_{26}O_{8}$
 - 459). II, 2067.
 - 2) Tetramethylester d. β -Säure $C_{18}H_{18}O_8$ (aus Santonsäure). Sm. 99—100°
 - (G. 23 [2] 458). II, 2068.
 - Tetraäthylester d. α-Penten-ααγγ-Tetracarbonsäure (T. d. Aethyldicarboxylglutakonsäure).
 Sd. 203—204°₁₁ (B. 23, 3181; 30, 962; Soc. **63**, 881). — **I**, 866.
 - 4) αγγ-Triäthyl-α-Butylester d. Propen-ααγγ-Tetracarbonsäure. Fl. (B. 22, 1422). I, 864.
 C 54,6 H 6,9 O 38,5 M. G. 374.
- $\mathbf{C}_{17}\mathbf{H}_{26}\mathbf{O}_{9}$ 1) Tetraäthylester d. γ-Oxypropenäthyläther-ααγγ-Tetracarbonsäure.
- Fl. Na (B. 27, 3375). C 52,3 H 6,7 O 41,0 M. G. 390. $\mathbf{C}_{17}\mathbf{H}_{26}\mathbf{O}_{10}$ 1) Pentacetat d. $\alpha\beta\delta\zeta\eta$ -Pentaoxyheptan. Fl. (J. pr. [2] 41, 61; J. r. 21,
- 472; A. 185, 138). I, 417. C 38,2 H 4,9 O 56,9 M. G. 534. 1) Milchzuckerweinsäure. Ca + H₂O (A. ch. [3] 54, 82). I, 1064. C 79,1 H 10,1 N 10,8 M. G. 258. C₁₇H₂₆O₁₉
- $C_{17}H_{26}N_2$ 1) Dipiperidylmethylbenzol (Benzylidendipiperidin). Sm. 80-81° (B. 17,
- 678; J. pr. [2] 36, 130; M. 9, 698). IV, 22. C 82,2 H 11,3 O 6,4 M. G. 248. 1) Phellylalkohol (Cerin). Sm. 100° (Z. 1868, 383). II, 1067. 2) norm. Heptyläther d. 3-Oxy-4-Isopropyl-1-Methylbenzol. Sd. 306,7° $\mathbf{C}_{17}\mathbf{H}_{28}\mathbf{O}$
- (A. **243**, 49). II, 770. C 77,3 H 10,6 O 12,1 M. G. 264. $\mathbf{C}_{17}\mathbf{H}_{28}\mathbf{O}_{2}$
 - 1) Methyläther d. Benzoresinol. Sm. 174° (B. 26 [2] 679). III, 554. 2) Diisoamyläther d. Dioxymethylbenzol. Sd. 2920 (A. 102, 364, 365). - III, 8.
 - 3) Diisoamyläther d. 3,5-Dioxy-1-Methylbenzol. Fl. (Z. 1867, 561). II, 961.
 - 4) Acetat d. Caryophyllenhydrat (A. 279, 393). III, 513.
- 5) Acetat d. Cadyoli, Sd. 157—160% (Bl. [3] 17, 488).
 6) Acetat d. Santalol. Sd. 298% (Bl. 24, 303). III, 549.
 C 72,8 H 10,0 O 17,2 M. G. 280.
 1) Gratioleretin (J. 1858, 518). III, 592.
 C 68,9 H 9,5 O 21,6 M. G. 296. C17 H28 O8
- C₁₇H₂₈O₄
 - Lichesterinsäure (Lichenstearinsäure). Sm. 120°. Ba + 3H₂O, Pb, Ag (A. 55, 150; 86, 50; B. 23, 461; J. pr. [2] 57, 303).
 C 65,4 H 9,0 O 25,6 M. G. 312.
- $\mathbf{C}_{17}\mathbf{H}_{28}\mathbf{O}_{5}$
- $C_{17}H_{28}O_{6}$
- Gratioletin (J. 1858, 518). III, 592.
 C 62,2 H 8,5 O 29,3 M. G. 328.
 Diäthylester d. βθ-Diketo-γη-Dimethylnonan-γη-Dicarbonsäure (D. d. Diacetyldimethyladipinsäure). Sd. 248—252°₈₀ (Soc. 59, 571).
 - 2) Diäthylester d. $\beta \zeta$ -Diketo- δ -Isobutylheptan- $\gamma \varepsilon$ -Dicarbonsäure (D. d. Isoamylidendiacetessigsäure). Sm. 134-135° (A. 288, 331).
 - 3) Triäthylester d. ζ -Methyl- α -Hepten- $\delta \delta \varepsilon$ -Tricarbonsäure. bis 295° (B. 29, 977).
 - 4) Diisobutylester d. 2,6-Dimethyltetrahydro-1,4-Pyron-3,5-Dicarbonsäure. Sd. 218—223° (B. 29, 2053).

C 59,3 — H 8,1 — O 32,6 — M. G. 344. 1) Triäthylester d. δ -Keto- β -Isopropylpentan- $\alpha\alpha\gamma$ -Tricarbonsäure. Sd. 189—191°₁₀ (Bl. [3] 19, 199). C 56,7 — H 7,8 — O 35,5 — M. G. 360. $C_{17}H_{28}O_{7}$ $C_{17}H_{28}O_{8}$ 1) Tetraäthylester d. Pentan-ααγγ-Tetracarbonsäure. Sd. 195-1970, 10-11 (B. 23, 3184; 30, 960). - I, 861.2) Tetraäthylester d. Pentan-ααδδ-Tetracarbonsäure. Sd. 240-250° 55. (Soc. 67, 114). 3) Tetraäthylester d. Pentan- $\alpha\alpha\varepsilon\varepsilon$ -Tetracarbonsäure. Sd. 259-2620 1000. Na_2 (Soc. 51, 241; 59, 823). — I, 861. 4) Tetraäthylester d. Pentan-αβγγ-Tetracarbonsäure. Sd. 203-204₁₁ (Soc. 73, 1009). 5) Tetraäthylester d. Pentan-αγγε-Tetracarbonsäure. Sd. 215°₁₃ (B. 24, 283; Soc. **69**, 1509). — I, 861. 6) Tetraäthylester d. Pentan- $\beta\beta\delta\delta$ -Tetracarbonsäure. Sd. 191 $^{\circ}_{12}$ (A. 256, 182; B. 30, 961). — I, 861. 7) Dipropylester d. β -Acetoxylpropan- $\alpha\beta\gamma$ -Tricarbonsäure (D. d. Acetyleitronensäure). Sd. 205°₁₈ (B. 18, 1954). — I, 840. C 78,5 — H 10,8 — N 10,8 — M. G. 260.

1) β-Phenylhydrazonundekan. Fl. (G. 20, 97). — IV, 769.
2) 2-Diäthylamidomethyl-1-Piperidylmethylbenzol. Sd. 175—180°₂₀. $C_{17}H_{28}N_2$ $(2 \text{HCl}, \text{PtCl}_4)$ (B. 31, 428). C 81,6 - H 12,0 - O 6,4 - M. G. 250. $C_{17}H_{30}O$ C 81,6 — H 12,0 — O 0,4 — M. G. 250.

C Champakol. Sm. 86—88° (B. 26 [2] 286).
C 76,7 — H 11,3 — O 12,0 — M. G. 266.

Blaeolsäure. Fl. (J. 1878, 738). — I, 535.
Elaeomargarinsäure. Sm. 48° (Bl. 26, 286; 28, 24; J. 1878, 738; C. 1897 [1] 26). — I, 535.

Elaeostearinsäure. Sm. 71° (Bl. 26, 286; 28, 24; C. 1897 [1] 26). — $C_{17}H_{30}O_{2}$ I, 535. C 72,3 — H 10,6 — O 17,0 — M. G. 282. $C_{17}H_{30}O_3$ 1) Anhydrid d. Rocellsäure (A 117, 341). — I, 690. C 68.5 — H 10.0 — O 21.5 — M. G. 298.

1) Anhydrid d. Oxyrocellsäure. Sm. 82° (*J. pr.* [2] 57, 260).

C 65.0 — H 9.5 — O 25.5 — M. G. 314. C17 H30 O4 $C_{17}H_{30}O_{5}$ Diäthylester d. δ-Keto-γε-Diäthylheptan-γε-Dicarbonsäure (D. d. Tetraäthylacetondicarbonsäure). Sd. 231–232°₁₃₀ (A. 261, 179). — I, 772.
 Diäthylester d. β-Keto-γ-Isoamylhexan-γδ-Dicarbonsäure. Sd. 295 bis 300° (B. **29**, 981). C 61,8 — H 9,1 — O 29,1 — **M.** G. 330. $C_{17}H_{30}O_{6}$ 1) Triacetat d. Trioxyundekan. Fl. (J. pr. [2] 49, 53). 2) Triäthylester d. Oktan- $\beta\beta\zeta$ -Tricarbonsäure. Sd. 227—230° (Soc. **65**, 994). 3) Triäthylester d. β -Methylheptan- $\gamma \delta \delta$ -Tricarbonsäure. Sd. 290—295° (B. **29**, 976). 4) Triäthylester d. β -Methylheptan- $\delta \delta \varepsilon$ -Tricarbonsäure. Sd. 290—295° (B. **29**, 976). 5) Triäthylester d. β-Methylheptan-εεζ-Tricarbonsäure. Sd. 295-300° (B. **29**, 976). 6) Triäthylester d. $\beta \varepsilon$ -Dimethylhexan- $\beta \gamma \gamma$ -Tricarbonsäure. Sd. 300 bis 305° (B. 29, 976). $\mathbf{C}_{17}\mathbf{H}_{30}\mathbf{O}_{9}$ C 54,0 - H 7,9 - O 38,1 - M.G. 378.1) Jalapinsäure (oder $C_{88}H_{118}O_{35}$). Sm. bei 120°. Ba, Ba₃ (A. 95, 136; 116, 301; J. 1884, 1447). — III, 595. C 43,0 — H 6,3 — O 50,6 — M. G. 474. $\mathbf{C}_{17}\mathbf{H}_{30}\mathbf{O}_{15}$ 1) Amyloïd (H. 17, 365). C 76,1 — H 11,9 — O 11,9 — M. G. 268. 1) Asellinsäure (Heptadekylensäure) (B. 26 [2] 538). $\mathbf{C}_{17}\mathbf{H}_{32}\mathbf{O}_{2}$ 1) Aschrylester d. Cimicinsäure (A. 114, 153). — I, 524. C 68,0 — H 10,7 — O 21,3 — M. G. 300. 1) Roccellsäure. Sm. 132° (130°). K + 2H₂O, Ca + H₂O, Ba, Cu, Pb, Ag₂ (A. 61, 78; 117, 332; 295, 264; J. pr. [2] 57, 261; [2] 58, 497. — $C_{17}H_{32}O_4$

2) P-Acetoxyltetradekan-P-Carbonsäure. Sm. 590 (B. 29, 1815).

I, 690.

3) Pentadekan-αα-Dicarbonsäure (Tetradekylmalonsäure). Sm. 117-118°. $C_{17}H_{32}O_4$ Ca, Zn, Cd, Cu, Ag₂ (B. **24**, 991). — I, 690.

4) Diäthylester d. Undekan-δθ-Dicarbonsäure (D. d. Dipropylpimelinsäure). Sd. $224-226^{\circ}_{100}$ (Soc. **59**, 837). — **I**, $68\dot{9}$.

5) Diäthylester d. $\beta \vartheta$ -Dimethylnonan- $\gamma \eta$ -Dicarbonsäure (D. d. Diisopropylpimelinsäure). Sd. 220—222°₁₀₀ (Soc. **59**, 840). — **I**, 689.

6) Isobutylester d. d-α-Pelargonoxylbuttersäure. Sm. 55°; Sd. 315°

 $C_{17}H_{32}O_5$

(Bl. [3] 15, 492). C 64,6 — H 10,1 — O 25,3 — M. G. 316. 1) Oxyrocellsäure. Sm. 128°. Ba, Ag₂ (J. pr. [2] 57, 258; [2] 58, 546). C 51,5 — H 8,1 — O 40,4 — M. G. 396. $\mathbf{C}_{17}\mathbf{H}_{32}\mathbf{O}_{10}$

1) Sapotiretin (Am. 13, 573). — III, 611. $\mathbf{C}_{17}\mathbf{H}_{33}\mathbf{N}$

C 81,3 — H 13,1 — N 5,6 — M. G. 251. 1) Cetyleyanid. Sm. 53° (J. 1856, 580; 1857, 445; A. 102, 211). — I. 1468. C 73.1 - H 11.8 - N 15.1 - M. G. 279.

 $C_{17}H_{33}N_3$ 1) ααα-Tri[1-Hexahydropyridyl]äthan. Sd. 261—263°. 3 HCl (B. 20, 3247). - IV, 11.

2) Tetrapropylglutarimidin. (2 HCl, PtCl₄), (HBr, Br₂) (B. 23, 2946). — I, 1165.

C 80,3 — H 13,4 — O 6,3 — M. G. 254. 1) Vitol (Alkohol). Sm. 74° (B. **25** [2] 286). — I, 256. $C_{17}H_{34}O$

2) β-Ketoheptadekan (Methylquindekylketon). Sm. 48°; Sd. 319—320° (B. 12, 1671; 15, 1724). -1, 1005.

3) ι -Ketoheptadekan (Dioktylketon). Sm. 11—12° (Soc. 63, 456).

4) β -Keto- γ -Heptyldekan (uns-Diheptylaceton). Sd. $300-304^{\circ}$ (A. 200, 115). — I, 1005.

C 75,6 — H 12,6 — O 11,8 — M. G. 270. $C_{17}H_{34}O_{2}$

- Margarinsäure. Sm. 59,5°; Sd. 227°₁₀₀. Ba, Ag (B. 8, 775; 12, 1672; J. 1857, 355; A. 102, 209). I, 444.
 Daturinsäure. Sm. 54,5° (57°); Sd. 223—225°₁₅. Na, K, KH, Mg, Ba, Cu, Zn, Pb, Ag (Bl. [3] 5, 96; B. 25 [2] 578; 26 [2] 287; C. 1895 [1] 786). — I, 444.
- 3) Methylester d. Palmitinsäure. Sm. 28° (J. 1853, 502). I, 443.
- 4) Aethylester d. Laktarsäure. Sm. 35,5° (Bl. [3] 2, 157) I, 442. 5) Aethylester d. Isocetinsäure. Sm. 21° (J. 1854, 463). I, 442. 6) β-Methylbutylester d. Laurinsäure. Sd. 305-308°₇₂₉ (*Bl.* [3] 15,
- 7) Pentadekylester d. Essigsäure, Sm. 10-11°, Sd. 230°, (M. 15, 13).
- C 71,3 H 11,9 O 16,8 M. G. 286.

 1) Oxymargarinsäure. Sm. 80°. Mg, Ag (B. 8, 775). I, 579.

 2) Methylester d. Jalapinolsäure. Sm. 50—51° (J. pr. [2] 57, 449).

 3) Aethylester d. Convolvulinolsäure. Sm. 22,5° (Č. 1897 [1] 419). C17 H84 O8

 - 4) Isoamylester d. ε-Oxy-βθ-Dimethylnonan-ε-Carbonsäure. Sd. 280 bis 290° (A. 142, 17). I, 578.
 C 67,6 H 11,2 O 21,2 M. G. 302.
- $\mathbf{C}_{17}\mathbf{H}_{34}\mathbf{O}_{4}$ 1) Dioxyheptadekylsäure. Sm. 114-116°. Ba (B. 26 [2] 539).
- C 58.3 H 9.7 O 32.0 M. G. 350.C17H34O7 1) Rautenölglykose (A. 244, 22). — I, 1050.
- $C_{17}H_{36}O$ C 79.7 — H 14.1 — O 6.2 — M. G. 256. 1) ι-Oxyheptadekan (Dioktylcarbinol). Sm. 60,5-61° (Soc. 63, 457).
- C 75.0 H 13.2 O 11.8 M. G. 272. $C_{17}H_{36}O_{2}$ 1) Dioktyläther d. Dioxymethan. Sd. 289° (A. 240, 200; Bl. [3] 11, 757). - I, 912. C 67,2 - H 11,8 - O 21,0 - M. G. 304.
- C17H36O4 1) Tetraisobutyläther d. Tetraoxymethan (Orthokohlensäuretetraisobutyl-
- äther). Sd. 244,9° (A. 205, 253). I, 316. C 58,0 H 10,2 O 31,8 M. G. 352. 1) Triglycerintetraäthyläther. Sd. 250—260°₁₀ (A. ch. [3] 67, 311). $C_{17}H_{36}O_{7}$ I, 315.
- \acute{C} 80,0 H 14,5 N 5,5 M. G. 255. $C_{17}H_{37}N$ 1) α-Amidoheptadekan. Sm. 49°; Sd. 335—340°. HCl, (2HCl, PtCl₄) (B. 15, 774; 21, 2487). — I, 1139.

C₁₇H₂₈N₂

C 75,5 — H 14,1 — N 10,4 — M. G. 270. 1) Di[Diisobutylamido]methan. Sd. $245-255^{\circ}$ u. Zers. (2HCl,PtCl₄) (J. pr. [2] 36, 124). — I, 1151. C 68,4 — H 12,7 — N 18,8 — M. G. 298.

 $C_{17}H_{38}N_4$

1) Base (aus Fleisch) (Bl. 48, 12). - I, 1167.

C,2-Gruppe mit drei Elementen.

 $C_{17}H_4O_3Cu_8$ 1) Kupferacetylid (B. 30, 762).

C = 53.0 - H = 1.8 - O = 41.6 - N = 3.6 - M. G. = 385. $\mathbf{C}_{17}\mathbf{H}_7\mathbf{O}_{10}\mathbf{N}$

1) ?-Nitro-9, 10-Diketo-9, 10-Dihydroanthracen-1, 2, 4-Tricarbonsäure. Sm. $308-310^{\circ}$ u. Zers. Na, Na₂, Cu₃ + $12H_2O$, Ag₃ (J. pr. [2] 41, 131).

— II, 2086. 2) isom. ?-Nitro-9,10-Diketo-9,10-Dihydroanthracen-1,2,4-Tricarbonsäure. Sm. 360-370° u. Zers. Na, Na₂, Cu₃ + 18 H₂O, Ag₃ (J. pr. [2] **41**, 135). — II, 2086.

1) ?-Dichlor-2-Naphtylester d. 2,5-Dichlorbenzol-1-Carbonsäure. Sd. $\mathbf{C}_{17}\mathbf{H}_{8}\mathbf{O}_{2}\mathbf{Cl}_{4}$ 178—180° (G. 28 [1] 158).

C₁₇H₈O₅Br₄ 1) Tetrabromcitrakonfluorescein (Soc. 63, 681). — II, 2026.

C 78,8 - H 3,5 - O 12,3 - N 5,4 - M. G. 259. $\mathbf{C}_{17}\mathbf{H}_9\mathbf{O}_2\mathbf{N}$

1) Anthrachinolinchinon. Sm. 185%. HCl, (2 HCl, PtCl₄), Pikrat (A. 201, 349). — IV, 461. C 74,2 — H 3,3 — O 17,4 — N 5,1 — M. G. 275. 1) Oxyanthrachinolinchinon. Sm. 208° (A. 276, 24). — IV, 461.

 $\mathbf{C}_{17}\mathbf{H}_9\mathbf{O}_3\mathbf{N}$

2) 1,2-Naphtochinon-3,4-Akridon. Sm. über 400° (B. 27, 3073). — III, 395.

 $C_{17}H_9O_4N$

C 70,1 — H 3,1 — O 22,0 — N 4,8 — M. G. 291.

1) Dioxyanthrachinolinchinon (Alizarinblau). Sm. 270°. HCl, Acetat, Pikrat, Ba + BaO + ½ H₂O, + 2 NaHSO₃ (Bl. 28, 62; J. 1878, 1190, 1191; Soc. 35, 800; A. 201, 333; B. 11, 1371; 15, 1783; 29, 708). — IV, 461.

2) Verbindung (aus Hippursäure u. Phtalsäureanhydrid) (A. 275, 1). -

П, 1874. С 66,4 — Н 2,9 — О 26,1 — N 4,6 — М. G. 307. C17 H9 O5 N

1) Trioxyanthrachinolinchinon (Oxyalizarinblau). H₂SO₄ (J. pr. [2] 44,

106). — IV, 462. C 63,2 — H 2,8 — O 29,7 — N 4,3 — M. G. 323. C17 H9 O6 N

1) Tetraoxyanthrachinolinchinon (Dioxyalizariublau) (A. 276, 28; J. pr. [2] **44**, 103). — **IV**, 463. C 58,1 — **H** 2,5 — O 27,4 — N 12,0 — M. G. 351.

 $\mathbf{C}_{17}\mathbf{H}_{9}\mathbf{O}_{6}\mathbf{N}_{3}$

Lakton d. ?-Dinitro-1-[α-Oxy-β-Cyan-β-(3-Methylphenyl)äthenyl]benzol-2-Carbonsäure. Sm. 187—188° (B. 28, 1393). — II, 1714. C 60,2 — H 2,7 — O 33,0 — N 4,1 — M. G. 339.
 Trioxyalizarinblau (J. pr. [2] 44, 104). — IV, 463.

C17H9O7N

2) Alizarinindigblau (Pentaoxyanthrachinolinchinon) (J. pr. [2] 44, 109; A.

276, 29). — ĪV, 463. C 57,5 — H 2,5 — O 36,0 — N 3,9 — M. G. 355. $\mathbf{C}_{17}\mathbf{H}_{9}\mathbf{O}_{8}\mathbf{N}$

1) ?-Amido-9,10-Diketo-9,10-Dihydroanthracen-1,2,4-Tricarbonsäure.

Sm. 210° (*J. pr.* [2] **41**, 133). — II, 2086. 2) isom. ?-Amido-9,10-Diketo-9,10-Dihydroanthracen-1,2,4-Tricar-

bonsäure. Sm. 255° (J. pr. [2] 41, 137). — II, 2087. C 74,5 — H 3,6 — O 11,7 — N 10,2 — M. G. 274.

 $\mathbf{C}_{17}\mathbf{H}_{10}\mathbf{O}_{2}\mathbf{N}_{2}$ 1) I - Phtalylmethyl - 2, 3 - Benzdiazin. Sm. 260° (B. 30, 3034). -IV, 952.

2) 1,4-Naphtochinon-4-Methylphenazin (B. 23, 2797). — III, 376. 3) Anhydrid d. Kyklothraustinsäure. Sm. 196° (M. 7, 288). — IV, 1050.

C 70,4 - H 3,4 - O 16,5 - N 9,7 - M. G. 290. $C_{17}H_{10}O_8N_2$ 1) Amidooxyanthrachinolinchinon (Alizarinblauanid). Sm. 255° (A. 201,

342; 276, 24). — IV, 462. 2) Nitro-meso-Ketodihydrophenonaphtakridin. Sm. 304° (B. 26, 2596). - IV, 464.

- $C_{17}H_{10}O_8Br_2$ 1) 1-Naphtylester d. 3,5-Dibrom-2-Oxybenzol-1-Carbonsäure. Sm. 155° (B. 26, 1463). — II, 1505.
 - 2) 2-Naphtylester d. 3,5-Dibrom-2-Oxybenzol-1-Carbonsäure. Sm. 1910 (В. **26**, 1464). — **II**, 1505. С 66,7 — **H** 3,3 — О 20,9 — **N** 9,1 — **M**. G. 306.
- $\mathbf{C}_{17}\mathbf{H}_{10}\mathbf{O}_4\mathbf{N}_2$
 - 1) Di[1,2-Phtalylimido] methan (Methylendiphtalimid). Sm. 226° (B. 23, 1002). — II, 1806.
 - 2) 2 Phtalylmethylbenzimidazol 5 Carbonsäure (A. 273, 320). IV, 1065.
 - 3) 2, 3-Di[2-Furanyl]-1, 4-Benzdiazin-6-Carbonsäure. Sm. 245° u. Zers. (B. **23**, 3626). — **III**, 729.
- $C_{17}H_{10}O_5Br_4$ 1) Diacetat d. Tetrabrom-4,4'-Dioxydiphenylketon (A. 202, 132).
- III, 199. C 48,3 H 2,4 O 22,7 N 26,5 M. G. 422. $\mathbf{C}_{17}\mathbf{H}_{10}\mathbf{O}_{6}\mathbf{N}_{8}$
 - 1) 2-Nitroso-l-Phenylazo-4-[2,4,6-Nitroso-Dinitrophenylazo]benzol? Zers. bei 158° (*J. pr.* [2] **44**, 461). — IV, 1370. C 57,6 — H 2,8 — O 31,6 — N 7,9 — M. G. 354. 1) Parabanbenzol-4-Carbonsäure. K₂, Ba, Ag₂ (B. 11, 979). — II, 1272.
- $C_{17}H_{10}O_7N_2$

 - 2) 1-Naphtylester d. 3,5-Dinitro-2-Oxybenzol-1-Carbonsäure. Sm. 1920 (B. 26, 1465). — II, 1511. 3) 2-Naphtylester d. 3, 5-Dinitro-2-Oxybenzol-1-Carbonsäure. Sm. 254°
 - (B. 26, 1465). II, 1511.
- C₁₇H₁₀O₇Br₄ 1) Aethyläther d. Tetrabrommorin + 4H₂O. Sm. 135° u. Zers. (M. 5, 668; **18**, 706, 708; *Soc.* **69**, 794). — III, *688*. C 52,8 — H 2,6 — O 37,3 — N 7,3 — M. G. 386.
- $\mathbf{C}_{17}\mathbf{H}_{10}\mathbf{O}_{9}\mathbf{N}_{2}$ 1) Dinitrocitrakonfluorescein. (NH₄)₂, Ba + BaO, Pb (Soc. 63, 683). -II, 2026.
- $\mathbf{C}_{17}\mathbf{H}_{10}\mathbf{O}_{10}\mathbf{Br}_{4}\mathbf{1}$) Verbindung (aus Quercinpentaacetat (A. 238, 375). III, 589
- meso-Chlorphenonaphtakridin. Sm. 165° (B. 26, 2596). IV, 464.
 C 83,3 H 4,5 O 6,5 N 5,7 M. G. 245.
 Oximidochrysofluoren. Sm. 190° (B. 29, 827). $\mathbf{C}_{17}\mathbf{H}_{10}\mathbf{NCl}$ $\mathbf{C}_{17}\mathbf{H}_{11}\mathbf{ON}$

 - 2) 2-[1-Naphtyl]benzisoxazol (Naphtylindoxazen). Sm. 92-93° (B. 28, 1873). — IV, 465.

 - 3) 1-Phenyl- α -Naphtoxazol. Sm. 122° (B. 15, 1816). II, 1179. 4) 2-Phenyl- β -Naphtoxazol. Sm. 120° (136°). (2 HCl, PtCl₄) (B. 15, 1817;
 - 16, 1937). II, 1180.
 5) 3-[2-Furanyl]-β-Naphtochinolin. Sm. 94° (B. 27, 2028). IV, 464.
 6) meso-Ketodihydrophenonaphtakridin. Sm. 304—305° (B. 26, 2590).
 - IV, 464. C 74,7 H 4,1 O 5,8 N 15,4 M. G. 273.
- $\mathbf{C}_{17}\mathbf{H}_{11}\mathbf{ON}_{3}$ 1) Verbindung (aus 2-Amido-1-Phenylazonaphtalin). Sm. 252° (B. 23, 503).
- **IV**, 1393. 2-Bromphenyl-1-Naphtylketon. Sm. 89° (M. 16, 208). — III, 254.
 Phenyl-?-Brom-1-Naphtylketon. Sm. 100,5° (98°) (J. pr. [2] 35, 508; $\mathbf{C}_{17}\mathbf{H}_{11}\mathbf{OBr}$
- $C_{17}H_{11}O_2N$
- J. 1886, 1651). III, 254.
 C 78,1 H 4,2 O 12,3 N 5,4 M. G. 261.
 Dioxy-β-Anthrachinolin. Sm. 270° (B. 29, 708).
 Phenylnaphtylcarbazolcarbonsäure. Sm. 325°. Mg, Ba (B. 29, 268). - IV, 458.
 - 3) Lakton d. $1-[\alpha-Oxy-\beta-Cyan-\beta-(3-Methylphenyl)$ äthenyl] benzol-2-Carbonsäure. Sm. 144—145° (B. 28, 1392). — II, 1714.
 - 4) Nitril d. 3-[4-Methylphenyl]-1,2-Isobenzpyron-4-Carbonsäure
- (3-p-Tolyl-4-Cyanisocumarin). Sm. 193—195° (B. 29, 2546).

 1) Benzoat d. 1-Chlor-2-Oxynaphtalin. Sm. 101° (C. 1895 [1] 834).

 C 73,6 H 4,0 O 17,3 N 5,1 M. G. 277. $C_{17}H_{11}O_2Cl$ $C_{17}H_{11}O_3N$
 - 1) 1,2-Dioxy-3,4-Naphtakridon. Sm. über 350° (B. 27, 3074). —
 - 2) 2-Nitroso-1-Naphtylester d. Benzolcarbonsäure. Sm. 1620 (B. 8, 1022; **15**, 1816). — **II**, 1149.
 - 3) 1-Nitroso-2-Naphtylester d. Benzolcarbonsäure. Sm. 1140 (B. 15, 1817). — II, 1149.
 - 4) Acetylchrysophansäureimid (A. 183, 223). III, 452.
 - 5) Verbindung (aus d. α , 2-Imid d. $\alpha\beta$ -Diphenyläthan- α , 2, 2'-Tricarbonsäure). Sm. 263° (B. 27, 2494). II, 2025.

C₁₇H₁₁O₂Br 1) 2 ^{3,4}-Methylenäther d. 6-Brom-1-Keto-2-[3,4-Dioxybenzyliden]-**2,3-Dihydroinden.** Sm. 223—224° (B. **31**, 725). C 69,6 — H 3,7 — O 21,8 — N 4,8 — M. G. 293.

 $C_{17}H_{11}O_4N$

1) 4-Phenylimido-2-Oxy-1-Keto-1,4-Dihydronaphtalin-42-Carbonsäure. Sm. 270-271° (B. 27, 3072). - III, 394.

2) 4-Phenylamido-1, 2-Naphtochinon-42-Carbonsäure. Sm. 2520 (B. 27,

3073). — III, *395*.

3) 2-Phenylchinolin-3,4-Dicarbonsäure + 2H₂O. Sm. 193-194^o. Ag₂ (J. pr. [2] 57, 471).

4) 2-Phenylchinolin-4,8-Dicarbonsäure. Sm. oberh. 300° u. Zers. Mg $+ H_2O$, Ag_2 (A. 281, 2). — IV, 451.

5) 4-Phenylchinolin-?-Dicarbonsäure. Ba + 4H₂O (B. 18, 2708). -

1V, 451.
 6) α, 2'-Lakton d. α-Oxy-αβ-Diphenyläthan-α, 2, 2'-Tricarbonsäure-α, 2-Imid. Sm. 239—241° (B. 27, 2501). — II, 2056.
 7) 1-Nitro-2-Naphtylester d. Benzolcarbonsäure. Sm. 142° (B. 16, 1935).

C 63.5 - H 3.4 - O 19.9 - N 13.1 - M. G. 321.C17H11O4N8

1) 2,6-Di[?-Nitrophenyl]pyridin. Sm. 110-1110 (B. 30, 1501). -IV, 455.

2) 2,6-Di[?-Nitrophenyl]pyridin. Sm. $210-220^{\circ}$ (B. 30, 1501). — II, 455.

3) Verbindung (aus Dizimmthydroxamsäure) (A. 178, 222). — II, 1408.

C 66,0 - H 3,6 - O 25,9 - N 4,5 - M. G. 309.C17H11O5N

1) 2-[4-Oxyphenyl]amido-1,4-Naphtochinon-23-Carbonsäure. Sm. 2780 u. Zers. (B. 32, 83).

2) 1-Naphtylester d. 5-Nitro-2-Oxybenzol-1-Carbonsäure (B. 26, 1464). II, 1509.

3) 2-Naphtylester d. 5-Nitro-2-Oxybenzol-1-Carbonsäure. Sm. 2010 (B. 26, 1465). — II, 1509.

C 60.5 - H 3.3 - O 23.7 - N 12.5 - M. G. 337. $C_{17}H_{11}O_5N_8$

1) 2,4-Dinitro-l-Naphtylamid d. Benzolcarbonsäure. Sm. 252° (A. 208, 329). — II, 1168.

C₁₇H₁₁O₅Br 1) 3,4-Methylenäther-7-Methyläther d. ?-Brom-7-Oxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron. Sm. 240—241° (B. 30, 302).

C 57.8 - H 3.1 - O 27.2 - N 11.9 - M. G. 353. $C_{17}H_{11}O_6N_3$

1) P-Trinitro-l-Benzylnaphtalin (Bl. 26, 5). — II, 281. C 50.9 - H 2.7 - O 35.9 - N 10.5 - M. G. 401.

 $\mathbf{C}_{17}\mathbf{H}_{11}\mathbf{O}_{9}\mathbf{N}_{3}$ 1) α-Phénylcumálinpikrat. Sm. 81—82° (B. 29, 1676; G. 26 [2] 341).

 $\mathbf{C}_{17}\mathbf{H}_{11}\mathbf{O}_{12}\mathbf{N}_{7}$ C 40.4 - H 2.2 - O 38.0 - N 19.4 - M. G. 405.1) Pentanitrodiphenylamid d. Pseudo-Itakonsäure (A. 85, 40-41). -

II, 418. $C_{17}H_{11}NCl_2$ 1) 1-[2,5-Dichlorbenzyliden] amidonaphtalin. Sm. 111-1126 (A. 299,

C₁₇H₁₁NBr₄ 1) ?-Tetrabrom-2-[4-Methylphenyl]amidonaphtalin. Sm. 168—169° (B. 16, 2080; 28, 337). — II, 603.

C, 7H, NS 1) 1-Phenyl-α-Naphtthiazol. Sm. 102,5—103°. Pikrat (B. 20, 1798). — II, 1180.

2) 2-Phenyl-β-Naphtthiazol. Sm. 107°. (2 HCl, PtCl₄) (B. 20, 1803). — II, 1180.

C 78,4 - H 4,6 - O 6,2 - N 10,8 - M G 260. $C_{17}H_{12}ON_{2}$

1) 2-Keto-3-Phenyl-1, 2-Dihydro-α-Naphtimidazol (β-Phenylnaphtylenharnstoff). Sm. 238° (B. 27, 2773). - IV, 919.

2) 2-Phenylamido-α-Naphtoxazol. Sm. 232—233°. Pikrat (B. 22, 3241). - II, 865.

3) 2-Phenylamido- β -Naphtoxazol. Sm. 167—168°. Pikrat (B. 21, 419).

4) 7-Methylrosindon [9] (ms-Methylisorosindon). Sm. 212—214°. HCl, HBr (B. 31, 2479).

5) ms-Methylrosindon. Zers. bei 100° (B. 30, 395). — IV, 1055. 6) Methylrosindon. Sm. 257—259° (B. 24, 2171). — IV, 1055.

7) 5-Oxy-10-Methyl- $\alpha\beta$ -Naphtophenazin (Methyl- α -Naphteurhodol). Zers. bei 265° (B. 19, 443; Soc. 63, 1385). — IV, 1063.

- $C_{17}H_{19}ON_{2}$ 8) Methyläther d. 5-Oxy- $\alpha\beta$ -Naphtophenazin. Sm. 176—177° (B. 24, 2173). — IV, 1054.
 - 9) Methyläther d. 6-Oxy- $\alpha\beta$ -Naphtophenazin. Sm. 158° (B. 26, 619). **– IV**, 1054.

 - 10) Acetylchinindolin. Sm. 185° (B. 30, 3021). IV, 1038.
 11) Base (aus 2-Chlor-4-Methylchinolin). Sm. 213° (B. 25, 2710). IV, 316.
 - 12) Nitril d. β -Methoxyl- β -Phenyl- α -[2-Cyanphenyl] äthen- α -Carbonsäure. Sm. 140-143° (B. 27, 835). - II, 1977.
 - 13) Nitril d. 1-Keto-3-[4-Methylphenyl]-1,2-Dihydroisochinolin-4-Carbonsäure (3-p-Tolyl-4-Cyanisocarbostyril). Sm. 290-2920 (B. 29,
 - 14) Verbindung (aus Benzoylchlorid u. Acetonitril). Sm. 2049 (J. pr. [2] 58, 157).

 - 15) Verbindung (aus 3,4-Dioxy-1,2-Diketotetrahydronaphtalin u. salzs. 3,4-Diamido-1-Methylbenzol (B. 25, 1178). IV, 1063.
 16) Verbindung (aus d. Verb. C₁₇H₁₂ON₂). Sm. 169—170°. HCl (B. 25, 1179). IV, 1063.
 C 70,8 H 4,2 O 5,6 N 19,4 M. G. 288.
- $\mathbf{C}_{17}\mathbf{H}_{12}\mathbf{ON}_{4}$
 - 1) 3-[2-Oxy-1-Naphtyl]azoindazol. Sm. 250-251° (A. 305, 354). 1) γ -Keto- $\alpha \varepsilon$ -Di[3-Chlorphenyl]- $\alpha \delta$ -Pentadiën. Sm. 123° (B. 31, 1512).
- $\mathbf{C}_{17}\mathbf{H}_{12}\mathbf{OCl}_2$ 1) Benzoat d. 1-Merkaptonaphtalin. Sm. 116-117°; Sd. 262° (B. 22, $C_{17}H_{12}OS$
 - 823). II, 1149. 2) Benzoat d. 2-Merkaptonaphtalin. Sm. 108°; Sd. 267°₁₅ (B. 22, 825). - II, 1149.
- C 73.9 H 4.3 O 11.6 N 10.1 M. G. 276. $C_{17}H_{12}O_{2}N_{2}$
 - 1) 1-Nitroso-2-[2-Oxybenzyliden]amidonaphtalin. Sm. 270° (A. 286,
 - 2) 1-[3-Nitrobenzyliden]amidonaphtalin. Sm. 102-103° (G. 23 [2] 222, 519). — III, *31*.
 - 3) 2-[4-Nitrobenzyliden]amidonaphtalin. Sm. 120-121° (G. 23 [2] 223, 519). — III, 31.
 - 4) 8-Nitro-l-Benzylidenamidonaphtalin. Sm. 128° (Soc. 63, 1061). —
 - 5) 2-Phtalylmethyl-5-Methylbenzimidazol. Sm. noch nicht bei 330° (A.
 - 273, 319). IV, 893. 6) α -[3-Nitrophenyl]- β -[2-Chinolyl]äthen. Sm. 139°. HCl, (2HCl, PtCl₄ + 1\(^1\)_2\(^1\)_2\(^1\), HNO₃, Pikrat (B. 16, 2009; 23, 3645). IV, 454. 7) α -[4-Nitrophenyl]- β -[2-Chinolyl]äthen. Sm. 164—165° (B. 20, 2047).
 - **IV**, 454.
 - 8) α -[3-Nitrophenyl]- β -[4-Chinolyl]äthen. Sm. 131—1320 (B. 21, 1429). - IV, 455.
 - 9) 6-Methyl-2, 3-Difuranyl-1, 4-Benzdiazin. Sm. 170° (B. 25, 2844). IV, 1064.
 - 10) 2,3-Diphenyl-1,4-Diazin-5-Carbonsäure. Sm. 175-176°. K, Ag + H₂O (Soc. 63, 1305). — IV, 1049.
 - 11) Nitril d. α [4 Nitrophenyl] δ Phenyl- $\alpha \gamma$ Butadiën α Carbonsäure. Sm. 205—206° (B. **23**, 3135). — II, *1479*. ° C 67,1 — H 3,9 — O 10,5 — N 18,4 — M. G. 304.
- $\mathbf{C}_{17}\mathbf{H}_{12}\mathbf{O}_{2}\mathbf{N}_{4}$ 1) 4, 4'-Di[5-Phenyl-1, 2, 4 - Oxdiazolyl] methan (Malonendiazoximdibenzenyl). Sm. 175° (B. 29, 1171).
- $C_{17}H_{12}O_{2}Br_{2}$ 1) Verbindung (aus Alìo- α -Brom- β -Phenylakrylsäure) oder ($C_{9}H_{5}OBr$)_x. Sm. oberh. 300° (B. 15, 19; 31, 2096). II, 1412. $C_{17}H_{12}O_{3}N_{2}$ C 69,9 H 4,1 O 16,4 N 9,6 M. G. 292. $\mathbf{C}_{17}\mathbf{H}_{12}\mathbf{O}_{3}\mathbf{N}_{2}$
 - 1) 2-[4-Nitrobenzyliden]amido-1-Oxynaphtalin. Sm. 1870 (B. 31, 2259). 2) 4-4-Nitrobenzyliden amido-1-Oxynaphtalin. Sm. 1710 (B. 31, 2258). 3) 1-[4-Nitrobenzyliden amido-2-Oxynaphtalin. Sm. 1740 (B. 31, 2258).
 - 4) 3-[2-Methylphenyl]azo-2-Oxy-1,4-Naphtochinon. Sm. 205°. NH₄ (B. 30, 2128). — IV, 1481.
 - 5) 3-[4-Methylphenyl]azo-2-Oxy-1,4-Naphtochinon. Sm. 205 ° u. Zers. (B. 30, 2128). - IV, 1481.
 - 6) 1-[4-Oxyphenyl]azonaphtalin-13-Carbonsäure. Sm. 2120 u. Zers. Na (Soc. 37, 747; A. 251, 195). — IV, 1470.
 - 7) 2-[4-Oxyphenyl]azonaphtalin-23-Carbonsäure. Sm. 2330 (A. 251, 196). **IV**, 1470.

 $C_{17}H_{12}O_3N_2$ 8) 2-Oxy-1-Phenylazonaphtalin-1*-Carbonsäure. Sm. 235°. K + 2H,0, Ba $+ 3^{1/2} H_2 O$ (B. 14, 2035). — IV, 1463.

9) 1-Oxy-2-Phenylazonaphtalin-23-Carbonsäure. Zers. bei 2600 (B. 24, 1599). — IV, 1463.

10) 3-Oxy-?-Phenylazonaphtalin-2-Carbonsäure. Sm. 2320 (B. 26, 2898). **- IV**, 1473.

11) Kyklothraustinsäure. Sm. 252°. Ca $+ 4H_2O$, Ba $+ xH_2O$ (M. 7, 283;

- 8, 198). IV, 1049. 12) 2-Nitroso-1-Naphtylester d. Phenylamidoameisensäure. Sm. 119 bis 120° u. Zers. (B. 22, 3106). — II, 862.
- 13) 4-Nitroso-l-Naphtylester d. Phenylamidoameisensäure. Sm. 1700 (B. 22, 3106). — II, 861.
- 14) 1-Nitroso-2-Naphtylester d. Phenylamidoameisensäure. Sm. 126 bis 127° (B. **22**, 3106). — II, 881.

15) Diphenylamid d. Krokonsäure (B. 19, 772). — II, 420.

- 16) 2-Nitro-1-Naphtylamid d. Benzolcarbonsäure. Sm. 174,5° (A. 208,
- 327; B. 15, 1815; 17, 111). II, 1168. 17) 4-Nitro-1-Naphtylamid d. Benzolcarbonsäure. Sm. 224° (A. 208, 325; B. 15, 1814). II, 1168.
- 18) 5-Nitro-2-Naphtylamid d. Benzolcarbonsäure. Sm. 181,5° (B. 25, 2078). — II, 597.
- 19) 8-Nitro-2-Naphtylamid d. Benzolcarbonsäure. Sm. 162° (B. 25, 2081). — II, 597.
- C₁₇H₁₂O₃Br₄ 1) 2,3,4,5-Tetrabrom-2,5-Dimethylfuran-3-Carbonsäure (Soc. 57, 953). /— III, 713.

 $\mathbf{C}_{17}\mathbf{H}_{12}\mathbf{O}_{4}\mathbf{N}_{2}$

- C 66,2 H 3,9 O 20,8 N 9,1 M. G. 308. 1) Methylisatoïd. Sm. 219° u. Zers. (B. 15, 2094). II, 1603.
- 2) P-Nitro-4-[2-Methylphenyl]imido-2-Oxy-1-Keto-1,4-Dihydronaphtalin. Sm. 240° (B. 17, 1136). — III, 394.
- 3) P-Nitro-4-[4-Methylphenyl]imido-2-Oxy-1-Keto-1,4-Dihydronaphtalin. Sm. 241° (B. 17, 1136). — III, 394.
- 4) 2-[2-Nitro-4-Methylphenyl]amido-1, 4-Naphtochinon (B. 23, 2797). - III, 376.
- 5) 3-Nitro-4-[1-Naphtyl]amidobenzol-1-Carbonsäure. Na (B. 23, 3457). - II, *1286*.
- 6) 3-Nitro-4-[2-Naphtyl]amidobenzol-1-Carbonsäure. Na (B. 23, 3456). · II, 1286̃.
- 7) 1,3-Diphenylpyrazol-4,5-Dicarbonsäure. Zers. bei 190°. Ba (B. 26, 114). — IV, 951.
- 8) 1,5-Diphenylpyrazol-3,4-Dicarbonsäure $+ \frac{1}{3}$ H₂0. Sm. 217—218°. NH_4 , $Ca + 2H_2O$, $Ba + H_2O$ (B. 22, 175). — IV, 952.
- 9) P-Nitro-P-Amidonaphtylester d. Benzolcarbonsäure. Sm. 158° (A. 208, 332). — II, 1149.
- C 60,7 H 3,6 O 19,0 N 16,7 M. G. 336. $C_{17}H_{12}O_4N_4$
 - 1) Di[Carbonylphenylhydrazid] d. Malonsäure. Sm. 2050 (B. 21, 1241). - IV, 702.
- C 63,0 H 3,7 O 24,7 N 8,6 M. G. 324. $C_{17}H_{12}O_5N_2$
 - 1) γ -Keto- $\alpha \varepsilon$ -Di[3-Nitrophenyl]- $\alpha \delta$ -Pentadiën. Sm. 239° (B. 31, 1512). 2) γ -Keto- $\alpha \varepsilon$ -Di[4-Nitrophenyl]- $\alpha \delta$ -Pentadiën. Sm. 254° (B. 31, 1512). 3) Benzoat d. Verb. $\mathbf{C}_{10}\mathbf{H}_{\delta}\mathbf{O_4}\mathbf{N}_{2}$. Sm. 146° (G. 22 [2] 487). $\mathbf{\Pi}_{\gamma}$ 978.
- C₁₇H₁₂O₅Br₂ 1) Monacetat d. ?-Dibrom-1, 7-Dioxyxanthonmonäthyläther. Sm. 186 bis 190° (M, 16, 319). — III, 206.
- $\mathbf{C}_{17}\mathbf{H}_{12}\mathbf{O}_{6}\mathbf{Br_{4}}$ 1) ?-Tetrabrom α δ -Diketo- α δ -Di[2,4-Dioxyphenyl] - β -Methylbutan (B. 17, 1281). — III, 299.
- C₁₇H₁₂O₇Br₂ 1) Dimethyläther d. Dibromquercetin. Zers. bei 250° (Soc. 67, 499). - III, 605.
- C₁₇H₁₂O₇Br₄ 1) Tetrabromevernsäure. Sm. 161° (A. 155, 56). II, 1766.
- $\mathbf{C}_{17}\mathbf{H}_{12}\mathbf{O}_{8}\mathbf{N}_{2}$
- C 54,8 H 3,2 O 34,4 N 7,5 M. G. 372.

 1) α,2-Lakton d. α-Oxy-αα-Di[?-Nitrophenyl]methan-2,2'-Dicarbon-säure-2'-Aethylester (L. d. Dinitrobenzhydroldicarbonsäuremonoäthylester). Sm. 146—148° (A. 242, 242). II, 1973.
- 1) 1-[α -Chlorbenzyliden]amidonaphtalin. Sm. 60° (B. 19, 984). II, 1167. 2) 2-[α -Chlorbenzyliden]amidonaphtalin. Sm. 68° (B. 19, 983). II, 1168. C₁₇H₁₉NCl

- 1) 2-Thiocarbonyl-3-Phenyl-1, 2-Dihydro-α-Naphtimidazol. Sm. 1420 C17H19N9S (B. **26**, 188). — **IV**, 919.
- $\mathbf{C}_{17}\mathbf{H}_{12}\mathbf{N}_{4}\mathbf{Br}_{2}\mathbf{1}$) Nitril d. 5- $[\alpha\beta$ -Dibrom- β -Phenyläthyl]-1-Phenyl-1, 2, 4-Triazol-3-Carbonsäure. Sm. 147°. — IV, 1165. C 82,6 — H 5,3 — O 6,5 — N 5,6 — M. G. 247.
- C₁₇H₁₃ON
- 1) 2-Oxy-1-Phenylimidomethylnaphtalin. Sm. 99° (B. 32, 286), 2) 4-Oxy-1-Phenylimidomethylnaphtalin. Sm. 133° (B. 32, 285), 3) 4-Oxy-1-[2-Naphtylimido]methylbenzol. Sm. 220° (A. 241, 356).

- 4) 2-[2-Oxybenzyliden]amidonaphtalin. Sm. 1210 (A. 241, 351). III, 73.
- 5) 2-Amidophenyl-l-Naphtylketon. Sm. 140,5° (B. 29, 827). III. 254.
- 6) α-Oximidophenyl-1-Naphtylmethan (Oxim d. Phenyl-1-Naphtylketon).
- Sm. 140—142° (M. 5, 200; A. 247, 181). III, 254.
 7) α-Oximidophenyl-2-Naphtylmethan. Sm. 174—176° (A. 247, 181). - III, 255.
- 8) 2-Keto-1,6-Diphenyl-1,2-Dihydropyridin. Sm. 144-146° (B. 29, 1677; G. 26 [2] 346). — IV, 376.
- 9) 4-Keto-2, 6-Diphenyl-1, 4-Dihydropyridin. Sm. 267° (B. 23, 3736).
- III, 304. 10) $2-[\beta-Phenyläthenyl]-5-Phenyloxazol.$ Sm. 62°. HCl (B. 29, 2102).
- ÏV, 456. 11) 3- $[\beta$ -Benzoyläthenyl]indol (3-Cinnamylindol). Sm. 229—231° (B. 23,
- 1360). IV, 375.
- 12) α -[2-Oxyphenyl]- β -[2-Chinolyl]äthen (Salicyläthylenchinolin). Sm. 209°. HCl + H₂O (B. 27, 1981). IV, 454.
- 13) α -[4-Oxyphenyl]- β -[2-Chinolyl]äthen. Sm. 258—259: $1^{1}/_{2}$ H₂O (B. 16, 2009; 22, 286; 27, 1982). IV, 454. Sm. 258-259° u. Zers. HCl+
- 14) α -[2-Oxyphenyl]- β -[4-Chinolyl]äthen. Sm. 215° (B. 21, 1429, 2172). **– IV**, 455.
- 15) α -[3-Oxyphenyl]- β -[4-Chinolyl]äthen. Sm. 254—255° (B. 21, 2170). **— IV**, 455.
- 16) α -[4-Oxyphenyl]- β -[4-Chinolyl]äthen. Sm. 248—249° (B. 21, 1427).
- IV, 455. 17) 6-Benzoyl-2-Methylchinolin. Sm. 67-68°. (2HCl, PtCl₄ + 2H₂O), $H_2Cr_2O_7$ (A. 242, 323). — IV, 375.
- 18) 8 Benzoyl 2 Methylchinolin. Sm. 107-108° (B. 18, 2406). -
- IV, 375. 19) meso-Oxydihydrophenonaphtakridin. Sm. 345° (B. 27, 2845). —
- IV, 456. 20) Nitril d. γ-Keto-αδ-Diphenyl-α-Buten-δ-Carbonsäure + H₂O. Sm. 162—163° (J. pr. [2] 55, 347).
 21) Phenylamid d. Naphtalin-1-Carbonsäure. Sm. 160° (B. 1, 42; 15,
- 3065; J. pr. [2] 41, 310). II, 1445. 22) Phenylamid d. Naphtalin-2-Carbonsäure. Sm. 170° (A. 180, 323). **- II**, 1454.
- 23) 1-Naphtylamid d. Benzolcarbonsäure. Sm. 159—160° (156°; 161—162°) (A. 208, 324; 279, 150; B. 15, 1814; 18, 1477; 20, 1798; Soc. 71, 1202).
- II, 1167. 24) 2-Naphtylamid d. Benzolcarbonsäure. Sm. 157° (141—143°; 162 bis 163°) (B. 14, 59; 18, 1585; A. 279, 152; Soc. 71, 1203). — II, 1168. C 74,2 — H 4,7 — O 5,8 — N 15,3 — M. G. 275.

 1) 4-Furalamidoazobenzol. Sm. 129—130° (G. 28 [1] 243). — IV, 1358. 2) 4-Benzoylamido-2-Phenyl-1,3-Diazin. Sm. 141° (B. 30, 2031). —
- $C_{17}H_{18}ON_8$
- IV, 1167.
- 3) Acetylmethylindophenazin. Sm. 204° (B. 29, 201). IV, 1190.
- 4) Anhydro-3-Methyl-5-[2-Amidophenyl]-1-Phenylpyrazol-4-Carbonsäure. Sm. 261° (B. 18, 2262). — IV, 1165.
- 5) Amid d. 2,3-Diphenyl-1,4-Diazin-5-Carbonsäure. Sm. 197-198° (Soc. **63**, 1307). — IV, 1049. C 67,3 — H 4,3 — O 5,3 — N 23,1 — M. G. 303.
- C₁₇H₁₈ON₅
- 5-Phenyl-3-[5-Methyl-1-Phenyl-1,2,4-Triazolyl-3-]-1,2,4-Oxdiazol. Sm. 166—167° (B. 22, 1751). IV, 1115.
 5-Methyl-3-[1,5-Diphenyl-1,2,4-Triazolyl-3-]-1,2,4-Oxdiazol. Sm.
- $152-153^{\circ}$ (B. 22, 1753). IV, 1164.

C17H18OC1 1) 3-Chlor-1-Keto-3,4-Diphenyl-2,3-Dihydro-R-Penten. Sm. 128°

(Soc. 51, 428). — III, 251. 1) P-Pentabrom-2, 3, 5, 6-Tetramethyldiphenylketon. Sm. 224—225° (A. ch. [6] 1, 515). — III, 238. C 77,6 — H 4,9 — O 12,2 — N 5,3 — M. G. 263. $\mathbf{C}_{17}\mathbf{H}_{18}\mathbf{OBr}_{5}$

 $C_{17}H_{13}O_{2}N$

- 1) 1-Imido-5-Oxy-3-Keto-2,4-Diphenyl-2,3-Dihydro-R-Penten. Sm. $151-152^{\circ}$ (A. 284, 257). — III, 320.
- 2) 4-Benzoylamido-1-Oxynaphtalin. Sm. 228-229° (B. 29, 2954).
- 3) 4-[2-Methylphenyl]imido-2-Oxy-1-Keto-1,4-Dihydronaphtalin. 240° (B. 15, 287, 689). — III, 393.
- 4) 4-[4-Methylphenyl]imido-2-Oxy-1-Keto-1,4-Dihydronaphtalin. Sm. 246° (B. 15, 287, 686, 1969). III, 393.
 5) Methyläther d. 4-Phenylimido-2-Oxy-1-Keto-1,4-Dihydronaphtalin.
- Sm. 150—151° (B. 15, 282). III, 393.
- 6) 2-[2-Methylphenyl]amido-1,4-Naphtochinon. Sm. 140—142° (B. 15. 689). — III, *376*.
- 7) 2-[4-Methylphenyl]amido-1,4-Naphtochinon. Sm. 200° (B. 15, 687, 688; Soc. 37, 642). — III, 376.
- 8) ? Oxy ? Phenyl 1, 4 Naphtochinonmethylimid (A. 226, 39).
- 9) Benzyläther d. 1-Nitroso-2-Oxynaphtalin. Sm. 98° (B. 16, 634). II. 1050.
- 10) 4-Oxy-2-Keto-3-Phenyl-5-Benzyliden-2,5-Dihydropyrrol? Sm. 226 bis 227° (A. 284, 258). — III, 320.
- 11) Acetat d. 2-[3-Oxyphenyl]chinolin. Sm. 920 (M. 13, 68). IV, 426.
- 12) Acetat d. 2-[4-Oxyphenyl]chinolin. Sm. 1230 (M. 8, 131). IV, 426. 13) Benzoat d. 4-Oxy-2-Methylchinolin. Sm. 1290. (2HCl, PtCl₄) (B. 21,
- 1970). IV, 311.
- 14) 3-Phenylamidonaphtalin-2-Carbonsäure. Sm. 235-237°. Na + $1^{1}/_{2}$ H₂O (B. **25**, 2741). — II, 1458.
- 15) 2,5-Diphenylpyrrol-3-Carbonsäure. Sm. 216° (B. 21, 1491, 3060). IV, 449.
- 16) Benzylidenchinolin-4-Carbonsäure. Sm. 218° (B. 18, 310; A. 270. 339). - IV, 347.
- 17) 6-Methyl-2-Phenylchinolin-4-Carbonsäure. Sm. 228°. Pb, Cu, Ag,
- (2 HCl, PtCl₄) (A. 242, 296). IV, 448. 18) 8-Methyl-2-Phenylchinolin-4-Carbonsäure. Sm. 245°. Cu + H₂O, $Ag + H_2O$ (A. 242, 298). – IV, 448.
- 19) 3-Allyl-β-Naphtochinolin-1-Carbonsäure. Sm. 289° (B. 27, 2023). IV. 448.
- 20) Methylbetaïn d. 2-Phenylchinolin-4-Carbonsäure + H₀O. Sm. 220 bis 221° u. Zers. (wasserfrei) (A. 276, 284). — IV, 445.
- 21) Benzylbetain d. Chinolin-4-Carbonsäure + 3 H₂O. Sm. 83-84° (190° u. Zers. wasserfrei) (B. 18, 364; A. 270, 336). — IV, 347.
- 22) Inn. Anhydrid d. α -Phenylacetylamido- β -Phenylakrylsäure (B. 31, 2239).
- 23) Methylester d. 2-Phenylchinolin-4-Carbonsäure. Sm. 61° (A. 282, 106). - IV, 445.
- 24) 1-Naphtylester d. Phenylamidoameisensäure. Sm. 178,5° (177°) (B. **18**, 2340, 2431). — **II**, 858.
- 25) 2-Naphtylester d. Phenylamidoameisensäure. Sm. 155° (B. 18, 2431; J. pr. [2] **41**, 320). — **II**, 878.
- 26) 1-Amido-2-Naphtylester d. Benzolcarbonsäure. Sm. 245° (B. 16, 1935). — II, *1149*.
- 27) Nitril d. β -Oxy- α -Benzoyl- β -Phenylakrylmethyläthersäure. Sm. 117 bis 118° (J. pr. [2] 58, 154).
- 28) Methylimid d. $\alpha\beta$ -Diphenyläthen- $\alpha\beta$ -Dicarbonsäure (M. d. Diphenylmaleïnsäure). Sm. 158° (B. 26, 2478). — II, 1897.
- 29) α-Phenylpropenyl-γ-Imid d. Benzol-1, 2-Dicarbonsäure (Styrylphtal-imid). Sm. 153° (B. **26**, 1857). II, 1806.
- 30) Phenylamid d. 3-Oxynaphtalin-2-Carbonsäure. Sm. 243-244° (B. 25, 2744). — II, 1691.
- 31) Acetylderivat d. Benzoylphenylessigsäurenitril. Sm. 99° (J. pr. [2] 55, 314 Anm.).

- $C_{17}H_{13}O_2N$ 32) Verbindung (aus d. Säure $C_{19}H_{15}O_4N$). Sm. 223° (B. 20, 2684). III, 839.
- $\mathbf{C}_{17}\mathbf{H}_{13}\mathbf{O}_{2}\mathbf{N}_{3}$ C 70,1 - H 4,5 - O 11,0 - N 14,4 - M. G. 291.
 - 1) 5-[β -Phenyläthenyl]-1-Phenyl-1,2,4-Triazol-3-Carbonsäure. Sm. 178°. + C_2H_6O , Cu + $2^4/_2H_2O$, Ag + $1^4/_2H_2O$. IV, 1170. 2) Amid d. 2-Oxy-1-Phenylazonaphtalin-1³-Carbonsäure (B. 14, 2036).
 - **IV**, 1463.
- C₁₇H₁₃O₂Br 1) ?-Brom-3-Oxy-1-Keto-3,4-Diphenyl-2,3-Dihydro-R-Penten.
- 172° u. Zers. (B. 18, 184). III, 251. C 73,1 H 4,7 O 17,2 N 5,0 M. G. 279. $C_{17}H_{13}O_3N$
 - 1) Phtalylamidomethyl-4-Methylphenylketon. Sm. 175-176° (B. 31, 2132).
 - 2) 3-[2-Methylphenyl]amido-2-Oxy-1, 4-Diketo-1, 4-Dihydronaphtalin. Sm. 172° (A. 286, 74). — III, 385.
 - 3) 3-[4-Methylphenyl|amido-2-Oxy-1,4-Diketo-1,4-Dihydronaphtalin. Sm. 188° (A. 286, 74). — III, 385.
 - 4) P-Acetylamido-2-Methyl-9,10-Anthrachinon. Sm. 176—1770 (B. 16, 699). **— III**, 450.
 - 5) α -Oximido-2-Oxyphenyl-2-[P-Oxynaphtyl]methan. Sm. 187—188° (A. 257, 91). - III, 256.
 - 6) a-Oximido-2-Oxyphenyl-2-[P-Oxynaphtyl]methan. Sm. 195-1960 (A. **257**, 94). — III, 255.
 - 7) Oxim d. Oxalyldibenzylketon? Sm. 183—184° u. Zers. (A. 284, 263). - III, 320.
 - 8) Anhydro-2-[3,4-Dioxybenzoyl]methylisochinolinammoniumhydrat $+2 H_2 O$ (Pyrokatechinglykoisochinolin). $+ 2 H_2 O$ (B. 27, 1970).
 - 9) 4-Oxy-6-Methyl-2-Phenylchinolin-3-Carbonsäure. Zers. bei 250° (B.
 - 19, 1542). IV, 448.
 10) 6-Methoxyl-2-Phenylchinolin-4-Carbonsäure (α-Phenylchininsäure). Sm. 237°. Ag, $(2 \text{HCl}, \text{PtCl}_4)$ (A. 249, 105; 282, 106). — IV, 447.
 - 11) 8-Methoxyl-2-Phenylchinolin-4-Carbonsäure. Sm. 216°. Na+6 H₂O, Pb + H₂O, Cu + 2H₂O, Ag, HCl + 2H₂O (α . 249, 107; 282, 85, 91). **— IV**, 447.
 - 12) Säure (aus 2-Methylindol u. Phtalsäureanhydrid). Sm. oberh. 200 ° (A.
 - 242, 381). III, 221.

 13) 1,4-Anhydrid d. 6-Oxy-1-Methyl-2-Phenylchinolinammonium-4-Carbonsäure. Sm. 243° (A. 282, 104). IV, 447.

 14) Methylester d. 6-Oxy-2-Phenylchinolin-4-Carbonsäure. Sm. 148°

 - (A.~282,~106). IV, 447. 15) β -Benzoyläthylimid d. Benzol-1,2-Dicarbonsäure (Phtalimidopropio-
 - phenon). Sm. 85° (B. **22**, 3251). III, 141. 16) Carminsäureanilid. Sm. 189—190° u. Zers. (B. **27**, 2983). II, 2097. 17) Verbindung (aus d. Amidoameisensäureäthylester u. Benzoylchlorid). Sm.
- $C_{17}H_{13}O_8N_3$
- 190° (B. 26, 928). II, 1181. C 66,4 H 4,2 O 15,6 N 13,8 M. G. 307. 1) 2-Nitrobenzyl-2-Naphtylnitrosamin. Sm. 102° (J. pr. [2] 52, 415). 2) 2-[4-Nitro-2-Methylphenyl] azo-l-Oxynaphtalin. Sm. 245° (B. 28,
 - 853, 1125; **30**, 515). **IV**, *1436*. 3) 4-[4-Nitro-2-Methylphenyl]azo-1-Oxynaphtalin. Zers. bei 245-247° (B. 28, 853, 1125). - IV, 1436.
 - 4) 1[oder 4]-Oxim d. 3-[2-Methylphenyl]azo-2-Oxy-1, 4-Naphtochinon.
 - Zers. bei 210—212° (B. 30, 2128). IV, 1481.
 5) 1[oder 4]-Oxim d. 3-[4-Methylphenyl]azo-2-Oxy-1,4-Naphtochinon.
 Sm. 176—178° u. Zers. (B. 30, 2128). IV, 1481.
 - 6) 2-Acetylamido-3-[4-Nitrophenyl]chinolin. Sm. 219—220° (B. 31, 1291). **— IV**, *1025*.
 - 7) 7-Methyloxydhydrat d. 10-Nitro-αβ-Naphtophenazin. Chlorid, Nitrat (B. **31**, 3096).
 - 8) Nitril d. α -[4-Nitrophenyl]- β -[2-Acetylamidophenyl]akrylsäure. Sm. **214—215°** (B. **31**, 1291).
- $C_{17}H_{13}O_3Br$ 1) β -Oxy- α -[4-Brombenzoyl]- α -Benzoylpropen. Sm. 105—106° (A. 291, 89). **— III**, *319*.
 - 2) 23-Methyläther d. 6-Brom-1-Keto-2-[3,4-Dioxybenzyliden]-2,3-Dihydroinden. Sm. 254—255° (B. 31, 725).

C₁₇H₁₈O₈Br 3) Acetat d. γ -Keto- γ -[5-Brom-2-Oxyphenyl]- α -Phenylpropen. 115—116° (B. 31, 2952).

4) Acetat d. γ-Keto-γ-Phenyl-α-[5-Brom-2-Oxyphenyl] propen. 133,5—135° (B. 29, 246). — III, 247. Sm.

- 5) Monacetat d. Bromdioxyphenanthrenmonomethyläther. Sm. 166° (A. 297, 214).
- 6) Benzoat d. γ-Keto-α-[5-Brom-2-Oxyphenyl]-α-Buten. Sm. 123° (B. **29**, 1893).
- $\begin{array}{c} {\bf C_{17}H_{18}O_8Br_8~1)~Acetat~d.~\beta\gamma-Dibrom-\alpha-Keto-\alpha-Phenyl-\gamma-[5-Brom-2-Oxyphenyl]-propan.~Sm.~158-160^{o}~(B.~\bf 29,~246).~-~III,~229.} \end{array}$

2) Acetat d. βγ-Dibrom-α-Keto-γ-Phenyl-α-[5-Brom-2-Oxyphenyl]propan. Sm. 121—122° (B. 31, 2952).

C 69.2 - H 4.4 - O 21.7 - N 4.7 - $C_{17}H_{18}O_4N$ - M. G. 295.

- 1) P-Nitro-1, 2, 4-Trimethyl-9, 10-Anthrachinon. Sm. 195-200° (J. pr. [2] 41, 130). — III, 457. 2) isom. ?-Nitro-1, 2, 4-Trimethyl-9, 10-Anthrachinon (J. pr. [2] 41, 134).
- **III**, 457.
- 3) Pyrogallolglykoisochinolin. HCl, $(2HCl, PtCl_4 + 4H_2O)$ (B. 27, 1971). - IV, 375.
- 4) α -Cyan- $\alpha\beta$ -Diphenyläthan- $\alpha\beta$ -Dicarbonsäure (B. 23, 114). II, 1890.
- 5) α , 2 Lakton d. α -Oximido- $\alpha\alpha$ -Diphenylmethan-2, 2'-Dicarbonsäure-2'-Aethylester. Sm. 146—149° (Å. 242, 251). — II, 1976. 6) Aethylester d. 3-Phtalylamidobenzol-1-Carbonsäure. Sm. 152° (B.

- 18, 216). II, 1813. 7) Aethylester d. 4-Phtalylamidobenzol-1-Carbonsäure (A. 303, 279). 8) α , 2-Imid d. $\alpha\beta$ -Diphenyläthan- α , 2, 2'-Tricarbonsäure. Sm. 242° (\dot{B} . **27**, 2493). — II, 2025.
- 9) 4-Propionoxylphenylimid d. Benzol-1, 2-Dicarbonsäure. Sm. 158° (C. 1897 [1] 49).
- 10) 4-Benzoxylphenylimid d. Bernsteinsäure. Sm. 215° (C. 1897 [1] 49). $C_{17}H_{18}O_4N_8$ C 73,2 - H 4,0 - O 19,8 - N 13,0 - M. G. 323.
 - 1) 3-Methyl-1-Phenyl-5-[2-Nitrophenyl] pyrazol-4-Carbonsäure.
 - 218° u. Zers. Ag (B. 18, 2260). IV, 948. 2) 3-Methyl-1-Phenyl-5-[4-Nitrophenyl]pyrazol-4-Carbonsäure. Sm. 202° (B. 18, 2258). — IV, 949.
 - 3) 4-Benzoylamido-5-Keto-1-Phenyl-4, 5-Dihydropyrazol-3-Carbonsäure. Sm. 185-190° u. Zers. (B. 24, 1261). - IV, 713.
- C₁₇H₁₈O₄Br 1) $\alpha\gamma$ -Lakton d. β -Brom- α -Oxy- $\alpha\alpha$ -Diphenylpropan- $\beta\gamma$ -Dicarbonsäure (γ -Diphenyl- β -Bromparakonsäure). Sm. 166,5° u. Zers. (B. 28, 3192).

2) Acetat d. β -Brom- β -Oxy- $\alpha\gamma$ -Diketo- $\alpha\gamma$ -Diphenylpropan. Sm. 101 bis 102° (B. 23, 3378). — III, 297.

 $C_{17}H_{18}O_5N$

- C 65,6 H 4,2 O 25,7 N 4,5 M. G. 311. 1) Säure (aus $\alpha\beta$ -Diphenyläthan- α , 2, 2'-Tricarbonsäure- α , 2 Imid) + H₂O. Sm. 128—130°. NH₄ (B. 27, 2500). II, 2056. C 62,4 - H 4,0 - O 29,3 - N 4,3 - M. G. 327
- $C_{17}H_{13}O_6N$ 1) Gem. Anhydrid d. Essigsäure u. d. 2-[3-Nitro-4-Methylbenzoyl]
 - benzol-1-Carbonsäure. Sm. 145—146° (Å. 299, 312).
 2) Anhydro 3 Acetylamido 1, 2 Naphtochinon 4 Methyldicarbonsäuremonoäthylester. Sm. 234° u. Zers. (B. 32, 265).
- C 57,5 H 3,7 O 27,0 N 11,8 \dot{M} . G. 355. $C_{17}H_{18}O_6N_8$ 1) 2,4,5-Trinitro-1-Methylbenzol + Naphtalin. Sm. 88-89° (A. 215, 378). — II, 182.
 - 2) 2, 4, 6-Trinitro-1-Methylbenzol + Naphtalin. Sm. $97-98^{\circ}$ (A. 215, 378). — II, 182.
 - 3) β -Trinitro-1-Methylbenzol + Naphtalin. Sm. 100° (A. 215, 378). 182.
 - 4) 3,5-Dinitro-2,4,6-Trimethylphenylimid d. Benzol-1,2-Dicarbonsäure (Phtaldinitromesidil). Sm. 242° (B. 15, 1018). — II, 1806. C 55,0 — H 3,5 — O 30,2 — N 11,3 — M. G. 371.
- C₁₇H₁₃O₇N₈ 1) P-Trinitro-2-Oxy-1-Methylbenzol + Naphtalin. Sm. 106° (B. 17, 271). - II, 183.
 - 2) 2,4,6-Trinitro-3-Oxy-1-Methylbenzol + Naphtalin. Sm. 126-127° (B. 15, 1862). — II, 183.

- $\mathbf{C}_{17}\mathbf{H}_{18}\mathbf{O}_7\mathbf{N}_3$ 3) β -[?-Dinitro-4-Methylphen] oxyläthylimid d. Benzol-1, 2-Dicarbonsäure. Sm. 88° (B. 24, 193). — II, 1801.
- C₁₇H₁₃O₁₀Br 1) Verbindung (aus Quercinpentaacetat) (A. 238, 375). III, 589.
- $\mathbf{C}_{17}\mathbf{H}_{13}\mathbf{NBr}_2$ 1) $\alpha\beta$ -Dibrom- α -Phenyl- β -[2-Chinolyl] $\ddot{\mathbf{a}}$ than. Sm. 173—174° (B. 16, 2009). **- IV**, 454.
- C17 H13 NS 1) Thiophenyl-1-Naphtylmethylamin. Sm. 132—1330 (B. 23, 2466). — II, 867.
 - 2) 1-Naphtylamid d. Benzolthiocarbonsäure. Sm. 147,5° (B. 11, 1760; **20**, 1897). — **II**, *1294*.
- $C_{17}H_{13}N_2Cl$ 1) Chlormethylat d. $\alpha\beta$ -Naphtophenazin + H_2O . + AuCl₃ (B. 30, 393). **- IV**, 1051.
- $C_{17}H_{13}N_2Br$ 1) Brommethylat d. αβ-Naphtophenazin (B. 30, 393). IV, 1051. $C_{17}H_{13}N_2J$ 1) Jodmethylat d. αβ-Naphtophenazin (B. 26, 180; 30, 393). IV, 1051. $\mathbf{C}_{17}\mathbf{H}_{13}\mathbf{N}_{3}\mathbf{S}_{3}$ 1) 5-Cinnamylidenhydrosulfamin-2-Thiocarconyl-3-Phenyl-2, 3-Di-
- hydro-1,3,4-Thiodiazol. Sm. 173° (B. 29, 2137). IV, 684. C 77,9 H 5,3 0 6,1 N 10,7 M. G. 262. 1) s-Phenyl-2-Naphtylharnstoff. Sm. 220—221° (B. 21, 2567). II, 617.
- $\mathbf{C}_{17}\mathbf{H}_{14}\mathbf{ON}_{2}$

 - 2) uns-Phenyl-2-Naphtylharnstoff. Sm. 189-190° (B. 23, 425). -II, 617.
 - 3) Benzylnitrosamidonaphtalin. Sm. 111-1120 (A. 241, 360). II, 603.
 - 4) 1- oder 2-Benzoylamido-2- oder 1-Amidonaphtalin. Sm. oberh. 280°
 - (B. 18, 801). IV, 919. 5) 1-Benzoylamido-4-Amidonaphtalin. Sm. 186°. HCl, HNO₃, H₂SO₄, Oxalat (A. 208, 326). — IV, 922.
 - 6) β -Furyl- $\alpha \alpha$ -Diphenylhydrazin. Sm. 90° (A. 258, 247). IV, 765.
 - 7) **4-[2-Furanoyl]amido-1-Phenylamidobenzol.** Sm. 129° (A. **255**, 190). **IV**, 598.

 - 8) **2-Oxy-1-Phenylhydrazonmethylnaphtalin.** Sm. 205° (B. **32**, 286). 9) **4-Oxy-1-Phenylhydrazonmethylnaphtalin.** Sm. 119,5° (B. **32**, 285).
 - 10) Mono-2-Methylphenylhydrazon d. 1,2-Naphtochinon. Sm. 156° (B. 19, 2492). — IV, 804.
 - 11) Mono-4-Methylphenylhydrazon d. 1,2-Naphtochinon. Sm. 145° (B. **19**, 2491). — **IV**, 810.
 - 12) 2-Oxy-1-[2-Methylphenylazo]naphtalin. Sm. 131° (B. 19, 2491; 20,
 - 1580). **IV**, *1435*. 13) 2-Oxy-1-[4-Methylphenylazo]naphtalin. Sm. 134—135° (B. 19, 2490; 20, 1580; 28, 1221; 30, 80). — IV, 1435.
 - 14) 4-Oxy-1-[2-Methylphenylazo]naphtalin. Sm. 144—146° (B. 19, 2488).
 - **IV**, *1435*. 15) 4-Oxy-1-[4-Methylphenylazo]naphtalin. Sm. 208°. HCl, HBr (B. 19, 2486). — IV, 1435.
 - 16) Methyläther d. 4-Oxy-1-Phenylazonaphtalin. Sm. 83° (B. 17, 3028). - IV, 1427. 17) Methylisoindileucin. Sm. 115° (B. 18, 2242). — III, 121.

 - 18) Methyläther d. Indileucin. Sm. 191-192° (B. 17, 979). II, 1622.
 - 19) 3-Acetyl-1,5-Diphenylpyrazol. Sm. 88° (B. 26, 1890). IV, 952.
 - 20) 5-Keto-3-Methyl-4-Benzyliden-l-Phenyl-4, 5-Dihydropyrazol. Sm. $106-107^{\circ}$ (A. 238, 179). — IV, 958.
 - 21) 6-Oxy-4-Phenyl-2-Benzyl-1, 3-Diazin. Sm. 233° (B. 22, 1623). IV, 1040.
 - 22) 6-Oxy-4-Phenyl-2-[4-Methylphenyl]-1, 3-Diazin. Sm. oberh. 290° (B. 23, 3826). — IV, 1040.
 - 23) 6-Oxy-5-Methyl-2,4-Diphenyl-1,3-Diazin. Sm. 256° (J. pr. [2] 39, 197; [2] **42**, 16). — IV, 1192.
 - 24) 2-[4-Acetylamidophenyl]chinolin. Sm. 189 (M. 8, 126). IV, 1024.
 - 25) 4-Methyl-2-[2-Formylamidophenyl]chinolin. Sm. 1076 (B. 26, 1352). **- IV**, 1029.
 - 26) Methyloxydhydrat d. $\alpha\beta$ -Naphtophenazin. Sm. 175° u. Zers. Chlorid + H₂O, Chlorid + AuCl₃, Bromid, Jodid (B. 26, 180; 30, 393). IV, 1051.
 - 27) 1-Methyl-3-Phenylchinolinoxazol. Sm. 134—135°. HCl, (2 HCl, PtCl₄),
 - H₂SO₄ (A. **282**, 382). **IV**, 908. 28) **Ni**tril d. β-Benzoylimido-β-[**4-Methylphenyl**] propionsäure. Sm. 179° (J. pr. [2] **52**, 113).

C₁₇H₁₄ON₂ 29) 1-Naphtylhydrazid d. Benzolcarbonsäure. Sm. 184° (B. 24, 4185). **– IV**, 927.

30) 2-Naphtylhydrazid d. Benzolcarbonsäure. Sm. 154-1550 (A. 253,

26). — IV, 930. C 70,4 — H 4,8 — O 5,5 — N 19,3 — M. G. 290. C17 H14 ON4

1) 3-Acetylamido-5, 6-Diphenyl-1, 2, 4-Triazin. Sm. 151° (A. 302, 310). **— IV**, 1294.

2) Amid d. $5-[\beta-Phenyläthenyl]-1-Phenyl-1,2,4-Triazol-3-Carbon$ säure. Sm. 198º. — IV, 1170.

 $C_{17}H_{14}OBr_4$ 1) $\alpha\beta\delta\epsilon$ -Tetrabrom- γ -Keto- $\alpha\epsilon$ -Diphenylpentan. Sm. 208—211° (B. 14, 2461; A. 223, 143). — III, 252.

1) S-1-Naphtyläther d. Merkaptooxymethylbenzol. Sm. 48-49° (B. 27 C17H14OS [2] 880). — III, 10.

2) S-2-Naphtyläther d. Merkaptooxymethylbenzol. Sm. 490 (B. 27 [2] 881). — III, 10. C 73,4 — H 5,0 — O 11,5 — N 10,1 — M. G. 278.

C17 H14 O2 N2

1) 2-Oxy-1-[2-Naphtyl]nitrosamidomethylbenzol. Sm. 165° u. Zers. (A. **247**, 352). — II, 742.

2) 4-Oxy-1-[2-Naphtyl]nitrosamidomethylbenzol. Sm. 1420 (A. 241, 358). — II, 754.

3) 2-Nitrobenzyl-2-Naphtylamin. Sm. 162°. HCl (J. pr. [2] 52, 410). 4) 2,4-Di[Furalamido]-1-Methylbenzol. Zers. bei 120-125°. (2 HCl,

PtCl₄) (A. 201, 360). — IV, 607. 5) 1,3-Diketo-2-[α-Phenylhydrazonäthyl]-2,3-Dihydroinden. Sm. 184 bis 185° (B. 27, 106). — IV, 788

6) Phenylhydrazon d. 3-Acetyl-1, 2-Benzpyron (Ph. d. α-Acetylcumarin).
 Sm. 181—182° (G. 27 [2] 500; B. 31, 733).

7) 2-Oxy-1-[2-Oxymethylphenylazo]naphtalin. Sm. 185° (B. 27, 1086). **– IV**, 1451.

8) 4-Oxy-1-[2-Oxymethylphenylazo]naphtalin. Sm. 1820 (B. 27, 1086). **– IV**, 1451.

9) Methyläther d. 1-Phenylazo-2,4-Dioxynaphtalin. Sm. 174—175° (B. 17, 1812). — IV, 1449.

10) 3-Keto-4-Benzoyl-5-Methyl-2-Phenyl-2, 3-Dihydropyrazol. Sm. 116

bis 117⁶ (A. 266, 127; B. 28, 705). — IV, 550. 11) 3,5-Diketo-4-Benzyliden-1-[4-Methylphenyl]tetrahydropyrazol. Sm.

253° (B. 30, 1021). — IV, 808. 12) Benzoat d. 5-Oxy-3-Methyl-1-Phenylpyrazol. Sm. 75—76° (A. 266

125; 293, 44; *J. pr.* [2] 54, 202). — IV, 513. 13) 6-Oxy-4-Phenyl-2- $[\alpha$ -Oxybenzyl]-1,3-Diazin. Sm. 218° (B. 23, 2951).

– IV, 1041. 14) 5- oder 6-Methyl-2-Furanyl-1-Furylbenzimidazol (Tolufurfuraldehy-

din). Sm. 128,5°. (2HCl,PtCl₄), HNO₃ (B. 11, 595, 1658). — IV, 620. 15) Methyläther d. 5-Benzoylamido-8-Oxychinolin. Sm. 268—269° (J. pr. [2] **48**, 27). — IV, 912.

16) 3-Amido-4-[1-Naphtyl]amidobenzol-1-Carbonsäure. Zers. bei 90° (B. 23, 3458). — II. 1275.

17) 5-Methyl-1,3-Diphenylpyrazol-4-Carbonsäure. Sm. 1940 (B. 18, 933). **- IV**, 949.

18) 3-Methyl-1,5-Diphenylpyrazol-4-Carbonsäure. Sm. 205°. K, Ag (B. 18, 313). — IV, 948.

19) 5-Phenyl-1-[2-Methylphenyl] pyrazol-3-Carbonsäure. Sm. 170-1710 (B. **26**, 1884). — IV, 891.

20) 5-Phenyl-1-[4-Methylphenyl]pyrazol-3-Carbonsäure. Sm. 194—195° (B. **26**, 1881). — IV, 892.

21) Phenylimid d. β-Phenylamidoglutakonsäure. Sm. 275° u. Zers. (B. **23**, 3764). — **II**, 420.

22) Phenylimid d. Phenylamidomethylmaleinsäure. Sm. 158-1600 (1570)

(B. 22, 3351; A. 295, 60). — II, 441.
 23) Anhydroderivat d. αγ-Di[2-Amidophenyl]propan-ββ-Dicarbonsäure.
 Zers. bei 350-360° (B. 20, 441). — II, 1893.
 C 66,7 — H 4,6 — O 10,4 — N 18,3 — M. G. 306.

 $C_{17}H_{14}O_2N_4$

1) 4 - Phenylhydrazon-1-Acetyl-5-Keto-3-Phenyl-4, 5-Dihydropyrazol. Sm. 199° (J. pr. [2] **52**, 33). — IV, 1490.

- C₁₇H₁₄O₂N₄ 2) 4-Phenylazo-5-Methyl-1-Phenylpyrazol-3-Carbonsäure. Sm. 206 bis 207° u. Zers. (A. 278, 283). — IV, 1490.
- $C_{17}H_{14}O_2Br_2$ 1) Methylester d. $\alpha\beta$ -Dibrom- $\gamma\gamma$ -Diphenylerotonsäure. Sm. 79-80° (Am. 19, 647).
- C 69.4 H 4.8 O 16.3 N 9.5 M. G. 294. $C_{17}H_{14}O_{3}N_{2}$
 - 1) Methylätherd. 3,5-Diketo-4-[4-Oxybenzyliden]-1-Phenyltetrahydropyrazol. Sm. 246° (B. 30, 1018). — IV, 955.
 - 2) 2,4,5-Triketo-1,3-Di[2-Methylphenyl]tetrahydroimidazol(Di-o-Tolylparabansäure). Sm. 202,5-203,5° (J. pr. [2] 41, 82; B. 12, 1856). II, 467.
 - 3) 2,4,5-Triketo-1,3-Di[4-Methylphenyl]tetrahydroimidazol(Di-p-Tolylparabansaure). Sm. 144° (B. 10, 1590; 11, 977; 31, 138). — II, 502.
 - 4) 3,6-Diketo-2-Benzoyl-1-Phenylhexahydro-1,2-Diazin. Sm. 1850 (B. 26, 677). — IV, 703.
 - 5) α -Oxy- α -[4-Nitrophenyl]- β -[2-Chinolyl] äthan. Sm. 160°. (2 HCl,
 - PtCl₄), HNO₃ (B. 20, 2046). IV, 454. 6) 1-Keto-2-Phenyl-1, 2-Dihydro-2, 3-Benzdiazin-4-Aethyl- β -Carbon-
 - säure. Sm. 210° . Ca $+ \text{H}_2\text{O}$, Ag (B. 18, 804). IV, 718. 7) 1,2°-Anhydrid d. 5 oder 6-Methyl-2-[3,4-Dimethoxylphenyl] benzimidazol-22-Carbonsäure (Toluylendimethoxyphtalamidon). Sm. 2280. $+ C_2 H_6 O$ (B. **24**, 629; **25**, 1990). – **IV**, 618.
 - 8) Aethylester d. 3,5-Diphenyl-1,2,4-Oxdiazol-52-Carbonsäure. Fl. (B. 18, 2466). — II, 1815.
 - 9) Nitril d. β -[2-Furanyl]- α -[4-Diacetylamidophenyl]akrylsäure. Sm. 203—204° (B. 23, 2855). III, 713.
- $C_{17}H_{14}O_3Br_2$ 1) Acetat d. $\beta\gamma$ -Dibrom- α -Keto- α -Phenyl- γ -[2-Oxyphenyl]propan. Sm. 134—135° (B. **29**, 235). — III, 228.
 - 2) Acetat d. $\beta\gamma$ -Dibrom- α -Keto- α -Phenyl- γ -[3-Oxyphenyl] propan. Sm. 170—171° (B. 29, 235). — III, 229.
 - 3) Acetat d. $\beta\gamma$ -Dibrom- α -Keto- α -Phenyl- γ -[4-Oxyphenyl]propan. Sm. 148° (B. 29, 236). III, 229.
 - 4) Acetat d. $\beta\gamma$ -Dibrom- α -Keto- γ -Phenyl- α -[2-Oxyphenyl] propan. Sm. $105-107^{\circ}$ (B. 31, 1758).
- $C_{17}H_{14}O_3Br_4$ 1) 4-Benzoat d. ?-Dibrom-3,4-Dioxy-1- $[\alpha\beta$ -Dibrom-norm. Propyl]benzol-3-Methyläther. Sm. 113° (B. 21, 1395). — II, 1150.
- 1) 1-Benzylnaphtalinsulfonsäure. $\ddot{K} + H_2(0)$, Pb (Bl. 26, 5). II, 281. $C_{17}H_{14}O_3S$ C 65.8 - H 4.5 - O 20.6 - N 9.0 - M. G. 310. $\mathbf{C}_{17}\mathbf{H}_{14}\mathbf{O}_{4}\mathbf{N}_{2}$
 - 1) 2,4-Dinitro-1-Methylbenzol + Naphtalin. Sm. 60-61° (A. 215, 380). **– II**, 182.
 - 2) Acetylfurfurin. Sm. 250° (B. 10, 1189; J. pr. [2] 27, 315). III, 722.
 - 3) γ-Phenylhydrazon-α-[3,4-Dioxyphenyl] propen-3,4-Methylenäthery-Carbonsäure. Sm. 155° (B. 28, 1192). — IV, 718.
 - 4) 3-Nitro-2,4,6-Trimethylphenylimid d. Benzol-1,2-Dicarbonsäure
 - (Nitrophtalmesidil). Sm. 210° (B. 15, 1018). II, 1806. 5) Diacetat d. 7,8-Dioxy-2-Methyl-5,10-Naphtdiazin. Sm. 160° (B. 24, 1338). — IV, 1010. C 62,6 — H 4,3 — O 24,5 — N 8,6 — M. G. 326.
- $C_{17}H_{14}O_5N_2$
 - α-Phenylamido-α-Phenylimido-β-Ketopropan-2¹, 2²-Dicarbonsäure (Pyrotraubendianthranilsäure). Sm. 295° (B. 30, 1190).
 Tartranilbenzamsäure. Sm. 245-246° u. Zers. (A. 232, 163).
 - II, 1266.
- C'59.6 H 4.1 O 28.1 N 8.2 M. G 342. $\mathbf{C}_{17}\mathbf{H}_{14}\mathbf{O}_{6}\mathbf{N}_{2}$ 1) 3,3'-Dicarbonsäure d. Malonsäurediphenylamid (Malondibenzamsäure)
 - (A. 232, 144). II, 1265.C 55,1 — H 3,8 — O 25,9 — N 15,1 — M. G. 370.
- $C_{17}H_{14}O_6N_4$ 1) 2,4-Diketo-5,5-Di[?-Nitrobenzyl] tetrahydroimidazol. Sm. 285° u.
- Zers. (6. 26 [1] 202). $C_{17}H_{14}O_6Br_2$ 1) 3,4-Methylenäther-2',4',6'-Trimethyläther d. ?-Dibrom-3,4,2',4',6'-
- Pentaoxydiphenylketon. Sm. 159° (A. 199, 51). III, 209. $\mathbf{C}_{17}\mathbf{H}_{14}\mathbf{O}_{6}\mathbf{Br}_{4}$ 1) Verbindung (aus Espartoharz) (Soc. 41, 94). — I, 1080.
- C 52.8 H 3.6 O 29.0 N 14.5 M. G. 386. $C_{17}H_{14}O_7N_4$ 1) ?-Dinitro-1-[3-Nitrobenzoyl]-2-Methyl-1, 2, 3, 4-Tetrahydrochinolin. Sm. $184-185^{\circ}$ (B. 25, 1270). — IV, 204.

C 54.5 - H 3.7 - O 34.2 - N 7.5 - M. G. 374. $\mathbf{C}_{17}\mathbf{H}_{14}\mathbf{O}_{8}\mathbf{N}_{2}$

1) $\alpha \gamma$ -Di[2-Nitrophenyl]propan- $\beta \beta$ -Dicarbonsäure (B. 20, 436; R. 6, 89). — II, 1893.

2) $\alpha \gamma$ -Di[4-Nitrophenyl]propan- $\beta \beta$ -Dicarbonsäure (B. 20, 434). II, 1893.

 $\mathbf{C}_{17}\mathbf{H}_{14}\mathbf{O}_{10}\mathbf{N}_{4}$ C'47,0 - H 3,2 - O 36,8 - N 12,9 - M. G. 414.

1) P-Tetranitro- $\alpha \alpha$ -Di[4-Methylphenyl] propionsäure + xH₂O. NH₄, Ba, Zn, Ag (B. 15, 1478). — II, 1472.

1) s-Phenyl-1-Naphtylthioharnstoff. Sm. 162-163° (158-159°) (J. 1858, $C_{17}H_{14}N_{2}S$ 350; B. 15, 1414; 21, 1869). — II, 609.

2) s-Phenyl-2-Naphtylthioharnstoff. Sm. 165° (155-157°) (B. 15, 1417; 25, 1468). — II, 619.

3) 2,3-Diphenylimido-4-Methyl-2,3-Dihydrothiofuran. Sm. 138,5° (A. **249**, 51). — IV, 821.

 $C_{17}H_{14}N_3Cl$ 1) 7-Chlormethylat d. 10-Amido- $\alpha\beta$ -Naphtophenazin. $2+PtCl_4$, $+AuCl_3$ (B. 31, 3096).

2) 3-Chlormethylat d. 3-Phenyl-β-Naphtisotriazol. Sm. 183° u. Zers. + ClJ (A. **255**, 345). — IV, 1171.

1) 3-Jodmethylat d. 3-Phenyl-β-Naphtisotriazol. Sm. 196° u. Zers. (A. $C_{17}H_{14}N_{3}J$ 255, 345). — IV, 1171

1) Amid d. 5- $[\beta$ -Phényläthenyl]-l-Phenyl-l,2,4-Triazol-3-Carbonsäure. C17H14N4S Sm. 182—183°. $+ C_2H_4O$. - IV, 117 $\dot{0}$, C 81,9 - H 6,0 - O 6,4 - N 5,6 - M. G. 249.

 $\mathbf{C}_{17}\mathbf{H}_{15}\mathbf{ON}$

1) ε -Oximido - $\alpha \varepsilon$ -Diphenyl- $\alpha \gamma$ -Pentadiën. Sm. 131° (B. 28, 1730). — III, 251.

2) γ -Oximido- α s-Diphenyl- α δ -Pentadiën? Sm. 164—165° (G. 27 [2] 270). 3) 2-Oxy-1-[2-Naphtyl]amidomethylbenzol. Sm. 147°. HCl (A. 247,

352). — II, 742.

4) 4-Oxy-1-[2-Naphtyl]amidomethylbenzol. Sm. 1170 (A. 241, 357). — II, 754.

5) Methyläther d. 7-Phenylamido-2-Oxynaphtalin. Sm. 137—138° (B. **26**, 3088). — **II**, 886.

6) 2-Keto-3-Methyl-1,5-Diphenyl-2,3-Dihydropyrrol. Sm. 128-130° (Bl. [3] 19, 395).

2-Aethyl-4,5-Diphenyloxazol. Sm. 32° (Soc. 63, 473). — IV, 444.

8) 5-Phenyl-3-[β-Phenyläthenyl]-4,5-Dihydroisoxazol? Sm. 142—144° (*G.* **27** [2] 268).

9) 3-Acetyl-1-Methyl-2-Phenylindol. Sm. 136° (A. 253, 21). — IV, 424. 10) 3-Keto-1-Benzyliden-2-Aethyl-1,3-Dihydroisoindol (Benzalphtaläthyl-

imidin). Sm. 75-77° (B. 18, 2435). - II, 1709.

11) α -[2-Oxyphenyl]- β -[4-Chinolyl]äthan. Sm. 180—181° (B. 21, 2168). - IV, 444.

12) α -[3-Oxyphenyl]- β -[4-Chinolyl]äthan. Sm. 209 (B. 21, 2171). —

IV, 444.
13) α-[4-Oxyphenyl]-β-[4-Chinolyl]äthan. Sm. 175—177°. HBr (B. 21, 1428, 2171). — IV, 444.
14) Methyläther d. 6-Oxy-4-Phenyl-2-Methylchinolin. Sm. 76°. HCl,
14) Methyläther d. 6-Oxy-4-Phenyl-2-Methylchinolin. Sm. 76°. HCl,

(2 HCl, PtCl₄), HNO₈, H₂SO₄, Pikrat (B. **28**, 1046). — IV, 435. 15) Aethyläther d. **4**-[2-Oxyphenyl]chinolin. Sm. 80—81° (B. **26**, 719;

27, 3041). — IV, 429. 16) Aethyläther d. 1-Oxy-3-Phenylisochinolin. Sm. 45—46°. (2HCl, $PtCl_4$) (B. **19**, 835). — **IV**, 431.

17) Phenyläther d. 1-Oxy-3-Aethylisochinolin. Fl. Pikrat (B. 27, 2240). IV, 332.

18) Homoapocinchen $+ xH_2O$. Sm. $184-185^{\circ}$ wasserfrei. $+ HBr + H_2O$ (B. **20**, 2682). — **III**, 839.

19) Nitril d. γ -Keto- $\alpha\beta$ -Diphenylbutan- α -Carbonsäure. Sm. 1930 (M. **19**, 411). C 73,6 — H 5,4 — O 5,8 — N 15,2 — M. G. 277.

 $\mathbf{C}_{17}\mathbf{H}_{15}\mathbf{ON_3}$ 1) β -[1-Naphtyl]amido- α -Phenylharnstoff. Sm. 192°. — IV, 926.

2) α-Phenyl-β-[1-Amido-2-Naphtyl] harnstoff. Sm. noch nicht bei 270° (B. 23, 502). — IV, 919. 3) α -Phenyl- β -[2-Amido-l-Naphtyl]harnstoff. Sm. noch nicht bei 335°

(B. 22, 1377). — IV, 919.

- $C_{17}H_{15}ON_3$ 4) 2,4-Diamido-l-Benzoylamidonaphtalin. HCl, H_2SO_4 (A. 208, 331). - IV, *1162*.
 - 5) Methyläther d. 2-Amido-1-[2-Oxyphenyl]azonaphtalin. Sm. 1290 (Soc. 59, 697). — IV, 1415. 6) Methyläther d. 2-Oxyphenylhydrazimido-β-Naphtalin. Sm. 133°

 - (B. 18, 3130). IV, 1575. 7) 5-Acetylimido-1,3-Diphenyl-4,5-Dihydropyrazol. Sm. 149° (J. pr. [2] 58, 139).
 - 8) 4-Benzylidenamido-5-Keto-3-Methyl-1-Phenyl-4,5-Dihydropyrazol. Sm. 186° (A. 238, 191). — IV, 1108.
 - 9) Aethyläther d. 3-Oxy-5, 6-Diphenyl-1, 2, 4-Triazin. Sm. 105° (A. 283)
 - 29). IV, 1190. 10) 6-Oxy-2,4-Di[4-Methylphenyl]-1,3,5-Triazin. Sm. oberh. 290° (PINNER, Imidoather 185). - IV, 1192.
 - 11) 4-Oxy-3-Phenylhydrazonmethyl-2-Methylchinolin. HCl (B. 21, 1974). - IV, 372.
 - 12) Verbindung (aus 4-Amido-1-Phenylhydrazonmethylbenzol u. Acetessigester). Sm. 195° (J. pr. [2] 56, 110). IV, 753.
 C 66,9 H 4,9 O 5,2 N 22,9 M. G. 305.
- $\mathbf{C}_{17}\mathbf{H}_{15}\mathbf{ON}_{5}$

C17H15O2N

- 1) 3-Oximidoamidomethyl-5- $[\beta$ -Phenyläthenyl]-1-Phenyl-1,2,4-Triazol. Sm. 203—204° u. Zers. — IV, 1170. C 77,0 — H 5,7 — O 12,0 — N 5,3 — M. G. 265.
- 1) Acetonphenanthrenchinonimid. Sm. bei 130° u. Zers. (Soc. 41, 270). **- III**, 448.
- 2) P-Amido-1, 2, 4-Trimethyl-9, 10-Anthrachinon. Sm. 154—155° (J. pr. [2] **41**, 138). — III, 457.
- 3) P-Acetylamido-10-Oxy-2-Methylanthracen. Sm. 170° (B. 16, 705). - II. 903.
- 4) γ -Keto- α -[3-Benzoylamidophenyl]- α -Buten. Sm. 125° (B. 23, 1885). - III, 161.
- 5) γ -Keto- γ -[2-Acetylamidophenyl]- α -Phenylpropen. Sm. 165° (B. 28, 2500). III, 246.
- 6) Methyl-2-Cinnamylamidophenylketon. Sm. 91° (B. 26, 1394). —
- 7) Phenacyloxydhydrat d. Isochinolin. Bromid, Nitrat (M. 9, 680). IV, 300.
- 8) 3-Isopropyl- β -Naphtochinolin-1-Carbonsäure. Sm. 266° (B. 27, 2022). **- IV**, 423.
- 9) α-Cyan-ββ'-Diphenylisobuttersäure. Sm. 188—189° u. Zers. (B. 25, 3027). II, 1470.
 (1) Lekton d. Left 2.3 4-Technologie. Chinalelloguenth albertal.
- 10) Lakton d. 1-[1,2,3,4-Tetrahydro-1-Chinolyl] oxymethylbenzol-2-Carbonsäure. Sm. 164-165° (B. 29, 183). - IV, 195.
- 11) Lakton d. 1-[1,2,3,4-Tetrahydro-2-Isochinolyl] oxymethylbenzol-
- 2-Carbonsäure. Sm. 170° (B. 29, 2039). IV, 202. 12) Aethylester d. Diphenylcyanessigsäure. Sm. 59° (B. 22, 1537). II, 1465.
- 13) Phonylimid d. β -Phonylpropan- $\alpha\gamma$ -Dicarbonsäure. Sm. 223° (Am. 20, 513).
- 14) 3,5-Dimethylbenzylimid d. Benzol-1,2-Dicarbonsäure (Mesitylphtalimid). Sm. 157° (B. 25, 3011). — II, 1806.
- 15) 2,4,5-Trimethylphenylimid d. Benzol-1,2-Dicarbonsäure (Phtalpseudocumidid). Sm. 148° (B. 17, 1802). — II, 1806.
- 16) 2,4,6-Trimethylphenylimid d. Benzol-1,2-Dicarbonsäure (Phtalmesidil). Sm. 171° (B. 15, 1017). — II, 1806.
- C 69,6 H 5,1 O 11,9 N 14,3 M. G. 293.C17H15O2N8 1) Oxalyldi[2-Methylphenyl]guanidin. Sm. 206—207,5° (B. 12, 1856). —
 - II, 467. 2) Oxalyldi[4-Methylphenyl]guanidin. Sm. 188,5° (B. 10, 1589). — II, 489.
 - 3) Acetat d. 3-Oxy-5-Phenyl-1-[4-Methylphenyl]-1,2,4-Triazol. Sm.
 - 112—113° (Soc. 73, 370). IV, 1158. 4) Acetat d. 3-Oxy-1-Phenyl-5-[3-Methylphenyl]-1,2,4-Triazol. Sm. 70° (Soc. 71, 214). — IV, 1161.

- $\mathbf{C}_{17}\mathbf{H}_{15}\mathbf{O}_{2}\mathbf{N}_{3}$ 5) 6-[4-Methylbenzoyl]-2-[4-Methylphenyl]-1,2,3,5-Oxtriazin. Sm. 2080 (R. 16, 340). - IV, 1119.
 - 6) 5 [4 Methylbenzoyl] 2 [4 Methylphenyl] 1, 2, 3, 6 Oxtriazin (R.16, 323).
 - 7) 5-[4-Methylbenzoyl]-2-Benzyl-1, 2, 3, 6-Oxtriazin (R. 16, 325).
 - 8) Acetat d. 3-[2-Methylphenylhydrazon]-2-Oxypseudoindol (o-Tolylhydrazon d. Acetylisatin). Sm. 167° (B. 28, 544). — IV, 803.
 - 9) Acetat d. 3-Methylphenylhydrazon-2-Oxypseudoindol. Sm. 145° (B. 28, 2527). - IV, 696.
 - 10) 3-Methyl-5-[4-Amidophenyl]-1-Phenylpyrazol-4-Carbonsäure. Sm. 251° (B. 18, 2259). — IV, 1165.
 - 11) Aethylester d. 1,5-Diphenyl-1,2,3-Triazol-4-Carbonsäure. Sm. 134 bis 135° (Am. 20, 393). — IV, 1165.
 - 12) Aethylester d. 1, 5-Diphenyl-1, 2, 4-Triazol-3-Carbonsäure. Sm. 164° bis 165° (B. 22, 800). — IV, 1164.
- 13) β-Phenylhydrazonpropylimid d. Benzol-1,2-Dicarbonsäure. Sm. 150—152° u. Zers. (B. 21, 2685). IV, 767.
 14) Benzolazohomophtaläthylimid. Sm. 139° (B. 20, 2498). IV, 1475. C 63,5 H 4,7 O 10,0 N 21,8 M. G. 321. $\mathbf{C}_{17}\mathbf{H}_{15}\mathbf{O}_{2}\mathbf{N}_{5}$
 - 1) Acetat d. 3-Amidooximidomethyl-1, 5-Diphenyl-1, 2, 4-Triazol. Sm. $176-177^{\circ}$ u. Zers. (B. **22**, 1753). — IV, 1164.
 - 2) Benzoat d. 3-Oximidoamidomethyl-5-Methyl-1-Phenyl-1,2,4-Tri-
- azol. Sm. 183—183,5° (B. 22, 1751). IV, 1115. $C_{17}H_{15}O_2Cl$ 1) Benzoat d. 3-Chlor-2-Oxy-1,2,3,4-Tetrahydronaphtalin. Sm. 64 bis 65° (B. 26, 1835; A. 288, 83). II, 855. $C_{17}H_{15}O_2Br$ 1) Aethyläther d. γ -Keto- γ -Phenyl- α -[5-Brom-2-Oxyphenyl] propen. Sm. 98—100° (B. 29, 246). III, 247.
- $C_{17}H_{15}O_{8}N$ 1) 3-Acetylphenylamido-1, 2-Benzpyron (3-Acetylphenylcumarin). Sm. 155—156° (G. 19, 57). — II, 1633.
 - 2) Dimethyläther d. 2,5-Di[4-Oxyphenyl]oxazol. Sm. 145°. HCl (B.
 - 29, 2100). IV, 433. 3) α -[3-Benzoylamidophenyl] propen- β -Carbonsäure. Sm. 190—191°
 - (B. **23**, 1900). 4) β -[2-Benzoylamidophenyl] propen-4-Carbonsäure.
 - Sm. 182°. —
 - 5) α -Phenylacetylamido- β -Phenylakrylsäure (B. 31, 2239).
 - 6) 1,1-Dimethyl-3-Phenyl-2,4-Benzoxazin-6-Carbonsäure (Phenylcumazonsäure). Sm. $219-220^{\circ}$. $H_2SO_4 + 2II_2O$ (B. 16, 2585). — II, 1587.
 - 7) 3- $[\beta$ -Oxypropyl]- β -Naphtochinolin-1-Carbonsäure. Sm. 234° (B. 27, 2028). — IV, 423
 - 8) Lakton d. α-Acetylamido-6-Oxy-3-Methyldiphenylessigsäure. 214—216° (B. 31, 2819).
 - 9) Mono[γ-Phenylpropenylamid] d. Benzol-1,2-Dicarbonsäure (Styrylphtalamidsäure). Sm. 132°. Ag (B. 26, 1857). — II, 1796.
 - 10) Benzylidenamid d. α-Acetoxylphenylessigsäure. Sm. 123° (B. 25, 1683). — III, 36.
 - γ-Phenoxylpropylimid d. Benzol-1,2-Dicarbonsäure. Sm. 88° (B. 24, 2633). II, 1803.
 - 12) β -[4-Methylphen]oxyläthylimid d. Benzol-1,2-Dicarbonsäure. Sm. 135° (B. **24**, 191). — II, 1801.
 - 13) Ketolaktoń-1-Naphtylimid d. β -Acetylpropan- $\alpha\gamma$ -Dicarbonsäure. Sm. 153° (A. 295, 120).
 - 14) Ketolakton-2-Naphtylimid d. β -Acetylpropan- $\alpha\gamma$ -Dicarbonsäure. Sm. 186° (A. **295**, 120).
- C 66,0 H 4,8 O 15,5 N 13,6 M.G. 309. $C_{17}H_{15}O_3N_8$ 1) Methyläther d. 6-[4-Oxybenzoyl]-2-Benzyl-1, 2, 3, 5-Oxtriazin.
 - 190° (R. 16, 342). IV, 1120. 2) Methyläther d. 5-[4-Oxybenzoyl]-2-Benzyl-1, 2, 3, 6-Oxtriazin. Zers.
 - bei 117º (R. 16, 328).
 - 3) Methyläther d. 5-[4-Oxybenzoyl]-2-[4-Methylphenyl]-1,2,3,6-Oxtriazin (R. 16, 327).

 $\mathbf{C}_{17}\mathbf{H}_{15}\mathbf{O}_{8}\mathbf{N}_{3}$ 4) Nitril d. γ -[4-Methoxylphenyl] amido - α -[3-Nitrophenyl] propen- γ -Carbonsäure. Sm. 106° (B. 25, 2057). — II, 1425. 5) Phenylimid d. β -Phenylnitrosamidopropan- $\alpha\beta$ -Dicarbonsäure. Sm.

204° (B. **21**, 1388). — **II**, 440.

C₁₂H₁₅O₃Br 1) Aethyläther d. 2- oder 3-Brom-6-Oxy-2-Phenyl-2, 3-Dihydro-1, 4-Benzpyron. Sm. 98-99° (B. 32, 330).

2) Acetat d. γ-Keto-γ-Phenyl-α-[5-Brom-2-Oxyphenyl]propan. Sm. 67° (B. **31**, 719).

3) Verbindung (aus d. Lakton d. 1-[αβ-Dibrom-α-Oxy-β-Phenyläthyl]benzol-2-Carbonsäure). Sm. 149° (B. 17, 2527). — II, 1708. C 68,7 — H 5,0 — O 21,5 — N 4,7 — M. G. 297.

1) 7,8-Dioxy-2-[4-Dimethylamidophenyl]-1,4-Benzpyron. Sm. 2030

 $C_{17}H_{15}O_4N$

 $C_{17}H_{15}O_5N_8$

- (B. **29**, 2434). 2) 9-Oximido-4-[\alpha-Oxyisopropyl]fluoren-l-Carbonsäure (A. 229, 150).
- **II**, 1900.
- 3) 2, 6 Dimethyl -4 [β Phenyläthenyl] pyridin 3, 5 Dicarbonsäure + 2 H₂O. Sm. 218 - 219° (241° wasserfrei). K₂ + 3 H₂O, (2 HCl, PtCl₄) (A. 231, 8; B. 19, 196). — IV, 403.
- 4) Aethylester d. Dibenzoylamidoameisensäure. Sm. 103° (B. 26, 928). **- II**, 1181.
- 5) Mono [β -Benzoyläthylamid] d. Benzol-1,2-Dicarbonsäure (Propiophenonphtalamidsäure). Sm. 140°. Ag + H₂O (B. 22, 3252). — III, 141.
- 6) Benzylimid d. 3,4-Dioxybenzoldimethyläther-1,2-Dicarbonsäure.
- Sm. 128—132° (R. 15, 284 Anm.).
 7) α-Benzylisoimid d. 3,4-Dioxybenzoldimethyläther-1,2-Dicarbonsäure. Sm. 99—100° (R. 15, 284).
- 8) β-Benzylisoimid d. 3,4-Dioxybenzoldimethyläther-1,2-Dicarbonsäure. Sm. 80-82° (R. 15, 286).
- 9) Benzylisoimid d. m-Hemipinsäure. Sm. 225° (M. 9, 334). II, 1999. 10) 4-Methylbenzoylmethylmonamid d. Benzol-1, 2-Dicarbonsäure
- (4-Methylacetophenon-α-Phtalaminsäure). Sm. 165°. Cu (B. 31, 2133). \dot{C} 62,8 — H 4,6 — O 19,7 — N 12,9 — M. G. 325.
- C17H15O4N8 1) Methylenäther d. γ -Phenylhydrazon- α -[2-Nitro-3, 4-Dioxyphenyl]- α -Buten. Sm. 197° (B. 24, 622). — IV, 774. C 65,2 — H 4,8 — O 25,6 — N 4,4 — M. G. 313. $C_{17}H_{15}O_5N$
 - 1) Methylester d. β -Phenyl- α -[4-Nitrobenzoyl]propionsäure. Sm. 570 (Soc. 49, 446). — II, 1713.
 - 2) Aethylester d. Benzoxylbenzoylamidoameisensäure. Sm. 72-730 (Am. 20, 50).
 - 3) Aethylester d. 2-[3-Nitro-4-Methylbenzoyl]benzol-1-Carbonsäure. Sm. 122° (A. 299, 311).
 4) Phenylester d. Benzoylamidoacetoxylessigsäure. Sm. 171 — 173°
 - (H. 20, 421).
 - 5) α -Monamid d. $\alpha\beta$ -Diphenyläthan- $\alpha\alpha\beta$ -Tricarbonsäure. Sm. 190° (B. 23, 116). - II, 2025.C 59.8 - H 4.4 - O 23.5 - N 12.3 - M. G. 341.
 - 1) P-Dinitro-1-Benzoyl-2-Methyl-1, 2, 3, 4-Tetrahydrochinolin. Sm. 169 bis 170° (B. 25, 1268). — IV, 204.
 - 2) P-Nitro-1-[3-Nitrobenzoyl]-2-Methyl-1,2,3,4-Tetrahydrochinolin. Sm. 163—164° (B. 25, 1270). — IV, 204.
 - 3) Dibenzoylmethenylamidoximacethydroxamsäure. Sm. 165° (B. 27 [2] 261). — II, *1209*.
 - 4) δ -Phenylhydrazon- α -[3-Nitrophenyl] butan- α δ -Oxyd- β -Carbonsäure Phenylhydrazid d. 3 - Nitrophenylparakonsäure). Sm. 130—132° u. Zers. (R. 6, 19). — IV, 717.
 - 5) Aethylester d. 4-Nitrophenylazobenzoylessigsäure. Sm. 1140 (B. **21**, 2124). — IV, 1473.
 - 6) Benzoat d. Benzoylmethenylamidoximacethydroxamsäure. Sm. 1650 (B. **27** [2] 261).
- C₁₇H₁₅O₅Br 1) 6-Acetat d. ?-Brom-2, 4, 6-Trioxydiphenylketondimethyläther (A. d. Bromhydrocotoin). Sm. 166° (A. 199, 61). — III, 203. C 62,0 — H 4,6 — O 29,2 — N 4,2 — M. G. 329. $C_{17}H_{15}O_6N$
 - 1) 3,4-Dioxy-1-[4-Carboxylphenyl]imidomethylbenzol-3,4-Dimethyläther-2-Carbonsäure (Opiananthranilsäure). Sm. 231° (B. 29, 2035).

2) Acetat d. Nitrolapachol. Sm. 166-170° (G. 12, 359). - III, 399. $C_{17}H_{15}O_6N$ 1) Diäthylester d. 3-Chlor-1, 4-Naphtochinon-2-Methyldicarbonsäure. $\mathbf{C}_{17}\mathbf{H}_{15}\mathbf{O}_{6}\mathbf{C}\mathbf{l}$ Sm. 82—83° (B. 32, 265).

- $C_{17}H_{15}O_8Br$ 1) 3,4-Methylenäther-2',4',6'-Trimethyläther d. ?-Brom-3,4,2',4',6'-Trimethyläther Pentaoxydiphenylketon. Sm. 190—192° (A. 199, 50). — III, 209.
 - 2) Diäthylester d. 3- oder 4-Brom-1, 2-Naphtochinon-4 oder 3-Methyldicarbonsäure. Sm. 96-97° (B. 32, 264).
 3) Diäthylester d. 3-Brom-1,4-Naphtochinon-2-Methyldicarbonsäure.

 $C_{17}H_{15}O_7N$

- Sm. 102° (B. 32, 262). C 59.2 H 4.3 O 32.5 N 4.0 M. G. 345. 1) Papaverinsäuremethylbetaïn + H_2O . Sm. $192 194^{\circ}$ (wasserfrei). $Ba + 6H_2O$, Ag, $HCl + H_2O$, $(2HCl_1PtCl_4 + 8H_2O)$ (M. 14, 521, 597).
- 2) 3-Methylester d. 2-[3,4-Dimethoxylbenzoyl]pyridin-3,4-Dicarbonsäure (β -M. d. Papaverinsäure). Sm. 153° (M. 13, 698; 17, 497; 18, 465). - IV, 176.
- 3) 4-Methylester d. 2-[3,4-Dimethoxylbenzoyl]pyridin-3,4-Dicarbonsäure (γ-M. d. Papaverinsäure). Sm. 196° u. Zers. (M. 17, 495; 18, 465).
- 4) β -[2-Nitrophenyl] äther d. 2-Acetoxylbenzol-1-Carbonsäure- β -Oxy-

 $C_{17}H_{15}O_{7}N_{5}$

- äthylester. Sm. 80° (*J. pr.* [2] **27**, 217—218). II, 1493. C 50,9 H 3,7 O 27,9 N 17,5 M. G. 401.

 1) Aethyläther d. s-Cinnamyliden 2,4,6 Trinitro 3 Oxyphenylhydrazin. Sm. 200-2010 (G. 25 [2] 504). - III, 62.
- $C_{17}H_{15}O_7Cl_3$ 1) Trichloraloin + xH₂O (Z. 1871, 700). III, 617.

 $C_{17}H_{15}O_7Br_8$ 1) Tribromaloin (A. 77, 212). — III, 617.

C 56,5 - H 4,1 - O 35,4 - N 3,9 - M. G. 361. $C_{17}H_{15}O_8N$

- 1) Säure (aus Corydinsäure). Sm. 228°. Ag₈ (Soc. 71, 663). $\mathbf{C}_{17}\mathbf{H}_{15}\mathbf{N}_{2}\mathbf{Cl}$ 1) 3-Chlor-1, 2-Diphenylimido-R-Pentamethylen. Sm. 129° u. Zers.
- $HCl + H_2O$ (B. 23, 1479). II, 447. C17 H15 N8 S 1) β -Phenylamido - α -[1-Naphtyl]thioharnstoff. Sm. 183° u. Zers. (Soc. 61, 1019). — IV, 681.
 - 2) β -Phenylamido- α -[2-Naphtyl] thioharnstoff. Sm. 190—191° (Soc. 61, 1019). **— IV**, 681.
 - 3) anti- β -[1-Naphtyl]amido- α -Phenylthioharnstoff. Sm. 135° (B. 24, 4190; **32**, 1086). — IV, 927.
 - 4) β -[2-Naphtyl]amido- α -Phenylthioharnstoff. Sm. 2020 (184–184,50) (B. **24**, 4180; Soc. **61**, 1020). — IV, 929. C 77,3 — H 6,0 — O 6,0 — N 10,6 — M. G. 264.

C17H16ON2

- 1) γ -Benzoylhydrazon- α -Phenyl- α -Buten. Sm. 157° (J. pr. [2] 50, 306). III. 160.
- 2) 2-Phenylhydrazon-3-Aethyl-1,2-Benzpyron. Sm. 115^o (B. 24, 3463).
- IV, 698. 3) 3-Keto-2-Methyl-4-Phenyl-5-Benzyl-2,3-Dihydropyrazol. Sm. 237
- bis 238° (A. 296, 11). IV, 1033. 4) 3-Keto-5-Methyl-2-Phenyl-1-Benzyl-2,3-Dihydropyrazol. Sm. 1190
- (J. pr. [2] 55, 153). IV, 511. 5) 5-Keto-3-Methyl-1-Phenyl-4-Benzyl-4,5-Dihydropyrazol.
- (Am. 16, 442; J. pr. [2] 54, 205; [2] 55, 152). IV, 941. 6) Aethyläther d. 4-Phenylamido-2-Oxychinolin. Sm. noch nicht bei 270° (B. **26**, 2230). — IV, 910.
- 7) 3-Keto-2- $[\beta$ -Phenyläthenyl]-6 oder 7-Methyl-1,2,3,4-Tetrahydro-1,4-Benzdiazin. Sm. 185—186° (B. 25, 954). — IV, 1034. 8) 1-Keto-2-Aethyl-4-Benzyl-1,2-Dihydro-2,3-Benzdiazin.
- (B. **29**, 1434). 9) Aethyläther d. 4-Oxy-1-Benzyl-2, 3-Benzdiazin. Sm. 84-86° (B. 29,
- 1435). **IV**, 1027. 10) Base (aus 4,4'-Diamido-3,3'-Dimethylbiphenyl u. Formaldehyd) oder
- $C_{18}H_{18}ON_2$. (2 HCl, PtCl₄) (B. **25**, 1939). **1V**, 982. 11) Nitril d. γ-[4-Methoxylphenyl]amido-α-Phenyl-α-Propen-γ-Carbonsäure. Sm. 126—127° (B. 25, 2057). — II, 1425.
- 12) Amid d. β -Cyan- $\alpha\gamma$ -Diphenylpropan- β -Carbonsäure (Dibenzyleyan-acetamid). Sm. 165° (G. 26 [1] 198; 26 [2] 225).

- 1) 5-Keto-4-Phenylhydrazon-3-Methyl-1-[4-Methylphenyl]-4,5-Dihydropyrazol. Sm. 187° (Soc. 59, 342). - IV, 807.
- 2) 5-[\gamma-Phenylhydrazonpropyl]-3-Phenyl-1, 2, 4-Oxdiazol. Sm. 1260

 $C_{17}H_{16}O_2N_2$

(B. 22, 2417). — IV, 691. C 72,9 — H 5,7 — O 11,4 — N 10,0 — M. G. 280. 1) ?-Di[Acetylamido]fluoren. Zers. bei 250° (A. 203, 101). — IV, 993. 2) Dehydroacetylpäonolphenylhydrazon. Sm. 206° u. Zers. (B. 25, 1299). IV, 772.

3) Methylenäther d. γ -Phenylhydrazon- α -[3,4-Dioxyphenyl]- α -Buten. Sm. 158—160° (B. 24, 620). — IV, 774.

- 4) Methylenäther d. isom. γ -Phenylhydrazon- α -[3,4-Dioxyphenyl]- α -Buten. Sm. 163° (B. 24, 620). IV, 774. 5) 4-Acetylamidobenzylphtalimidin. Sm. 226—227° (B. 23, 344). IV, 640.
- 6) α -Acetylimido α Acetylphenylamido α Phenylmethan (Diacetylbenzenylphenylamidin). Sm. 128-130° (J. pr. [2] 54, 120). - IV, 845.
- 7) 2-Benzoyl-5-Keto-3-Methyl-1-Phenyltetrahydropyrazol. Sm. 162° (B. 26, 105). — IV, 489.
- 8) 2,4-Diketo-5,5-Dibenzyltetrahydroimidazol. Sm. 208-209° (G. 26 [1] 201).
- 9) 2,4-Diketo-1,3-Di[2-Methylphenyl]tetrahydroimidazol. Sm. 273 bis 275° u. Zers. (B. 25, 2275). — II, 469.
- 10) 2,4-Diketo-1,3-Di[4-Methylphenyl]tetrahydroimidazol. Sm. 1750 (B. **25**, 2289). — **II**, 506.
- 11) 3,6-Diketo-2-Benzyl-1-Phenylhexahydro-1,2-Diazin. Sm. 159° (B. 26, 678). — IV, 703.
- 12) 2,5-Diketo-1-Phenyl-4-[2-Methylphenyl]hexahydro-1,4-Diazin. Sm. 165-166° (J. pr. [2] 40, 443). — II, 469.
- 13) 2, 5-Diketo-1-Phenyl-4-[4-Methylphenyl]hexahydro-1,4-Diazin. Sm. $220-221^{\circ}$ (B. 23, 1999). — II, 505.
- 14) 1-Allylphenylhydrazonmethylbenzol-2-Carbonsäure. Sm. 160° (B. 24, 2352). — IV, 696.
- 15) Diphenylamid d. Pseudo-Itakonsäure. Sm. 1850 (A. 77, 282; 254, 148; B. 14, 2789; 15, 1641). — II, 418.
- 16) Diphenylamid d. Citrakonsäure. Sm. 175,50 (B. 14, 2789; 15, 1641). - II, 418.
- 17) Diphenylamid d. Mesakonsäure. Sm. 185,7° (B. 14, 2789; 15, 1461). · II, 419.
- 18) Phenylimid d. β -Phenylamidopropan- $\alpha\beta$ -Dicarbonsäure. Sm. 135° (B. 21, 1386; A. 261, 143). II, 440.
- 19) β -Methylphenylamidoäthylimid d. Benzol-1, 2-Dicarbonsäure. Sm. 104—105° (B. **24**, 2199). — II, 1800.
- 20) β -[2-Methylphenyl]amidoäthylimid d. Benzol-1,2-Dicarbonsäure. Sm. 153° (B. **24**, 2194). — II, 1800.
- 21) β -[4-Methylphenyl]amidoäthylimid d. Benzol-1,2-Dicarbonsäure.
- Sm. 96° (B. **24**, 2195). II, 1800. 22) β-Phenylamidopropylimid d. Benzol-1,2-Dicarbonsäure. Sm. 93° (B. **24**, 2630). — II, 1802.
- 23) γ-Phenylamidopropylimid d. Benzol-1, 2-Dicarbonsäure. Sm. 87-89° (B. 23, 1168). — II, 1802. C 66,2 — H 5,2 — O 10,4 — N 18,2 — M. G. 308.
- $C_{17}H_{16}O_2N_4$
 - 1) αβ-Di[Benzoylhydrazon] propan (Methylglyoxalbenzoylosazon). Sm. 251 bis $25\tilde{2}^{0}$ u. Zers. (B. 31, 34).
 - 2) Di[Benzylidenhydrazid] d. Methandicarbonsäure. Sm. 226° (J. pr. [2] **51**, 188). — III, 40.
- $\mathbf{C}_{17}\mathbf{H}_{16}\mathbf{O}_2\mathbf{Br}_2$ 1) Aethyläther d. $\beta\gamma$ -Dibrom- α -Keto- α -[?-Oxyphenyl]- γ -Phenylpropan. Sm. 150° (B. 25, 3535). III, 228.
 - 2) Benzoat d. 3,5-Dibrom-2-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 97
 - bis 98,5° (G. 19, 472). II, 1147. 3) Benzoat d. 2,6-Dibrom-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 88 bis 90° (G. 22 [2] 585). — II, 1148.

C 68,9 - H 5,4 - O 16,2 - N 9,4 - M. G. 296. $C_{17}H_{16}O_3N_2$

- 1) 2,2'-Diacetyldiamidodiphenylketon. Sm. 168° (154°) (B. 23, 2578; 31, 3033; A. 283, 171). — III, 184.
- 2) 2,3'-Diacetyldiamidodiphenylketon. Sm. 167° (B. 23, 2578; A. 283, 173). **— III**, 184.
- 3) 2,4'-Diacetyldiamidodiphenylketon. Sm. 128-129° (B. 23, 2578). -III, 184.
- 4) 3,3'-Diacetyldiamidodiphenylketon. Sm. 226-227° (A. 194, 360; **283**, 170). — III, 185.
- 5) 3, 4'-Diacetyldiamidodiphenylketon. Sm. 218° (B. 27, 2294). III, 185.
- 6) 4, 4'-Diacetyldiamidodiphenylketon. Sm. 235° (B. 23, 2578; A. 283, 170). **— III**, *185*.
- 7) Acetat d. anti-α-Oximido-2-Acetylamidodiphenylmethan. Sm. 218° (B. **24**, 2383). — **III**, 191.
- 8) α -Acetyl- α -Phenyl- β -[2-Acetoxylbenzyliden]hydrazin. Sm. 1330 (B. 17, 3006). — IV, 759.
- 9) Aethylfurfurin. Fl. (2 HCl, PtCl₄), HJ (J. 1855, 559). III, 722.
- 10) Dimethyläther d. 2-Keto-4,5-Di[4-Oxyphenyl]-2,3-Dihydroimidazol. Sm. noch nicht bei 280° (A. 284, 25). — III, 227.

 11) 1-[3-Nitrobenzoyl]methyl-1, 2, 3, 4-Tetrahydrochinolin. Sm. 145°
- (B. 30, 576). IV, 195. 12) 1-[3-Nitrobenzoyl]-2-Methyl-1,2,3,4-Tetrahydrochinolin. Sm. 114°
- (B. 25, 1269). IV, 204.
- 13) P-Nitro-1-Benzoyl-2-Methyl-1,2,3,4-Tetrahydrochinolin. Sm. 1490 (B. 25, 1268). - IV, 204.
- 14) Aethylester d. Phenylazobenzoylessigsäure. Sm. 65° (B. 21, 2120). **- IV**, 1472.
- 15) 4-Methylphenylamid d. Mesoxalsäure. Sm. 187° (Am. 16, 383).
 16) β-[2-Methoxylphenyl]amidoäthylimid d. Benzol-1,2-Dicarbonsäure. Sm. 118-119° (B. 27, 929). II, 1800.
 17) 4-Benzylidenhydrazid d. Benzol-1,4-Dicarbonsäure-1-Aethylester.
- Sm. 195° (*J. pr.* [2] **54**, 80). C 63,0 H 4,9 O 14,8 N 17,3 M. G. 324.
- C17H16O3N4
 - 1) Aethylester d. Formazylglyoxalsäure. Sm. 105-106° (B. 27, 151). - IV, 1228.
- $C_{17}H_{16}O_3Cl_2$ 1) Diäthyläther d. Di[?-Chlor-?-Oxyphenyl]keton. Sm. 122-123° (B. **28**, 2873). — **III**, 200.
- $C_{17}H_{16}O_3Br_2$ 1) $\alpha\beta$ -Dibrom- α -Oxy- β -Phenylpropion-[3-Methylphenyläther]säure. Sm. 109° (G. 20, 510). — II, 1577.
 - 2) $\alpha \beta$ -Dibrom α -Oxy- β -Phenylpropion-[4-Methylphenyläther] säure. Sm. 124—125° (G. 20, 510). — II, 1577.
 - 3) 5-Benzoat-2-Methyläther d. 3,6-Dibrom-5-Oxy-2-Oxymethyl-1,4-Dimethylbenzol. Sm. 120° (B. 28, 2905). C 65,4 — H 5,1 — O 20,5 — N 9,0 — M. G. 312. 1) Dinitroretenfluoren. Sm. bei 245° (A. 229, 145). — II, 253.
- $C_{17}H_{16}O_4N_2$

 - 2) N-Benzoat d. α-Acetoxyl-α-Phenyläthenylamidoxim. Sm. 165° (B. **18**, 1078). — **II**, *1554*.
 - 3) Diacetat d. 2'4'-Dioxy-2-Methylazobenzol. Sm. 74-75° (B. 15, 2825). - IV, 1444.
 - 4) Diacetat d. 2', 4'-Dioxy-4-Methylazobenzol. Sm. 98° (B. 15, 2821). **– IV**, 1444.
 - 5) αα-Di[Benzoylamido] propionsäure. Sm. 172° u. Zers. (B. 14, 1599 bis 1600). — II, 1192.
 - 6) $\alpha \beta$ -Di[Benzoylamido] propionsäure. Sm. 195—197°. Ba (H. 19, 331).
 - 7) α-Phenylhydrazon-α-Phenylpropan-γγ-Dicarbonsäure. Sm. 120° u. Zers. (B. 18, 3325). — IV, 718.
 - 8) 5 oder 6-Methyl-2-[3,4-Dimethoxylphenyl]benzimidazol-2²-Carbonsäure. Zers. bei 237⁰. Ca (B. 24, 627). IV, 618.
 - 9) Aethylester d. $1-[\beta-Nitro-\alpha-Amido-\beta-Phenyläthenyl]$ benzol-2-Car-
 - bonsäure. Sm. 154-155° (B. 18, 2441). II, 1710.

 10) Aethylester d. 2-Oxybenzyliden-2-Aldehydophenylkohlensäurehydrazon. Sm. 114—115° (B. 31, 2808).

- C₁₇H₁₈O₄N₂ 11) Phenylamid d. Bernsteinsäuremonophenylamid 3 Carbonsäure. Sm. 252° (G. 15, 549). — II, 1265.
 - 12) 1-Phenylamid d. Benzol-1-Carbonsäure-3-Amidoketocarbonsäureäthylester. Sm. 180° (A. 232, 137). — II, 1264. C 60,0 — H 4,7 — O 18,8 — N 16,5 — M. G. 340.
- $C_{17}H_{16}O_4N_4$
 - 1) αγ-Dibenzoximido αγ-Diamidopropan (Malonendibenzoyldiamidoxim). Sm. 183—185° u. Zers. (B. 29, 1170).
 - 2) Di[4-Oxybenzylidenhydrazid] d. Methandicarbonsäure. Sm. 163° (J. pr. [2] 51, 189). — III, 86. C 55,4 — H 4,3 — O 17,4 — N 22,8 — M. G. 368.
- $C_{17}H_{16}O_4N_6$ 1) $\alpha \gamma$ -Dinitro- $\alpha \gamma$ -Di[4-Methylphenylazo] propan. Sm. 199° (B. 25, 1712).
- IV, *1384*. 1) Merkaptoessigdiphenylmethylenäthersäure. Sm. 175-176° u. Zers. $C_{17}H_{16}O_4S_2$
- (B. **21**, 483). IIII, 180. C 62,2 H 4,9 O 24,4 N 8,5 M. G. 328. $C_{17}H_{16}O_5N_2$
- P-Dinitro-5-Isopropyl-2-Methyldiphenylketon (J. pr. [2] 35, 499).
 Aethoxylmethenyldi [2-Amidobenzol-1-Carbonsäure]. Sm. 223°. Ag
 - (B. 19, 2656). II, 1251.
 - 3) Dimethylester d. s-Diphenylharnstoff-3, 3'-Dicarbonsäure. Sm. 223° u. Zers. (A. 291, 324).
 - 4) Dimethylester d. s-Diphenylharnstoff-4, 4'-Dicarbonsäure. Sm. 2460 (A. **291**, 332).
 - 5) Di[4-Acetylamidophenylester] d. Kohlensäure. Sm. 200° (C. 1897) [1] 469).
- C 59.3 H 4.6 O 27.9 N 8.1 M. G. 344. $C_{17}H_{16}O_6N_2$
 - 1) ?-Dinitro-αα-Di[4-Methylphenyl]propionsäure. Sm. 129° u. Zers. Ba (B. 15, 1476). — II, 1471.
 - 2) α Phenylhydrazontetra
oxyphenyl ? Dimethyläther -? Methylenätheressigsäure (Apionylglyoxylsäurephenylhydrazon). Sm. 169—170° (G. 20, 697). — IV, 727.

 3) Benzoat d. 3,5-Dinitro-2-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 98
 - bis 100° (G. 20, 186). II, 1147.
 - 4) Benzoat d. 2,6-Dinitro-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 127 bis 128° (G. 20, 142). — II, 1148. C 54,8 — H 4,3 — O 25,8 — N 15,1 — M. G. 372.
- $C_{17}H_{16}O_6N_4$
 - 1) Di [3-Nitro-4-Acetylamidophenyl] methan. Sm. oberh. 300° (B. 25, 303). — IV, 975.
 - 2) a-Phenylhydrazon-3,5-Dinitro-2,4,6-Trimethylphenylessigsäure.
 - Sm. 202° u. Zers. (A. 264, 144). IV, 698.

 3) Methylester d. ?-Dimethylphenylazo-2,4-Dinitrophenylessigsäure. Sm. 159° (B. 22, 326). — IV, 1465.
- C₁₇H₁₆NCl 1) Chlormethylat d. 4-Methyl-2-Phenylchinolin. 2 + PtCl₄ (B. 18, 35). **–** IV, 436.
 - 2) Chlormethylat d. 2-Methyl-4-Phenylchinolin. 2 + PtCl₄ (B. 28, 1039). — IV, 434.
 - 3) Chloräthylat d. 2-Phenylchinolin $+ 2H_2O$. $2 + PtCl_4$ (B. 19, 1199). · IV, 425.
- 1) Jodmethylat d. 4-Methyl-2-Phenylchinolin. Sm. 185° u. Zers. (B. $C_{17}H_{16}NJ$ 18, 34). — IV, 436.
 - 2) Jodmethylat d. 2-Methyl-4-Phenylchinolin. Sm. 205 ° u. Zers. (B. **28**, 1039). — **IV**, 434.
 - 3) Jodäthylat d. 2-Phenylchinolin. Sm. 195° (B. 19, 1200). IV, 425.
 - 4) Jodäthylat d. 6-Phenylchinolin $+1[2]H_2O$. Sm. 169° (wasserfrei) (A. 230, 18). - IV, 430.
- 1) 2-Merkapto-1-Aethyl-4,5-Diphenylimidazol. Sm. noch nicht bei 240° $C_{17}H_{16}N_2S$ (A. 284, 26). — III, 224.
 - 2) Aethyläther d. 2-Merkapto-4,5-Diphenylimidazol. Sm. 181-1820 (A. 284, 16). — III, 224.
- $C_{17}H_{16}N_4Cl_2$ 1) 2,2-Dichlor-1,3-Di[Phenylhydrazon]-R-Pentamethylen + 2 H_2O . Sm. 84° (B. **22**, 1260). — IV, 782. C 81,3 — H 6,8 — O 6,3 — N 5,6 — M. G. 251.
- $\mathbf{C}_{17}\mathbf{H}_{17}\mathbf{ON}$ 1) α -Phenylamido- β -Benzoyl- α -Buten. Sm. 120° (B. 22, 3278). — III, 166.
 - 2) ?-Acetylamido-l-Methyl-?-Dihydroanthracen. Sm. 1980 (B. 16, 1634). — II, *639*.

 $C_{17}H_{17}ON$

- 3) ?-Acetylamido-2-Methyl-9,10-Dihydroanthracen. Sm. 1980 (B. 16, 1634). — IV, 401.
- 4) 1-Acetyl-4-Phenyl-1, 2, 3, 4-Tetrahydrochinolin. Sm. 120° (B. 28) 1043). — IV, 400.
- 5) 1-Acetyl-6-Phenyl-1,2,3,4-Tetrahydrochinolin. Sm. 99-1000 (A.
- 230, 22). IV, 401. 6) 1-Benzoylmethyl-1, 2, 3, 4-Tetrahydrochinolin. Sm. 104° (B. 30, 576). **- IV**, 195.
- 7) 1-Benzoyl-2-Methyl-1,2,3,4-Tetrahydrochinolin. Sm. 118° (B. 25, 1263). — IV, 204.
- 8) Benzoylderivat d. Base C₁₀H₁₃N (aus 1,2-Phenylendiessigsäurenitril). Sm. 150—152° (G. 22 [2] 513). — IV, 207.
- 9) 3,4-Dimethylphenylamid d. β -Phenylakrylsäure. Sm. 175—176°. **- II**, 1408.
- 10) 3,5-Dimethylphenylamid d. β -Phenylakrylsäure. II, 1408.
- 11) 1,2,3,4-Tetrahydro-2-Naphtylamid d. Benzolcarbonsäure. Sm. 150 bis 151° (B. 21, 857). — II, 588. C 73,1 — H 6,1 — O 5,7 — N 15,1 — M. G. 279.

 $C_{17}H_{17}ON_3$

- 1) α [4-Methylphenyl]imido- β -Phenylhydrazon- α -Oxypropan. Sm. 104° (Am. 16, 386).
- 2) Aethyläther d. 3-Oxy-5-Phenyl-1-[4-Methylphenyl]-1,2,4-Triazol. Sm. 51-52° (Soc. 73, 370). IV, 1158.
 3) Aethyläther d. 3-Oxy-1-Phenyl-5-[3-Methylphenyl]-1,2,4-Triazol.
- Sm. 59° (Soc. 71, 214). IV, 1161.
- 4) 1 oder 3-Acetyl-2-[4-Methylphenyl]imido-5-Methyl-2, 3-Dihydro-
- benzimidazol. Sm. 149° (B. 24, 2520). IV, 623. 5) Phenylamidoaposafranon. Sm. 256° (B. 29, 1605). C 66,4 H 5,5 O 5,2 N 22,8 M. G. 307.

C17H17ON5

1) 4-Diazoantipyrinamidobenzol. Zers. bei 136-137° (A. 293, 68). — IV, 1582. C 76,4 — H 6,4 — O 12,0 — N 5,2 — M. G. 267.

C17H17O2N

- 1) Methyläther d. α -Keto- γ -Phenylimido- α -[3-Oxyphenyl] butan. Sm. 84—85° (B. 27, 3042). — III, 271.
- Methyläther d. α-Keto-γ-Phenylimido-α-[4-Oxyphenyl] butan. Sm. 111—112° (B. 27, 910). III, 271.
- 3) Methyläther d. γ -[4-Oxyphenyl]imido- α -Keto- α -Phenylbutan. Sm. $107-108^{\circ}$ (B. 28, 1045). III, 270.
- 4) 2-Butyrylamidodiphenylketon. Sm. 56° (B. 25, 3087). III, 182.
- 5) γ -Keto- α -[3-Benzoylamidophenyl] butan. Sm. 94—956 (B. 23, 1886). **— III**, 149.
- 6) α -Phenylacetylamidoäthylphenylketon. Sm. 55° (Bl. [3] 17, 72)
- 7) 2-Methylphenylacetylamidobenzoylmethan. Sm. 92° (B. 25, 2866). **- III**, 127.
- 8) 4-Methylphenylacetylamidobenzoylmethan. Sm. 89° (B. 25, 2867). - III, *127*.
- 9) Acetonbenzilimid. Sm. 176° u. Zers. (B. 18, 180). III, 299.
- 10) 2-Aethyläther d. γ-Oximido-γ-[4-Oxyphenyl]-α-Phenylpropen. Sm. 107-108° (B. 25, 3535). III, 247.
- 11) Benzyläther d. β -Oximido- γ -Keto- α -Phenylbutan. Fl. (B. 16, 834). - III, 149.
- 12) Acetat d. anti-α-Oximido-4-Aethyldiphenylmethan. Sm. 95° (B. 24, 4031). — III, *231*.
- 13) Acetat d. syn-α-Oximido-4-Aethyldiphenylmethan. Fl. (B. 24, 4031).
- 14) Acetat d. anti-α-Oximido-2,4-Dimethyldiphenylmethan. Sm. 91° (B. 24, 4049). — III, 231.
- 15) Acetat d. syn-α-Oximido-2,4-Dimethyldiphenylmethan. Sm. 103° (B. 24, 4049). — III, 231.
- 16) Benzoat d. 4-Isopropyl-1-Oximidomethylbenzol. Sm. 125—126° (G. **26** [1] 459).
- 17) N-Benzoylbenzimidopropyläther. Sd. 231—232,5% (Am. 20, 75).
 18) N-Benzoylphenylacetimidoäthyläther. Sd. 215—216% (Am. 20, 76). 19) 3-Benzoyl-2-Methyl-4-Phenyltetrahydrooxazol. Sm. 140° (B. 21, 927). — IV, 207.

C₁₇H₁₇O₂N 20) 3,5-Diacetyl-2,6-Dimethyl-4-Phenylpyridin. Sm. 188^o (B. 31, 1027).

21) Apomorphin. HCl (A. Spl. 7, 172, 179; Fr. 24, 643; J. 1872, 754; Soc. 26, 1082; B. 4, 21; M. 18, 384). — III, 901.

 Aethylester d. β-Phenylamido-β-Phenylakrylsäure. Fl. (B. 21, 521). II, 1644.

23) 1,2,3,4-Tetrahydro-2-Naphtylester d. Phenylamidoameisensäure. Sm. 98,5° (B. 23, 211). — II, 855.

- 24) Aethylamid d. α -Keto- $\alpha\beta$ -Diphenyläthan- α^2 -Carbonsäure. Sm. 139 bis 140° (B. 18, 1258, 2435). — II, 1709.
- 25) Phenylamid d. β -Benzoylisobuttersäure. Sm. 188—190° (Bl. [3] 19, 398). 26) **2-Naphtylimid d. Pentan-** α γ -Dicarbonsäure. Sm. 127,5° (A. 292, 216).
- 27) **2-Naphtylimid d. Pentan**- $\beta\gamma$ -Dicarbonsäure. Sm. 159,-160° (Å. **298**, 166).
- 28) 1-Naphtylimid d. mal. Pentan- $\beta\delta$ -Dicarbonsäure. Sm. 199° (A. 285, 238).
- 29) **2-Naphtylimid d. mal. Pentan-\beta\delta-Dicarbonsäure.** Sm. 231—232° (A. 285, 238).
- 30) **2-Naphtylimid d.** β -Methylbutan- $\alpha\beta$ -Dicarbonsäure. Sm. 96—97° (A. 298, 177).
- 31) 2-Naphtylimid d. β-Methylbutan-βγ-Dicarbonsäure. Sm. 148° (A. 285, 236).
- C 69.2 H 5.8 O 10.8 N 14.2 M. G. 295. $C_{17}H_{17}O_2N_3$
 - 1) 1,2-Phtalylkyanäthin. Sm. 127—128° (J. pr. [2] 39, 275). II, 1814.
 - 2) β -[4-Acetylamidobenzyliden]- α -Acetyl- α -Phenylhydrazin. Sm. 211° (J. pr. [2] **56**, 104). — IV, 753.
 - 3) Verbindung (aus Citrakonsäurephenylimid). Sm. 158-159° (B. 21, 1362, 1380; **22**, 2297). — IV, 708.
- C₁₇H₁₇O₂Cl 1) Benzoat d. 6-Chlor-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 71-73° (G. 26 [2] 405).
- C₁₇H₁₇O₂Br 1) ?-Brom-αα-Di[4-Methylphenyl]propionsäure. Sm. 143—144°. Ba (B. 15, 1478). — II, 1471.
 - 2) Benzoat d. ?-Brom-4-Oxy-1-Isobutylbenzol. Sm. 78,5° (Am. 17, 114). 3) Benzoat d. 6-Brom-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 67 bis
 - 67,5° (G. 18, 517; 23 [2] 78). II, 1148.

 1) Benzoat d. 6-Jod-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 95°
- $C_{17}H_{17}O_{2}J$ (J. pr. [2] 39, 294). — II, 1148. C 72,1 — H 6,0 — O 17,0 — N 4,9 — M, G. 283. $C_{17}H_{17}O_8N$
 - 1) 2-[3,4-Dioxybenzoyl]methyl-1,2,3,4-Tetrahydrochinolin. Sm. 170° (B. 27, 1973). - IV, 215.
 - 2) Morphothebain (oder $C_{18}H_{19}O_8N$). Sm. 190—191°. HCl, 2HCl, HNO₃ $+2H_2O$, $H_2SO_4+7H_2O$ (B. 17, 529; 19, 1598; M. 18, 388). III, 910.
 - 3) Acetonbenziloximid. Sm. 146° (B. 18, 181). III, 300.
 - 4) Anthracenpropylnitrat. Sm. 92° (Soc. 61, 866). II, 260.
 - 5) Aethyläther d. Benzoyl-4-Methylbenzhydroxamsäure. Fl. (A. 281, 267). — II, *1345*.
 - 6) Aethyläther d. 4-Methylbenzoylbenzhydroxamsäure. Fl. (A. 281, 267). — II, 1345.
 - 7) α -Phenacetylamido - β -Phenylpropionsäure. Sm. 126° (B. 17, 1619; 30, 2977; 31, 2238). — II, 1420.
 - 8) α-[3-Benzoylamidobenzyl]propionsäure. Sm. 147—148° (B. 23, 1900). **— II**, 1382.
 - 9) α -Oximido- $\alpha\gamma$ -Diphenylbutan- δ -Carbonsäure. Sm. 144—146° (A. **294**, 332).
 - 10) Methylester d. 2-[4-Dimethylamidobenzoyl]benzol-1-Carbonsäure. Sm. 128° (B. 27 [2] 665).
 - 11) Aethylester d. α-Benzoylamido-α-Phenylessigsäure. Sm. 84° (B. 24, 4151). — II, 1326.
 - 12) 2-Methoxylphenylester d. 1,2,3,4-Tetrahydrochinolin-1-Carbonsäure. Sm. 69° (Bl. [3] 21, 13).
 - 13) 2-Methoxyl-4-Allylphenylester d. Phenylamidoameisensäure. Sm.
 - 95,5° (B. 18, 2432). II, 975. 14) Acetat d. 4-[2-Methylphenyl]acetylamido-1-Oxybenzol. Sm. 106° (J. pr. [2] 34, 61). — II, 718.

- C₁₇H₁₇O₈N 15) Acetat d. 4-[4-Methylphenyl]acetylamido-1-Oxybenzol. Sm. 101^o (J. pr. [2] 33, 227). II, 718.
 - 16) Benzoat d. 6-Nitroso-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 110° (B. 8, 1501). — II, 1148.
 - 17) Benzoat d. α-Propylbenzhydroxamsäure. Sm. 32° (A. 281, 238). II, 1207.
 - 18) Benzoat d. β-Propylbenzhydroxamsäure. Sm. 50,3° (A. 281, 240). - II, 1207.
 - 19) Benzoat d. γ-Propylbenzhydroxamsäure. Sm. 20-24° (A. 281, 242). **– II**, 1207.
 - 20) Benzoat d. α-Aethyl-4-Methylbenzhydroxamsäure. Sm. 62° (A. 281, 252). — II, 1344.
 - 21) Benzoat d. β-Aethyl-4-Methylbenzhydroxamsäure. Sm. 51,5-52° (A. **281**, 253). — II, 1344.
 - 22) Benzoat d. γ -Aethyl-4-Methylbenzhydroxamsäure. Sm. 56° (A. 281, 254). II, 1344.
 - 23) 4-Methylbenzoat d. α-Aethylbenzhydroxamsäure. Sm. 114,5° (A. **281**, 247). — II, 1344.
 - 24) 4-Methylbenzoat d. β-Aethylbenzhydroxamsäure. Sm. 70° (A. 281, 248). — II, 1344.
 - 25) Amid d. 2-[4-Isopropylbenzoyl]oxybenzol-1-Carbonsäure. Sm. 200° (J. 1856, 502). — II, 1500.
 - 26) Phenylmonamid d. β-Phenylpropan-αγ-Dicarbonsäure. Sm. 168° (171°). Ag (Am. 20, 513; C. 1899 [1] 730).
 - 27) 2,4,5-Trimethylphenylmonamid d. Benzol-1,2-Dicarbonsäure (Phtalpseudocumidsäure). Sm. 179° u. Zers. (B. 17, 1808). — II, 1797. 28) 3,5-Dimethylbenzylmonamid d. Benzol-1,2-Dicarbonsäure (Mesityl-
 - phtalamidsäure). Sm. 1520. Ag (B. 25, 3012). II, 1797.
 - 29) 4-Aethoxylphenylamid d. Benzoylessigsäure. Sm. 139-140° (C. 1898 [1] 501).
 - 30) α Aethoxylbenzylamid d. Benzolketocarbonsäure. Sm. 116° (B. 29, 2105).
- C 65.6 H 5.5 O 15.4 N 13.5 M. G. 311. $C_{17}H_{17}O_3N_3$
 - 1) β -Acetyl- α -[2-Acetylamidobenzoyl]- α -Phenylhydrazin. Sm. 195—196° (A. 301, 93).
 - 2) α -Oximido α -[4-Methylbenzoyl] β -[4-Methylphenyl] oxyhydrazonäthan (R. 16, 324).
 - 3) Aethylamid d. Carbanilidoisatinsäure. Sm. 210° u. Zers. (J. pr. [2] **32**, 290). — II, 1604.
 - 4) Phenylacetylhydrazid d. Benzoylamidoessigsäure. Sm. 155° (J. pr. [2] **52**, 250). — **IV**, 670. C 68,2 — H 5,7 — O 21,4 — N 4,7 — M. G. 299.
- C17H17O4N
 - 1) 2-[2,3,4-Trioxybenzoyl]methyl-1,2,3,4-Tetrahydrochinolin (Hydrochinolinglykopyrogallol). Sm. 177—178° (B. 27, 1972). — IV, 215. 2) Aethyläther d. P-Nitroso-1, 3-Dioxy-P-Aethylbenzolbenzoat. Sm. 141

 - bis 142° (M. 12, 377). II, 1150.
 3) Aethyläther d. Benzoyl-4-Methoxylbenzhydroxamsäure. Sm. 93 bis 94° (A. 217, 15; B. 16, 875). — II, 1534.
 - 4) Aethyläther d. 4-Methoxylbenzoylbenzhydroxamsäure. Sm. 640 (A. 217, 10; B. 16, 875). — II, 1533.
 - 5) Benzoat d. α-Aethyl-4-Methoxylbenzhydroxamsäure. Sm. 79° (A. 175, 337; 217, 7; 281, 259). — II, 1533.
 - 6) Benzoat d. β-Aethyl-4-Methoxylbenzhydroxamsäure. Sm. 51° (A. 281, 260).
 - 7) 4-Methoxylbenzoat d. Aethylbenzhydroxamsäure. Sm. 74° (A. 175, 336; **217**, 2). — **II**, *1533*.
 - 8) isom. 4-Methoxylbenzoat d. Aethylbenzhydroxamsäure. (A. 217, 4). - II, 1533.
 - 9) Monomethylester d. α -Phenylamido- α -Phenyläthan- $\beta\beta$ -Dicarbonsäure. Anilinsalz (B. 28, 146). II, 1850.
 - 10) Dimethylester d. 2,6-Dimethyl-4-Phenylpyridin-3,5-Dicarbonsäure.
 - Sm. 139—140°. (HCl, AuCl₈) (B. **25**, 2788). IV, 386. 11) Aethylester d. α-Phenylamidoformoxylphenylessigsäure (Phenylglykolsäureäthylesterphenylurethan). Sm. 93° (Bl. [3] 19, 775).

- C₁₇H₁₇O₄N 12) Monoäthylester d. 2,6-Dimethyl-4-Phenylpyridin-3,5-Dicarbon
 - säure. Sm. 179—180° (B. 17, 2911; Ph. Ch. 3, 394). IV, 386.
 13) Mono [γ-Phenoxylpropylamid] d. Benzol-1,2-Dicarbonsäure. 134°. Ag (B. 24, 2633). II, 1796.
 - 14) 4-Aethoxylphenylamid d. 2-Acetoxylbenzol-1-Carbonsäure. Sm. 1320 G. 28 [2] 200).
- 15) Mono [4-Methylphen- β -Oxyäthylamid] d. Benzol-1, 2-Dicarbonsäure (p-Kresoxäthylphtalimidsäure). Sm. 137°. Ag (B. **24**, 191). — II, 1796. C 62,4 — H 5,2 — O 19,6 — N 12,8 — M. G. 327. $C_{17}H_{17}O_4N_8$
 - 1) Allyldi[2-Nitrobenzyl]amin. Sm. 55°. (2 HCl, PtCl₄) (B. 26, 2587). —
 - 2) Allyldi[4-Nitrobenzyl]amin. Sm. 46° (B. 30, 68).
 - 3) Phenylamid d. 4-Urethanphenyl-1-Oxaminsäure. Sm. 340° (351° cor.) (B. 27, 962; A. 293, 379). — IV, 593. C 64,8 — H 5,4 — O 25,4 — N 4,4 — M. G. 315.
- $C_{17}H_{17}O_5N$ 1) 2-Oxybenzoat-4-Acetylamidophenyläther d. $\alpha\beta$ -Dioxyäthan. Sm. 133° (A. 305, 285).
 - 2) 4-Methoxylbenzoat d. α -Methyl-4-Methoxylbenzhydroxamsäure. Sm. $50-51^{\circ}$ (A. **281**, 258). — II, 1535.
 - 3) 4-Methoxylbenzoat d. β -Methyl-4-Methoxylbenzhydroxamsäure. Sm. 91° (A. **281**, 258). — II, 1535.
 - 4) Aethylester 4 Phenylglykolylamidophenylester d. Kohlensäure (Amygdophenin). Sm. 162—163° (C. 1897 [1] 469).
 - 5) 1-Benzylamid d. 3,4-Dioxybenzoldimethyläther-1,2-Dicarbonsäure. Sm. 161—162° (R. 15, 285).
 - 6) 2-Benzylamid d. 3,4-Dioxybenzoldimethyläther-1,2-Dicarbonsäure. Sm. 171—172° (R. 15, 283).
 - 7) Benzylmonamid d. m-Hemipinsäure (M. 9, 334). II, 1999.
 - 8) 4-Aethoxylphenylamid d. Oxyessigphenyläthersäure 2 Carbonsäure. Sm. 182° (*C.* 1898 [2] 952). C 59,5 — H 4,9 — O 23,3 — N 12,2 — M. G. 343.
- $C_{17}H_{17}O_5N_3$ 1) Verbindung (aus 4-Amidoantipyrin u. Brenztraubensäure). Sm. 170° u. Zers. (A. 293, 63). — IV, 1109
- C 61,6 H 5,1 O 29,0 N 4,2 M. G. 331. $C_{17}H_{17}O_6N$ Aethylester d. 2-Oxybenzol-β-[2-Nitrophen]oxyläthyläther-1-Carbonsäure. Sm. bei 100° (J. pr. [2] 27, 212). — II, 1495.
 Aethylester d. 2-Oxybenzol-β-[4-Nitrophen]oxyläthyläther-1-Carbonsäure. Sm. 81° (J. pr. [2] 27, 220). — II, 1496.
 Aethylester d. 4-Oxybenzol-β-[2-Nitrophen]oxyläthyläther-1-Carbonsäure. Sm. 1020 (J. pr. [2] 27, 220). — II, 1496.

 - bonsäure. Sm. 103° (J. pr. [2] 27, 222). II, 1527
 - 4) Aethylester d. 4-Oxybenzol- β -[4-Nitrophen]oxyläthyläther-l-Carbonsäure. Sm. 131° (J. pr. [2] 27, 224). — II, 1527.
 - 5) Diäthylester d. 6-Oxy-2-Keto-1-Phenyl-1, 2-Dihydropyridin-3, 5-Dicarbonsäure. Sm. 197°. Na, K, Ag (A. 285, 115, 141, 142).
 6) Diäthylester d. 2, 6-Diketo-1-Phenyl-1, 2, 5, 6-Tetrahydropyridin-
 - 3,5-Dicarbonsäure (αγ-Phenylimid d. Propen-ααγγ-Tetracarbonsäure-
- α_{γ} -Diathylester). Sm. 1479 (A. 285, 108). $\mathbf{C}_{17}\mathbf{H}_{17}\mathbf{O}_{7}\mathbf{C}\mathbf{1}$ 1) Aethylester d. 3 [oder 5]-Chlor-4, 5-[oder 4, 6]-Diacetoxyl-1, 6 [oder 1,3]-Dimethylbenzfuran-2-Carbonsäure. Sm. 136° (A. 283, 264). -
- III, 732. $\mathbf{C}_{17}\mathbf{H}_{17}\mathbf{N}_{2}\mathbf{C}\mathbf{1}$ 1) 4-[α -Chloreinnamyliden]amido-1-Dimethylamidobenzol. Sm. 122 bis 124° (B. **24**, 247). — **IV**, 597.
 - 2) Chlormethylat d. 5-Methyl-1, 3-Diphenylpyrazol. 2 + PtCl₄ (B. 18, 935). - IV, 936.
 - 3) Chlormethylat d. 3-Methyl-1,5-Diphenylpyrazol. 2 + PtCl₄ (B. 18, 315). — IV, 936.
 - 4) Chlorbenzylat d. 1-Benzylimidazol. 2 + PtCl₄ (B. 10, 1369). -IV, 502.
- $C_{17}H_{17}N_2Br$ 1) 4-[α -Bromeinnamyliden]amido-1-Dimethylamidobenzol. Sm. 253 bis
 - 255° (B. 24, 248). IV, 597. 2) Verbindung (aus 2-Amido-1-Methylbenzol u. $\alpha\beta$ -Dibromakrylsäure). Sm. 115°. HBr (B. 22, 3309). — II, 463.
 - 3) Verbindung (aus 4-Amido-1-Methylbenzol u. $\alpha\beta$ -Dibromakrylsäure). Sm. $165-166^{\circ}$ (B. **22**, 3309). II, 494.

 $C_{17}H_{17}N_{2}J$

- 1) Jodmethylat d. 5-Methyl-1, 3-Diphenylpyrazol. Sm. 192° (B. 18, 934). **- IV**, 936.
- 2) Jodmethylat d. 3-Methyl-1,5-Diphenylpyrazol. Sm. 1870 u. Zers. (B. 18, 315). — IV, 936.
- 3) Jodäthylat d. 2-Methyl-4-Phenyl-1, 3-Benzdiazin. Sm. 2040 (B. 25, 3085). **— IV**, 1026.

 $C_{17}H_{17}N_3S$

1) Farbstoff (aus Tetrahydrochinolindimethylanilinthiosulfonsäureindamin). $2 + \text{ZnCl}_2 + \text{H}_2\text{O} (B. 23, 1379). - \text{IV}, 197.$

 $\mathbf{C}_{17}\mathbf{H}_{17}\mathbf{N}_{4}\mathbf{C}\mathbf{1}$ $\mathbf{C}_{17}\mathbf{H}_{18}\mathbf{ON}_{2}$

- 1) 3-Chlor-1, 2-Diphenylhydrazon-R-Pentamethylen (B. 20, 2789). C 76,7 — H 6,8 — O 6,0 — N 10,5 — M. G. 266.
- 1) α -Phenyl- β -1, 2, 3, 4-Tetrahydro-2-Naphtylharnstoff. Sm. 165,5° (B. **21**, 859). — **II**, 588.
- 2) α -Phenyl- β -[5, 6, 7, 8-Tetrahydro-l-Naphtyl] harnstoff (B. 21, 1794). **— II**, 587.
- 3) α-Phenylimido-α-Butyrylamidophenylmethan. Sm. 1370 (Am. 20, 576).
- 4) α-Benzyliden-β-Butyryl-β-Phenylhydrazin. Sm. 113,5° (A. 252, 310). **IV**, 750.
- 5) α-Methylphenylhydrazon-γ-Keto-α-Phenylbutan. Sm. 103-104° (A. 253, 18). — IV, 783.
- 6) 2-Aethylamido-4,5-Diphenyl-4,5-Dihydrooxazol. Sm. 141°. 2 + (2 HCl, PtCl₄) (B. 28, 1901).
- 7) Benzoylmetanikotin. Fl. (2 HCl, PtCl₄), Pikrat (Sm. 128°) (B. **27**, 1057, 1060, 2865; Bl. [3] **11**, 110). **IV**, 860.
- 8) 3-Keto-2-Methyl-1, 4-Diphenylhexahydro-1, 4-Diazin. Sm. 137—1380
- (B. **25**, 2935). **II**, 432. 9) 2-Keto-4,5-Dimethyl-1,3-Diphenyltetrahydroimidazol (s-Dimethyläthylen-αβ-Diphenylharnstoff). Sm. 139—141° (B. 25, 3282). — II, 381.
- 10) 2-Keto-1,3-Di[4-Methylphenyl]tetrahydroimidazol (Aethylendi-4-Methylphenylharnstoff). Sm. 228° (B. 14, 2184). — II, 495.
- 11) 4-Amido-3-Methyl-6-Isopropyl-1-Phenylbenzoxazol. Sm. 106-108°.
- (2 HCl, PtCl₄) (G. **20**, 142; **25** [2] 402). II, 1148. 12) **4-A**mido-6-Methyl-4-Isopropyl-1-Phenylbenzoxazol. Sm. 130—132° (G. 20, 188). — II, 1148.
- 13) 1-Acetyl-2-Methyl-3-Phenyl-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 120,5° (B. **24**, 3058). — **IV**, 853.
- 14) Verbindung (aus αδ-Diketo-α-Phenylpentan). Sm. 105° (B. 17, 2763). III, 273. - M. G. 294.

 $\mathbf{C}_{17}\mathbf{H}_{18}\mathbf{ON}_{4}$

- C 69.4 H 6.1 O 5.4 N 19.1 -1) $\alpha \gamma$ -Di[4-Methylphenylhydrazon]- β -Ketopropan. Sm. 192—193° u. Zers. (B. **27**, 221). — **IV**, 810.
- 2) β -Phenylhydrazon- α -Acetylphenylhydrazonpropan. Sm. 229° (Soc. **53**, 527). — IV, 758.
- 3) α -[4-Methylphenyl]azo- α -[4-Methylphenyl]hydrazon- β -Ketopropan. Sm. $153-154^{\circ}$ (B. **25**, 3546). — IV, 1230.
- 4) Verbindung (aus Phenylhydrazinlävulinsäurephenylhydrazid). Sm. 142 bis 142,5° (A. 267, 108). IV, 692.
 C 72,3 H 6,4 O 11,3 N 9,9 M. G. 282.
 1) 4-Acetylamido-1-Acetylbenzylamidobenzol. Sm. 116,5—117° (Soc.

 $C_{17}H_{18}O_2N_2$

- 55, 591). IV, 586.
- 2) 2,4'-Di[Acetylamido]diphenylmethan. Sm. 218-219° (A. 283, 162). - IV, 973.
- 3) 4,4'-Di[Acetylamido]diphenylmethan. Sm. 228° (A. 283, 161; B. 23, 2578; **25**, 303; **27**, 1811). — IV, 975.
- 4) 4,4'-Di[Acetylamido]-2-Methylbiphenyl. Sm. 310° (B. 28, 2550). —
- IV, 975. 5) **4,4'-Di[Acetylamido]-3-Methylbiphenyl**? Sm. 310° (B. **25**, 3225). -
- 6) $\alpha \beta$ -Di[Benzoylamido]propan. Sm. 192—193° (B. 21, 2360). II, 1169.
- 7) $\alpha \gamma$ -Di Benzoylamido propan. Sm. 147—148° (B. 21, 2365). II, 1170. 8) αε-Dioximido-αε-Diphenylpentan. Sm. 149-1516 (1619) (A. ch. [6] **22**, 358; A. **302**, 218). — III, 299.
- 9) isom. $\alpha \varepsilon$ -Dioximido- $\alpha \varepsilon$ -Diphenylpentan. Sm. 62° (A. 302, 217). 10) Furfuranilin. HCl, HNO₃ (A. 156, 199; 201, 355; 239, 352; B. 15, 232). — III, 723.

- $\mathbf{C}_{17}\mathbf{H}_{18}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{11}$ 3,6-Di[Dimethylamido] xanthon. Sm. 240—242°. HCl, (2HCl, PtCl.) (J. pr. [2] 54, 235).
 - 12) $\alpha\beta$ -Diacetyl- α -Phenyl- β -[4-Methylphenyl] hydrazin. Sm. 91° (A. 303, 370). — IV, 1502.
 - 13) γ-Phenylhydrazon-α-Phenylbuttersäure. Sm. 140° (B. 18, 793). ív, 698.
 - 14) Aethylester d. β-Phenylhydrazon-α-Phenylpropionsäure. Sm. 63 bis 64° (B. 28, 773). IV, 697.
 15) Aethylester d. α-Phenyl-β-Benzylidenhydrazidoessigsäure. Sm. 73 bis 74° (B. 28, 1226). IV, 750.

 - 16) Acetat d. 4'-Oxy-2, 4, 5-Trimethylazobenzol. Sm. 105° (B. 24, 2313). **– IV**, 1414.
 - 17) Acetat d. 5-Oxy-1.2,4-Trimethyl-?-Azobenzol. Sm. 73-74° (B. 24) 2307). — IV, 1424.
 - 18) Amid d. α-Phenacetylamido-β-Phenylpropionsäure. Sm. 189—190° (B. 16, 2822; 17, 1616; 30, 2977, 2981; 31, 2238). — II, 1367, 1577.
 - 19) Methylenamid d. Phenylessigsäure. Sm. 205° (208°) (B. 10, 1650; J. pr. [2] 54, 545). — II, 1312.
 - 20) s-Diphenylamid d. Glutarsäure. Sm. 223-224°. II, 414.
 - 21) s-Diphenylamid d. Aethylmalonsäure. Sm. 213-2150 (B. 21, 1245). - II, 415.
 - 22) Di[Methylphenylamid] d. Malonsäure. Sm. 109° (B. 17, 137; 31, 1826). — II, 413.
 - 23) Di[4-Methylphenylamid] d. Malonsäure. Sm. 248° (J. pr. [2] 58, 414).
 - 24) Phenyl-2-Acetylamidobenzylamid d. Essigsäure. Sm. 123—124° (B. **24**, 3053; **27**, 42; *J. pr.* [2] **51**, 262). — IV, 630.
 - 25) Mono[2,4,5-Trimethylphenyl]diamid d. Benzol-1,2-Dicarbonsäure (Phtalpseudocumidamid). Sm. 218° (B. 17, 1807). — II, 1808.
 - 26) Nitril d. β -Butyroxyl- α -[2-Cyanphenyl]- α -Penten- α -Carbonsäure. Sm. 105° (B. 29, 2393).
 - 27) Nitril d. β-Isobutyroxyl-α-[2-Cyanphenyl]-γ-Methyl-α-Buten-α-Carbonsäure (Pseudodiisobutyryl-o-Cyanbenzylcyanid). Sm. 94°. + $\rm C_2H_6O$ (Sm. 140°) (B. 30, 890).
 - 28) Verbindung (aus Dibenzalaceton). Sm. 200,5—202° (G. 27 [2] 271).
 - 29) Verbindung (aus Phenylcarbonimid u. anti-4-Isopropylbenzaldoxim). Sm. 89° (B. 26, 2095). — III, 56.
 - 30) Verbindung (aus Phenylcarbonimid u. syn-4-Isopropylbenzaldoxim). Sm. 103° (B. 23, 2176). III, 57.
 - 31) Verbindung (aus 2-Amido-1-Methylbenzol u. Brompropiolsäure). Sm. 184 bis 185° (B. 22, 3308). II, 463.
 - 32) Verbindung (aus Cantharidin u. 3,4-Diamido-1-Methylbenzol). Sm. 180 bis 189° (G. 23 [1] 139). III, 623.
- C 65.8 H 5.8 O 10.3 N 18.1 M. G. 310. $C_{17}H_{18}O_2N_4$
 - 1) Propenyldiphenyldiureïd. Sm. 169-170° (B. 23, 2924). II, 378.
 - 2) α -Acetylphenylhydrazon- α - $[\alpha$ -Acetyl- β -Phenylhydrazido] methan. Sm. 197° (B. 25, 3188). — IV, 1227.
 - 3) $\alpha \beta$ -Di[4-Methylphenylhydrazon] propionsäure. Sm. 187—188° u. Zers. (A. 248, 88). — IV, 807.
 - 4) Aethylester d. αβ-Di[Phenylhydrazon]propionsäure. Sm. 222—223°
 - (B. 24, 3833). IV, 705.
 5) Aethylester d. α-[4-Methylphenyl]azo-α-Phenylhydrazonessigsäure.
 Sm. 85° (B. 27, 1687). IV, 1241.
 - 6) Verbindung (aus Brenztraubensäurephenylhydrazon). Sm. 186,5° (Am. 21, 42).
- $\mathbf{C}_{17}\mathbf{H}_{18}\mathbf{O}_{2}\mathbf{Br}_{2}$ 1) 3-Methyläther-4-Benzyläther d. 3,4-Dioxy-1- $[\alpha\beta$ -Dibrompropyl]benzol (Benzylisoeugenoldibromid). Sm. 122° (C. 1897 [2] 1183).
- 1) Diäthyläther d. 4,4'-Dioxydiphenylthioketon. Sm. 118-1190 (B. 28, C17H18O2S 2871). — III, *211*.
- 1) $\gamma\gamma\text{-Dimerkaptovaleriandiphenyläthersäure. Sm. 68—69°. Ba<math display="inline">(B.\,19,\,1795).$ II, 789. $C_{17}H_{18}O_2S_2$
- C 68.5 H 6.0 O 16.1 N 9.4 M. G. 298. $C_{17}H_{18}O_3N_2$ 1) α -Acetylamido- β -[2-Naphtoyl]acetylamidoäthan (B. 25, 2139). — II, 1454.

- C₁₇H₁₈O₃N₂ 2) 2-Acetylamido-1-[2-Acetoxylbenzyl]amidobenzol. Sm. 162° (B. 28, 935). - IV, 556.
 - 3) Resorcinantipyrin. Sm. 103-104° (Bl. [3] 15, 172). IV, 510.
 - 4) α-Benzylidenamido-β-Phenylamido-α-Oxybuttersäure. Sm. 220° (B. **31**, 2716).
 - 5) α -Benzylidenamido- β -Methylamido- α -Oxy- β -Phenylpropionsäure. Sm. 179° u. Zers. (B. 31, 2717).

6) α - Benzylidenamido - β - [4- Methylphenyl] amido - α - Oxypropions äure. Sm. 228° (B. **31**, 2712).

7) 1,22-Anhydrid d.?-Tetrahydro-5 oder 6-Methyl-2-[3,4-Dimethoxylphenyl]benzimidazol-22-Carbonsäure (Tetrahydrotoluylendimethoxyphtalamidon). Sm. 248° (B. 25, 1990). — IV, 619.

8) Aethylester d. Phenylamidoformylphenylamidoessigsäure. Sm. 80° (B. 31, 509).

9) Aethylester d. α-Phenylharnstoff-α-Phenylessigsäure. Sm. 165° (B. **24**, 4153). — **II**, *1326*.

10) β -Phenylmonamid d. β -Phenylamidopropan- $\alpha\beta$ -Dicarbonsäure. Sm. 150° (B. **21**, 1387). — II, *439*.

11) ?-Nitro-l-Methyl-3-Isopropyl-6-Phenylamid d. Benzolcarbonsäure. Sm. 177^o (A. **221**, 167). — II, 1167

12) Di[Phenylamid] d. Oxymethanäthyläther- $\alpha\alpha$ -Dicarbonsäure. Sm. 170-171° (B. 31, 554).

13) α-Benzyl-β-Phenylhydrazid d. Bernsteinsäure. Sm. 142° (B. 26, 678). **– IV**, 812.

14) Phenylamidoformiat d. 4-Oximido-1-Keto-5-Isopropyl-2-Methyl-1,4-Dihydrobenzol. Sm. 131-132° (B. 22, 3106). — III, 365.

 $C_{17}H_{18}O_8N_4$

- C 62.6 H 5.5 O 14.7 N 17.2 M. G. 326.1) s-Di[4-Acetylamidophenyl]harnstoff. Sm. 344° (cor.) (B. 27, 399; A.
- 293, 376). I, 591. 2) s-Di[Benzoylamidoacetyl]harnstoff. Sm. 246° (J. pr. [2] 52, 262).

 $\mathbf{C}_{17}\mathbf{H}_{18}\mathbf{O}_4\mathbf{N}_2$ C 65,0 - H 5,7 - O 20,4 - N 8,9 - M. G. 314.

- 1) Nitrosomorphin + H₂O (B. 4, 123). III, 901. 2) Pyrogallolantipyrin. Sm. 77-78° (Bl. [3] 15, 1049). IV, 510. 3) Phloroglucinantipyrin. Sm. 182—184° (Bl. [3] 15, 1049). IV, 510. 4) Lycoctoninsäure (C. 1895 [1] 1184).

5) α - $[\beta$ - Methyl- β -Phenylhydrazido] - α -Phenyläthan- $\beta\beta$ -Dicarbonsäure. K_2 (B. 29, 814). — IV, 742.

6) Aethylester d. β-Phenylamido-β-[2-Nitrophenyl] propionsäure. Sm. 78° (B. **17**, 1502). — **II**, *1368*.

- 7) Aethylester d. α-Phenyl-4-Nitro-2-Methylphenylamidoessigsäure. Sm. 118,3° (B. **30**, 2771).
- 8) Aethylester d. α-Phenyl-2-Nitro-4-Methylphenylamidoessigsäure. Sm. 106° (B. 30, 2772).
- 9) Benzoat d. 3-Nitro-5-Amido-2-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 280—283°. (2 HCl, PtCl₄) (G. 20, 186). — II, 1148.
- 10) Benzoat d. 2-Nitro-6-Amido-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 158—160° (G. **25** [2] 403).
- 11) 2-Nitrobenzoat d. r-Carvoxim (Ph. Ch. 14, 404). III, 114,
- 12) 3-Nitrobenzoat d. r-Carvoxim (Ph. Ch. 14, 404). III, 114.
- 13) 4-Nitrobenzoat d. r-Carvoxim (Ph. Ch. 14, 404). III, 114.
- 14) Hydrat d. Mesoxalsäure-2-Methylphenylamid. Sm. 127-131° (A. 270, 315). — II, 468. 15) Hydrat d. Mesoxalsäure-4-Methylphenylamid. Sm. 120—130° u. Zers.
- Am. 16, 381).
- 16) Di [4-Methoxylphenylamid] d. Methandicarbonsäure. Sm. 232—2330 (G. 25 [2] 539).
- 17) Mesoxanilid-Aethylalkoholat. Sm. 145—151° u. Zers. (A. 270, 288). - II, 421.
- $\mathbf{C}_{17}\mathbf{H}_{18}\mathbf{O}_{4}\mathbf{N}_{4}$ C 59,6 — H 5,3 — O 18,7 — N 16,4 — M. G. 342. 1) Ricinin. Sm. 194° . $+2 \text{HgCl}_2$ (C. 1895 [1] 853).
- $\mathbf{C}_{17}\mathbf{H}_{18}\mathbf{O_4N}_{10}$ C 47.9 - H 4.2 - O 15.0 - N 32.9 - M. G. 426.
 - 1) Bis[3-Nitrodiazobenzol]pentamethylentetramin. Sm. 184° u. Zers. (A. 288, 245). — IV, 1493.

- $\mathbf{C}_{17}\mathbf{H}_{18}\mathbf{O}_4\mathbf{N}_{10}$ 2) Bis[4-Nitrodiazobenzol] pentamethylentetramin. Sm. 244° u. Zers. (A. 288, 243). IV, 1493. $\mathbf{C}_{17}\mathbf{H}_{18}\mathbf{O}_4\mathbf{S}$ 1) Aethylester d. α-Phenylsulfon-β-Phenylpropionsäure. Sm. 95—96°.
- Na (Am. 5, 118). II, 1369. C 61,8 H 5,4 O 24,2 N 8,5 M. G. 330.
- $C_{17}H_{18}O_5N_2$
 - 1) α^4 -Methyläther- β^4 -Aethyläther d. β -[2-Nitro-4-Oxyphenyl] amido- α -Keto- α -[4-Oxyphenyl]äthan. Sm. 171° (B. 31, 170).
 - 2) Diäthylester d. $\alpha \gamma$ -Dicyan- β -[2-Oxyphenyl]propan- $\alpha \gamma$ -Dicarbonsäure + ½ H₂O. Sm. 140° (J. pr. [2] 50, 20). — II, 1957. 3) Verbindung (aus Benzylidencampher). Sm. 183° (C. 1895 [2] 364).

 - 4) Verbindung (aus d. Verbindung $C_{31}H_{20}O_6N_4$). Sm. 170° (J. pr. [2] 33, 28). — II, *1249*.
- C 57,0 H 5,0 O 22,3 N 15,6 M. G. 358. $C_{17}H_{18}O_5N_4$
 - 1) Di[2-Nitro-4-Dimethylamidophenyl]keton. Sm. 165—166° (Bl. [3] 19, 609).
 - 2) Carbonat d. α-Oxy-α-Phenyläthenylathidoxim. Sm. 131° (B. 18,
- 2480). II, 1554. 1) Benzoat d. 3-Oxy-4-Isopropyl-1-Methylbenzol-6-Sulfonsäure. K+ C₁₇H₁₈O₅S H_9O , $Ca + 4H_9O$, $Ba + 5H_9O$, $Pb + 5H_9O$ (Z. 1869, 50). — II, 1148.
 - 2) Benzoat d. 3-Oxy-4-Isopropyl-1-Methylbenzol-γ-Sulfonsäure. K+ 3H₂O (Z. 1869, 50). — II, 1148.
- 1) $\alpha \gamma$ -Di[4-Methylphenylsulfon]- β -Ketopropan. Sm. 152° (J. pr. [2] 36, C17H18O5S2 427). — II, 825.
- C 50,7 H 4,5 O 23,9 N 20,9 M. G. 402. $C_{17}H_{18}O_6N_6$
 - 1) Dimethyläther d. $\alpha \gamma$ -Dinitro- $\alpha \gamma$ -Di[4-Oxyphenylazo] propan. 181° (B. 25, 1712). — IV, 1415.
- 1) 5-Isopropyl-2-Methyldiphenylketon-?-Disulfonsäure. Ba (J. pr. [2] C17H18O7S2 **35**, 501). — III, 238.
- 1) Trimethylanthracylammoniumchlorid. 2 + PtCl₄ (B. 16, 1637). - $\mathbf{C}_{17}\mathbf{H}_{18}\mathbf{NC1}$ II, 639.
- $\mathbf{C}_{17}\mathbf{H}_{18}\mathbf{NJ}$ 1) Trimethylanthracylammoniumjodid. Sm. 215° u. Zers. (B. 16, 1636). - II. 639.
- 1) s-Phenyl-[1,2,3,4-Tetrahydro-2-Naphtyl]thioharnstoff. (B. 21, 858). II, 588. C17H18N9S Sm. 161°
 - 2) s-Phenyl-[5,6,7,8-Tetrahydro-1-Naphtyl]thioharnstoff. Sm. 1530 (B. 21, 1794). - II, 587.
 - 3) 2-Aethylamido-4,5-Diphenyl-4,5-Dihydrothiazol. Sm. 139°. 2+
 - (2HCl, PtCl₄) (B. 28, 1901). 4) 2-[2-Methylphenyl]imido-3-[2-Methylphenyl]tetrahydrothiazol.
 - Sm. 91° (B. 15, 1317). II, 465. 5) 2-[2-Methylphenyl]imido-3-[4-Methylphenyl] tetrahydrothiazol.Sm. 82° (B. 15, 1315). — II, 499.
 - 6) 2-[4-Methylphenyi]imido-3-[4-Methylphenyl]tetrahydrothiazol.
 Sm. 112° (115°). HCl, H₂SO₄ (B. 14, 1492; 15, 1314). II, 499.
- $\mathbf{C}_{47}\mathbf{H}_{18}\mathbf{N}_{2}\mathbf{Cl}$ 1) Chloräthylat d. 5-Methyl-3-[2-Pyridyl]-1-Phenylpyrazol. $2+\mathrm{PtCl}_{4}$ (M. 17, 450). — IV, 1162.
- 1) Jodäthylat d. 5-Methyl-3-[2-Pyridyl]-1-Phenylpyrazol. Sm. 181 bis $C_{17}H_{18}N_{8}J$ 183° u. Zers. (M. 17, 450). — IV, 1162.
- C17 H18 N4S 1) \alpha-Allyl-\beta-[4-Phenylhydrazonmethylphenyl]thioharnstoff. Sm. 136°
- (J. pr. [2] 56, 107). IV, 753. 1) Di[1,2,4-Toluylendiamin] cyanurchlorid. Zers. bei 172° (B. 19, 2058). $\mathbf{C}_{17}\mathbf{H}_{18}\mathbf{N}_{7}\mathbf{C}\mathbf{I}$ - IV, 606.
- C 80,6 H 7,5 O 6,3 N 5,5 M. G. 253. $C_{17}H_{19}ON$ 1) 6-Oxy-3-tert. Butyl-1-Phenylimidomethylbenzol. Sm. 87° (Am. 16, 638). — III, *91*.
 - 2) 5-Oxy-4-Isopropyl-2-Phenylimidomethyl-1-Methylbenzol. Sm. 1420 (B. 16, 2097). — III, 90.
 - 3) 6-Benzylidenamido-3-Oxy-4-Propyl-1-Methylbenzol. Sm. 148—150° (G. 25 [2] 390). - III, 32.
 - 4) 2-Oxymethylphenyl-4-Isopropylbenzylidenamin. Sm. 103° (B. 25, 2973). — III, 56.
 - 5) Methyläther d. 2-[4-Oxybenzylidenamido-1,3,5-Trimethylbenzol. Sm. 67° (A. **274**, 241). — III, 82.

C17 H19 ON

- 6) β -[2-Methylphenyl]amido- α -Keto- α -Phenylbutan. Sm. 91° (Bl. [3] **15**, 1102).
- 7) β -[4-Methylphenyl]amido- α -Keto- α -Phenylbutan. Sm. 96° (Bl. [3] **15**, 1102).
- 8) β -Phenylamido- α -Keto- α -2, 5-Dimethylphenylpropan. Sm. 110—111°
- (C. 1897 [2] 576). 9) α -[2,4-Dimethylphenyl] amidoäthylphenylketon. Sm. 161—161,5° (Bl. [3] 17, 74).
- 10) 4-Diāthylamidodiphenylketon.
 Sm. 78° (A. 217, 265). III, 183.
 11) α-Oximido-αβ-Diphenylpentan.
 Sm. 100° (B. 22, 346). III, 238.
 12) γ-Oximido-αε-Diphenylpentan.
 Sm. 92° (A. 261, 188). III, 237.
- 13) δ -Oximido- $\gamma \delta$ -Diphenyl- β -Methylbutan. Sm. 69—70° (B. 22, 347). III, 238.
- 14) β -Oximido- $\alpha \gamma$ -Di[4-Methylphenyl] propan. Sm. 106° (G. 21, 102). III, *238*.
- 15) N-Benzyl-4-Isopropylbenzaldoxim. Sm. 156° (B. 27, 1958).
 16) N-[4-Isopropylbenzyl] benzaldoxim. Sm. 139° (B. 27, 1958).
- 17) α-Acetylamidodi [4-Methylphenyl] methan. Sm. 159° (157—158°) (B. **24**, 2799; **31**, 1773). — II, *638*.
- 18) Trimethylanthracylammopiumhydrat. Chlorid, Jodid siehe diese (B. **16**, 1637). — **II**, *639*.
- 19) α -[2-Oxyphenyl]- β -1,2,3,4-Tetrahydrochinolyl[2] äthan (Salicyläthantetrahydrochinolin). Sm. 121°. HCl (B. 27, 1981). - IV, 402
- 20) α-[4-Oxyphenyl]-β-1,2,3,4-Tetrahydrochinolyl[2]äthán. Sm. 115°. HCl (B. 27, 1982). IV, 402.
- 21) Phenylamid d. isom. ?-δ-Phenylvaleriansäure. Sm. 101-102° (A. **261**, 305). — II, 1393.
- 22) Phenylamid d. α-Benzylbuttersäure. Sm. 88-89° (A. 261, 307). -II, 1394.
- 23) Phenylamid d. 4-Isopropylphenylessigsäure. Sm. 104° (G. 21 [1] 56). - II, 1395.
- 24) 4-Isopropyl-2-Methylphenylamid d. Benzolcarbonsäure. Sm. 165° (A. **221**, 167). — II, 1167.
- 25) 5-Isopropyl-2-Methylphenylamid d. Benzolcarbonsäure. Sm. 102° (B. 20, 1263). — II, 1167.
- 26) 4-Isopropylbenzylamid d. Benzolcarbonsäure. Sm. 93° (B. 22, 932). • II, *1167*

C17H19ON3

- C 72,6 H 6,8 O 5,7 N 14,9 M. G. 281.1) γ-Semicarbazon-αα-Diphenylbutan. Sm. 171° (Soc. 71, 678).
- 2) β -Phenylbenzylhydrazon- γ -Oximidobutan. Sm. 114—115° (J. pr. [2] 57, 162 Anm.).
- 3) $3-[\alpha-Phenylhydrazonäthyl]-5-Acetyl-2,6-Dimethylpyridin. HNO₃$ (B. 30, 2298). - IV, 800.

4) Phenylazocyancampher. Sm. 155° u. Zers. — IV, 1481. C 75,8 — H 7,1 — O 11,9 — N 5,2 — M. G. 269.

 $C_{17}H_{19}O_{2}N$

- 1) γ -Aethyläther d. γ -Imido- $\beta\gamma$ -Dioxy- $\alpha\alpha$ -Diphenylpropan. HCl (A. 248, 41). **— II**, *1699*.
- 2) 6-Benzoylamido-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 178—1790 (G. **25** [2] 389).
- 3) Benzoat d. 3-Diäthylamido-l-Oxybenzol. Sm. 22,5-23°; Sd. 236°, s
- B. **29**, 509). 4) Benzoat d. r-Carvoxim. Sm. 97º (A. 252, 149; Ph. Ch. 14, 402). — III, 114.
- 5) Benzoat d. i-Carvoxim. Sm. 95°. HCl (B. 18, 1730, 2222; A. 252, 149). — III, *113*.
- 6) Benzoat d. Isocarvoxim. Sm. 1120 (B. 20, 2074). III, 114.
- 7) 3,5-Diacetyl-2,6-Dimethyl-4-Phenyl-1,4-Dihydropyridin. Sm. 180°; Sd. 225—235°₂₅ (B. **31**, 1026).
- 8) Desoxymorphin (J. 1871, 779). III, 907.
- 9) α -Phenylamido- α -[4-Isopropylphenyl]essigsäure. Sm. 158° u. Zers. (145—146° u. Zers.) (B. 31, 2706; G. 21 [1] 48). II, 1395.
- 10) Methylester d. 4-Dimethylamidodiphenylmethan-2'-Carbonsäure. Sm. 62° (C. 1898 [1] 1296). 11) Aethylester d. α-Diphenylamidopropionsäure. Sd. 217029 (B. 31, 2679).

- $C_{17}H_{19}O_2N$ 12) Aethylester d. α -Methylphenylamidophenylessigsäure. Sm. 72° (B. **30**, 3176).
 - 13) Aethylester d. Phenyl-3-Methylphenylamidoessigsäure. Sm. 109° (B. **30**, 2468).
 - 14) Aethylester d. Phenyl-4-Methylphenylamidoessigsäure. Sm. 85 bis 86° (B. 30, 2472).
 - 15) Aethylester d. α -[2-Methylphenyl]amido- α -Phenylessigsäure. Fl. (J. 1878, 781). — II, 1324.
 - 16) Aethylester d. α-[4-Methylphenyl]amido-α-Phenylessigsäure. Sm. 89-90° (J. 1878, 781). II, 1324.
 - 17) Aethylester d. Di [4-Methylphenyl] amidoameisensäure. Sm. 60 bis 62° (B. **25**, 1824). — **II**, 494.
 - 18) Aethylester d. Benzyl-[2-Methylphenyl]amidoameisensäure. Fl. (B. 25, 1825). — II, 525.
 - 19) Aethylester d. Dibenzylamidoameisensäure. Fl. (B. 25, 1824). II, 525.
 - 20) 2-Methyl-5-Isopropylphenylester d. Phenylamidoameisensäure. Sm. $134-135^{\circ}$ (B. **26**, 2086). — II, 767.
 - 21) 3-Methyl-6-Isopropylphenylester d. Phenylamidoameisensäure. Sm. 104° (J. pr. [2] 41, 320). II, 771.
 22) β-[2,4-Dimethylphenoxyl]äthylamid d. Benzolcarbonsäure. Sm.
- 117—118° (B. **29**, 2401). C 68,7 H 6,4 O 10,8 N 14,1 M. G. 297. $\mathbf{C}_{17}\mathbf{H}_{19}\mathbf{O}_{2}\mathbf{N}_{3}$
 - 1) α -Butyrylamido- $\alpha\beta$ -Diphenylharnstoff. Sm. 155° (B. 27, 1517). IV, 675.
 - 2) Phenyl-4-Isopropylbenzoylamidoharnstoff (Cuminoylphenylsemicarb-
 - azid). Sm. $20\overline{9}^{\circ}$. IV, $67\overline{5}$. 3) Aethyläther d. s-Phenyl-[α -Oximido- β -Phenyläthenyl] harnstoff. Sm. 148° (B. 18, 2482). — II, 1315.
 - 4) α-Phenylhydrazon-α-[3-Nitro-4-Propylphenyl]äthan. Sm. 138—139° (B. 21, 2226). - IV, 773.
 - 5) α -Phenylhydrazon- α -[3-Nitro-4-Isopropylphenyl] äthan. Sm. 138° (B. 21, 2227). - IV, 773.
 - 6) Diäthylamidoazobenzolcarbonsäure. Sm. 125°. Ba, Ag (B. 10, 526).
 - IV, 1461.
 7) Amid d. α-Phenylnitrosamido-α-[4-Isopropylphenyl] essigsäure.
 Sm. 132° (B. 31, 2706).
 C 71,6 H 6,7 O 16,8 N 4,9 M. G. 285.
 C 71,6 H 6,7 O 16,8 N 4,9 M. G. 285.
- $C_{17}H_{19}O_3N$
 - 1) α^4 -Methyläther- β^4 -Aethyläther d. β -[4-Oxyphenyl]amido- α -Ketoα-[4-Oxyphenyl]äthan. Sm. 1240 (B. 31, 170).
 - 2) 4³, 4⁴-Dimethyläther-1-Aethyläther d. 4-[3,4-Dioxybenzyliden]amido-1-Oxybenzol $+ 2H_2O$ (Methylvanillin-p-Phenetidin). Sm. 210° (C. **1897** [1] 1121).
 - 3) 3-Methyläther-4-Benzyläther d. 3,4-Dioxy-1-[a-Oximidopropyl]benzol. Sm. 118,5° (C. 1897 [2] 1183).
 - 4) Diäthyläther d. 4-Benzoylamido-1,3-Dioxybenzol. Sm. 113,5° (B. **20**, 1127). — **II**, 1180.
 - 5) Benzyläther d. Aethyl-4-Methoxylbenzhydroxamsäure. Fl. (A. 281, 219). II, 1533.
 - 6) 6-[4-Methylphenyl]amido-3-Oxy-5-Isopropyl-2-Methyl-1,4-Benzo-

 - chinon. Sm. 164—165° (B. 16, 902). III, 369.

 7) Cinnamylscopolein. HBr, HNO₃ (C. 1895 [1] 435).

 8) Piperin. Sm. 128—129,5° (127—128°). (HCl, HgCl₂), (2 HCl, PtCl₄), (HJ,J₂) (A. 74, 204; 77, 204; 95, 107; J. 1854, 525; 1857, 413; 1877, 891; B. 15, 1390; J. pr. [2] 3, 328; C. 1896 [2] 127). III, 926.

 9) Morphin + H₂O. subl. 191—193°₀ (B. 29, 2242). Salze meist bek. Lit. bedeutend. III, 895.

 - 10) Base (aus Scopolamin). Sm. 102° (u. 182°) (C. 1898 [1] 1198).
 - 11) Aethylester d. β Oxy- $\alpha\beta$ Diphenyläthylamidoameisensäure. 148–148,5° (B. 29, 1211).
 - 12) Amid d. α-Aethoxyl-6-Oxy-3-Methyldiphenylessigsäure. Sm. 103 bis 105° (B. 31, 2820).
 - 13) 2-Naphtylmonamid d. Pentan-αγ-Dicarbonsäure. α-Modif. Sm. 129,5°; β-Modif. Sm. 142—143° (A. 292, 216).

 $\mathbf{C}_{17}\mathbf{H}_{20}\mathbf{ON}_{2}$

- $C_{17}H_{19}O_3N$ 14) 1-Naphtylmonamid d. mal. Pentan- $\beta\delta$ -Dicarbonsäure. Sm. 155° (A. 285, 238).
 - 15) 2-Naphtylmonamid d. mal. Pentan- $\beta\delta$ -Dicarbonsäure. Sm. 151° (A. **285**, 237).
 - 16) 2-Naphtylmonamid d. β -Methylbutan- $\alpha\beta$ -Dicarbonsäure. Sm. 179° (A. **298**, 176).
 - 17) 2-Naphtylmonamid d. β -Methylbutan- $\beta\gamma$ -Dicarbonsäure. Sm. 1530 (A. **285**, 235).
 - 18) Verbindung (aus l-Scopolamin). (2 HCl, PtCl₄) (C. 1898 [1] 1195).
 - 19) Verbindung (aus ααγγ-Tetracetyl-β-Phenylpropan). Sm. 1456 (A. 281, 82), **- III**, 324.
- C 65,2 H 6,1 O 15,3 N 13,4 M. G. 313. $C_{17}H_{19}O_3N_3$
 - 1) ?-Nitro-4,4'-Di[Dimethylamido]diphenylketon. Sm. 144° (B. 22, 1883), - III, 186.
 - 2) N-Aethyläther d. α-Oxy-α-Phenyläthenylphenyluramidoxim. Sm. 119° (B. 18, 2479). — II, 1553.
- C₁₇H₁₉O₃Cl₃ 1) 1-Chlor-2-Naphtylester d. 3,5-Dichlor-2-Oxybenzol-1-Carbonsäure, Sm. 155—157° (*G*. **28** [1] 156). C 67,8 — H 6,3 — O 21,3 — N 4,6 — M. G. 301.
- $C_{17}H_{19}O_4N$
 - 1) Benzoat d. Camphonitrosophenol. Sm. 131° (138°) (Bl. [3] 1, 471; Soc. 73, 999). — III, 494.
 - 2) Diäthylester d. δ -Phenylimido- $\alpha\beta$ -Pentadiën- $\alpha\gamma$ -Dicarbonsäure, Sm. 180º (Soc. 71, 326).
- 3) Diäthylester d. 2-Naphtylamidomalonsäure. Sm. 88° (B. 31, 1816), C 62,0 H 5,8 O 19,4 N 12,8 M. G. 329. $C_{17}H_{19}O_4N_3$
- Propyldi[2-Nitrobenzyl]amin. Sm. 31° (B. 26, 2586). II, 520.
 Propyldi[4-Nitrobenzyl]amin. Sm. 77° (B. 30, 65).
 C 64,4 H 6,0 O 25,2 N 4,4 M. G. 317. $C_{17}H_{19}O_5N$
 - 1) Dioxymorphin? (M. 10, 102). III, 901. 2) Acetat d. Salicylscopoleïn (C. 1895 [1] 61).
 - 3) Diäthylester d. 2,4-Dimethyl-6-[2-Furanyl]pyridin-3,5-Dicarbonsäure. Sm. $40-41^{\circ}$. (2 HCl, PtCl, HNO₃ (B. **25**, 2406). — **IV**, 370. C 61,3 — H 5,7 — O 28,8 — N 4,2 — M. G. 333.
- $C_{17}H_{19}O_6N$ Diäthylester d. γ-Phtalylamidopropan-αα-Dicarbonsäure. Sm. 42 bis 44° (B. 24, 2449). — II, 1812.
 C 52,4 — H 4,9 — O 24,7 — N 18,0 — M. G. 389.
- $C_{17}H_{19}O_6N_5$ 1) α -Isoamyl- α -Phenyl- β -[2, 4, 6-Trinitrophenyl] hydrazin. Sm. 58° (B.
- 30, 2821). IV, 1498. 1) Diäthylester-2-Phenylester d. Phenylphosphorsäure-2-Carbon- $C_{17}H_{19}O_6P$
- säure (Salol-O-Phosphinsäurediäthylester). Sd. 105-115° 18 (B. 31, 2176). $\mathbf{C}_{17}\mathbf{H}_{19}\mathbf{N}_{2}\mathbf{Cl}$ 1) Chlorathylat d. 1- $\mathbf{\hat{A}}$ ethyl-2-Phenylbenzimidazol $+2\ddot{\mathbf{H}}_{2}\dot{\mathbf{0}}$. $2+\mathbf{PtCl}_{4}$
- (A. 210, 361). IV, 1007. 1) Jodäthylat d. 1-Aethyl-2-Phenylbenzimidazol + H_2O . + J_3 (A. 210, $C_{17}H_{19}N_{2}J$ 360; Am. 5, 419). — IV, $_{\psi}1007$. 1) α -sec. Butylidenamido- $\alpha\beta$ -Diphenylthioharnstoff. Sm. 174° (B. 30,
- $C_{17}H_{19}N_3S$ 1016). — IV, 768. 2) α -Isopropylidenamido- β -Phenyl- α -[4-Methylphenyl]thioharnstoff,
 - Sm. 164° (B. 30, 1017). IV, 810.
- $\mathbf{C}_{17}\mathbf{H}_{19}\mathbf{N}_{4}\mathbf{J}$
- Sm. 164° (D. 30, 1011). 1V, 370.
 Jodmethylat d. 1,4-Di[2-Methylphenyl]-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 198° (Soc. 57, 53). IV, 1234.
 Jodmethylat d. 1,4-Di[4-Methylphenyl]-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 242° (Soc. 57, 50). IV, 1234.
 C 76,1 H 7,5 O 6,0 N 10,4 M. G. 268.
 - 1) α -Phenyl- β -[4-Isopropylbenzyl] harnstoff. Sm. 143,5 (146°) (B. 8, 1151; 20, 2415). — II, 561.
 - 2) $Di[\beta$ -Phenyläthyl]harnstoff. Sm. 108—109° (G. 9, 568). II, 539.
 - 3) Di[4-Aethylphenyl]harnstoff. Sm. 217° (B. 17, 2804). II, 537.
 - 4) $\alpha\alpha$ -Diäthyl- $\beta\beta$ -Diphenylharnstoff. Sm. 54° (B. 9, 711). II, 381. 5) $\alpha\beta$ -Diäthyl- $\alpha\beta$ -Diphenylharnstoff. Sm. 79° (B. 9, 712). II, 380.
 - 6) s-Di[2, 3-Dimethylphenyl]harnstoff. Sm. 240—241° (u. 207—209°) (Bl. [3] **17**, 732).
 - 7) s-Di[2,4-Dimethylphenyl]harnstoff. Sm. 263° (B. 3, 226; 21, 526), - II, 544.
 - 8) s-Di[2,5-Dimethylphenyl]harnstoff. subl. bei 285° (Bl. [3] 17, 732),

- C₁₇H₂₀ON₂ 9) s-Di[3,4-Dimethylphenyl]harnstoff. Sm. 234—235° (*Bl.* [3] 17, 732). 10) s-Di[3,5-Dimethylphenyl]harnstoff. Sm. 250—251° (*B.* 25, 1089).
 - 11) s-Di[3-Methylbenzyl]harnstoff. Sm. 137° (B. 21, 2703). II, 545. 12) α -[4-Methylphenyl]- β -[2,4,5-Trimethylphenyl|harnstoff. Śm. 218° (B. 25, 1361). - II, 552.
 - 13) 4-Methylphenyl-4-Isopropylbenzylnitrosamin. Sm. 67° (A. 245, 295). - II, 560.
 - 14) α -Benzoylamido- γ -[4-Methylphenyl]amidopropan (B. 30, 2508).
 - 15) 4,4'-Di[Dimethylamido]diphenylketon (Tetramethyldiamidobenzophenon). Sm. 174° (172—172,5°); Sd. oberh. 360°. 2 HCl, (2 HCl, PtCl₄), (2 HCl, + 2 ClJ), Pikrat (B. 9, 716, 1900; 19, 109; 20, 2845, 3262; 31, 1002, 1144; Bl. [3] 7, 657; R. 6, 366). III, 185.
 - 16) Isotetramethyldiamidobenzophenon. Sm. 152°. (2HCl, PtCl₄) (B. 12, 1168). — III, 186.
 - 17) 4-[4-Dimethylamidophenyl]imido-l-Keto-3-Isopropyl-l, 4-Dihydrobenzol. Sm. 73-74° (Bl. [3] 13, 983). — IV, 599.
 - 18) 4-[4-Dimethylamidophenyl]imido-1-Keto-2-Methyl-5-Aethyl-1,4-Dihydrobenzol. Sm. 77° (Bl. [3] 13, 897). III, 364.
 - 19) 6-Oxy-3-tert. Butyl-1-Phenylhydrazonmethylbenzol. Sm. 178° (Am. 16, 637).
 - 20) Phenyl-6-Oxy-3-tert. Butylbenzylidenhydrazin. Sm. 178º (Am. 16, 637). — IV, 761.
 - 21) β -Propionyl- $\alpha \alpha$ -Di[2-Methylphenyl]hydrazin. Sm. 167° (B. 25, 1079). **- IV**, 801.
 - 22) β -Propionyl- $\alpha\alpha$ -Di[4-Methylphenyl]hydrazin. Sm. 171,5° (B. 25, 1080). **— IV**, 805.
 - 23) Isobutyläther d. 4'-Oxy-4'-Methylazobenzol. Sm. 90° (A. 287, 162). · IV, 1413.
 - 24) 3,6-Di[Dimethylamido] xanthen (Anhydroverbindung d. Di[4-Dimethylamido-1-Oxyphenyl] methan). Sm. 116°. (2 HCl, PtCl₄) (B. 27, 3303; J. pr. [2] 54, 229).
 - 25) Aethyloxydhydrat d. 1-Aethyl-2-Phenylbenzimidazol. Sm. 132°. Chlorid + 2H₂O, 2Chlorid + PtCl₄, Jodid, Jodid + J₂, Sulfat + H₂O (A.
 - 210, 360; Am. 5, 419. IV, 1007. 26) Amid d. α-Phenylamido-α-[4-Isopropylphenyl]essigsäure. Sm. 159° (B. 31, 2706).
 - 27) Phenylamid d. α-Phenylamidoisovaleriansäure. Sm. 105-106° (B. 30, 2319).
 - 28) 4-Methylphenylamid d. α -[4-Methylphenyl]amidopropionsäure. Sm. 158° (B. **30**, 2474).
- C 68.9 H 6.8 O 5.4 N 18.9 M. G. 296.C₁₇H₂₀ON₄
 - 1) 4'-Dimethylamido-5-Acetylamido-2-Methylazobenzol. Sm. 200°. HCl (A. 234, 355). — IV, 1385. 2) 4'-Dimethylamido-3-Acetylamido-4-Methylazobenzol. Sm. 192° (A.
 - **234**, 361). **IV**, *1383*.
- $\mathbf{C}_{17}\mathbf{H}_{20}\mathbf{OBr}_{2}$ $\mathbf{C}_{17}\mathbf{H}_{20}\mathbf{O}_{2}\mathbf{N}_{2}$

 - γγ-Di[2-Oxymethylphenylamido] propen (B. 25, 2970). II, 1062.
 Diäthyläther d. 4-Oxyphenylimido-4-Oxyphenylamidomethan. Sm. 114°. HCl, Acetat (C. 1898 [2] 523).
 - 3) Aethyläther d. 5-[4-Acetylamidophenyl]amido-2-Oxy-1-Methylbenzol. Sm. 173° (A. 287, 154).
 - 4) Aethyläther d. 6-[4-Acetylamidophenyl]amido-3-Oxy-1-Methylbenzol. Sm. 97—98° (A. 287, 158).
 - 5) Aethyläther d. 2-[4-Oxyphenyl]amido-5-Acetylamido-1-Methyl-Sm. 112-113° (A. 287, 174). benzol.
 - 6) Aethyläther d. 2-Acetylamido-5-[4-Oxyphenyl]amido-1-Methylbenzol. Sm. 156° (A. 287, 166).
 7) Carbanilido-r-Carvoxim. Sm. 133° (B. 22, 3104). III, 113.
 8) Carbanilido-Isocarvoxim. Sm. 150° (B. 22, 3104). III, 114.
 9) Protechine (SHO). Oxidate (A. 287, 287).

 - 9) Protochinamicin. (2HCl, PtCl₄) (A. 207, 305). III, 857.

 $C_{17}H_{20}O_{2}N_{2}$ 10) ?-Diamido- $\alpha\alpha$ -Di[4-Methylphenyl] propionsäure. 2HCl, (2HCl, PtCl,) (B. 15, 1477). — II, 1472.

11) Aethylester d. γ-[2-Naphtyl] hydrazonvaleriansäure. Sm. 129—130°
 (A. 242, 368). — IV, 930.

12) Acetat d. $\beta\gamma$ -Di[Phenylamido]- α -Oxypropan. Sm. 99—100° (J. 1888, 1063). — II, 426.

13) Acetat d. α -Phenyl- β -[5-Oxy-1,2,4-Trimethyl-?-Phenyl]hydrazin. Sm. 123° (B. 24, 2308). — IV, 1506.

14) Acetat d. 4'-Oxy-2,4,5-Trimethyl-s-Diphenylhydrazin. Sm. 102 bis 103° (B. **24**, 2313). — IV, 1505. C 65,4 — H 6,4 — O 10,3 — N 17,9 — M. G. 312.

 $C_{17}H_{20}O_2N_4$

- 1) 4-Nitro-2'-Diäthylamido-1'-Methylazobenzol. Sm. 107,5-108° (B. **28**, 1892). — IV, 1383.
- 2) α -Phenyl- $\alpha\alpha$ -Di[5-Keto-3,4-Dimethyl-4,5-Dihydropyrazolyl-4]methan. Sm. 1290 (J. pr. [2] 52, 40). — IV, 1289.
- 3) Di[Phenylhydrazon] d. Methyltetrose. Sm. 171-174° (B. 29, 1382). - IV, 790.
- 4) Di[Phenylhydrazid] d. Propan-αα-Dicarbonsäure. Sm. 233° (B. 21, 1242). — IV, 704.
 - Verbindung (aus 4-Methylphenylhydrazin u. 1-p-Tolyl-3,5-Pyrazolidon). Sm. 182° (B. 30, 1023). IV, 808. C 68,0 H 6,7 O 16,0 N 9,3 M. G. 300.
- $C_{17}H_{20}O_3N_2$ 1) 4-Methyläther- α -Aethyläther d. α -Oxy- β -Phenyl- α -[4-Oxybenzyl]harnstoff. Sm. 92° (*J. pr.* [2] **56**, 82). 2) Diäthyläther d. s-Di[**4**-Oxyphenyl]harnstoff. Sm. 225—226° (*B.* **25**,

1090; C. 1898 [1] 501). — II, 720.

- 3) Di[3-Dimethylamidophenylester] d. Kohlensäure. Sm. 137—138°; Sd. 265°₁₅. 2 HCl, (2 HCl, PtCl₄) (B. **29**, 503).
- 4) Aethylester d. 6-Oxy-2-[4-Isopropylphenyl]-1,3-Diazin-4-Methyl-
- carbonsaure. Sm. 128° (B. 30, 2008). IV, 990.
 C 62,2 H 6,1 O 14,6 N 17,1 M. G. 328.
 1) Di[Phenylhydrazon] d. d-Arabinose. Sm. 159—160° (162—163°) (B. 26, 735; 31, 1576). IV, 790.
 2) Di[Phenylhydrazon] d. 1-Arabinose. Sm. 160° (157—158°) (A. 254, C17H20O3N4
 - 304; B. **20**, 345). IV, 790.
 - 3) Di[Phenylhydrazon] d. i-Arabinose. Sm. 163° (169-170° cor.) u. Zers. (B. **26**, 637, 742, 2491). — **IV**, 790.
 - 4) Di[Phenylhydrazon] d. 1-Xylose. Sm. 155—160° (160°) (A. 254, 304; B. 23, 385). — IV, 790.
 - 5) Di[Phenylhydrazon] d. i-Xylose. Sm. 210—215° u. Zers. (B. 27, 2486). **IV**, 790.
 - 6) Di[Phenylhydrazid] d. α -Oxypropan- $\alpha\beta$ -Dicarbonsäure. Sm. 231 bis
 - 232° (B. **25**, 202). **IV**, 712. 7) Di[Phenylhydrazid] d. β-Oxypropan-αγ-Dicarbonsäure. Sin. 234 bis 235° (B. **24**, 3251). — **IV**, 712.
- C 57,3 H 5,6 O 13,5 N 23,6 M G 356. $\mathbf{C}_{17}\mathbf{H}_{20}\mathbf{O}_{3}\mathbf{N}_{6}$ 1) Dibenzylidentriureïd (A. 151, 192). — III, 33.
- C 64,6 H 6,3 O 20,3 N 8,8 M. G. 316. $\mathbf{C}_{17}\mathbf{H}_{20}\mathbf{O}_{4}\mathbf{N}_{2}$ 1) **4-**Biphenylhydron d. Arabinose. Sm. 138—140° u. Zers. (B. 27, 3107).
 - **IV**, 970. 2) Benzoat d. Terpinennitrosit. Sm. 77-78° (A. 245, 274). — III, 532.
 - 3) Diäthylester d. 1-Phenylpyrazol-3-Carbonsäure-5-Aethyl-\(\beta\)-Carbonsäure. Sm. 83-84° (B. 21, 2585; 31, 625). — IV, 722.
- C 59.3 H 5.8 O 18.6 N 16.3 M. G. 344. $C_{17}H_{20}O_4N_4$ 1) Di[2-Nitro-4-Dimethylamidophenyl] methan. Sm. 172° (191,5°) (B. 27, 2323, 3162; J. pr. [2] 54, 241). — IV, 974. 2) Di [3-Nitro-4-Dimethylamidophenyl]methan. Sm. 123—124° (B. 27,
 - 3161). IV, 974. 3) α -Isoamyl- α -Phenyl- β -[2,4-Dinitrophenyl] hydrazin. Sm. 104° (B. 30,
 - 2821). IV, 1498.
- 1) γγ-Diphenylsulfonpentan. Sm. 130—131° (A. 253, 162). II, 784. $C_{17}H_{20}O_4S_2$ 2) $\beta \gamma$ -Diphenylsulfon- β -Methylbutan? Fl. (J. pr. [2] 51, 305). 3) $\alpha\beta$ -Di[2-Methylphenylsulfon] propan. Fl. (J. pr. [2] 54, 528).

 $\mathbf{C}_{17}\mathbf{H}_{20}\mathbf{O}_4\mathbf{S}_2$ 4) $\alpha\beta$ -Di[4-Methylphenylsulfon]propan. Sm. 147—148° (143—144°) (A. 283, 200, 203; J. pr. [2] 51, 292).

5) αγ-Di[2-Methylphenylsulfon] propan. Fl. (J. pr. [2] 54, 529).

6) $\alpha \gamma$ -Di[4-Methylphenylsulfon] propan. Sm. 124—1250 (A. 283, 200; B. 24, 1834; J. pr. [2] 51, 296). — II, 824. C 61,4 — H 6,0 — O 24,1 — N 8,4 — M. G. 332.

 $C_{17}H_{20}O_5N_2$

- 1) Aethylester d. Nitroso-Nor-l-Ecgoninbenzoat. Fl. (B. 26, 1486). III, 863.
- 2) Diathylester d. 4-Acetyl-5-Phenyl-4,5-Dihydropyrrol-3,4-Dicar-
- Diathylester d. 4-Acetyl-5-Phenyl-4, 5-Dihydropyrrol-3, 4-Dicarbonsäure? Sm. 76° (B. 28, 222). IV, 893.
 Diäthylester d. Säure C₁₃H₁₂O₅N₂ (aus Diazoessigsäureäthylester u. Benzalacetessigsäureäthylester). Sm. 76°. IV, 952.
 C 52,6 H 5,2 O 20,6 N 21,6 M. G. 388.
 Disalicyltriureid. Cu (A. 151, 200). III, 74.
 C 58,6 H 5,7 O 27,6 N 8,1 M. G. 348.
 m-Nitro-d-Cocaïn. Fl. HCl, (2HCl, PtCl₄), (HCl, AuCl₃), HBr, HJ, HNO. (B 27, 1880). III, 868.

 $C_{17}H_{20}O_5N_6$

 $C_{17}H_{20}O_6N_2$

- HNO₃ (B. 27, 1880). III, 868. 2) m-Nitro-1-Cocaïn. Sm. 76—77°. HCl, (2HCl, PtCl₄), HNO₃ (B. 27, 1876). — III, *867*.

3) Verbindung (aus Cannabinol) (C. 1898 [1] 948). C 54,2 — H 5,3 — O 25,5 — N 14,9 — M. G. 376. $C_{17}H_{20}O_6N_4$

- 1) Amidobenzol + 2,4,6-Trinitro-3-Pseudobutyl-1-Methylbenzol. Sm. 58-59° (B. 24, 2838). II, 313.
- 1) ?-Benzyl-4-Isopropyl-1-Methylbenzol-?-Disulfonsäure (J. 1878, 402). $\mathbf{C}_{17}\mathbf{H}_{20}\mathbf{O}_{6}\mathbf{S}_{2}$ **— II**, 241.
- 1) α -Aethylsulfon- $\beta\beta$ -Diphenyldisulfonpropan. Sm. 138-139° (B. 24, $C_{17}H_{20}O_6S_3$ 1513). — II, 783. C 56,0 — H 5,5 — O 30,8 — N 7,7 — M. G. 364.

 $\mathbf{C}_{17}\mathbf{H}_{20}\mathbf{O}_7\mathbf{N}_2$

1) Dinitropodocarpinsäure. Sm. 203°. $K_2 + 5H_2O$, $Ba + 4H_2O$, $Ag_2 +$ $4|H_2O$ (A. 170, 229). — II, 1686.

 \dot{C} 53,7 — H 5,2 — O 33,7 — N 7,4 — M. G. 380. $\mathbf{C}_{17}\mathbf{H}_{20}\mathbf{O}_{8}\mathbf{N}_{2}$

 $\mathbf{C}_{17}\mathbf{H}_{20}\mathbf{N}_{2}\mathbf{S}$

- 1) 1,2-Methylen-3,4-Dimethyläther d. 5,6-Di[Diacetylamido]-1,2,3,4-Tetraoxybenzol. Sm. 133° (B. 23, 2290). — II, 1030. 2) Verbindung (aus d. Verb. $C_{17}H_{20}O_6N_2$ aus Cannabinol) (C. 1898
- 1] 948).
- $C_{17}H_{20}O_8N_3$ 1) Säure (aus Gelseminin) = $(C_{17}H_{20}O_8N_3)_X$. Sm. noch nicht bei 350° (B. 26, 1060). — III, 884.
- C₁₇H₂₀NJ 1) α -Methylallylphenylbenzylammoniumjodid. Sm. 140—142° u. Zers. (B. **32**, 519).
 - 2) β-Methylallylphenylbenzylammoniumjodid. Sm. 158—159° u. Zers. (B. **32**, 522).
 - 3) Jodmethylat d. 1-Methyl-6-Phenyl-1,2,3,4-Tetrahydrochinolin + H₂O. Sm. 194—195° (A. 230, 27). — IV, 401.
 - 1) α -Methyl- β -Propyl- $\alpha\beta$ -Diphenylthioharnstoff. Sm. 56,5° (B. 21, 103). **– II**. 397.
 - 2) s-Di[2-Aethylphenyl]thioharnstoff. Sm. $141-142^{\circ}$ (B. 17, 768). II, 536.
 - 3) s-Di[4-Aethylphenyl]thioharnstoff. Sm. 144° (B. 16, 2019; 17, 768). **–** II, 537.

 - 4) s-Di [\$\alpha\$-Phenyläthyl] thioharnstoff. Sm. 163° (\$\begin{align*} B_1 & 26 & 2168 \end{align*}. II, 538. 5) s-Di [\$\beta\$-Phenyläthyl] thioharnstoff. Sm. 84° (\$\beta\$. 19, 1824). II, 539. 6) \$\alpha\$\beta\$-Di\beta\text{thin}\text{thioharnstoff.} Sm. 75,5° (\$\beta\$. 20, 1631). —
 - Iİ, 397.
 - 7) α -Phenyl- β -[4-Isobutylphenyl]thioharnstoff. Sm. 152° (B. 16, 2023). - II, 558.
 - 8) s-Di[2, 4-Dimethylphenyl]thioharnstoff. Sm. 152—153 ° (B. 9, 1296). - II, 544.
 - 9) $\alpha [2-Methylphenyl] \beta [2, 4, 6-Trimethylphenyl] thioharnstoff. Sm.$
 - 167° (B. 15, 1014). II, 555. 10) α -Phenyl- β -[4-Isopropylbenzyl]thioharnstoff. Sm. 106° (B. 20, 2416). **– II**, 561.
 - 11) Di[2-Methylbenzyl]thioharnstoff. Sm. 186-187° (B. 23, 1027). -II, 541.
 - 12) Di[3-Methylbenzyl]thioharnstoff. Sm. 97° (B. 21, 2702). II, 545. RICHTER, Lex. d. Kohlenstoffverb.

- $\mathbf{C}_{17}\mathbf{H}_{20}\mathbf{N}_{2}\mathbf{S}$ 13) $\mathbf{Di}[\mathbf{4}$ -Methylbenzyl]thioharnstoff. Sm. $124-125^{\circ}$ (B. 23, 1031).
 - II, 547. 14) 2 Methylphenylimido [2 Methylphenyl]amidomethyläthylsulfid. Sm. 51° (B. 15, 1316). — II, 456.
 - 15) 4 Methylphenylimido [4 Methylphenyl]amidomethyläthylsulfid. Sm. 87°. HCl (B. 15, 1312). II, 498.
 - 16) Benzylimidobenzylamidomethyläthylsulfid. Fl. (2HCl, PtCl₄), HJ, H_9SO_4 (B. 19, 2349). — II, 528.
 - 17) Phenylimidoäthylphenylamidomethyläthylsulfid. Fl. (2HCl, PtCl₄) (B. **15**, 567). — **II**, 395.
 - 18) **4,4'-Di**[Dimethylamido]diphenylthicketon. Sm. 202° (B. **20**, 1732, 2857, 3266, 3290; A. **259**, 303; Bl. [3] **7**,657; L. pr. [2] **50**, 411; C. **1898** [1] 1029). III, 191.
- 1) $\alpha \alpha'$ -Trimethylen- β , β' -Diphenylthioharnstoff. Sm. 60° u. 115° (A. 228, $C_{17}H_{20}N_4S_2$ 236). — II, 393.
- 1) Verbindung (aus 4-Methylbenzenylamidomerkaptoxim) (B. 24, 390). $\mathbf{C}_{17}\mathbf{H}_{20}\mathbf{N}_{4}\mathbf{S}_{4}$ II, 1343.

C 80,0 - H 8,2 - O 6,3 - N 5,5 - M. G. 255. $\mathbf{C}_{17}\mathbf{H}_{21}\mathbf{ON}$

1) Phenylamidomethylencampher. Sm. 167-170° (A. 281, 357; Am. 21, 248). — III, 116.

- 2) Benzoylamidopinen. Sm. 125° (A. 268, 204). IV, 79.
 3) α-d-Benzoylarvylamin. Sm. 168—169° (B. 26, 2805; 30, 2071). —
- 4) β -d-Benzoylcarvylamin. Sm. 103° (B. 26, 2805; 30, 2073). IV, 78.
- 5) α -1-Benzoylearvylamin. Sm. 169° (B. 30, 2073).

6) racem. α-Benzoylcarvylamin.
 7) racem. β-Benzoylcarvylamin.
 8) 2-Oxybenzylidenamidopinen.
 8) Sm. 141° (B. 30, 2074).
 8) Sm. 140° (B. 30, 2074).
 8) Sm. 108—109° (A. 268, 206).

- 9) Aethyläther d. 3-[4-Methylphenyl]äthylamido-1-Oxybenzol. Fl. (J. pr. [2] 33, 217). II, 715.
 10) Aethyläther d. 4-[4-Methylphenyl]äthylamido-1-Oxybenzol. Sd.
- 340° (J. pr. [2] 33, 229). II, 718.
- 11) Oxim d. Benzylidendihydrocarvon + H₂O. Sm. 145-146° (A. 305, 269).

 $\mathbf{C}_{17}\mathbf{H}_{21}\mathbf{ON}_{3}$

- C 72.1 H 7.4 O 5.6 N 14.8 M. G. 283.1) 4-Benzoylamido-1, 3-Di [Dimethylamido] benzol. Fl. Pikrat (Sm. 128°) (B. **30**, 3113). — **IV**, 1124.
- 2) α-Oximido-4,4'-Di Dimethylamido diphenylmethan. Sm. 233° (B. 19.
- 1852). III, 191. 3) P-Amido-4,4'-Di[Dimethylamido]diphenylketon.Sm.82°.(2 HCl, PtCl₄), Pikrat (B. **22**, 1884). — III, 186.

1) α-Brombenzylcampher. Sm. 82° (Bl. [3] 15, 988). $\mathbf{C}_{17}\mathbf{H}_{21}\mathbf{OBr}$

- 1) Isoamyldiphenylphosphinoxyd. Sm. 96–976 (A. **229**, 317). IV, 1658. C. 75,3 H. 7,7 O. 11,8 N. 5,2 M. G. 271. $\mathbf{C}_{17}\mathbf{H}_{21}\mathbf{OP}$ $\mathbf{C}_{17}\mathbf{H}_{21}\mathbf{O}_{2}\mathbf{N}$

 - 1) Belladonin. (2 HCl, PtCl₄ + 3 H₂O), (HCl, AuCl₃ + H₂O) (B. 13, 165; 17, 381; A. 148, 236; 277, 295). III, 797.

 2) Apoatropin. Sm. 60—62°. HCl, (HCl, AuCl₃), HBr, H₂SO₄ + 5 H₂O (G. 11, 538, 547; 12, 60, 285; A. 277, 292; B. 27 [2] 883). III, 785.

 3) Atropyltropein. Fl. (HCl, AuCl₃) (A. 217, 102). III, 787.

 4) Cinnamyltropein. Sm. 70°. (2 HCl, PtCl₄), (HCl, AuCl₈) (B. 13, 1085;

 - A. 217, 100). III, 787. 5) Cinnamylpseudotropin. Sm. 87-88°. HCl, (2HCl, PtCl₄) (B. 24, 2344).
 - **III**, 795. 6) Benzoylamidocampher. Sm. 141° (A. 274, 94; B. 31, 3260). — III, 496.
 - 7) Phenylester d. Cyancampholsäure. Sd. 265-270% (A. ch. [6] 30, 518; [7] 2, 390). — II, 662. 8) Benzoat d. 1-Oximido-3-Isopropyl-5-Methyl-1,2,3,4-Tetrahydro-
 - benzol. Sm. 155° (A. **297**, $1\overline{47}$). 9) Benzoat d. d-Campheroxim. Sm. 88-90° (Soc. 71, 1041).
 - 10) Benzylimid d. Camphersäure. Sm. 58-62° (R. 12, 14). -
- 11) Benzylisoimid d. Camphersäure. Sm. 63-66° (R. 12, 18). II, 530. $C 68,2 - H 7,0 - O \overline{10},7 - N 14,0 - M. G. 299.$ $\mathbf{C}_{17}\mathbf{H}_{21}\mathbf{O}_{2}\mathbf{N}_{3}$
 - 1) 3-Nitro-4,4'-Di[Dimethylamido]diphenylmethan. Sm. 87-88° (B. **27**, 3161).

C 62.4 - H 6.4 - O 9.8 - N 21.4 - M. G. 327. $C_{17}H_{21}O_2N_5$

1) 4-Nitrosodimethylanilinhydrocyanid. Sm. 221—222° (M. 6, 537). —

 $C_{17}H_{21}O_{3}N$

C 71,1 — H 7,3 — O 16,7 — N 4,9 — M. G. 287.

1) Methylester d. 6-[4-Methylphenyl]amido-4-Keto-2,2-Dimethyl-1.2, 3.4-Tetrahydrobenzol-3-Carbonsäure. Sm. 147° (A. 294, 301).

2) Phenylamidoformiat d. d-Oxycaron. Sm. 190° u. Zers. (B. 31, 3213).

 $C_{17}H_{21}O_{3}N_{3}$

C 64.8 - H 6.7 - O 15.2 - N 13.3 - M. G. 315.

1) Verbindung (aus 4-Amidoantipyrin u. Acetessigsäureäthylester). Sm. 158 bis 160° (A. **293**, 63). — IV, 1109. C 67.3 - H 6.9 - O 21.1 - N 4.6 - M. G. 303.

 $C_{17}H_{21}O_4N$

1) Atroscin + 2 H₂O (oder i-Scopolamin). Sm. 36—37° (50° wasserfrei). HCl, (HCl, AuCl₃), HBr + ½ H₂O (B. 29, 1776; C. 1898 [1] 1200; 1898 [2] 664). — III, 796.

2) i-Scopolamin. Sm. 55—56°. (HCl, AuCl₃), HBr, CHNS (B. 27 [2] 883;

- C. 1898 [1] 1199; 1898 [2] 664). III, 796.

 3) 1-Scopolamin + H₂O. Sm. 59°. HCl + 2H₂O, (HCl, AuCl₃), HBr + 3H₂O, HJ, H₂SO₄, Pikrat (A. 206, 299; 271, 111; B. 14, 1870; 22, 3183; 27 [2] 883; 29, 1775; M. 18, 387; C. 1898 [1] 1194). III, 796.
- 4) Cocain (Methylester d. Benzoylecgonin). Sm. 98°. HCl, (HCl, HgCl₂), (2 HCl, PtCl₄), (HCl, AuCl₃), HJ, Dioxalat (A. 133, 351; 276, 343; C. 1898 [1] 857; B. 18, 2264, 2953; 20, 321; 21, 3201, 3337; 26, 251; 27, 1523; J. 1860, 365; 1885, 1713, 1714, 1719; 1887, 2167; M. 6, 561; J. pr. [2] 45, 368). — III, 866.

5) d-Cocain (Methylester d. d-Benzoylecgonin). Sm. 46-470 (43-450). HCl, (2 HCl, PtCl₄), (HCl, AuCl₃), HBr + H₂O, HJ + \times H₂O, HNO₃, H₂SO₄

(2 HCl, PtCl₄), (HCl, AuCl₃), HBr + H₂O, HJ + xH₂O, HNO₃, H₂SO₄
(B. 23, 473, 508, 926, 981). — III, 867.
6) α-Cocaïn. Sm. 87—88°. HCl, (2 HCl, PtCl₄), (HCl, AuCl₃), HJ+1¹/₂H₂O, Pikrat (B. 29, 2224). — III, 873.
7) Hyoscin, siehe C₁₇H₂₃O₃N.
8) Tropylscopoleïn. Sm. 174°. HCl, (2 HCl, PtCl₄), (HCl, AuCl₃), HBr, HNO₃, H₂SO₄ (C. 1898 [1] 1198).
9) Mothylester d. Reprovidiowyna hydrogegonin. Sm. 107—108°. HCl.

- 9) Methylester d. Benzoyldioxyanhydroecgonin. Sm. 107-108°. HCl, $(2 \text{ HCl}, \text{PtCl}_4), (\text{HCl}, \text{AuCl}_3), \text{HNO}_3 (B. 25, 1397). - III, 872.$
- 10) Dimethylester d. Benzaltropinsäure. Sm. 67-69° (B. 31, 1592).
- 11) Aethylester d. Nor-d-Ecgoninbenzoat (Nor-d-Cocathylin). Sm. 127°. HCl, (2 HCl, PtCl₄) (B. **26**, 1487). — III, 863.
- 12) Aethylester d. Cocaylbenzoxylessigsäure. Fl. HCl, (HCl, AuCl₃), HBr, HJ (B. 21, 3032, 3441). III, 863.

13) Diäthylester d. β -[4-Methylphenyl]imidodiakrylsäure. Sm. 73° (B. 25, 1053). — II, 509.

14) Acetat d. Santoninoxim. Sm. 165—170° u. Zers. (G. 19, 375; B. 26, 412). — II, *1786*.

15) Phenylimid d. γ -Acetoxyl- $\beta\delta$ -Dimethylpentan- $\beta\delta$ -Dicarbonsäure.

Sm. 178° (C. 1898 [2] 416). 16) Verbindung (aus Mesitylsäureäthylester). Sm. 74° (B. 14, 1077). — I, 1009. C 63,9 — H 6,6 — O 25,1 — N 4,4 — M. G. 319.

 $C_{17}H_{21}O_5N$

1) m-Oxy-d-Cocain. Sm. 82°. HCl (B. 27, 1886). — III, 868.

- 2) m-Oxy-1-Cocain. Sm. 123°. HCl, (2 HCl, PtCl₄), (HCl, AuCl₃) (B. 27, 1879). — III, 868.
- 3) Methyläther d. 4-Oxybenzoylecgonin (Anisylecgonin). Sm. 1940 (B. **22**, 132). — III, 870.
- 4) Nitropodocarpinsäure. Sm. 205°. $NH_4 + 4H_2O$, $Na_2 + 9H_2O$, $K_2 + 5\frac{1}{2}H_2O$, $Ca + 4H_2O$, $Ba + 4(7)H_2O$ (A. 170, 226). II, 1686.
- 5) Diäthylester d. Hydrofuryldicarbolutidinsäure. Sm. 164° (B. 16,

1607). — IV, 242.
 6) γ-Piperidid d. β-Phenylpropan-ααγ-Tricarbonsäure. Sm. 146° u. Zers. (C. 1899 [1] 730).
 C 60,9 — H 6,3 — O 28,6 — N 4,2 — M. G. 335.

 $C_{17}H_{21}O_6N$

1) Diäthylester d. 1-Oximido-5-Methyl-3-[2-Furanyl]-1,2,3,4-Tetrahydrobenzol-2,4-Dicarbonsäure. Sm. 1420 u. Zers. (A. 303, 245).

- C 53.3 H 5.5 O 37.6 N 3.6 M. G. 283. $C_{17}H_{21}O_9N$
 - 1) Tetraäthylester d. 4-Keto-1, 4-Dihydropyridin-2, 3, 5, 6-Tetracarbon-
- säure. Sm. 229° (G. 21, 203). II, 2095.

 1) Chlormethylat d. 1,4-Diphenylhexahydro-1,4-Diazin. 2 + PtCl₄ C17H91N9Cl (J. 1858, 353). — II, 344.
- 1) \dot{P} -Jod- $\delta\delta$ -Di[Phenylamido]- β -Methylbutan (A. ch. [6] 16, 168). $\mathbf{C}_{17}\mathbf{H}_{21}\mathbf{N}_{2}\mathbf{J}$ II. 445.
 - 2) Jodmethylat d. α-Phenyl-α-Aethylphenylamidoäthan (J. 1856, 415). - II, 347.
 - 3) Jodnethylat d. 1,4-Diphenylhexahydro-1,4-Diazin (J. 1858, 353). **— II**, 344.
- $C_{17}H_{21}N_{8}S$ 1) β -Isobutylphenylamido - α -Phenylthioharnstoff. Sm. 140° (A. 252, 284). — IV, 680. C 75,6 — H 8,1 — O 5,9 — N 10,4 — M. G. 270.
- $\mathbf{C}_{17}\mathbf{H}_{22}\mathbf{ON}_{2}$ 1) α-Oxydi[4-Dimethylamidophenyl]methan (Tetramethyldiamidobenzhydrol). Sm. 96° (97°). HCl, (2HCl, PtCl₄), Pikrat (B. 9, 1900; 22, 1879, 1881; 27, 1403; 31, 1002; Bl. [3] 9, 127; [3] 11, 406; [3] 13, 273, 275). — II, 1078.

 - 2) s- α -d-Phenylcarvylharnstoff. Sm. 187—191° (*B.* **26**, 2085). **IV**, 78. 3) s- β -d-Phenylcarvylharnstoff. Sm. 138° (*B.* **26**, 2085). **IV**, 78.
 - 4) Phenylamid d. Cyancampholsäure. Sm. 162—163°. II, 371.
 5) Monobenzoylderivat d. Base C₁₀H₁₈N₂ (aus Nitrosopiperidin). HCl (B. 30, 534; 31, 2273). — IV, 533. C 68,4 — H 7,4 — O 5,4 — N 18,8 — M. G. 298.
- $C_{17}H_{22}ON_4$ 1) s-Phenyl-2,4-Di[Dimethylamido]phenylharnstoff. Sm. 1750 (B. 30, 3114). — IV, 1123.
 - 2) s-Di[4-Dimethylamidophenyl]harnstoff. Sm. 262° (246°) u. Zers. 2 HCl, (2 HCl, PtCl₄), H_2 SO₄ (B. 12, 536; 14, 2179). — IV, 591. C 71,3 — H 7,7 — O 11,2 — N 9,8 — M. G. 286.
- $C_{17}H_{22}O_2N_2$ 1) Di[4-Dimethylamido-2-Oxyphenyl]methan. Sm. 175° (178°). 2HCl + H₂O, (2HCl, PtCl₄) (B. 27, 2896, 3301; J. pr. [2] 54, 223). 2) Diäthyläther d. Di[4-Oxyphenylamido]methan. Sm. 80° (B. 31, 3245). 3) Phenylamidoformiat d. d-Campheroxim. Sm. 94° (B. 22, 3104). —

 - III, 500. 4) 4-Methylphenylamidoimid d. Camphersäure. Sm. 1460 (B. 25, 2568).
 - **IV**, 809. 5) Phenylhydrazid d. Camphocarbonsäure. Sm. 137º (B. 24, 3395; 26, 291). — IV, 693.
 - 6) isom. Phenylhydrazid d. Camphocarbonsäure. Sm. 126-1270 (B.
- **24**, 3395; **26**, 291). **IV**, 693. C 67,5 H 7,3 O 15,9 N 9,3 M. G. 302. $\mathbf{C}_{17}\mathbf{H}_{22}\mathbf{O}_{3}\mathbf{N}_{2}$ 1) Hippuryltropein (HCl, AuCl₃), HBr (C. 1895 [1] 434).
 - 2) Aethylester d. 2-Keto-4-[4-Isopropylphenyl]-6-Methyl-1,2,3,4-Tetrahydro-1,3-Diazin-5-Carbonsäure. Sm. 161-1620 (G. 23 [1] 373). — II, 1685.
- $C_{17}H_{22}O_3Br_2$ 1) Aethylester d. $\varepsilon\zeta$ -Dibrom- δ -Keto- ζ -Phenyl- γ -Aethylpentan- γ -Car-
- bonsäure. Sm. 55° (A. 218, 184). II, 1685.' C 64,1 H 6,9 O 20,1 N 8,8 M. G. 318. 1) m-Amido-d-Cocaïn. Sm. 116—117°. 2HCl, (2HCl, 2AuCl₃ + H₂O) $\mathbf{C}_{17}\mathbf{H}_{22}\mathbf{O}_{4}\mathbf{N}_{2}$
 - (B. 27, 1881). III, 868. 2) m-Amido-l-Cocaïn. Sm. 125°. 2HCl, 2HJ (B. 27, 1877). III, 868.
 - 3) 4-Phenylhydrazon-R-Pentamethylen-1, 2-Dicarbonsäure. Sm. 1050 (B. 26, 376). — IV, 715. C 61,1 — H 6,6 — O 23,9 — N 8,4 — M. G. 334.
- $C_{17}H_{22}O_5N_9$
- 1) Nitroatropin. HCl (B. 25, 1390). III, 784. C₁₇H₂₂O₅Br₂ 1) Santonindibromidacetat. Zers. oberh. 60° (B. 25, 3317). II, 1787. C₁₇H₂₂O₆S 1) Podocarpinsulfonsäure + 8 H₂O. Na₂ + 7 H₂O, Ca + 7 H₂O, Ba + 6 H₂O, Ba + 8 H₂O (A. 170, 232). II, 1686.
- $\mathbf{C}_{17}\mathbf{H}_{22}\mathbf{NJ}$ 1) Methyldiathyl-4-Biphenylammoniumjodid. (2HCl, PtCl₄) (J. 1862, 345). — II, *633*.
- C17H22N4S 1) s-Di[4-Dimethylamidophenyl]thioharnstoff. Sm. 186,5°. 2 HCl (B.
 - 12, 534). IV, 591.
 2) s Phenyl 2, 4 Di[Dimethylamido] phenylthioharnstoff. Sm. 143° (B. 30, 3114). — IV, 1123.

 $C_{17}H_{28}ON$

- C 79,4 H 8,9 O 6,2 N 5,4 M. G. 257.

 1) Oenanthol-1-Naphtylamin. Fl. (B. 16, 287). II, 623.
 2) d-2-Oxybenzylidenfenchylamin. Sm. 95° (A. 272, 107). IV, 59.
 3) 1-2-Oxybenzylidenfenchylamin. Sm. 95° (A. 296, 363; 276, 321).
- 4) i 2 Oxybenzylidenfenchylamin. Sm. 64 65° (A. 272, 108). IV, 59.

- 1V, 59.

 5) 1-4-Oxybenzylidenfenchylamin. Sm. 175° (A. 276, 321). IV, 59.
 6) Benzoylbornylamin. Sm. 131° (B. 20, 108). IV, 57.
 7) d-Benzoylbornylamin. Sm. 139° (Soc. 73, 393).
 8) Benzoylneobornylamin. Sm. 130° (Soc. 73, 395).
 9) Benzoylearvylamin. Sm. 123° (B. 27, 3486). IV, 57.
 10) Benzoyldihydrocarvylamin. Sm. 181—182° (A. 275, 123). IV, 58.
 11) Benzoyldihydroeucarvylamin. Sm. 155—156° (B. 27, 3487). IV, 58.
 12) Benzoylfencholenamin. Sm. 88—89° (A. 269, 373). IV, 58.
 13) I-Benzoylfenchylamin. Sm. 133—135° (A. 269, 361). IV, 58.
 14) 3-Oximido-2-Renzyliden-4-Isopropyl-1-Methylkeyahydrobenzol
- 14) 3-Oximido-2-Benzyliden-4-Isopropyl-1-Methylhexahydrobenzol. Sm. 161° (A. 305, 265).

15) Benzyläther d. d-Campheroxim. Fl. (Soc. 71, 1037).
16) Oxim d. Benzylcampher. Sm. 127—128° (B. 24 [2] 731). — III, 514.
17) Oxim d. Benzylidenmenthon. Sm. 160—161° (B. 29, 1599).

18) 1-Acetyl-?-Triäthyl-1,2-Dihydrochinolin. Sm. 116-117%. (2HCl, $PtCl_4$) (B. 29, 2477). — IV, 230.

19) Propylphenyltetrahydroazindon. Sm. 212° (B. 29, 818). — IV, 343.

20) Camphylamid d. Benzolcarbonsäure. Sm. 75-770 (B. 19, 711). -II, 1162. C 71,6 — H 8,1 — O 5,6 — N 14,7 — M. G. 285.

 $\mathbf{C}_{17}\mathbf{H}_{23}\mathbf{ON}_{8}$

1) Oxim (aus α-Oxy-Tetramethyldiamidodiphenylmethan). Sm. 154° u. Zers. (B. 27, 1404). — II, 1709.

1) Benzylidenmenthonhydrochlorid. Sm. 140° (B. 29, 1599).

 $\mathbf{C}_{17}\mathbf{H}_{23}\mathbf{OCl}$ $\mathbf{C}_{17}\mathbf{H}_{23}\mathbf{OBr}$ $C_{17}H_{23}O_2N$

- 1) Benzylidenmenthonhydrobromid. Sm. 115-1160 (B. 29, 1599). C 74,7 - H 8,4 - O 11,7 - N 5,1 - M. G. 273.

- 1) Hydroapoatropin. Fl. (G. 11, 547). III, 785. 2) Benzoylpulegonamin. Sm. 100,5—101° (A. 262, 15). III, 510. Phenylamidoformiat d. d-Borneol. Sm. 138-1390 (1330) (B. 20, 45;
- 23 [2] 148; J. pr. [2] 49, 5). III, 471. 4) Phenylamidoformiat d. Isoborneol. Sm. 138—139° (J. pr. [2] 49, 5). - III. 473.
- 5) Phenylamidoformiat d. Dihydrocarveol. d-Modif. Sm. 87°; l-Modif. Sm. 87°; i-Modif. Sm. 93° (A. 275, 112). — III, 476. 6) Phenylamidoformiat d. Pinocampheol. Sm. 98° (A. 300, 289).

- 7) Phenylamidoformiat d. Terpineol. Sm. 1130 (A. 230, 267; 275, 104). **– III**, 483.
- 8) 4-Methylphenylimid d. $\beta \varepsilon$ -Dimethylhexan- $\gamma \delta$ -Dicarbonsäure. Sm. 113—115° (A. **292**, 174). C 70,6 — H 8,0 — O 16,6 — N 4,8 — M. G. 289.

 $C_{17}H_{28}O_{3}N$

- 1) d-Atropin. Sm. 110—111°. (HCl, AuCl₃) (B. 22, 2591). III, 784. 2) l-Atropin. Sm. 111°. (HCl, AuCl₃) (B. 22, 2592). III, 784. 3) i-Atropin (Daturin). Sm. 115—115,5°. Salze meist bek. Lit. bedeutend. **– III**, 783.
- 4) Pseudoatropin (Atrolaktyltropeïn). Sm. 119—120°. (HCl, AuCl₃), Pikrat (B. 15, 1027; A. 217, 87). III, 788.
- 5) p-Methylhomoatropin (4-Methylphenylglykolyltropeïn). (HCl, AuCl₃) C. 1895 [1] 434).
- 6) Propylpseudotropin. Sm. 86-88% HCl, (2HCl, PtCl₄), (HCl, AuCl₃) (B. **25**, 934). — **III**, 796.
- (B. 25, 934). III, 796.

 7) Hyosein. Fl. (HCl, AuCl₃), HBr + 1½(3)H₂O, (HBr, AuBr₃), (HBr, AuCl₃), HJ + ½H₂O (A. 206, 299; 303, 149; B. 13, 1554; 14, 1870; 25, 2388; Soc. 71, 679). III, 795.

 8) Hyoseyamin. Sm. 108,5°. (2HCl, PtCl₄), (HCl, AuCl₃), (HBr, AuCl₃), (HBr, AuBr₃), H₂SO₄ + H₂O, Oxalat (J. 1878, 894; 1882, 1094; A. 7, 270; 157, 98; 206, 282; 208, 196; B. 13, 254, 607; 14, 154, 1870; 21, 1720, 2784; 23 [2] 208; 31, 2036; Soc. 61, 90; 71, 681; 75, 72). III 794 III, 794.

- - III, 511.
 - 12) Phenylmonamid d. Oxycamphocarbonsäure. Sm. 203° (C. 1895 [2] 217).
- 13) Verbindung (aus d. Ketoalkohol $C_{10}H_{18}O_2$). Sm. 157° (B. 27, 1640). C₁₇H₂₃O₃Br 1) Aethylester d. d-?-Brom-7-Oxy-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Aethyl-α-Carbonsäure (Ae. d. d-Bromsantonigen Säure).

Sm. 86° (B. 28 [2] 394). — II, 1672. 2) Aethylester d. 1-?-Brom-7-Oxy-5,8-Dimethyl-1, 2, 3,4-Tetrahydronaphtalin-2-Aethyl-α-Carbonsäure (Ae. d. l-Bromsantonigen Säure). Sm. 86° (B. 28 [2] 394). — II, 1672.

3) Aethylester d. i-?-Brom-7-Oxy-5, 8-Dimethyl-1, 2, 3, 4-Tetrahydronaphtalin-2-Aethyl-α-Carbonsäure (Ae. d. i-Bromsantonigen Säure). Sm. 104° (B. **28** [2] 394). — II, 1672. C 66,9 — H 7,5 — O 21,0 — N 4,6 — M. G. 305.

 $C_{17}H_{23}O_4N$

1) Piperidinbrenzkatechin. Sm. 80-81° (Soc. 73, 140). 2) Methylester d. Cineolphenylaminsäure. Sm. 78-79° (A. 271, 23).

3) Aethylester d. β -Benzoximido- γ -Aethylpentan- γ -Carbonsäure. Sm. $70-71^{\circ}$ (G. 28 [1] 276).

4) 4-Methylphenylmonamid d. Cineolsäure. Sm. 125-126°. Ag (A. **271**, 24). — II, 503. C 63,5 — H 7,2 — O 24,9 — N 4,4 — M. G. 321.

C17 H23 O5 N 1) Sebacinsäuremonophenylamid-3-Carbonsäure (Benzamsebacylsäure).

Sm. 192—193° (G. 15, 550). — II, 1266.

2) Monophenylamid d. γ -Acetoxyl- $\beta\delta$ -Dimethylpentan- $\beta\delta$ -Dicarbonsäure. Sm. 157° (C. 1898 [2] 416). C₁₇H₂₈N₂Cl 1) Chlormethylat d. 4, 4'-Di [Dimethylamido] biphenyl. (HCl, PtCl₄)

(B. 14, 2164). — IV, 963.

 $C_{17}H_{23}N_2Cl_3$ 1) Verbindung (aus α -Oxy-Tetramethyldiamidodiphenylmethan) (Bl. [3] 9, 127). — II, 1079.

1) Jodnethylat d. 2,4'-Di[Dimethylamido]biphenyl. Sm. 184° (B. 22, $\mathbf{C}_{17}\mathbf{H}_{23}\mathbf{N}_{2}\mathbf{J}$ 3017). — IV, 959.

Jodmethylat d. 4,4'-Di[Dimethylamido]biphenyl. Sm. 263° (B. 14, 2163). — IV, 963.

1) Campholenamidinphenylthioharnstoff. Sm. 119°. - IV, 533. C17H23N3S

2) Verbindung (aus Phenylsenföl u. Dipiperideïn). Sm. 143-144° (B. 22, 1323). — IV, 533. C 75,0 — H 8,8 — O 5,9 — N 10,3 — M. G. 272.

 $\mathbf{C}_{17}\mathbf{H}_{24}\mathbf{ON}_{2}$

1) α-Phenyl-β-Bornylharnstoff. Sm. 248° u. Zers. (B. 20, 108). — IV, 57.

2) s-Phenyl-d-Bornylharnstoff. Sm. 270° (Soc. 73, 393). 3) s-Phenylneobornylharnstoff. Sm. 254° (Soc. 73, 396). 4) α - Phenyl - β - Dihydrocarvylharnstoff. Sm. 191° (A. 275, 123). —

5) α -Phenyl- β -Dihydroeucarvylharnstoff. Sm. 1420 (A. 305, 240).

6) s-Phenylpulegonylharnstoff. Sm. 154—155° (A. 289, 349). — IV, 57. 7) s-Phenylthujenylharnstoff. Sm. 120° (A. 286, 97). — IV, 59.

8) isom. s-Phenylthujenylharnstoff. Sm. 110° (A. 286, 97). — IV, 59.
9) isom. s-Phenylthujenylharnstoff. Sm. 110° (A. 286, 98). — IV, 60.
10) Benzyl-l-Fenchylnitrosamin. Sm. 93° (A. 269, 362). — IV, 58.
11) α-Dipentinnitrolbenzylamin. Sm. 109—110° (A. 252, 126). —

12) α-Limonennitrolbenzylamin. Sm. 93°. HCl (A. 252, 121). — III, 526.

13) Pinennitrolbenzylamin. Sm. 122—123°. HCl (A. 252, 130). — III, 522. 14) Sylvestrennitrolbenzylamin. Sm. 71-72°. HCl (A. 252, 135).

III, 531.

15) Terpinennitrolbenzylamin. Sm. 137° (A. 252, 134). — III, 532.
16) P-Benzoyl-1, I'-Bipiperidyl. Fl. HCl (C. 1896 [1] 1126).
17) 1-Benzoyl-4, 4'-Bipiperidyl. Sd. 224°₉₁ (B. 31, 2279).
C 70,8 — H 8,3 — O 11,1 — N 9,7 — M. G. 288.
1) Pinolnitrolbenzylamin. Sm. 135—136°. HCl (A. 253, 264). — III, 508.

- C 67,1 H 7,9 O 15,8 N 9,2 M. G. 304. $C_{17}H_{24}O_3N_2$
 - 1) Mono-4-Methylphenylhydrazid d. Camphersäure. Sm. bei 1930 (B. 25, 2568). — IV, 809.
- $\mathbf{C_{17}H_{24}O_{4}N_{2}}$ C 63.7 - H 7.5 - O 20.0 - N 8.7 - M. G. 320.
 - Diäthylester d. γ-Phenylhydrazonpentan-αε-Dicarbonsäure. Sm. 66° (B. 20, 2815; 21, 1398). IV, 714.
 - 2) Diäthylester d. β-Phenylhydrazonpentan-γγ-Dicarbonsäure. Sm. 44—45° (Am. 14, 506). IV, 715.
 C 60,7 H 7,1 O 23,8 N 8,3 M. G. 336.
- $\mathbf{C}_{17}\mathbf{H}_{24}\mathbf{O}_{5}\mathbf{N}_{2}$
 - 1) Butyl-3,5-Dinitro-4-Pseudobutyl-2,6-Dimethylphenylketon, Sm. 151° (B. 31, 1349).
- $C_{17}H_{24}O_9N_2$ C 51.0 - H 6.0 - O 36.0 - N 7.0 - M. G. 400.
 - 1) Tetraäthylester d. Harnstoffdioxalessigsäure (Dioxalessigestercarbamid). Sm. 104° (*J. pr.* [2] **55**, 506). C 47,6 — H 5,6 — O 33,6 — N 13,1 — M. G. 428. 1) Tetraäthylester d. Nitrosoguanidindioxalessigsäure. Sm. 127—128°
- $C_{17}H_{24}O_9N_4$
- u. Zers. (J. pr. [2] 56, 484).

 1) Chlormethylat d. 3-Isopropyl-2-Isobutylchinolin. 2 + PtCl₄ (B. 18, $\mathbf{C}_{17}\mathbf{H}_{24}\mathbf{NCl}$ 3376). — IV, 343.
- $\mathbf{C}_{17}\mathbf{H}_{24}\mathbf{NJ}$ 1) Jodmethylat d. 3-Isopropyl-2-Isobutylchinolin + H₂O. Zers. bei 180° (B. 18, 3375). — IV, 343.
- 1) α -Phenyl- β -Bornylthioharnstoff. Sm. 170° (B. 20, 109). IV, 57. 2) s-Phenylcamphylthioharnstoff. Sm. 118° (B. 19, 712). II, 393. $\mathbf{C}_{17}\mathbf{H}_{24}\mathbf{N}_{2}\mathbf{S}$
 - 3) act. α -Phenyl- β -Dihydrocarvylthioharnstoff. Sm. 125—126° (A. 275,
 - 122). IV, 57. 4) inact. α -Phenyl- β -Dihydrocarvylthioharnstoff. Sm. 119° (A. 275,
 - 125). IV, 57. 5) α-Phenyl-β-Dihydroeucarvylthioharnstoff. Sm. 144-145° (A. 305,
 - 6) s-Phenyl-d-Fenchylthioharnstoff. Sm. 153-154° (A. 272, 107).
 - IV, 59. 7) s-Phenyl-1-Fenchylthioharnstoff. Sm. 153—154° (A. 269, 360). —
 - IV, 58.
 - 8) s-Phenyl-i-Fenchylthioharnstoff. Sm. 169-170° (A. 272, 108).
 - 9) s-Phenylthujenylthioharnstoff. Sm. 152-153° (A. 286, 98). IV, 60. C 78,8 - H 9,6 - O 6,2 - N 5,4 - M. G. 259.
- C17H25ON
 - 1) Benzoylcampholamin. Sm. 98° (G. 22 [2] 112). II, 1162. 2) d-2-Oxybenzylidenmenthylamin. Sm. 96—97° (A. 276, 311). IV, 43.
 - 3) 1-2-Oxybenzylidenmenthylamin. Sm. 56-57° (A. 276, 305). IV, 42. C 71,1 — H 8,7 — O 5,6 — N 14,6 — M. G. 287.
- $C_{17}H_{25}ON_{3}$ 1) 5-Semicarbazon-1-Methyl-3-[4-Isopropylphenyl]hexahydrobenzol. Sm. 142° (A. 303, 274).
- $C_{17}H_{25}O_2N$ C 74,2 - H 9,1 - O 11,6 - N 5,1 - M. G. 275.1) Phenylamidoformiat d. cis-5-Oxy-3-Isopropyl-1-Methylhexahydro
 - benzol. Sm. 88° (A. 297, 170).
 - 2) Phenylamidoformiat d. Menthol. Sm. 111º (B. 20, 115). III, 467. 3) Benzoat d. 1- $[\beta$ -Oxyäthyl]-2-Propylhexahydropyridin. HJ (B. 15, 1144). **— IV**, *33*.
- 1) Chlordekylester d. Benzolcarbonsäure. Sd. 201° (B. 25, 480). $\mathbf{C}_{17}\mathbf{H}_{25}\mathbf{O}_{2}\mathbf{C}\mathbf{1}$ II, 1141. C 70,1 -- H 8.6 — O 16.5 — N 4.8 — M. G. 291.
- $C_{17}H_{25}O_3N$ 1) Aethylester d. Benzoylhomoconiinsäure. Sm. 95° (B. 19, 501). —
 - IV, 34. 2) Phenylglykolat d. stab. 4-Oxy-1,2,2,6-Tetramethylhexahydropyridin (Ph. d. stab. Methylvinyldiacetonalkamin). Fl. (A. 296, 337).
 - 3) Phenylglykolat d.lab.4-Oxy-1, 2, 2, 6-Tetramethylhexahydropyridin (Ph. d. lab. Methylvinyldiacetonalkamin; Euphthalmin). Sm. 113°. HCl, (HCl, AuCl₃), Salicylat (A. 296, 341; B. 31, 665).
 - 4) Acetylamid d. Alantolsäure. Sm. 1790 u. Zers. (A. 285, 364). II, 1595.
 - 5) 4-Methylphenylmonamid d. $\beta \varepsilon$ -Dimethylhexan- $\gamma \delta$ -Dicarbonsäure. Sm. 172—173° (A. 292, 173).

- C 66.4 H 8.1 O 20.8 N 4.6 M. G. 307. $C_{17}H_{25}O_4N$ 1) Aethylester d. Santonsäureoxim. Sm. 126-127° (G. 22 [1] 186). -2) Aethylester d. Metasantonsäureoxim. Sm. 166° (G. 25 [2] 470).
 3) Diäthylester d. 2,6-Dimethyl-4-Isobutylpyridin-3,5-Dicarbonsäure. Sd. $312-318^{\circ}$. HCl, $(2\text{HCl}, \text{PtCl}_4)$ (A. **231**, 57). — **IV**, 171. C 63.2 — H 7.7 — O 24.8 — N 4.3 — M. G. 323. $\mathbf{C}_{17}\mathbf{H}_{25}\mathbf{O}_{5}\mathbf{N}$ 1) Diäthylester d. α -[1-Piperidyl]- α -[3-Furanyl]äthan- $\beta\beta$ -Dicarbonsäure. Sm. 35-37° (B. 29, 816). — IV, 21. C 51,1 — H 6,3 — O 32,1 — N 10,5 — M. G. 399. C17 H25 O8 N3 1) Tetraäthylester d. Guanidindioxalessigsäure (Dioxalessigesterguanidin). Sm. 147° u. Zers. (J. pr. [2] 55, 506; [2] 56, 479). C 74,4 — H 9,5 — O 5,8 — N 10,2 — M. G. 274. 1) s-Phenyl-d-Menthylharnstoff. Sm. 177—178° (A. 300, 284). 2) s-Phenyl-l-Menthylharnstoff. Sm. 140—141° (A. 300, 279). C17 H26 ON2 3) s-Phenyl-d-Tetrahydrocarvylharnstoff. Sm. 185-186° (A. 287, 379). — IV, 41. 4) γ-Keto-β-Phenylhydrazonundekan. Sm. 91—92° (J. pr. [2] 50, 376: G. 24 [2] 297). — IV, 782. 5) i-Menthennitrolbenzylamin. Sm. 105,5-106,5° (Am. 18, 769). $C_{17}H_{26}O_2Br_8$ 1) Terapinsäurebromid (C. 1896 [1] 171). $C_{17}H_{26}O_8Br_2$ 1) Tetraäthylester d. αs -Dibrompentan- $\alpha \alpha s s$ -Tetracarbonsäure. Sm. $38-40^{\circ}$ (Soc. **59**, 827). — **I**, 861. α-Phenyl-β-[2-Methyl-5-Isopropylhexahydrophenyl]thioharnstoff. Sm. 117° (A. 277, 139). — IV, 43. $C_{17}H_{26}N_2S$ 2) s-Phenylcampholylthioharnstoff. Sm. 117-118° (G. 22 [2] 112). II, 393. 3) s-Phenyl-d-Menthylthioharnstoff. Sm. 178-1790 (A. 276, 311). -IV, 43. 4) s-Phenyl-l-Menthylthioharnstoff. Sm. 135° (A. 276, 305). — IV, 42. C 28,2 - H 10,3 - O 6,1 - N 5,4 - M. G. 261. C17H27ON 1) 4-Methylphenylamid d. $\beta\zeta$ -Dimethylheptan- δ -Carbonsäure. Sm. 140—141° (Soc. 73, 63). 2) ?-Oktyl-2-Methylphenylamid d. Essigsäure. Sm. 81° (B. 18, 147). **– II**, 566. $C_{70,6} - H_{9,3} - O_{5,5} - N_{14,5} - M_{6,289}$ $\mathbf{C}_{17}\mathbf{H}_{27}\mathbf{ON}_3$ 1) β -Phenylhydrazon- γ -Oximidoundekan. Sm. 91—92° (J. pr. [2] 50, 376). — IV, 782. C 73,6 — H 9,7 — O 11,6 — N 5,1 — M. G. 277. 1) Acetat d. Cedronoxim. Sd. 185—190°₉ (Bl. [3] 17, 487). 2) Phenylamidoformiat d. Oxydekan (aus Diisoamylen). Sm. 214° (J. pr. C17 H27 O2 N [2] **54**, 461). C = 69.6 - H = 9.2 - O = 16.4 - N = 4.8 - M. G. 293. $C_{17}H_{27}O_8N$ 1) Aethylester d. Santonaminsäure. Sm. 140-141° (G. 22 [1] 191). -II, 1789. C17H27O3N3 C 63,5 - H 8,4 - O 15,0 - N 13,1 - M. G. 321. αα-Diamyl-β-[2-Nitrophenyl]harnstoff. Fl. (Am. 19, 317).
 66,0 — H 8,7 — O 20,7 — N 4,5 — M. G. 309.
 Diäthylester d. Isobutyldihydrolutidindicarbonsäure. Sm. 100° (A. C17H27O4N **231**, 56). — **IV**, 95. C 62,8 — H 8,3 — O 24,6 — N 4,3 — M. G. 325. $C_{17}H_{27}O_5N$ 1) Diäthylester d. 1-Oximido-3-Isobutyl-5-Methyl-1, 2, 3, 4-Tetrahydrobenzol-2,4-Dicarbonsäure. Sm. 108-1090 (A. 288, 333). 2) α -Diäthylmonamid d. Propen- $\alpha\alpha\gamma\gamma$ -Tetracarbonsäure- $\alpha\gamma\gamma$ -Triäthyl-
- ester. Fl. (A. 285, 101).

 C₁₇H₂₇N₂P 1) 4-Methylphenyldi[1-Piperidyl]phosphin. Sm. 80° (B. 31, 1046). —

 IV, 1682.

 C₁₇H₂₇N₃S 1) Verbindung (aus Phenylsenföl u. Isovaleraldehyd). Sm. 152--153° (Soc. 53, 417). II, 445.
- C₁₇H₂₈N₂S 1) $\alpha \alpha$ -Diisoamyl- β -Phenylthioharnstoff. Sm. 72—72,3° (B. 26, 1685). II, 392. C₁₇H₂₉O₆N C 59,5 H 8,5 O 28,0 N 4,0 M. G. 343.
- C₁₇H₂₉O₆N C 59,5 H 8,5 O 28,0 N 4,0 M. G. 343. 1) Triäthylester d. β -Piperidylpropan- $\alpha\beta\gamma$ -Tricarbonsäure. Sd. 201 bis 202°₁₀. HCl (Soc. 73, 725).

1) α -Phenylamido- $\beta\beta$ -Diisoamylthioharnstoff. Sm. 99—100° (B. 30, 848). $C_{17}H_{99}N_{9}S$ — IV, 678. C 72,6 — H 11,0 — O 11,4 — N 5,0 — M. G. 281.

 $C_{17}H_{91}O_{9}N$

- 1) α-Cyanpalmitinsäure. Sm. 75—76° (B. 24, 989). I, 1220. C 54,7 H 8,3 O 25,7 N 11,2 M. G. 373. $\mathbf{C}_{17}\mathbf{H}_{31}\mathbf{O}_{6}\mathbf{N}_{3}$
 - 1) Aethylaminderivat d. 2, 6-Diketo-1-Aethyl-1, 2, 5, 6-Tetrahydropyridin-3,5-Dicarbonsäurediäthylester (A. 285, 89).

Aethylaminsalz d. Säure C₁₅H₂₄O₆N₂, siehe diese (A. 285, 67).
 Jodäthylat d. Sparteïn (A. 235, 374). — III, 932.

- $C_{17}H_{31}N_2J$

- Monamid d. Pentadekan-αα-Dicarbonsäure (B. 24, 990). I, 1388.
 Oxydithioameisencetyläthersäure (Cetylxanthogensäure). K (A. 44, $C_{17}H_{34}OS_{2}$
- 319—320). I, 886. C 75,8 H 13,0 O 5,9 N 5,2 M. G. 269. $C_{17}H_{35}ON$
- $C_{17}H_{35}O_{2}N$
- 1) Oxim d. Dioktylketon. Sm. 11—12° (Soc. 63, 457). C 71,6 H 12,3 O 11,2 N 4,9 M. G. 285. 1) Sphingosin. HCl, H₂SO₄ (J. pr. [2] 25, 24; [2] 53, 73). III, 574. 2) Methylester d. Pentadekylamidoameisensäure. Sm. 61—62° (B.
 - **30**, 900).
- C 62,2 H 11,0 O 9,7 N 17,1 M. G. 328. $C_{17}H_{36}O_{2}N_{4}$
- 1) $\alpha \alpha'$ -Oenanthylidendi [$\beta \beta'$ -Diäthylharnstoff]. Sm. 95° (R. 8, 242). —
- I, 1314. C 54,8 H 9,7 O 12,9 N 22,6 M. G. 372. $\mathbf{C}_{17}\mathbf{H}_{36}\mathbf{O}_{3}\mathbf{N}_{6}$
- Diönanthotriureid. Sm. 162° (A. 151, 189). I, 1314.
 C 56,7 H 10,0 O 17,7 N 15,6 M. G. 360. C17 H86 O4 N4
- 1) Verbindung (aus d. α-Amidocaprylsäure) (A. 177, 131).
- 1) Di[Jodmethylat] d. $\alpha \gamma$ -Di[1-Methylpiperidyl]methan (B. 21, 3102). $C_{17}H_{36}N_2J_2$ - IV, 493.
- 1) Kieselsäureäthyltriisoamylester. Sd. 280-285° (A. ch. [4] 9, 19). -C17 H38 O4Si I, 347.

C₁₇-Gruppe mit vier Elementen.

- $C_{17}H_8O_2N_2Br_2$ 1) 4,6-Dibrom- $\alpha\beta$ -Naphtophenazin-2-Carbonsäure (A. 293, 136). IV, 1065.
- C₁₇H₈O₃N₂Br₂ 1) Dibromnaphteurhodolcarbonsäure (A. 293, 139). IV, 1065. C₁₇H₈O₇N₂Br₂ 1) 2-Naphtylester d. 3,5-Dibrom-4,6-Dinitro-2-Oxybenzol-1-Carbonsäure. Sm. 248—262° (B. 26, 1469). — II, 1512.
- 1) Alizaringrün (B. 24, 2299; J. pr. [2] 44, 106). IV, 462. C₁₇H₉O₄NS
- 1) ?-Brom-?-Dinitrophenyl-1-Naphtylketon. Sm. bei 90° u. Zers. $C_{17}H_9O_5N_2Br$ (J. pr. [2] 35, 509). - III, 254.
- C17H9O8NS 1) Trioxyanthrachinolinchinonsulfonsäure (Alizarinblaugrün). K (J. pr.
- [2] 44, 105; A. 276, 32). IV, 462. $C_{17}H_{10}O_4N_2Br_2$ 1) Methylbromisatoïd. Sm. 230—231° (B. 15, 2095). II, 1606.
- $\mathbf{C}_{17}\mathbf{H}_{10}\mathbf{O}_{5}\mathbf{N}_{2}\mathbf{Cl}_{2}$ 1) γ -Keto- $\alpha \varepsilon$ -Di[5-Chlor-2-Nitrophenyl] $\alpha \delta$ -Pentadiën (A. 262, 143). · III, 252.
- $C_{17}H_{11}ONBr_2$ 1) 3,5-Dibrom-4-Oxy-1-[1-Naphtylimido]methylbenzol. Sm. 146° (B. 28, 3236). — III, 85.
- 1) 1 [3, 5 Dijod 4 Oxybenzyliden] amidonaphtalin. Sm. 156° (B. 29, 2305).

 29, 2-[3,5-Dijod-4-Oxybenzyliden]amidonaphtalin. Sm. 156° (B. 29, 2305). $\mathbf{C}_{17}\mathbf{H}_{11}\mathbf{ONJ}_{2}$
- 1) Methylchlornaphteurhodon (Soc. 63, 1386). IV, 1063. $\mathbf{C}_{17}\mathbf{H}_{11}\mathbf{ON}_{2}\mathbf{Cl}$
- C₁₇H₁₁O₄N₂Cl 1) 3-Chlor-2-[?-Nitro-4-Methylphenyl]amido-1,4-Naphtochinon. Sm. 230° (B. 15, 487). III, 378.
 - 2) 3-Chlor-2-[?-Nitro-4-Methylphenyl]amido-1,4-Naphtochinon.
- Sm. 236-240° (B. 15, 487). III, 378. 1) Phenyl-P-Brom-1-Naphtylketon-P-Sulfonsäure. Sm. 116°. Pb (B. C17H11O4BrS 19, 1967). — III, 254.

- $C_{17}H_{12}ONCI$ 1) Chlorid d. Phenyl-2-Naphtylamidoameisensäure. Sm. 101-102° (B. **23**, 425, 811, 1540). — II, 615.
- C₁₇H₁₉ONBr 1) 1-Brom-2-[2-Oxybenzyliden]amidonaphtalin. Sm. 144-145° (A. **274**, 257). — III, 73. 2) α-Oximido-2-Bromphenyl-1-Naphtylmethan. Sm. 165° (B. 28, 1872;

M. 16, 210). — III, 254.

- $C_{17}H_{12}ON_2Cl_2$ 1) 3,4-Dichlor-5-Phenylimido-2-Keto-l-[4-Methylphenyl]-2,5-Dihydropyrrol (Dichlormaleïn-p-Toluilanil). Sm. 141° (A. 295, 51).
- C₁₇H₁₂ON₂Br₂ 1) Mono-2-Methylphenylhydrazon d. ?-Dibrom-1,2-Naphtochinon. Sm. 254° (B. 19, 2492). — IV, 804. 2) Mono-4-Methylphenylhydrazon d. ?-Dibrom-1,2-Naphtochinon

Sm. 136° (B. 19, 2492). — IV, 810.

- 3) P-Dibrom-2-Oxy-1-[4-Methylphenylazo] naphtalin. Sm. 1900 (B. 19, 2490). — IV, 1436.
- 1) 3-Chlor-2-[2-Methylphenyl]amido-1,4-Naphtochinon. Sm. 1520 C₁₇H₁₉O₂NCl (B. 15, 487; A. 210, 191). — III, 377. 2) P-Chlor-P-[2-Methylphenyl]amido-1,4-Naphtochinon.
 - Sm. 175° (B. 18, 3075). — III, 378.
 - 3) 3-Chlor-2-[4-Methylphenyl] amido-1,4-Naphtochinon. Sm. 196°
 - (B. 15, 487). III, 378. 4) P-Chlor-P-[4-Methylphenyl]amido-1,4-Naphtochinon. Sm. 164° (B. 18, 3075). — III, 378.
- $C_{17}H_{12}O_2N_2Cl_2$ 1) 3,6-Dichlor-2,5-Diketo-1,4-Diphenyl-1,2,4,5-Tetrahydro-1,4-Diazin. Sm. 174—175° (J. pr. [2] 41, 85). — II, 469. 2) Acetat d. 5,7-Dichlor-8-Phenylamido-6-Oxychinolin.

- 22, 285). — IV, 454.
- $C_{17}H_{12}O_2N_2Br_41$) 2,4-Diketo-5,5-Di[?-Dibrombenzyl]tetrahydroimidazol. Sm. 285° (G. **26** [1] 203).
- $C_{17}H_{12}O_2N_3Cl$ 1) 7-Chlormethylat d. 10-Nitro- $\alpha\beta$ -Naphtophenazin (B. 31, 3095). $C_{17}H_{12}O_5N_2Br_41$ $\alpha\beta\delta\varepsilon$ -Tetrabrom- γ -Keto- $\alpha\varepsilon$ -Di[4-Nitrophenyl]pentan. Sm. 239° (B. **31**, 1512).
- $C_{17}H_{12}O_6N_2S$ 1) 2-Oxy-1-Phenylazonaphtalin-13-Carbonsäure-?-Sulfonsäure? $+4 H_2 O \text{ } (B. 14, 2036). - IV, 1464.$ C₁₇H₁₂O₇N₂S₂ 1) 1-Oxy-9 oder 10-Methyl- $\alpha\beta$ -Naphtophenazin-3,6-Disulfonsäure.
- Na₂ (B. 31, 2158).
- C₁₇H₁₂O₉N₂S₂ 1) 2-Oxy-1-Phenylazonaphtalin-13-Carbonsäure-3,6-Disulfonsäure. $Ba + 6H_2O$, $Ba_2 + 12H_2O$ (B. 14, 2037). — IV, 1464.
- $\mathbf{C}_{17}\mathbf{H}_{12}\mathbf{O}_{12}\mathbf{N}_{2}\mathbf{S}_{8}$ 1) m-Sulfobenzoësäureazo-eta-Naphtol-lpha-Disulfonsäure. $Ba_{2} + 5 H_{2}O_{1}$
- pyrrol (Chloreitrakondianil). Sm. 125° (A. 295, 60). C₁₇H₁₃ON₂Br 1) α -[3-Bromphenyl]- β -[1-Naphtyl]harnstoff. Sm. 250°. II, 608.
- 2) 4-Oxy-1-[2-Brom-4-Methylphenylazo]naphtalin. Sm. 160° (B. 31, 1784). — IV, 1436.
 - 3) P-Brom-2-Oxy-1-[2-Methylphenylazo]naphtalin. Sm. 1670 (B. 19, 2491). — IV, 1436.
- $C_{17}H_{13}O_2NBr_2$ 1) $\beta\gamma$ -Dibrom- γ -Phenylpropylimid d. Benzol-1,2-Dicarbonsäure. Sm. 195° (B. 26, 1862). II, 1806.
- isom. βγ-Dibrom-γ-Phenylpropylimid d. Benzol-1,2-Dicarbon-säure. Sm. 117° (B. 26, 1857). Π, 1806. $C_{17}H_{13}O_2N_2Cl$ 1) Phenylimid d. α -Chlor- β -Methylphenylamidomaleïnsäure. Sm.
- $189-190^{\circ}$ (B. **28**, 58; A. **295**, 36). 2) 4-Methylphenylimidd. α -Chlor- $\hat{\beta}$ -Phenylamidomaleïnsäure. Sm. 40° (A. **295**, 48).
- C₁₇H₁₃O₂N₂Br 1) Benzoat d. 4-Brom-5-Oxy-3-Methyl-1-Phenylpyrazol. Sm. 82,5°
- (A. 266, 128). IV, 513. $\mathbf{C}_{17}\mathbf{H}_{13}\mathbf{O}_{2}\mathbf{N}_{4}\mathbf{Cl}$ 1) 7-Chlormethylat d. 10-Nitro-5-Amido- $\alpha\beta$ -Naphtophenazin. 2 + $PtCl_4$, + $AuCl_8$ (B. 31, 3094).
- C₁₇H₁₃O₃NS 1) 1-Benzylidenamidonaphtalin-4-Sulfonsäure. Na + H₂O (B. 20, 2002; A. 247, 325). — III, 31.

- 2) 1-Benzylidenamidonaphtalin-5-Sulfonsäure. Na + H₂O (A. 247, C17H13O3NS 326). — III, *31*.
 - 3) 2-Benzylidenamidonaphtalin-5-Sulfonsäure. Na + ½ H₂O (A. 275, 278). — III, 31.
 - 4) 1-[3-Sulfobenzyliden]amidonaphtalin. Na (B. 24, 793). III, 31. 5) α -Phenyl- β -[4-Chinolyl] athen- β -Sulfonsaure (B. 23, 2682).
 - IV, 455. 6) Benzoylamid d. Naphtalin-l-Sulfonsäure. Sm. 194-195°. K, Ca
- + H₂O, Ba, Ag (Z. 1871, 423; A. 114, 138). II, 1175. C₁₇H₁₈O₃N₂Br 1) 1,2²-Anhydrid d. 7 oder 4-Brom-5 oder 6-Methyl-2-[3,4-Di-
- methoxylphenyl]benzimidazol-22-Carbonsäure. Sm. 212-2130 (B. 25, 1986). — IV, 619.
- 1) 1-[3-Sulfobenzyliden]amidonaphtalin-4-Sulfonsäure. Na. (B. 24, $C_{17}H_{18}O_6NS_2$ 793). — III, *31*.
- C₁₇H₁₄ONBr 1) Bromphenyläther d. 1-Oxy-3-Aethylisochinolin. Sm. 58-590 (B. **27**, 2240). — IV, *332*.
 - 2) Phenacylbromid d. Chinolin. Zers. bei 115-118° (B. 20, 3340). -IV, 253.
 3) Phenacylbromid d. Isochinolin. Sm. 205° (M. 9, 680). — IV, 300.
- $\mathbf{C}_{17}\mathbf{H}_{14}\mathbf{O}_{2}\mathbf{NCl}$ 1) Chlormethylat d. 2-Phenylchinolin-4-Carbonsäure + 2H,0. Sm.
- $209-210^{\circ}$ u. Zers. (A. **276**, 283). IV, 445. C₁₇H₁₄O₂NBr 1) Brombenzylat d. Chinolin-4-Carbonsäure. Sm. 130^o (B. 18, 363). **– IV**, 347.
- C₁₇H₁₄O₂NJ 1) Jodmethylat d. 2-Phenylchinolin-4-Carbonsäure. Sm. 182 -186° u. Zers. (A. 276, 282). IV, 445. C₁₇H₁₄O₂N₂Cl₂1) Phenylimid d. P-Dichlor- β -Phenylamidopropan- $\alpha\beta$ -Dicarbon-
- säure. Sm. 138° (B. 23, 552). II, 440.
- $C_{17}H_{14}O_2N_2Br_21$) Phenylimid d. \hat{P} -Dibrom- β -Phenylamidopropan- $\alpha\beta$ -Dicarbonsäure. Sm. 134° (B. 23, 549). — II, 440.
- 1) 2-Thiocarbonyl-4,5-Diketo-1,3-Di[4-Methylphenyl]tetrahydro- $C_{17}H_{14}O_{2}N_{2}S$ imidazol (Di-p-Tolylthioparabansäure). Sm. 236° (B. 31, 138).
 - Benzylidenhydrazid d. Naphtalin-2-Sulfonsäure. Sm. 150-152° u. Zers. (J. pr. [2] 58, 183).
 Verbindung (aus d. Chlorid C₁₇H₁₂O₂NClS) (B. 5, 143). II, 1176.
- 1) 2-[3,4-Dioxybenzoyl]methylisochinolinammoniumehlorid+1/2H,0 C₁₇H₁₄O₂NCl
 - (B. **27**, 1969). 2) Chlormethylat d. 6-Oxy-2-Phenylchinolin-4-Carbonsäure. Sm.
 - 248° (A. 282, 102). IV, 447. 3) Verbindung (aus Chinolin u. Chloracetylbrenzkatechin). Sm. 139°.
- $+ \Pr(1_4 + 2H_2O(J, r. 25, 284). IV, 253.$ $\mathbf{C_{17}H_{14}O_3N_2Br_21}) \text{ Acetat d. } \alpha\text{-Acetyl-}\alpha\text{-Phenyl-}\beta\text{-}[\text{P-Dibrom-2-Oxybenzyliden]-hydrazin. Sm. } 158^{\circ} (B. 17, 3009). IV, 760.$ $\mathbf{C_{17}H_{14}O_3N_2S} \text{ 1) 2-Phenylimido-4-Keto-3-Phenyltetrahydrothiazol-5-Methylcar-phenyltetrahydrothiazol-5-Meth$
- bonsäure. Sm. 187—188° (189—189,5°) (M. 16, 797; A. 280, 239).
- $C_{17}H_{14}O_3N_3Br$ 1) Phenylimid d. ?-Brom- β -Phenylamidopropan- $\alpha\beta$ -Dicarbonsäure.
- Sm. $199,5^{\circ}$ (B. 23, 549). II, 440. C₁₇H₁₄O₄NCl 1) 2-[2,3,4-Trioxybenzoyl] methylisochinolinammoniumchlorid. $2 + \text{PtCl}_4 + 4\text{H}_2\text{O} (B. 27, 1971).$
- 2) Verbindung (aus Chinolin u. Chloracetylpyrogallol). Sm. 104° (J. r. 25, 284). IV, 253.

 C₁₇H₁₄O₄N₂Br₆1) Acetylfurfurinhexabromid (B. 10, 1192). III, 722.
- $\mathbf{C}_{17}\mathbf{H}_{14}\mathbf{O}_7\mathbf{N}_2\mathbf{Cl}_2$ 1) $\alpha \varepsilon$ -Dioxy- γ -Keto- $\alpha \varepsilon$ -Di[5-Chlor-2-Nitrophenyl]pentan. bis 208,5° u. Zers. (A. 262, 141). — III, 237.
- C₁₇H₁₄O₇N₂S₂ 1) 2-Oxy-1-[4-Methylphenylazo] naphtalindisulfonsäure. Na₂, Ba. IV, 1436.
- 1) Dithiënyl-2-Acetylamidophenylmethan. Sm. 153-154° (B. 30, $\mathbf{C}_{17}\mathbf{H}_{15}\mathbf{ONS}_{2}$
 - 2) Dithienyl-3-Acetylamidophenylmethan. Sm. 115° (B. 30, 2035).
 - 3) Dithiënyl-4-Acetylamidophenylmethan. Sm. 142-1430 (B. 30,
- 1) α -Allyl- β -4- $[\beta$ -Cyan- α -Furanyläthenyl]phenylthioharnstoff. Sm. 206—2080 (B. 23, 2855). III, 713. C17H15ON3S
- 1) Benzyläther d. Benzol-1,2-Dicarbonsäure- β -Merkaptoäthylimid C17H15O2NS (B. **25**, 3049). — **II**, 1801.

- 2) 1-Naphtylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 157° (B. 27, C₁₇H₁₅O₂NS
 - 3) 2-Naphtylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 1330 (B. 27. 2371).
- C₁₇H₁₅O₂N₂Br 1) Methylenäther d. γ -Phenylhydrazon- α -[?-Brom-3,4-Dioxyphenyl]- α -Buten. Sm. 158° (B. 24, 2596). IV, 774.
 - 2) Phenylimid d. ?-Brom-β-Phenylamidopropan-αβ-Dicarbonsäure. Sm. 141°. HBr + CHCl₃ (B. 23, 546). — II, 440.
- C₁₇H₁₅O₂N₂Br₃1) ?-Tribrom-3, 6-Di [Dimethylamido] xanthon. 3 HBr (J. pr. [2] 54,
- $C_{17}H_{15}O_{2}N_{2}J$ 1) Jodmethylat d. Phenylfurfuraldehydin. Sm. 192-1930 (B. 11, 1656).
- IV, 564. $C_{17}H_{15}O_{8}\text{NBr}_{4} \text{ 1) Tetrabrommorphin} + 2H_{2}O. \text{ HBr (2 Modif.), } H_{2}SO_{4} + H_{2}O, \text{ Oxalat,}$ $BaO + 2H_2O$ (Bl. [3] 19, 707).
- C₁₇H₁₅O₂NS 1) β -[1,2-Phtalyl]amidoäthylbenzylsulfoxyd. Sm. 143—145° (B. 25, 3052). — II, 1801.
 - 2) Benzaldehyd-2-Naphtylaminthionsulfonsäure. Sm. 112° (A. 274, 256). — III, 7.
 - 3) Phenylamid d. 2-Oxynaphtalinmethyläther-6-Sulfonsäure. Sm. 79—80° (*C.* **1895** [1] 1064).
 - 4) Phenylamid d. 2-Oxynaphtalinmethyläther-8-Sulfonsäure. Sm. 196° (C. **1895** [1] 1064).
- C17 H15 O4 NS 1) β -[1, 2-Phtalyl]amidoäthylbenzylsulfon. Sm. 137—139° (B. 25, 3052). II, 1801.
 - 2) 2-Methyl-4-[4-Methoxylphenyl]chinolin-?-Sulfonsäure. Ba+ $10\,\mathrm{H}_2\mathrm{O}$ (B. **27**, 911). — IV, 435.
- $C_{17}H_{15}O_4N_2Br$ 1) 7 oder 4-Brom-5 oder 6-Methyl-2-[3,4-Dimethoxylphenyl] benzimidazol-2²-Carbonsäure. Sm. 240° u. Zers. (B. 24, 629). — IV, 619.
- $C_{17}H_{15}N_2S_2P$ 1) Phenyldi[I-Piperidyl]phosphin + Schwefelkohlenstoff. Sm. 1370 (B. **31**, 1042).
- $\mathbf{C}_{17}\mathbf{H}_{16}\mathbf{ONBr}$ 1) $9-[\alpha-Bromisovaleryl]$ carbazol. Sm. 130° (B. 31, 2850).
- $C_{17}H_{16}ON_2Br_4$ 1) ?-Tetrabrom-4,4'-Di[Dimethylamido]diphenylketon. Sm. 1720 (B. **22**, 1883). — III, 186.
- $\mathbf{C}_{17}\mathbf{H}_{16}\mathbf{ON}_{2}\mathbf{S}$ 1) s-Cinnamoyl-2-Methylphenylthioharnstoff. Sm. 182-1830 (Soc. 67, 1047).
 - 2) s-Cinnamoyl-4-Methylphenylthioharnstoff. Sm. 194—194,5° (Soc. 67, 1047).
- $C_{17}H_{16}O_2N_2Cl_2$ 1) Chlorid d. $\alpha\gamma$ -Trimethylendi [Phenylamidoameisensäure]. Sm. 102° (B. **20**, 783). — II, *374*.
- 1) 4,4'-Dimethyläther d. 2-Merkapto-4,5-Di[4-Oxyphenyl]imidazol. $C_{17}H_{16}O_2N_2S$ Sm. noch nicht bei 280° (A. 284, 24). — III, 227.
- $\textbf{C}_{17}\textbf{H}_{16}\textbf{O}_{2}\textbf{N}_{3}\textbf{Cl} \hspace{0.1cm} \textbf{1)} \hspace{0.1cm} \textbf{4-[} \alpha \textbf{-Chlor-2-Nitrocinnamyliden}] \\ \textbf{amido-1-Dimethylamidobenzol.}$ Sm. 128-130° (B. 24, 248). - IV, 597. 2) $4-[\alpha-Chlor-3-Nitrocinnamyliden]$ amido-1-Dimethylamidobenzol.
 - Sm. 225—227° (B. 24, 251). IV, 597. 3) 4-[\alpha-Chlor-4-Nitrocinnamyliden]amido-1-Dimethylamidobenzol.
- Sm. 185° (B. 24, 248). IV, 597. $\mathbf{C_{17}H_{16}O_2N_3Br~1)~4-[\alpha\text{-Brom-2-Nitrocinnamyliden}]} \\ \mathbf{amido-1-Dimethylamidobenzol.}$
- Sm. 172—173° (B. 24, 248). IV, 597.
 - 2) 4-[α-Brom-3-Nitrocinnamyliden]amido-1-Dimethylamidobenzol. Sm. 145—147° (B. 24, 252). — IV, 597.
 - 3) 4-[\alpha-Brom-4-Nitrocinnamyliden]amido-1-Dimethylamidobenzol. Sm. 172—173° (B. 24, 248). — IV, 597.
- C₁₇H₁₆O₂Cl₂S 1) Diäthyläther d. Di[?-Chlor-?-Oxyphenyl]thioketon. Sm. 141—142° (B. **28**, 2873). — **III**, *211*.
- $C_{17}H_{16}O_3NBr$ 1) $\dot{\beta}\delta$ -Lakton d. δ -Brom- β -Oxypentan- $\beta\delta$ -Dicarbonsäure- β -[2-Naphtyl]amid. Sm. 186° (A. 292, 232). C₁₇H₁₆O₃NBr₃ 1) Tribrommorphin. HBr (Bl. [3] 19, 709).
- $\mathbf{C}_{17}^{\mathsf{H}_{16}}\mathbf{O_{3}^{\mathsf{N}_{2}}Cl_{2}^{\mathsf{I}_{2}}}$?-Dichlor- γ -Keto- $\beta\delta$ -Di[Phenylamido]butan- β -Carbonsäure. Sm. 151° (B. 23, 552). — II, 439.
- $\mathbf{C_{17}H_{16}O_3N_2Br_21}) \ \ \mathbf{Dibromid} \ \ \mathbf{d.} \ \alpha \text{-} \mathbf{Acetyl-} \alpha \text{-} \mathbf{Phenyl-} \beta \text{-} [\mathbf{2-} \mathbf{Acetoxylbenzyliden}] \mathbf{hydrazin}$
- $(B.\ 17,\ 3007). \text{IV},\ 759.$ $\mathbf{C}_{17}\mathbf{H}_{16}\mathbf{O}_{3}\mathbf{N}_{2}\mathbf{S} \quad 1) \quad \mathbf{2}, \mathbf{3}\text{-Dimethyläther d. } \mathbf{2}\text{-}[\mathbf{2}\text{-Oxyphenyl}] \text{imido-} \mathbf{4}\text{-Keto-} \mathbf{3}\text{-}[\mathbf{2}\text{-Oxyphenyl}] \mathbf{M} \quad \mathbf{3}$ phenyl tetrahydrothiazol. Sm. 1900 (B. 21, 1867). — II, 712.

- Chlormethylat d. Papaverolin. Sm. 235° (J. pr. [2] 56, 344).
 Jodmethylat d. Papaverolin. Sm. 77° (J. pr. [2] 56, 345). $\mathbf{C}_{17}\mathbf{H}_{16}\mathbf{O}_{4}\mathbf{NCl}$ $\mathbf{C}_{17}\mathbf{H}_{16}\mathbf{O}_{4}\mathbf{NJ}$
- 1) 5-Keto-3-Methyl-4-Benzyl-1-Phenyl-4, 5-Dihydropyrazol-2(?)-C17H18O4N2S Sulfonsäure. Sm. noch nicht bei 300° (Am. 16, 440). - IV, 941.
- $C_{17}H_{16}O_4N_3Br$ 1) δ -Brom-?-Nitroso- γ -Keto- $\beta\delta$ -Di[Phenylamido]butan- β -Carbon-
- $C_{17}H_{16}O_{10}NCl_3 1$ Verbindung (aus Morphin) (B. 4, 127). III, 901.
- Verbindung (aus 4-Amido-1-Methylbenzol u. $\alpha\beta$ -Dibromakrylsäure). Sm. 164° (B. 22, 3309). II, 494. $\mathbf{C}_{17}\mathbf{H}_{17}\mathbf{ON}_{2}\mathbf{Br}$
- C₁₇H₁₇O₂NBr₂ 1) 3,6-Dibrom-5-Oxy-2-Phenylacetylamidomethyl-1,4-Dimethylbenzol. Sm. 223-225° (B. 28, 2907).
 - Acetat d. 3,6-Dibrom-5-Oxy-2-Phenylamidomethyl-1,4-Dimethylbenzol. Sm. 120° (A. 301, 271).
- 1) α-Acetat-4-Aethyläther d. anti-α-Oximido-4-Merkaptodiphenyl- $C_{17}H_{17}O_{9}NS$ methan. Sm. 58-60° (B. 27, 1736). — III, 211.
 - 2) α-Acetat-4-Aethyläther d syn-α-Oximido-4-Merkaptodiphenylmethan. Sm. 99—100° (B. 27, 1736). III, 210.
- $\mathbf{C}_{17}\mathbf{H}_{17}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{C}\mathbf{l}$ 1) Verbindung (aus Phenylisocyanid u. d. Phenylamid d. α -Chlor- α -Oxybuttersäure). Sm. $101,5-104,5^{\circ}$ (B. 21, 302). II, 404.
- 1) Di [Methylphenylamid] d. Jodmalonsäure. Sm. bei 164° u. Zers. $C_{17}H_{17}O_{2}N_{2}J$ (B. 31, 1827).
- 1) 4-Diacetylamido-s-Diphenylthioharnstoff. Sm. 220—221° (J. pr. [2] C17H17O2N3S **50**, 410). — **I**, 591.
- C₁₇H₁₇O₃NBr₂ 1) 5-Methyläther-2-Phenylamidoformiat d. 3,6-Dibrom-5-Oxy-2-Oxymethyl-1,4-Dimethylbenzol. Sm. 157-158° (B. 29, 2339).
- 1) β -Benzoylamidoäthylbenzylsulfid-2,2'-Dicarbonsäure (Aethylben-C17H17O2NS zylsulfidphtalamidsäure). Ag (B. 25, 3050). — II, 1796.
- $C_{17}H_{17}O_3N_2Br$ 1) δ -Brom- γ -Keto- $\beta\delta$ -Di[Phenylamido] butan- β -Carbonsäure. Sm. 157°. $Na + 3H_2O$ (B. 23, 550). — II, 439.
- Verbindung (aus Aethylfurfurin) (J. 1855, 559). 1-Naphtylaminbenzoylsulfit (A. 171, 137). III, 7. $C_{17}H_{17}O_3N_2J$
- $\mathbf{C}_{17}\mathbf{H}_{17}\mathbf{O}_{4}\mathbf{NS}$ C₁₇H₁₇O₄N₂Br 1) 6-Brom-3, 4-Dimethoxyl-1-Methylphenylhydrazonmethylbenzol-
- 2-Carbonsäure (Bromopiansäuremethylphenylhydrazon). Sm. 291° (B. 25, 1999). IV, 716.
- 1) 2-[3,4-Dioxybenzoyl]methyl-1,2,3,4-Tetrahydrochinolin-?-Sulfon- $\mathbf{C}_{17}\mathbf{H}_{17}\mathbf{O}_{6}\mathbf{NS}$ säure (B. 27, 1974). — IV, 215.
- $\mathbf{C}_{17}\mathbf{H}_{17}\mathbf{O}_{7}\mathbf{NS}$ 1) 2-[2,3,4-Trioxybenzoyl] methyl-1, 2, 3,4-Tetrahydrochinolin-?-Sulfonsäure. Sm. 188° (B. 27, 1972). — IV, 215.
- 1) Diphenylamid d. α-Bromisovaleriansäure. Sm. 110,5° (B. 31, 2682). $\mathbf{C}_{17}\mathbf{H}_{18}\mathbf{ONBr}$ 2) Phenylbenzylamid d. α -Brombuttersäure. Sm. $50-54^{\circ}$ (B. 31, 2677).
- 3) Phenylbenzylamid d. α-Bromisobuttersäure. Fl. (B. 31, 2677). $\mathbf{C_{17}H_{18}ON_{2}Br_{2}}$ 1) $\mathbf{Di[?-Brom-4-Dimethylamidophenyl]keton.}$ Sm. 130—131° (Bl. [3]
- **19**, 609). 1) α -Acetyl- $\alpha\beta$ -Dibenzylthioharnstoff. Sm. 93° (Soc. 59, 406). — $C_{17}H_{18}ON_2S$ II. 529.
 - 2) α-Propionylimido-α-Phenylbenzylamidomerkaptomethan. Sm. 101
 - bis 102° (Soc. 69, 859).
 3) 6-Aethyläther d. 2-Merkapto-6-Oxy-5-Methyl-1-[2-Methylphenyl]benzimidazol. Sm. 253° (A. 287, 190).
 - 4) 6-Aethylätherd. 2-Merkapto-6-Oxy-5-Methyl-1-[4-Methylphenyl]benzimidazol. Sm. 205—206° (A. 287, 202).

 1) 4-[α-Bromisovaleryl]amidoazobenzol. Sm. 190° (B. 31, 2853).
- $C_{17}H_{18}ON_9Br$ 1) 6-Brom-2-Benzoylamido-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. $\mathbf{C}_{17}\mathbf{H}_{18}\mathbf{O}_{2}\mathbf{NBr}$
 - $162-164^{\circ}$ (G. 19, 67). II, 1179.
- 2) 2-Brombenzoat d. r-Carvoxim (*Ph. Ch.* 14, 404). III, 114.
 3) 3-Brombenzoat d. r-Carvoxim (*Ph. Ch.* 14, 404). III, 114.
 4) 4-Brombenzoat d. r-Carvoxim (*Ph. Ch.* 14, 404). III, 114.
 C₁₇H₁₈O₂N₂Br₂1) Dibromnaphtazincarbonsäure (*A.* 293, 136).
 C₁₇H₁₈O₂N₂S
 1) 2,3-Dimethyläther d. 2-[2-Oxyphenyl]imido-3-[2-Oxyphenyl]tetrahydrothiazol. Sm. 128°. (2HCl, PtCl₄) (*B.* 21, 1864). II, 711.
 - 2) Aethylester d. α-Phenyl-α-Benzylthioharnstoff-β-Carbonsäure. Sm. 93—94° (Soc. 69, 332).

C₁₇H₁₈O₂N₂S 3) Aethylester d. α -Phenylthioharnstoff- α -Phenylessigsäure. Sm. 162° (B. 24, 4151). — Π , 1326.

1) Thiocarbonyldi [4-Methylbenzenylamidoxim]. Sm. 1150 (B. 28, $\mathbf{C}_{17}\mathbf{H}_{18}\mathbf{O}_{2}\mathbf{N}_{4}\mathbf{S}$ 2233).

1) Brommorphin $+ \frac{1}{2} H_2 O$. HCl $+ 3 H_2 O$ (A. 297, 209). $\mathbf{C}_{17}\mathbf{H}_{18}\mathbf{O}_{3}\mathbf{NBr}$ 2) Verbindung (aus Thebain) (M. 18, 388).

C₁₇H₁₈O₃N₂Br₂1) Dibromnaphteurhodolcarbonsäure (Å. 293, 139). 1) Anilinfurosulfanilat (A. 239, 363). — III, 723. $C_{17}H_{18}O_5N_2S$

1) Pentamethylentetraminbis [diazobenzolsulfonsäure]. Na₂ + 6 H₂O, $C_{17}H_{18}O_6N_8S_2$ $Ba + 3H_2O$ (A. 288, 246).

C₁₇H₁₉ONBr₂ 1) Verbindung (aus Dimethylphenyl-3, 6-Dibrom-4-Oxy-2, 5-Dimethylbenzylammoniumbromid). Sm. 124°. HCl, HBr, HNO₃, H₂SO₄ (B. **28**, 2911).

1) 2,4-Dimethylphenylamid d.4-Oxybenzoläthyläther-1-Thiocarbon-C17H19ONS säure. Sm. 139—140° (B. 25, 3530). — II, 1541.

1) Nikotinbenzoylchlorid. Fl. Pikrat (B. 24, 1376; 27, 2865). —

 $\mathbf{C}_{17}\mathbf{H}_{19}\mathbf{ON}_{2}\mathbf{Cl}$ IV, 857.

C₁₇H₁₉ON₂Br 1) 5-Brom-4-Oxy-3-Phenylhydrazonmethyl-1-tert. Butylbenzol. Sm. 152° (Am. 16, 644). — IV, 761. 2) α-Bromisovaleryl-s-Diphenylhydrazin. Sm. 106° (B. 31, 3244). —

IV, 1496.

1) α -Butyrylamido- $\alpha\beta$ -Diphenylthioharnstoff. Sm. 117—118° (B. 27, C17H19ON3S 1518). — IV, *681*.

1) Aethylester d. 2-Methyl-5- $[\beta$ -Phenylthioharnstoff] phenylamido- $C_{17}H_{19}O_{2}N_{3}S$ ameisensäure (Thiocarbaniltoluylenurethan). Sm. 154-1550 (A. 268, 316). - IV, 603.

2) Aethylester d. α-Phenyl-β-Phenylamidothioformylhydrazidoessigsäure. Sm. 155-156° (B. 28, 1227). - IV, 739.

1) Benzoylamid d. 4-Isopropyl-1-Methylbenzolsulfonsäure. Sm. 1530 C₁₇H₁₉O₈NS (B. 5, 142). — II, 1175.

2) Benzoylisobutylamid d. Benzolsulfonsäure. Sm. 113-1140 (C.

1897 [2] 848).
1) 1, 2, 3, 4 - Tetrahydrochinolindimethylanilinthiosulfonsäurein- $C_{17}H_{19}O_3N_3S_2$ damin $+ \frac{1}{2}$ H₂O (*B*. 23, 379). — IV, 196. 1) Morphinschwefelsäure + 2H₂O (*H*. 8, 242). — III, 900.

 $\mathbf{C}_{17}\mathbf{H}_{19}\mathbf{O}_{6}\mathbf{NS}$

 $\mathbf{C}_{17}\mathbf{H}_{19}\mathbf{N}_{2}\mathbf{ClS}$ 1) Dehydrothio-p-Toluidintrimethylammoniumchlorid. 2 + PtCl₄ (B. **22**, 971). — **II**, 822.

1) Dehydrothio-p-Toluidintrimethylammoniumjodid (B. 22, 971). — $C_{17}H_{19}N_{2}JS$ II, 822.

C₁₇H₂₀ONBr₃ 1) Dimethylphenyl-3,6-Dibrom-4-Oxy-2,5-Dimethylbenzylammoniumbromid. Sm. 226—230° (234—236°) (B. 28, 2910).

1) Jodäthylat d. α-[2-Aethoxylphenyl]-β-[2-Pyridyl]äthen. Sm. 217,5° $\mathbf{C}_{17}\mathbf{H}_{20}\mathbf{ONJ}$ (B. **23**, 2699). — IV, 395.

1) α -Aethyl- β - $[\beta$ -Oxy- $\alpha\beta$ -Diphenyläthyl]thioharnstoff. Sm. 148—149° C17H20ON2S (B. **28**, 1901).

 $\mathbf{C}_{17}\mathbf{H}_{20}\mathbf{O}_{2}\mathbf{NCl}$ 1) Benzoylderivat d. Limonennitrosylchlorid. Sm. 109-110° (A. 270, 176). — III, *524*.

 $C_{17}H_{20}O_2NBr_3$ 1) Methylalkoholat d. Verb. $C_{16}H_{16}ONBr_3$. Sm. 179° (B. 29, 2353). 1) Jodmethylat d. 2,6-Dimethyl-4-Phenylpyridin-3-Carbonsäure- $\mathbf{C}_{17}\mathbf{H}_{20}\mathbf{O}_{2}\mathbf{N}\mathbf{J}$ äthylester. Sm. 205—206° (B. 17, 2913). — IV, 383.

1) Phenylamid d. Diäthylphenylphosphinoxyd-4-Carbonsäure. Sm.

 $\mathbf{C}_{17}\mathbf{H}_{20}\mathbf{O}_{2}\mathbf{NP}$ 198° (A. **293**, 290). — IV, 1673.

 $\mathbf{C}_{17}\mathbf{H}_{20}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{S}$ 1) Dimethyläther d. s-Di[4-Oxybenzyl]thioharnstoff. Sm. 149—150° (B. **20**, 2409). — II, 755.

2) Aethyläther d. 2-Methoxylphenylamido-2-Methoxylphenylimidomerkaptomethan. Sm. 82.5° . (2 HCl, PtCl₂), HJ (B. 21, 1863). — II, 711.

3) α -[?-Methyl-?-Isopropylphenyl]sulfonimido- α -Amido- α -Phenylmethan. Sm. 188° (B. 5, 142). — IV, 847.

1) o-Chlor-d-Cocain. HCl, (2HCl, PtCl₄), (HCl, AuCl₈) (B. 27, 1875). — $\mathbf{C}_{17}\mathbf{H}_{20}\mathbf{O}_4\mathbf{NCl}$ III, 867. 2) o-Chlor-l-Cocain. Sm. 63-64°. (2 HCl, PtCl₄), (HCl, AuCl₃), HJ (B.

27, 1874). — III, 867.

1) Tetramethyläther d. s-Di[2,4-Dioxyphenyl]thioharnstoff. Sm. $\mathbf{C}_{17}\mathbf{H}_{20}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{S}$ 159—160° (B. **22**, 2380). — II, 928.

- 2) Tetramethyläther d. s-Di[2,5-Dioxyphenyl]thioharnstoff. Sm. C17 H20 O4 N2 S 109° (B. 17, 2123). — II, 948.
 - 3) 4-Oxy-2,4'-Dimethyl-5-Isopropylazobenzol-?-Sulfonsäure, Na. Ba (B. 14, 2795). - IV, 1425.
- 1) Pentamethylentetraminbis-4-Diazobenzolsulfonsäure. Na₂+6H₂O, $\mathbf{C}_{17}\mathbf{H}_{20}\mathbf{O}_{6}\mathbf{N}_{8}\mathbf{S}_{2}$
- $\mathbf{C}_{17}\mathbf{H}_{20}\mathbf{N}_3\mathbf{ClS}$
- Ba + 3 H₂O (A. 288, 246). IV, 1493.

 1) Homomethylenblau (B. 25, 3136). II, 826.

 1) Pyronin + ½ H₂O. HCl + ½ H₂O, 2 + PtCl₄ (J. pr. [2] 54, 234).

 1) Phenylamid d. 1-Aethyl-4-Propylbenzol-P-Sulfonsäure. Sm. 97 $\mathbf{C}_{17}\mathbf{H}_{21}\mathbf{ON}_{2}\mathbf{Cl}$ $\mathbf{C}_{17}\mathbf{H}_{21}\mathbf{O}_{2}\mathbf{NS}$ bis 98° (B. 23, 3196). — II, 425.
 - 2) Phenylamid d. 1-Aethyl-4-Isopropylbenzol-?-Sulfonsäure. Sm. 92
 - bis 93° (B. 23, 3194). II, 425.

 3) Phenylamid d. 1,2-Dimethyl-4-Propylbenzol-P-Sulfonsäure. Sm. 213—214° (B. 23, 2350). II, 425.

 4) Phenylamid d. 1,3-Dimethyl-4-Propylbenzol-P-Sulfonsäure. Sm. 1400 (B. 23, 2350).

 - 180—182° (B. 23, 2350). II, 425.
 5) Phenylamid d. 1,4-Dimethyl-2-Propylbenzol-?-Sulfonsäure. Sm. 215—216° (B. **23**, 2350). — II, 425.
 - 6) Phenylamid d. 1,3-Dimethyl-4-Isopropylbenzol-?-Sulfonsäure. Sm. 207° (B. **23**, 2351). — **II**, 425.
- $C_{17}H_{21}O_3N_3S_2$ 1) Tetramethylhomoindaminthiosulfonat $+H_2O$ (B. 25, 3136). II, 826.
- 1) Methyldi [β -Phenylsulfonäthyl] amin. Fl. HCl (J. pr. [2] 30, 335). $\mathbf{C}_{17}\mathbf{H}_{21}\mathbf{O}_4\mathbf{NS}_2$ - II, 781.
- 2) Isoamylimid d. Benzolsulfonsäure. Sm. 71,5° (C. 1897 [2] 848). Sm. 112° (B. 25, 2371). 1) s-Acetalyl-1-Naphtylthioharnstoff. $C_{17}H_{22}O_2N_2S$
- II, 609. 1) Di[Dimethylamidophenyl]methan-α-Sulfonsäure. Zers. oberh. 120°. $C_{17}H_{22}O_3N_2S$
- Na (B. **27**, 1405). II, 1079. 1) Pulegonaminphenylthioharnstoff. Sm. 198° (A. 262, 15). — III, 510. $\mathbf{C}_{17}\mathbf{H}_{24}\mathbf{ON}_{2}\mathbf{S}$
- 1) Hydrochlordipentinnitrolbenzylamin. Sm. 1500 (A. 270, 193). $\mathbf{C}_{17}\mathbf{H}_{25}\mathbf{ON}_{2}\mathbf{Cl}$ III, 529.
 - 2) Hydrochlorlimonennitrolbenzylamin. Sm. 103-1040 (A. 270, 192). **- III**, 526.
- 1) Phenyldi [1-Piperidyl] phosphin + Schwefelkohlenstoff. Sm. 1440 $C_{17}H_{25}N_2S_2P$ (B. 31, 1042). - IV, 1682.
- $\mathbf{C}_{17}\mathbf{H}_{26}\mathbf{O}_4\mathbf{NJ}$ 1) Jodmethylat d. Isobutoxylhydrocotarnin + H₂O. Sm. bei 120° (A. **254**, 365). — III, 917.
- 1) 4-Methylphenyldi[1-Piperidyl]phosphinoxyd. Sm. 60° (B. 31, 1046). C17H27ON2P IV, 1682.
 - 2) Methyläther d. 4-Oxyphenyldi [1-Piperidyl]phosphin. Sm. 69° (B. 31, 1047).
- 1) 4-Methylphenyldi[1-Piperidyl]phosphinsulfid. Sm. 88° (B. 31, $\mathbf{C}_{17}\mathbf{H}_{27}\mathbf{N}_{2}\mathbf{SP}$ 1046). — **IV**, 1682.
- 1) Methylphenyldi [1-Piperidyl] phosphoniumchlorid. Sm. 130°. 2+ $C_{17}H_{28}N_2ClP$ PtCl₄ (\vec{B} . 31, 1044). — IV, 1682.

 1) Methylphenyldi[1-Piperidyl]phosphoniumbromid (\vec{B} . 31, 1044).
- $\mathbf{C}_{17}\mathbf{H}_{28}\mathbf{N}_{2}\mathbf{BrP}$ 1) Methylphenyldi 1-Piperidyl phosphonium jodid. Sm. 1670 (B. 31, $\mathbf{C}_{17}\mathbf{H}_{28}\mathbf{N}_{2}\mathbf{JP}$ 1043). **— IV**, 1682.
- 1) Rhodanid d. Palmitinsäure. Fest. Sd. 200-205 10 u. Zers. (Soc. $C_{17}H_{31}ONS$ **69**, 1595).
- 1) Aethyl-1-Tripiperidylphosphoniumjodid. Sm. 178-179° (B. 28, $\mathbf{C}_{17}\mathbf{H}_{85}\mathbf{N}_{8}\mathbf{JP}$ 2210). — IV, 11.

C₁₇-Gruppe mit fünf Elementen.

- 67, 911).
- 1) 3-Chlor-?-Brom-2-[2-Methylphenyl]amido-1,4-Naphtochinon. C₁₇H₁₁O₂NClBr Sm. 212° (B. 15, 487). — III, 378.

 $C_{18}H_{16}$

 $C_{18}H_{20}$

- C₁₇H₁₁O₂NClBr 2) 3-Chlor-?-Brom-2-[4-Methylphenyl]amido-1, 4-Naphtochinon. Sm. 185° (B. 15, 487). — III, 378.
- 1) Verbindung (aus d. Benzoylamid d. Naphtalin-1-Sulfonsäure). Sm. C₁₇H₁₂O₂NClS $92-94^{\circ}$ (B. 5, 142). — II, 1175.
- C₁₇H₁₉O₅N₉ClBr 1) Farbstoff (aus Dibromgallussäure u. Nitrosodimethylanilin) (Bl. [3] **15**, 405).
- 1) Phenylester d. α-Acetylamido-α-Merkaptopropion-4-Brom-C₁₇H₁₆O₃NBrS phenyläthersäure. Sm. 96° (H. 20, 436).
- $\mathbf{C}_{17}\mathbf{H}_{19}\mathbf{ONBr}_{3}\mathbf{J}$ 1) Jodmethylat d. Verbind. $C_{16}H_{16}ONBr_3$. Sm. 1540 (B. 29, 2353).

C₁₈-Gruppe mit einem Element.

 $C_{18}H_{12}$ C 94,7 — H 5,3 — M. G. 228

- 1) Chrysen. Sm. 250°; Sd. 448°₇₈₀ (subl. bei 169°₀). Lit. bedeutend. II, 291.

- 2) Isochrysen. Sm. 196° (A. 147, 229; 203, 135). II, 292.
 3) Naphtacen. Sm. bei 335° (B. 31, 1279).
 4) Naphtanthracen. Sm. 141°. Pikrat (B. 19, 2211). II, 292.
- 5) Truxen. Sm. noch nicht bei 360° (B. 22, 786, 2022; 26 [2] 607; Soc. 65, 269). — II, 293.
- 6) Kohlenwasserstoff (aus Theer). Sm. 1220 (B. 9, 1208). II, 293.

7) Kohlenwasserstoff. Sm. 181—186° (Bl. 34, 532). — II, 293.

 $C_{18}H_{14}$ C 93,9 — H 6,1 — M. G. 230.

- 1) 1,3-Diphenylbenzol (Isodiphenylbenzol). Sm. 85°; Sd. 363° (369°₇₆₆) (A.
- 174, 233; 203, 129; B. 26, 1999; 27, 3385; Soc. 69, 983). II, 286.
 2) 1,4-Diphenylbenzol. Sm. 205°; Sd. 383° (404—427°) (A. 164, 170; 174, 230; 203, 124; B. 9, 11; 11, 1338; 26, 1998; 27, 3385; 29, 116; Soc. 37, 712; 69, 981). II, 286.
- 3) 5,12-Dihydronaphtacen. Sm. 206-207°; Sd. bei 400° (B. 31, 1276). C 93,1 H 6,9 M. G. 232. 1) α -Phenyl- β -[?-Naphtyl]äthan (Benzylnaphtylmethan) (B. 12, 1078). —

III, 282.

C 92,3 — H 7,7 — M. G. 234.

1) Reten. Sm. 98,5°; Sd. 390° (135°) (A. 106, 388; 185, 75; 229, 102; A. ch. [6] 13, 298; Bl. 7, 231; 8, 389; J. 1858, 440; 1860, 475; Z. 1869, 73; B. 29, 2241). — II, 276. C18 H18

2) 9-Isobutylanthracen. Sm. 57°. Pikrat (B. 14, 802; A. 212, 107). —

- 3) ?-Tetramethylanthracen. Sm. 162—163° (A. ch. [6] 11, 268). II, 275. 4) P-Tetramethylanthracen (aus 1,3-Dimethylbenzol). Sm. 280° u. Zers.
- (A. 235, 174). II, 275. 5) isom. Tetramethylanthracen (aus 1,4-Dimethylbenzol). Sm. bei 2800
- (A. 235, 175). II, 276.
- 6) isom. Tetramethylanthracen (aus 1,4-Dimethylbenzol). Sm. oberh. 280° (A. 235, 175). — II, 276.
- 7) Kohlenwasserstoff (aus Pseudocumol). Sm. 290° (A. ch. [6] 11, 268). —

C 91,5 — H 8,5 — M. G. 236.

- 1) $\alpha \beta$ -Di[4-Aethylphenyl]äthen. Sm. 134,5° (B. 7, 1414). II, 254. 2) $\alpha\beta$ -Di[2,5-Dimethylphenyl]äthen. Sm. 157° (B. 7, 1417; J. pr. [2] 47, 47). — II, 254.
- 3) $\alpha \beta$ -Di[m-Dimethylphenyl]äthen. Sm. 105—106° (B. 7, 1416; J. pr. [2] 39, 300; [2] 47, 46). — II, 253.
- 4) 1-Methyl-2, 3-Diphenyl-R-Pentamethylen. Sm. 62-63° (Soc. 71, 153).
- Methronol (2,3-Dimethyl-4-Phenyl-1,2,3,4-Tetrahydronaphtalin). Sd. 322 bis 323° (A. 227, 249). II, 254.
- 6) 9-Isobutyl-9,10-Dihydroanthracen. Fl. (A. 212, 79; B. 14, 462). II, 254.
- 7) 9,9-Diäthyl-9,10-Dihydroanthracen. Sm. 48-50° (B. 21, 1182). -II, 254.
- 8) ?-Tetramethyl-9,10-Dihydroanthracen. Sm. 171—171,5°. Pikrat (A. **235**, 317). — II, 254.

 $C_{18}H_{22}$

- C 90,8 H 9,2 M. G. 238.

 1) Tetrahydroreten. Sd. 280°₅₀ (B. 20, 3076). II, 276.
 2) αα-Di[m-Dimethylphenyl]äthan. Sd. 323—325° (A. 235, 326). —
- 3) **2,4,6,2',4',6'-Hexamethyl**biphenyl (Dimesityl). Sm. 78,5°; Sd. 330° cor. (B. **27**, 2522).

4) isom. Dimesityl. Fl. Sd. 312—320° (B. 27, 2523).

C 88,5 — H 11,5 — M. G. 244. C18H28

C18 H20

Hexadekahydrochrysen. Sd. bei 360° (B. 22, 135). — II, 292.
 C 87,8 — H 12,2 — M. G. 246.

- 1) Dodekahydroreten. Sd. 336° (B. 22, 780, 3365). II, 276.
 2) Oktadekahydrochrysen. Sm. 115°; Sd. 353° (B. 22, 135). II, 292.
 3) P-Tri[tert. Butyl]benzol. Sm. 128°; Sd. 291—292°_{786,6} (B. 23, 2421). - II, 39.
- 4) Hexaäthylbenzol. Sm. 1290 (1260); Sd. 3050 (2920) (Bl. 31, 464; B. 16, 1747; 21, 2817; 26 [2] 693; 31, 1716). — II, 39.

 $\mathbf{C}_{18}\mathbf{H}_{32}$ C 87,1 — H 12,9 — M. G. 248.

1) Fichtelit. Sm. 46°; Sd. 355°₇₁₈ (A. 37, 304; 103, 237; B. 22, 499, 3362). — II, 177. C 86,4 — H 13,6 — M. G. 250.

 $C_{18}H_{34}$ 1) α-Oktadekin (Hexadekylacetylen). Sm. 26°; Sd. 180°, Ag + AgNO.

(B. **25**, 2248). 2) β-Oktadekin (s-Methylpentadekylacetylen). Sm. 30°; Sd. 184°₁₅ (B. 17,

1374; **25**, 2248). — **1**, *137*. C 85,7 — H 14,3 — **M**. G. 252. $C_{18}H_{36}$

1) α-Oktadeken. Sm. 18°; Sd. 179°₁₅ (B. 16, 3024). — I, 125. 2) Hexapropylen. Sd. 330—340° (J. 1873, 320, 321). — I, 125.

3) Anthemen. Sm. 63-64°; Sd. 440° (Bl. 41, 484). — I, 125.

 $C_{18}H_{38}$ C 85,0 — H 15,0 — M. G. 254.

1) norm. Oktadekan. Sm. 28°; Sd. 317° (98°₀) (B. **15**, 1703; **19**, 2221; **21**, 2261; **29**, 1323). — I, 106.

C18Cl14 1) Perchlor-1, 4-Diphenylbenzol. subl. (B. 16, 2884). — II, 286.

C₁₈-Gruppe mit zwei Elementen.

- $\mathbf{C}_{18}\mathbf{H}_{2}\mathbf{Cl}_{10}$
- $\mathbf{C}_{18}\mathbf{H}_7\mathbf{Br}_5$
- $C_{18}H_8O_2$

RICHTER, Lex. d. Kohlenstoffverb.

- Dekachlorchrysen (A. 158, 313). II, 292.
 Pentabromehrysen (J. pr. [2] 9, 277). II, 292.
 C 84,4 H 3,1 O 12,5 M. G. 256.
 Verbindung (aus Anhydrobisdiketodihydroinden) oder C₈₈H₁₆O₄. Sm. noch nicht bei 310° (A. 277, 372; B. 3I, 2089). III, 276.
 C 75,0 H 2,8 O 22,2 M. G. 288.
- $\mathbf{C}_{18}\mathbf{H}_{8}\mathbf{O}_{4}$ 1) Diphtalyläthen (Indenigo oder Isoäthindiphtalid C₁₈H₁₀O₄). subl. oberh. 200° (B. 30, 386; 31, 1285).
 - 2) 5,6,11,12-Tetraketo-5,6,11,12-Tetrahydronaphtacen (Naphtacendichinon). Sm. 330-333° (B. 31, 1283).
 - 3) Verbindung (aus d. Verb. $C_{19}H_{12}O_{6}$) (C. 1899 [1] 254).
- C 71,0 H 2,6 O 26,3 M. G. 304. $\mathbf{C}_{18}\mathbf{H}_{8}\mathbf{O}_{5}$ 1) Anhydrid d. 2,2'-Bi-2-Oxy-1,3-Diketo-2,3-Dihydroinden. Sm. 216
- bis 218° u. Zers. (B. 31, 1166). C 85,7 — H 3,2 — N 11,1 — M. G. 252. 1) Nitril d. Pyrendicarbonsäure. Sm. oberh. 300° (M. 4, 255). — $\mathbf{C}_{18}\mathbf{H}_{8}\mathbf{N}_{2}$
- II, 1912.
- 1) Verbindung d. Kohlenw. C₁₈H₁₂ (aus Braunkohlentheer) (B. 9, 1207). $C_{18}H_8Cl_4$
- 1) Tetrabromchrysen (J. pr. [2] 9, 277). II, 292. $\mathbf{C}_{18}\mathbf{H}_{8}\mathbf{Br}_{4}$ 2) Verbindung d. Kohlenw. C₁₈H₁₂ (aus Braunkohlentheer) (B. 9, 1207).
- **II**, 293. 1) Trichlorchrysen. Sm. über 300° (J. pr. [2] 9, 279). — II, 292. $\mathbf{C}_{18}\mathbf{H}_{9}\mathbf{Cl}_{3}$

C 83,7 — H 3,9 — O 12,4 — M. G. 258. $C_{18}H_{10}O_{2}$ 1) Chrysochinon. Sm. 235° (A. 158, 309; J. pr. [2] 9, 284; B. 7, 784; 9, 284; 23, 2437). — III, 462. 2) Naphtanthrachinon. Sm. 168° (B. 19, 2209). — III, 463. 3) 5,12-Diketo-5,12-Dihydronaphtacen. Sm. 294° (B. 31, 1277). C 78,8 - H 3,6 - O 17,5 - M. G. 274. $C_{18}H_{10}O_{3}$ 1) Anhydrobisdiketodihydroinden (Bindon). Sm. 206—208° u. Zers. Na, K, Ca, Cu (A. 252, 76; 277, 371; B. 30, 2143; 3138; 31, 1165, 2935). — III, 275. 2) Anhydrid d. Phenylnaphtalin-2,3-Dicarbonsäure. Sm. 2550 (Am. **20**, 90). C 74,5 — H 3,4 — O 22,1 — M. G. 290. C18H10O4 Diphtalyläthan. Sm. oberh. 200°. K (B. 30, 385; 31, 1160 Anm.).
 Aethindiphtalid. Sm. 328° (B. 10, 1560; 17, 2620; 19, 837; 31, 1160, 1162 Anm.). — II, 2033. 3) 6,11-Dioxy-5,12-Diketo-5,12-Dihydronaphtacen (Isoäthindiphtalid). Sm. 346-347°. K, Na (B. 17, 2774; 31, 1162, 1272). — II, 2034. 2.2'-Bi-1,3-Diketo-2,3-Dihydroinden. Sm. noch nicht bei 350°. K₂+ 4) 2,2'-Bi-1,3-Diketo-2,3-Dihydroinden. Sm. noch nicht bei 350°. K₂+H₂O (B. 26, 2582; 31, 1162). — III, 325.
 5) Chinon (aus d. β-Diäthylester d. Dibenzoylbernsteinsäure). Sm. 288—289°. +2HNO₂ (B. 27, 1167; A. 293, 110). — II, 2033. 6) Pyrendicarbonsäure. Sm. oberh. 300° (M. 4, 260). — II, 1912. 7) Anhydrid d. 2,5-Diphenylfuran-3,4-Dicarbonsáure. Śm. 254—255° u. Zers. (B. 17, 62; Soc. 47, 269). — III, 719. 8) Anhydrid d. Pulvinsäure. Sm. 220—221° (B. 13, 1630; 15, 1551; A. 219, 9; 282, 11; *J. pr.* [2] 57, 317, 440; [2] 58, 516). — II, 2031.
9) Dicumarin (Anhydrid d. Dicumarsaure) (Soc. 51, 63). — II, 1982.
C 70,6 — H 3,2 — O 26,1 — M. G. 306.
1) 2-Oxy-2,2'-Bi-1,3-Diketo-2,3-Dihydroinden. Sm. 171° (B. 31, 1171). $C_{18}H_{10}O_5$ 2) 1,9-Lakton d. 1-Oxy-4-Acetoxyl-10-Keto-9,10-Dihydroanthracen-9-Methenylcarbonsäure (m-Acetoxylanthracumarin). Sm. 255° (B. 20, 3142). — II, 1980. 3) Anhydrid d. Oxypulvinsäure. Sm. 1960 (J. pr. [2] 57, 314). C 67,1 - H 3,1 - O 29,8 - M. G. 322.C18 H10 O6 1) 2,2'-Bi-2-Oxy-1,3-Diketo-2,3-Dihydroinden. Sm. 168-170° (B. 31, 1164). 2) Säure (aus Vasculose) (Bl. 37, 409). — I, 1079. C 63,9 — H 2,9 — O 33,1 — M. G. 338. $C_{18}H_{10}O_7$ 1) Anhydrid d. Dibenzoxylmaleïnsäure. Sm. 167—168° (Soc. 69, 551). C 58,4 — H 2,7 — O 38,9 — M. G. 370. 1) **M**onacetat d. **V**erb. $\mathbf{C}_{10}\mathbf{H}_8\mathbf{O}_8$. Sm. 216— 220° u. Zers. (Soc. **65**, 929). $C_{18}H_{10}O_{9}$ • III, *454*. C 85.0 - H 3.9 - N 11.0 - M. G. 254. $C_{18}H_{10}N_2$ Verbindung (aus d. β-Oxy-α-Phenylakrylsäurenitril). Sm. 186—187°
 (J. pr. [2] 55, 341). 1) Dichlorchrysen. Sm. 267° (*J. pr.* [2] 9, 278). — II, 292.
1) Dibromchrysen. Sm. 273° (*J. pr.* [2] 9, 275; *A.* 158, 309). — II, 292.
2) Dibromtruxen (*B.* 26 [2] 608; *Soc.* 65, 287). — II, 293.
1) 4-Brom-3-[4-Bromphenyl]-1-[3,4-Dibromphenyl]benzol? Sm. 181° $\mathbf{C}_{18}\mathbf{H}_{10}\mathbf{Cl}_{2}$ $\mathbf{C}_{18}\mathbf{H}_{10}\mathbf{Br}_{2}$ $\mathbf{C}_{18}\mathbf{H}_{10}\mathbf{Br}_{4}$ (B. **27**, 3391). 2) ?-Dibrom-1, 4-Di [4-Bromphenyl] benzol. Sm. 245° (B. 27, 3396). C 80,3 - H 4,1 - N 15,6 - M. G. 269. $C_{18}H_{11}N_3$ 1) β -Naphtindophenazin. Sm. oberh. 300° (B. 31, 253). — IV, 1212. C 83,1 - H 4,6 - O 12,3 - M. G. 260. $C_{18}H_{12}O_2$ 1) 2,5-Diphenyl-1,4-Benzochinon. Sm. 2140 (B. 22, 2131). — III, 462.

2) 1,3-Diketo-2-Cinnamyliden-2,3-Dihydroinden. Sm. 150-151° (B. 30, 3) Lakton d. Phenyl-2-Oxy-l-Naphtylessigsäure. Sm. 184° (186°) (B.

4) Lakton (aus d. 1-Phenylnaphtalin-2, 3-Dicarbonsäureanhydrid). Sm. 135 bis 137° (Am. **20**, 101). C 78,3 — H 4,3 — O 17,4 — M. G. 276.

30, 130; 31, 2822).

 $C_{18}H_{12}O_3$

1) 2-Oxy-1,1'-Diketo-2,3-Dihydro-2,2'-Biinden. Zers. bei 230-250° (Soc. 71, 247; B. 29 [2] 869).

- $\mathbf{C}_{18}\mathbf{H}_{12}\mathbf{O}_3$
- 2) Chrysooxyessigsäure (B. 18, 1933). II, 1722.
- 3) 2-[1-Naphtoyl] benzol-1-Carbonsaure. Sm. 173,5°. Ba (Bl. 34, 531; B. **29**, 827). — II, 1721.
- 4) Säure (aus Dehydrobenzoylessigsäure). Sm. 112º (Soc. 47, 287). II, 1721.
- 5) α, 2'-Lakton d. α-Oxy-α-Phenyl-2-Oxy-l-Naphtylmethan-2'-Carbonsäure. Sm. 234—235° (B. 31, 2802).
- 6) α,2'-Lakton d. α-Oxy-α-Phenyl-4-Oxy-1-Naphtylmethan-2'-Carbonsäure. Sm. 222—223° (B. 31, 2802). C 74,0 — H 4,1 — O 21,9 — M. G. 292.

 $C_{18}H_{12}O_4$

- 1) Isomethylenphtalid. Sm. 215—216,5° (B. 17, 2620, 2660). II, 1647.
- 2) 3-Benzoyl-4-Keto-6-Phenyl-3,4-Dihydro-1,2-Pyron. Sm. 171-172°. Ag (B. 17, 64; Soc. 47, 278). — II, 1909. 3) Acetat d. 3-Oxy-2-Phenyl-1,4-Naphtochinon. Sm. 112—113,5° (A.
- **296**, 21).
- 4) Acetat d. P-Oxy-P-Phenyl-1,4-Naphtochinon. Sm. 110-1110 (A. **226**, 34). — III, 461.
- 5) Acetat d. 1,3-Diketo-2-[2-Oxybenzyliden]-2,3-Dihydroinden. Sm. 124—125° (B. 30, 2140).
- 6) Acetat d. 1,3-Diketo-2-[3-Oxybenzyliden]-2,3-Dihydroinden.
- 140° (B. 30, 2141). 7) Acetat d. 1,3-Diketo-2-[4-Oxybenzyliden]-2,3-Dihydroinden. Sm. 162° (B. 30, 2141).
- 8) 2,6-Diphenyl-1,4-Pyron-3-Carbonsäure. Sm. 2010 u. Zers. NH₄, Ba $+6H_2O$, $2Ag + AgNO_3$ (B. 23, 3731). — II, 1910.
- 9) 2-[2-Oxynaphtoyl]benzol-1-Carbonsäure. Sm. 256° u. Zers. Na, Ba $+2H_2O$, Ag (B. 15, 2177; 16, 299). — II, 1909.
- 10) 1-Phenylnaphtalin-2,3-Dicarbonsäure. $Na_2 + 4\frac{1}{2}H_2O$, $Ca + 3H_2O$, Ba + $3 H_2 O$, Ag₂ (Am. 20, 93).
- 11) Isophenanthroxylenacetessigsäure. Sm. 267—269° u. Zers. Cu+9 H₉O, Ag (Soc. 59, 11). — II, 1908.
- 12) Säure (aus Anhydroacetonbenzilcarbonsäure). Sm. 205-207° u. Zers. Ag (Soc. 71, 143).
- 13) Dilakton d. $\alpha \delta$ -Di[?-Oxyphenyl]- α -Buten- $\beta \gamma$ -Dicarbonsäure (Hydrodicumarin). Sm. 256° (Soc. 51, 66). — II, 2026.
- 14) Inn. Anhydrid d. 1- $[\beta$ -Oxyäthenyl]benzol-2-Carbonsäure. Sm. 234 bis 235° (B. 27, 210). — II, 1641.
- 15) Anhydrid d. γ -Keto- $\alpha \delta$ -Diphenyl- α -Buten- $\alpha \delta$ -Dicarbonsäure (A. d. Carboxylcornicularsäure). Sm. 215°. Ag (B. 15, 1547, 1550; A. 219, 20). - II, 1981.
- 16) Verbindung (aus Oxybisdiketohydrinden). Sm. 150° (B. 31, 1172).

 \mathbf{C} 70,1 — \mathbf{H} 3,9 — \mathbf{O} 26,0 — \mathbf{M} . \mathbf{G} . 308. $C_{18}H_{12}O_{5}$

- 1) Calycin. Sm. 240°. $K + 2H_2O$ (B. 13, 1816; A. 284, 125; J. pr. [2] **58**, 536). — III, *621*.
- 2) 2,5-Diphenylfuran-3,4-Dicarbonsäure. Sm. 238°. Ag. (B. 17, 61; Soc. 47, 266; 49, 168; 57, 954). — III, 719.
- 3) Pulvinsäure ($\alpha\gamma$ -Lakton d. $\beta\gamma$ -Dioxy- $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadiën- $\alpha\delta$ -Dicarbonsäure). Sm. 214—215°. Ca + H₂O, Ba + 4 H₂O, Cu, Ag, Ag₂ + H₂O (B. 13, 1631; 15, 1550; A. 219, 6; 282, 14; 284, 116). II, 2029.
- 4) α-Anhydrid d. αδ-Diketo-αδ-Diphenylbutan-2,2'-Dicarbonsäure?
- Sm. 228—230° (B. 10, 2207; 17, 2622). II, 2033.
 5) β-Anhydrid d. αδ-Diketo-αδ-Diphenylbutan-2,2'-Dicarbonsäure?
 Sm. 200—202° (B. 18, 3116). II, 2033.
 C 66,7 H 3,7 O 29,6 M. G. 324.

C18H12O6

- 1) Trimethyltricumarin (B. 20, 1331). II, 2092.
- 2) Diphenyläther d. 2,3,5,6-Tetraoxy-1,4-Benzochinon. Sm. 276° (Am.
- 17, 648). III, 355. 3) Diacetat d. 1,2-Dioxy-9,10-Anthrachinon. Sm. 179—183° (160°) (J. 1873, 447; B. 9, 1232). — III, 422.
- 4) Diacetat d. 1,3-Dioxy-9,10-Anthrachinon. Sm. 183-184° (A. 183, 215). **— III**, 425.
- 5) Diacetat d. 1,4-Dioxy-9,10-Anthrachinon. Sm. 2000 (B. 8, 1647). - III, 426.

 $\mathbf{C}_{18}\mathbf{H}_{13}\mathbf{N}$

6) Diacetat d. 1,5-Dioxy-9,10-Anthrachinon. Sm. 244-245° (B. 11. $C_{18}H_{12}O_6$ 1178, 1616). — III, 427. 7) Diacetat d. 1,6-Dioxy-9,10-Anthrachinon. Sm. 227-2320 (B. 12)

186). — III, 427.

- 8) Diacetat d. 1,7-Dioxy-9,10-Anthrachinon. Sm. 199° (B. 11, 972). III, 429.
- 9) Diacetat d. 2,3-Dioxy-9,10-Anthrachinon. Sm. 205-207° (B. 21, 2505). — III, 430. 10) Diacetat d. 2,6-Dioxy-9,10-Anthrachinon. Sm. 228—229° (J. 1873,
- 449; B. 9, 382). III, 430.
- 11) Diacetat d. 2,7-Dioxy-9,10-Anthrachinon. Sm. 195° (B. 9, 382). III, 431.
- 12) Diacetat d. Isochrysazin. Sm. 160—165° (B. 17, 897). III, 431. 13) Cetrapinsäure. Sm. 147°. K + H₂O (B. 30, 361).

- 14) Oxypulvinsäure. Sm. 207° (wasserfrei). Ba + H₂O (J. pr. 2] 57, 313). C18H12O7
 - C 63,5 H 3,5 O 32,9 M. G. 340.

 1) Diacetat d. 1,2,6-Trioxy-9,10-Anthrachinon. Sm. 238°. subl. bei 160° (B. 10, 1822; 13, 42). III, 435.
 - 2) Anhydrid d. Dibenzoylweinsäure. Sm. 1740 (B. 13, 1178; J. 1882, 855). — II, 1155. C 58,1 — H 3,2 — O 38,7 — M. G. 372.
- C18H12O9 1) 2,4,6-Trimethyl-1,3,5-Benztrifuran-1,3,5-Tricarbonsäure. Ba₃ + $7 \,\mathrm{H_2O}$ (B. 19, 2936). — III, 736.
- $C_{18}H_{12}N_2$ C 84,4 - H 4,7 - N 10,9 - M. G. 256.

 - C 54,4 H 4,7 N 10,9 M. G. 256.

 1) Triphenylendiamin. HCl (B. 8, 1611). IV, 600.
 2) 2-Phenyl-α-Naphtodiazin. Sm. 187° (B. 28, 3174). IV, 1071.
 3) 2, 3'-Bichinolyl. Sm. 176—177°. Sd. oberh. 400°. HCl, 2HCl+4H₂O, (2HCl, PtCl₄ + H₂O), (HCl, AuCl₃ + 2H₂O), H₂SO₄ + H₂O (M. 2, 491; 7, 306; 8, 121; B. 23, 2895; A. 287, 42). IV, 1066.
 4) 2, 5'-Bichinolyl. Sm. 144°. (2HCl, PtCl₄) (M. 8, 140). IV, 1068. 5, 2, 7'-Bichinolyl. Sm. 192,5° (191°). (2HCl, PtCl₄), H₂SO₄ (M. 2, 501; Soc. 39, 174; B. 17, 1899, 1965). IV, 1066.
 6) 6,6'-Bichinolyl. Sm. 178°. 2HCl+4H₂O, (2HCl, SnCl₂), (2HCl, Cl₂J₂), (2HCl, PtCl₄), (HCl, AuCl₃ + 2H₂O), H₂SO₄ + 3H₂O, 2H₂SO₄, H₂Cr₂O₇,

 - (2 HCl, PtCl₄), (HCl, AuCl₃ + 2 H₂O), H₂SO₄ + 3 H₂O, 2 H₂SO₄, H₂Cr₂O₇, Pikrat (*M*. 5, 418; *B*. 17, 1817, 2380, 2444, 2767). TV, 1069.

 7) 6,7'[P]-Bichinolyl. Sm. 148°. 2 HCl, (2 HCl, PtCl₄ + H₂O), H₂SO₄, Pikrat (*M*. 6, 548; *B*. 17, 2450). TV, 1070.

 8) isom. Bichinolyl. Sm. 116—117°. (2 HCl, PtCl₄), HNO₃, H₂SO₄, Pikrat

 - (B. 20, 634). IV, 1071. 9) isom. Bichinolyl. Sm. 115°. 2HCl + 3H₂O, (2HCl, PtCl₄) (B. 18,
 - 1913; J. 1885, 1021). IV, 1070. 10) isom. Biehinolyl. Sm. 122°. (2 HCl, PtCl₄), HNO₃, $\rm H_2SO_4$, Pikrat (B. 20, 632). — IV, 1071.
 - 10. Sept. IV, 1071.
 11. isom. Bichinolyl. Sm. 159°. 2HCl + 2H₂O, (2HCl, PtCl₄), H₂SO₄, Pikrat (B. 18, 1911; J. 1885, 1021). IV, 1070.
 12. Biisochinolyl? (2HCl, PtCl₄) (B. 25, 735). IV, 1071. C 76,0 H 4,2 N 19,7 M. G. 284.
 1) Homofluorindin (B. 23, 2791). IV, 1300.
 2) polym. Nitril d. Benzol I Carbonsäure 2 Methylcarbonsäure (C.H.N.) Sept. 260, 2618, Nov. (B. 27, 2241, 29, 2392 Apm)
- $C_{13}H_{12}N_4$
 - = $(C_9H_6N_2)_2$. Sm. 260—261° u. Zers. (B. 27, 2241; 29, 2392 Anm.). II, 1843.
- $\mathbf{C}_{18}\mathbf{H}_{12}\mathbf{Br}_{2}$ 1) 1,4-Di[4-Bromphenyl]benzol. Sm. 304° (B. 27, 3394). $C_{18}H_{12}S$ 1) Verbindung (aus Phenylsulfid). Sm. 1970; Sd. über 3300 (A. 174, 186).
 - · II, 803. $C_{\rm s}88,9 - H_{\rm 5,3} - N_{\rm 5,8} -$ - M. G. 243.
 - 1) Amidochrysen. Sm. 199° (201-203°). (2HCl, PtCl₄) (B. 23, 793, 2445). - II, 643.
 - 2) 2-[1-Naphtyl]indol. Sm. 196°. Pikrat (A. 272, 204). IV, 465. 3) 1-Phenyl- β -Naphtindol. Sm. 211° u. Zers. Pikrat (A. 253, 40). IV, 465.
 - 4) 2-Phenyl- β -Naphtindol. Sm. 129—130°. Pikrat (A. 253, 43). — IV, 465.
 - Base (aus Anhydroformaldehyd-p-Toluidin u. β-Naphtylamin). Sm. 178 bis 179° (Soc. 73, 545).

- $C_{18}H_{18}N$
- 6) Nitril d. Phenylnaphtylessigsäure. Sm. 97°; Sd. 280°45 (B. 25, 1618). — II, 1480. C 79,7 — H 4,8 — N 15,5 — M. G. 271.
- $C_{18}H_{13}N_3$
- 1) Di β-Cyan-β-Phenyläthenyl]amin (Diphenyldicyanvinylamin). Sm. 175° (J. pr. [2] 55, 335).
- 2) 2-Phenyl-5-[2-Naphtyl]-1,3,4-Triazol. Sm. 2170 (B. 30, 1883; A.
- 298, 42). IV, 1211. 3) Aposafranin. (2 HCl, PtCl₄), HNO₈, H₂SO₄ (B. 21, 1590; 28, 2288; 30, 2624; A. 286, 188). IV, 1176.
- 4) Base (aus Aposafranin). Sm. 203—204°. HCl, HNO₃ (B. 26, 1655; 28, 1712, 2285; A. 272, 312; 286, 189).
 5) Nitril d. ββ'-Di[2-Cyanphenyl]isobuttersäure. Sm. 130° (B. 25, 3027). II, 1470.
- C, H, Cl
- 1) 4-Chlor-4'-Phenylbiphenyl. Sm. 220-220,5° (B. 30, 2801).
- 1) 4-Brom-1, 3-Diphenylbenzol? Sm. 31° (B. 27, 3387). $\mathbf{C}_{18}\mathbf{H}_{18}\mathbf{Br}$
 - 2) 1-[4-Bromphenyl]-4-Phenylbenzol. Sm. 228° (B. 27, 3393). C 87.8 - H 5.7 - O 6.5 - M. G. 246.
- $C_{18}H_{14}O$
- 1) Anhydrobishydrindon. Sm. 142-1430 (Soc. 65, 495). III, 256.
- 2) Anhydrobis-2-Hydrindon. Sm. bei 170° (B. 32, 32).
- 3) α-Keto-β-Phenyl-α-[1(?)-Naphtyl]äthan (Benzylnaphtylketon). Sm. 57° (B. 12, 1078). — III, 256.
- $C_{18}H_{14}O_{2}$
- C 82,4 H 5,3 O 12,2 M. G. 262.1) 2-Naphtyläther d. Oxymethylphenylketon. Sm. 104-106° (B. 28, 3031). — III, 133.
- 2) Phenylnaphtylessigsäure. Sm. 141° (B. 25, 1619). II, 1480.
- 3) Verbindung (aus $\alpha \gamma \delta \zeta$ -Tetraketo $\alpha \zeta$ -Diphenylhexan). Sm. $120-140^{\circ}$ (B. **28**, 1207). — III, 324.
- 4) Verbindung (aus d. Verb. C₁₈H₁₄O₈). Sm. 119-120° (B. 28, 1210). -III, 325. C 77,7 - H 5,0 - O 17,3 - M. G. 278.
- $C_{18}H_{14}O_{3}$
- 1) 3,4-Methylenäther d. γ -Keto- ε -Phenyl- α -[3,4-Dioxyphenyl]- α δ -Pentadiën. Sm. 115° (B. 31, 728).
- 2) 5-Oxy-1, 3-Diketo-2-Methyl-2, 4-Diphenyl-2, 3-Dihydro-R-Penten. Sm. 167°. Ag (A. 284, 266). — III, 321.
- 3) Methyläther d. 5-Oxy-1, 3-Diketo-2, 4-Diphenyl-2, 3-Dihydro-R-Penten. Sm. 94—95° (A. 284, 269). — III, 320.
- Methylenäther d. ε-Keto-ε-Phenyl-α-[3,4-Dioxyphenyl]-αγ-Penta-diën. Sm. 133° (B. 28, 1194). III, 251.
- 5) Aethyläther d. 1,3-Diketo-2-[2-Oxybenzyliden]-2,3-Dihydroinden
- (2 Modif.). Sm. 135° (B. 30, 2140). 6) Aethyläther d. 1,3-Diketo-2-[3-Oxybenzyliden]-2,3-Dihydroinden. Sm. 131—132° (B. 30, 2141).
- 7) Aethyläther d. 1,3-Diketo-2-[4-Oxybenzyliden]-2,3-Dihydroinden. Sm. 139° (B. 30, 2142). 8) Anishumin (A. 151, 47). — II, 1119.
- 9) α -Oxy- α -Phenyl- α -[1-Naphtyl]methan- α -Carbonsäure $+2H_2O(Phenyl-Phe$ 1-Naphtyloxyessigsäure). Sm. 108-115° (148° wasserfrei) (A. 266, 12). — II, 1721.
- 10) α -Phenyl- α -[2-Oxy-1-Naphtyl]essigsäure. Ba + 2H₂O, Ba + 3H₂O (B. 31, 2822).
- 11) α' -Phenyl- α^2 -[?-Oxy-2-Naphtyl]methan- α' 2-Carbonsäure (o- β -Oxynaphtoyltoluylsäure). Sm. 261° u. Zers. Ag (B. 16, 304). — II, 1721.
- 12) Anhydrid d. β-Phenylakrylsäure. Sm. 130° (135°; 132—133°) (A. 87, 76; B. 21, 3373; 27, 284). — II, 1407.
- 13) Anhydrid d. Allo-β-Phenylakrylsäure. Fl. (B. 27, 2045). II, 1423.
- 14) Anhydrid d. 1-Phenyl-1, 2, 3, 4-Tetrahydronaphtalin-2, 3-Dicarbon-säure. Sm. 145—150° (Am. 20, 99).
- 15) Anhydrid d. α-Truxillsäure (B. 22, 682, 2145, 2261). II, 1901.
- 16) Anhydrid d. β-Truxillsäure. Sm. 116° (B. 22, 128, 680, 2260). II, 1902.
- 17) Anhydrid d. γ-Truxillsäure. Sm. 191° (B. 22, 126, 2245). II, 1903.
- 18) Verbindung (aus d. Verbind. $C_{18}H_{16}O_4$). α -Modif. Sm. 142°; β -Modif. Sm. 172—173° (B. 28, 1209). III, 324.

 $C_{18}H_{14}O_{4}$

C 73,5 — H 4,7 — O 21,8 — M. G. 294.

- 1) $\alpha \gamma \delta \zeta$ -Tetraketo- $\alpha \zeta$ -Diphenylhexan. Sm. 179—180°. Cu (B. 21, 1134; **28**, 1206). — **III**, 324.
- 2) 3,4-Methylenäther d. γ -Keto- ε -[2-Oxyphenyl]- α -[3,4-Dioxyphenyl]- α δ -Pentadiën. Sm. 168° (B. 31, 729). 3) Triresorcin + $2^{1}/_{2}$ H₂O. HCl + H₂O, 4 + 5 HBr (A. 289, 61).

4) Benzoylphenyltetrinsäure. Sm. 110° (B. 21, 2609). — II, 1682.

5) $\alpha \delta$ -Diphenyl- $\alpha \gamma$ -Butadiën- $\beta \gamma$ -Dicarbonsäure. Sm. 201° u. Zers. (B.

27, 2406). — II, 1906. 6) α -Biphenyl- $\alpha \gamma$ -Butadiën- β , 2-Dicarbonsäure. Sm. 295°. Ba $+ 2H_2O$,

 Ag_2 (B. 16, 279). — II, 1906.

 7) α-Phenyl-δ-[3,4-Dioxyphenyl]-αγ-Butadiën-3,4-Methylenäther-α-Carbonsäure (α-Phenylpiperinsäure).
 Sm. 208—209° (B. 28, 1189). II, 1899.

8) 3-Oxy-1-Keto-3,4-Diphenyl-2,3-Dihydro-R-Penten-2-Carbonsäure

+H₂O (Anhydroacetonbenzilcarbonsäure). Sm. 167—168°. Ag (Soc. 71, 140). 9) Polyporsäure. Sm. über 300°. (NH₄)₂ + 2H₂O, Na₂ + 2H₂O, K₂ + 2H₂O, Mg + 3H₂O, Ca + 3H₂O, Sr + H₂O, Ba + 4H₂O, Ag (A. 187, 177, 180; 195, 365). — II, 1906.

10) Säure (aus Dehydrobenzoylessigsäure). Sm. 145-150° u. Zers. (Soc. 47, 289). — II, *1906*.

11) Lakton [oder Anhydrid] d. $\alpha\delta$ -Di[2-Oxyphenyl]butan- $\beta\gamma$ -Dicarbonsäure (Tetrahydrocumarin). Sm. $222-224^{\circ}$ (Soc. 51, 70). — II, 2023.

12) Dilakton d. αδ-Dioxy-αδ-Diphenylbutan-2, 2'-Dicarbonsäure. Sm. 208—210° (B. 10, 2209). — II, 2024. 13) Diacetat d. 2,3-Dioxyanthracen. Sm. 155—160° (B. 28, 1534).

14) Diacetat d. 2,9-Dioxyanthracen. Sm. 141-1420 (B. 31, 2794).

- 15) Diacetat d. 2,10-Dioxyanthracen. Sm. 155° (A. 212, 28; B. 14, 1264). - II, 1112.
 - 16) Diacetat d. 9,10-Dioxyanthracen (Diacetyloxanthranol). Sm. 260° u.
 - Zers. (A. 212, 66; B. 21, 1172). III, 244. 17) Diacetat d. α-Dioxyanthracen. Sm. 184° (B. 12, 186). II, 999. 18) Diacetat d. β -Dioxyanthracen. Sm. 196-198° (B. 11, 1616). -
- II, 999.
- 19) Diacetat d. isom. Dioxyanthracen. Sm. 254-255° (B. 15, 1809). -II, 1000.
- 20) Diacetat d. 9,10-Dioxyphenanthren. Sm. 2020 (A. 167, 149). -II, 1001.
- 21) Diacetat d. Dioxyphenanthren. Sm. 159° (B. 19, 793; 27, 1148; A. **212**, 28). — **II**, 1000.
- 22) Aethylenester d. $\alpha\beta$ -Diphenyläthen- $\alpha\beta$ -Dicarbonsäure (Ae. d. Diphenylmaleïnsäure). Sm. 112° (A. 280, 194). — II, 1897. 23) Verbindung (aus Essigsäurephenylester). Sm. 138° (Soc. 37, 481). —
- II, 662. C 69,7 H 4,5 O 25,8 M. G. 310.

C18H14O5

1) 2-Acetat-3,4-Methylenäther d. γ -Keto- γ -[2-Oxyphenyl]- α -[3,4-Dioxyphenyl]propen. Sm. 95—96,5° (B. 32, 316).

2) Aethylätheracetat d. 1,2-Dioxy-9,10-Anthrachinon. Sm. 141° (Soc. **65**, 186). — III, 422.

3) 3, 4-Methylenäther-5-Aethyläther d. 5-Oxy-2-Keto-1-[3, 4-Dioxybenzyliden]-1,2-Dihydrobenzfuran. Sm. 150° (B. 32, 310).

4) Anhydro-1- $[\beta$ -Oxyäthenyl] benzol-2-Carbonsäure. Sm. 183—184°.

- Pb, Cu, Ag₂ (B. **27**, 209). II, 1641. 5) Diacetophenoncarbonsäure. Sm. 132—135° (B. 17, 2667). — II, 1647.
- 6) γ -Keto- α δ -Diphenyl- α -Buten- α δ -Dicarbonsäure (Carboxylcornicularsäure) (A. 219, 19; B. 15, 1550). — II, 1981. 7) Lakton d. $\alpha\delta$ -Di[β -Oxyphenyl]- α -Buten- $\beta\gamma$ -Dicarbonsäure (Hydro-
- dicumarinsäure). Ba $+ x \hat{H}_2 O$, Ag (Soc. 51, 64). II, 2026. 8) Anhydrid d. $\alpha\beta$ -Diphenylpropan $-\beta$, 2, 2'-Tricarbonsäure.
- bis 184° (B. 27, 2498). II, 2026.
- 9) Monacetat d. 5,7-Dioxy-4-Phenyl-1,2-Benzpyronmonomethyläther. Sm. 142° (B. 27, 420; G. 27 [1] 576). — III, 248.

10) Acetat d. Chrysinmethyläther. Sm. 148° (149°) (B. 26, 2903; 27, 21). - III, 628.

11) Diacetat d. P-Dioxy-9-Keto-9,10-Dihydroanthracen (D. d. Desoxy-C18H14O5 isoanthraflavinsäure). Sm. 1730 (B. 15, 1044). - III, 246. 12) Verbindung (aus 6-Phenylcumalin u. Salicylsäure). Sm. 930 (B. 29,

1676; G. 26 [2] 343).

C 66.3 - H 4.3 - O 29.4 - M. G. 326.C18H14O6

1) 3',4'-Methylenäther-3,5-Dimethyläther d. 3,5-Dioxy-2-Keto-1-[3,4-Dioxybenzyliden]-1,2-Dihydrobenzfuran. Sm. 220—224° (B. 30,

2) Acetat d. Thebaolchinon. Sm. 203° (B. 28, 942; 30, 1390).
3) Dimethylätheracetat d. 1,2,3-Trioxy-9,10-Anthrachinon. Sm. 213—215°; β-Modif. Sm. 175°; γ-Modif. Sm. 160° (Soc. 63, 1169; 67, 824). — III, *433*.

4) $\alpha \delta$ -Diketo- $\alpha \delta$ -Diphenylbutan- $\beta \gamma$ -Dicarbonsäure (Dibenzoylbernsteinsäure). Ca, Ag, (B. 17, 60; Soc. 57, 950). — II, 2032.

5) αδ-Diketo-αδ-Diphenylbutan-2,2'-Dicarbonsäure? (o-Aethylendibenzoyldicarbonsäure). Sm. 1720 (165,5—166,50). Ag₂ (B. 10, 1561; 18, 3116). - II, 2033.

6) α, 2-Lakton d. α-Oxydiphenylmethan-α, 2, 2'-Tricarbonsäure-α, 2'-Dimethylester. Sm. 147-148° (A. 242, 235). - II, 2055.

- 7) Dimethylester d. Diphtalylsäure. Sm. 191-192° (A. 242, 225). -II, 2028.
- 8) Diacetat d. 1,7-Dioxy-3-Methylxanthon. Sm. 163° (B. 27, 1993). III, 216.
- 9) Verbindung (aus Diphtalylsäure). Sm. 174° (A. 242, 226). II, 2029. 10) Verbindung (aus Diphtalylsäure). Sm. 275 — 276° (A., 242, 227). —

II, 2028. C 63,2 - H 4,1 - O 32,7 - M. G. 342.C18H14O7

1) Triphloroglucid + 2H₂O (A. 276, 336). — II, 1020.

- 2) 1,3-Diacetat d. 1,3,7-Trioxyxanthon-7-Methyläther (Gentisindiacetat). Sm. 196—196,5° (A. 175, 74; M. 16, 924). — III, 210. 3) Benzoat d. Cotarnlaktonsäurelakton. Sm. 184° (A. 254, 344). —
- II, 2040.
- 4) β -Oxy- $\alpha\delta$ -Diketo- $\alpha\delta$ -Diphenylbutan- $\beta\gamma$ -Dicarbonsäure (Dibenzoyläpfelsäure). Sm. 157—158° u. Zers. (B. 30, 1998).

C 60,3 - H 3,9 - O 35,8 - M. G. 358. $C_{18}H_{14}O_{8}$

 $\mathbf{C}_{18}\mathbf{H}_{14}\mathbf{O}_{11}$ $\mathbf{C}_{18}\mathbf{H}_{14}\mathbf{N}_{2}$

 $\mathbf{C}_{18}\mathbf{H}_{14}\mathbf{N}_{4}$

1) Hydräskuletin (Z. 1868, 727). — III, 569. 2) Acetylgardeniasäure. Sm. 244° u. Zers. (A. 200, 320). — III, 633. 3) Dibenzoylweinsäure + H₂O. Sm. 90° (132° wasserfrei) (B. 15, 2242; Ph. Ch. 8, 473). — II, 1155.

4) Diacetylrufohydroellagsäure (B. 8, 1497). — II, 2022.

5) Säure (aus Diacetylcitrakonfluorescein) (B. 29, 2825).

C 57,8 — H 3,7 — O 35,5 — M. G. 374.

1) Purpurogallin (Pyrogallochinon). Sm. über 220° (Z. 1870, 86; A. 163, 162; B. 5, 848; 20, 1278, 3260; J. pr. [2] 15, 324; J. 1882, 682, 683, $C_{18}H_{14}O_{9}$ 684). — III, 345.

2) Anhydro-5-Oxy-1-Methylbenzol-2,4-Dicarbonsäure (Anhydrooxyuvitinsäure) (B. 8, 886). — II, 1948.

3) Acetylderivat d. α-Diresorcinessigsäure. Sm. 138° (C. 1895 [1] 530).
4) Verbindung (aus Acetaldehyd u. Gallussäure) (B. 31, 150).
C 53,2 — H 3,4 — O 43,4 — M. G. 406.
1) Säure (aus Vasculose) (Bl. 37, 409). — I, 1079.
C 83,7 — H 5,4 — N 10,8 — M. G. 258.

1) 3-Amido-1-Benzylamidobenzol. Fl. 2 HCl (Soc. 55, 597). — IV, 573. 2) 7-Phenylhydrazonacenaphten. Sm. 90° (A. 290, 200). — IV, 775. 3) 4-Phenylazobenzol. Sm. 150° (B. 9, 132; 21, 912). — IV, 1402. 4) Diphenylazophenylen. Sm. 176—180° (M. 7, 375; 8, 478). — II, 337.

5) Dichinolin. HCl (J. 1878, 891). — IV, 1064. C 75,5 — H 4,9 — N 19,6 — M. G. 286.

1) 1,2-Di[Phenylazo]benzol? (Disazobenzol). Sm. 98° (B. 21, 2145). — IV, 1370.

2) 1,3-Di[Phenylazo]benzol. Sm. 167—168° (B. 29, 103). 3) 1,4-Di[Phenylazo]benzol. Sm. 168—169° (Soc. 67, 929). — IV, 1370. 1) Tetrabromreten. Sm. 210—212° (A. 185, 84). — II, 277.

 $\mathbf{C}_{18}\mathbf{H}_{14}\mathbf{Br}_{4}$

 $C_{18}H_{15}N$

C 88,2 — H 6,1 — N 5,7 — M. G. 245. 1) Triphenylamin. Sm. 127° (B. 6, 1514; 18, 2156; J. 1877, 481; G. 23 [2] 43). — II, 342.

2) 1-12-Methylphenylimido methylnaphtalin (α-Naphtobenzylidentoluidin). Sm. 59° (B. 22, 2150). — III, 63.

3) 1-[4-Methylphenylimido]methylnaphtalin. Sm. 93° (B. 22, 2150).

4) 2-[2-Naphtyl]-1,3-Dihydroisoindol. Sm. 232° (B. 31, 1158).

5) Verbindung (Base aus Zimmtaldehyd). Fl. HCl, (2 HCl, PtCl₄), 2 + PtCl₄ (A. 100, 57). — II, 342.
 C 79,1 — H 5,5 — N 15,4 — M. G. 273.

 $C_{18}H_{15}N_{3}$

1) 2-Phenylamido-4-Phenylimido-1-Imido-1, 4-Dihydrobenzol (B. 26, 384). — IV, 1136.

2) α -Amido- α -Benzylidenhydrazon- α -[2-Naphtyl] methan (Benzyliden-2-Naphtenylhydrazidin). Sm. 96°. Pikrat (B. 30, 1880; A. 298, 36). — IV, 1168.

3) 4-Phenylamidoazobenzol. Sm. 82° (B. 12, 259). — IV, 1356.

4) 5-Aethylamido-αβ-Naphtophenazin. Sm. 169°. (2HCl, PtCl₄), (HCl, $AuCl_{3}$) (B. 23, 3804). — IV, 1203.

5) 5-Dimethylamido-αβ-Naphtophenazin. Sm. 221°. (2HCl, PtCl₄), (HCl, $AuCl_3$) (B. 23, 3808). — IV, 1203.

6) 9-Dimethylamido-αβ-Naphtophenazin (Dimethylnaphteurhodin). Sm. 205° (B. 21, 721). — \mathbf{IV} , 1200.

7) 3-Methyl-2-Phenyl-2, 3-Dihydro-1, 2, 4-Naphtisotriazin. HCl, (2HCl,

PtCl₄) (B. 24, 1004). — IV, 1393. 8) Azodiphenylblau. HCl, Pikrat (B. 5, 472; 8, 1613; 20, 1541). — IV, 1210. C 71,8 — H 5,0 — N 23,2 — M. G. 301.

 $C_{18}H_{15}N_{5}$

1) Bisdíazobenzolanilid. Zers. bei 80-81° (78,5°) (B. 27, 704, 1861, 2597). **— IV**, 1519.

2) 4-Phenylazo-1-[4-Amidophenylazo] benzol (Amidodisazobenzol). Sm.

170° (B. 21, 2145). — IV, 1371.

1) Triphenylphosphin. Sm. 79°; Sd. oberh. 360° (i. H-Strom). (2 HCl, PtCl₄), HJ, + HgCl₂ (B. 15, 801, 1610; A. 229, 295; G. 24 [1] 34). — $\mathbf{C}_{18}\mathbf{H}_{15}\mathbf{P}$ IV, 1658.

1) Triphenylarsin. Sm. 58-59°; Sd. oberh. 360° (i. CO₂) (A. 201, 237; $\mathbf{C}_{18}\mathbf{H}_{15}\mathbf{A}\mathbf{s}$

B. 15, 1954, 2876; 19, 1031). — IV, 1688.
1) Wismuthtriphenyl. Sm. 78° (u. 75°) (B. 20, 55; A. 251, 324). — $C_{18}H_{15}Bi$ IV, 1698.

 $C_{18}H_{15}Sb$ 1) Antimontriphenyl. Sm. 48°; Sd. oberh. 360° u. Zers. (A. 233, 43; G. **24** [1] 317). — **IV**, 1694.

C18H16O C 87,1 - H 6,4 - O 6,4 - M. G. 248.

1) 1-Keto-3,5-Diphenyl-1,2,3,4-Tetrahydrobenzol. Sm. 70-72° (A. 281, 59). — III, 253.

2) Verbindung (aus αδ-Diketo-αδ-Di[4-Methylphenyl] butan). Sm. 164° (R. 6, 72). — III, 300. C 81,8 — H 6,0 — O 12,1 — M. G. 264.

 $C_{18}H_{16}O_2$

1) 1-Oxy-3-Keto-2-Methyl-1, 5-Diphenyl-2, 3-Dihydro-R-Penten. Sm. 179° (Soc. 51, 431). — III, 253.

2) 1,3-Diketo-5-Methyl-2-Aethyl-2-Phenyl-2,3-Dihydroinden. Sm. 91 bis 93° (B. **29**, 2378).

3) 1,3-Diketo-2-Aethyl-2-[3-Methylphenyl]-2,3-Dihydroinden. Sm. 63

5) bis 65° (B. 28, 1391). — II, 303.
4) Retenchinon. Sm. 197—197,5°. subl. (Z. 1869, 73; A. 188, 75; 229, 117; B. 17, 695; Bl. [3] 19, 514). — III, 458.
5) Acetat d. 1-[α-Oxybenzyl]inden. Sm. 110—111° (B. 28, 1504).

6) γ -Phenylallylester d. β -Phenylakrylsäure (Styracin; Zimmtsäurestyrylester). Sm. 44° (A. 31, 273; 70, 1; 97, 91; 188, 200; B. 13, 1072; 15, 2624). — II, 1406. C 77,1 — H 5,7 — O 17,1 — M. G. 280.

 $C_{18}H_{16}O_{3}$

1) ζ -Oxy- $\gamma\delta$ -Diketo- $\alpha\zeta$ -Diphenyl- α -Hexen. Sm. 114—115° (B. 28, 1210). · III,

2) Methyläther d. Thebenol (Methylthebenol). Sm. 133-134° (B. 30, 1381; 32, 181).

- C18 H18 O8
- 3) Acetat d. γ-Keto-γ-Phenyl-α-[6-Oxy-3-Methylphenyl] propen (B. 31, 713 Anm.).
- 4) Acetat d. γ-Keto-γ-[4-Methylphenyl]-α-[2-Oxyphenyl]propen. Sm. 112° (B. 29, 239). III, 249.
 5) Acetat d. Verb. C₁₆H₁₄O₂. Sm. 103° (B. 12, 1307). III, 443.
- 6) Methylester d. γ-Keto-αδ-Diphenyl-α-Buten-δ-Carbonsäure (J. pr. 2] 55, 348).
- 7) Aethylester d. γ-Keto-αγ-Diphenylpropen-β-Carbonsäure (Ae. d. Benzylidenbenzoylessigsäure). Sm. 98—99° (Soc. 47, 259). II, 1720.
- Methylderivat d. Lakton d. β-Oxy-δ-Keto-αγ-Diphenylbutan-δ-Carbonsäure. Sm. 102° (B. 27, 2226). II, 1894.
- 9) Verbindung (aus Diäthylcarbobenzonsäure). Sm. 120° (A. 261, 302). II, 1476. C 72,9 — H 5,4 — O 21,6 — M. G. 296.
- C18H16O4

- 1) Nepodin. Sm. 158° (A. 291, 310). III, 453. 2) Orcaceteïn (J. pr. [2] 26, 55). III, 146. 3) Phenochinon. Sm. 71° (B. 5, 249, 846; 12, 1981; A. 200, 251; 215, 134). — III, *343*.
- 4) isom. P-Phenochinon. Na₂ (Am. 18, 14). III, 344. 5) γ -Oxy- $\alpha\beta\delta$ -Triketo- $\alpha\delta$ -Di[4-Methylphenyl]butan (p-Tolylformoïn). Sm. 161° (B. **25**, 3473). — III, 320.
- 6) α -Aethyläther d. $\alpha\beta$ -Dioxy- $\gamma\delta$ -Diketo- $\alpha\delta$ -Diphenyl- α -Buten (α -Aethylbenzoylformoïn). Sm. 137—138° (B. 27, 717). — III, 317.
- 7) β -Aethyläther d. α β -Dioxy- γ δ -Diketo- α δ -Diphenyl- α -Buten (β -Aethylbenzoylformoïn) (B. 25, 3471; 27, 712). III, 317.
- 8) 2-Acetat-4-Methyläther d. γ -Keto- γ -[2,4-Dioxyphenyl]- α -Phenylpropen. Sm. 83—84° (B. 32, 312).
- 9) **2-A**cetat-**4-M**ethyläther d. γ -Keto- γ -[2-Oxyphenyl]- α -[4-Oxyphenyl]propen. Sm. 84° (B. **32**, 319)
- 10) Diäthyläther d. 1, 2-Dioxy-9, 10-Anthrachinon (M. 5, 228). III, 422.
- 11) Diäthyläther d. 1, 3-Dioxy-9, 10-Anthrachinon. Sm. 170° (B. 9, 1204). - III, 425.
- 12) Diäthyläther d. 1,4-Dioxy-9,10-Anthrachinon. Sm. 176-1770 (B. **21**, 1169). — III, 426.
- 13) Diäthyläther d. 2,3-Dioxy-9,10-Anthrachinon. Sm. 160-163 (B.
- 22, 684). III, 430. 14) Diäthyläther d. 2,6-Dioxy-9,10-Anthrachinon. Sm. 232° (B. 9, 383;
- 15, 1799; Ph. Ch. 18, 561). III, 430. 15) Diäthyläther d. 2,7-Dioxy-9,10-Anthrachinon. Sm. 193—194° (B.
- 9, 383). III, 431. 16) 24-Methyläther-7-Aethyläther d. 7-Oxy-2-[4-Oxyphenyl]-1,4-Benz-
- pyron. Sm. 144-145° (B. 32, 323). 17) α -Isoatropasäure. Sm. 237—237,5°. Ca + 2 H₂O, Ba + 2½ H₂O (A. 138, 237; 148, 246; 195, 167; 206, 36; 217, 109; B. 28, 140). — II, 1403.
- 18) β -Isoatropasäure. Sm. 206°. Ca $+ 3 H_2 O$, Ba. (Lit. siehe d. α -Säure u. A. 206, 38; B. 28, 140). — II, 1403.
- 19) 1,2-Diphenyl-R-Tetramethylen-3,4-Dicarbonsäure? (β -Truxillsäure; δ-Isatropasäure). Sm. 206°. $(NH_4)_2 + H_2O$, $Na_2 + 2H_2O$, $Ca + 3H_2O$, $Ba + 2H_2O$, $Cu + 4H_2O$, Ag_2 (B. 21, 2347; 22, 2257; A. 271, 193). II, 1902.
- 20) 1,3-Diphenyl-R-Tetramethylen-2,4-Dicarbonsäure (α-Truxillsäure; γ -Isatropasäure). Sm. 274°. Na₂ + 10H₂O, Ca + H₂O, Ba + 8½ H₂O, Pb + H₂O, Ag, Ag, (B. **21**, 2346; **22**, 2246; **27**, 1414; Ph. Ch. **6**, 318). - II, 1901.
- 21) γ -Truxillsäure (e-Isatropasäure). Sm. 228°. Cu + 3¹/₂ H₂O, Ba + 11 H₂O, Ag, Ag₂ (B. 22, 127, 2258; 27, 1414; Ph. Ch. 6, 318). II, 1903.
- 22) δ -Truxillsäure. Sm. 174°. Ca, Ba + 4H₂O, Cu + 2H₂O, Ag₂ (B. 22,
- 2250; A. 271, 205). II, 1903. 23) β -Cocasäure. Sm. 189°. Cu + 2H₂O, Ag₂ (A. 271, 202). II, 1404.
- 24) γ -Acetoxyl- $\beta\gamma$ -Diphenylpropen- γ -Carbonsäure. Sm. 145—146° (Soc. 71, 138).
- 25) αα-Diphenyl-α-Buten-βγ-Dicarbonsäure (α-Methyl-γ-Diphenylitakonsäure). Sm. 179-180° u. Zers. (B. 28, 3193).

C18H16O5

26) $\alpha \varepsilon$ -Diketo- $\alpha \varepsilon$ -Diphenylpentan- γ -Carbonsäure ($\alpha \gamma$ -Dibenzoylpropan- β -Carbonsäure). Sm. 132—133°. Na, Ca + 6 H₂O, Ba + 6 H₂O, Ag (B. 19, 3147; 22, 3228; 26, 912; 28, 2102). — II, 1900. $C_{18}H_{16}O_4$

27) 1-Phenyl-1,2,3,4-Tetrahydronaphtalin-2,3-Dicarbonsäure. Sm. 195

bis 198°. Ag₂ (Am. 20, 98).

28) Aethylester d. αγ-Diketo-αγ-Diphenylpropan-β-Carbonsäure (Ae. d. Dibenzoylessigsäure). Sm. 112°. Cu (Soc. 47, 426; 59, 1000; B. 16, 2133; A. 282, 158). — II, 1896.

29) Aethylester d. β -Benzoxyl- α -Phenylakrylsäure. Sm. 87—88° (A. 291, 194).

30) Di[4-Methylphenylester] d. Fumarsäure. Sm. 162° (B. 18, 1948).

31) Acetat d. Thebaol. Sm. $118-122^{\circ}$ (B. 28, 942; 30, 1386). 32) Diacetat d. $\alpha\beta$ -Di[4-Oxyphenyl]äthen. Sm. 213° (B. 7, 1203). —

II, 998.

33) Verbindung (aus 2-Benzoyl-1,3-Diketo-2,3-Dihydroinden). Na (B. 27, 107).
34) Verbindung (aus αγδζ-Tetraketo-αζ-Diphenylhexan). Sm. 79°. Cu (B. 28, 1207). — III, 324.
35) Verbindung (aus Tropasäure). Fl. (B. 12, 947; 25, 936). — II, 1579.
36) Verbindung (aus Rumex nepalensis). Sm. 158° (B. 29, 325). C 69,2 — H 5,1 — O 25,6 — M. G. 312.
35) Weight (A. 1) Weight (A. 1) Weight (A. 2) Lakton de Weight (A. 2) Lakto

1) Mekoninmethylphenylketon (α, 2 - Lakton d. γ - Keto-α-Oxy-γ-Phenyl-α-[3,4-Dimethoxylphenyl]propan-2-Carbonsäure). Sm. 127-128° (M. 12,

476; 13, 664). — II, 2022. 2) $\gamma\gamma$ -Dioxy- $\alpha\beta\delta$ -Triketo- $\alpha\delta$ -Di[4-Methylphenyl]butan. Sm. 88° (B. 25, 3474). — III, 324.

3) α^{3,4}-Methylenäther-γ⁴-Aethyläther d. γ-Keto-γ-[2,4-Dioxyphenyl]-α-[3,4-Dioxylphenyl]propen. Sm. 160° (B. 31, 704).
 4) Diäthyläther d. 1,2,3-Trioxy-9,10-Anthrachinon. Sm. 134° (B. 21, 1169). — III, 433.

5) isom. Diäthyläther d. 1,2,3-Trioxy-9,10-Anthrachinon. Sm. 1980 (B. 21, 1170). — III, 433.

6) Diäthyläther d. 1,2,4-Trioxy-9,10-Anthrachinon (J. 1864, 543). — III, 434.

7) Diäthyläther d. 1,2,6-Dioxy-9,10-Anthrachinon. Sm. 2090 (B. 21, 1171; Ph. Ch. 18, 562). — III, 435.

8) Diäthyläther d. 1, 2, 7-Trioxy-9, 10-Anthrachinon. α -Modif. Sm. 162° ;

β-Modif. Sm. 170° (B. 21, 1170; Ph. Ch. 18, 560). — III, 436.
9) Diacetat d. P-Dioxy-2-Methyldiphenylketon. Sm. 148—150° (A. 179,

197). — III, 211. 10) Diacetat d. P-Dioxy-P-Methyldiphenylketon (D. d. Benzomethylresorcin). Sm. 120° (B. 28, 2306 Anm.). — III, 216.

11) α -Keto- $\alpha \gamma$ -Diphenylbutan- $\delta \delta$ -Dicarbonsäure. Sm. 144° (A. **294**, 332). 12) 2,5-Diphenyltetrahydrofuran -22,52-Dicarbonsäure. Sm. 208-2100.

 $Ba + 3 H_2 O$, Ag_2 (B. 31, 1578). 13) Anhydrid d. α-Hydrocumarinsäure. Sm. 222° (A. Spl. 8, 36). —

II, 2024.

14) Melilotsaures Cumarin. Sm. 128° (A. 126, 257). — II, 1630.
C 65,8 — H 4,9 — O 29,2 — M. G. 328.
Diacetat d. Cotoïn (D. d. 2,4,6 Trioxydiphenylketonmonomethyläther). Sm. 94° (91—92°) (A. 199, 27; 282, 192; B. 27, 411, 1184, 1627). III. 203.

2) $\alpha\beta$ -Diphenylpropan- β , 2, 2'-Tricarbonsäure. Sm. 160° (B. 27, 2497). **– II**, 2026.

3) Methylester d. $d-\alpha\beta$ -Dibenzoxylpropionsäure. Sm. $58-59^{\circ}$ (Soc.

69, 105). 4) Methylester d. $i-\alpha\beta$ -Dibenzoxylpropionsäure. Sm. 44-46° (Soc. **69**, 106).

5) Dimethylester d. α -Oxy- β -Keto- $\alpha\beta$ -Diphenyläthan-4,4'-Dicarbonsäure (D. d. p-Benzoïndicarbonsäure). Sm. 126° (B. 19, 1817). — II, 2024.

6) Dimethyläther d. Maleinfluorescein (B. 18, 2864). — II, 2050. C 62.8 - H 4.6 - O 32.6 - M. G. 344.

1) Rocellinin. Sm. 182° (A. 68, 69; J. pr. [2] 57, 271). — III, 647. 2) α -Usninsäure. Sm. 195—196°. Na + 2 H₂O, K + 3 H₂O, Ca + 4 H₂O, Ba + 4 H₂O, Pb + 2 H₂O, Cu, Ag (A. 48, 8; 49, 104; 68, 97; 117, 344;

C18 H16 O7

 $C_{18}H_{16}O_{6}$

- 155, 51; 284, 159, 173; 300, 355; Soc. 39, 234; B. 30, 357; J. pr. [2] 57, 236, 273, 317, 435; [2] 58, 481). II, 2056.

 3) Carbousninsäure. Sm. 199—201°. Na + 2H₂O, K + 3H₂O, Cu (A. 137, 241; 284, 171; 288, 51; B. 8, 1459; 10, 1325; 16, 427; J. 1875, 612; 1878, 830, 831; G. 12, 432). II, 2057.

 4) Usnolsäure (oder C₂₆H₂₄O₁₀). Sm. 213,5° (206—208°) (A. 284, 168; Soc. 39, 234; G. 12, 247). II, 2057.

 5) Monacetat d. 3,4,2',4',6'-Pentaoxydiphenylketon 3,4 Methylensithen and Acadelematicactain). Sm. 103° (B. 24, 2984) 35 proportional contents and conten C18H16O7

äther-?-Dimethyläther (Acetylprotocotoïn). Sm. 1030 (B. 24, 2984). — III, 209.

C 60,0 - H 4,4 - O 35,6 - M. G. 360.

 $C_{18}H_{16}O_{8}$

 $C_{18}H_{16}N_4$

C18H16N6

1) Irigenin. Sm. 186° (B. 26, 2011). — III, 596.

- 2) Tetramethyläther d. 1,2,3,5,6,7-Hexaoxy-9,10-Anthrachinon. Sm. 220° (B. 10, 885). — III, 439.
- 3) Dioxyessigdi[3-Acetoxylphenyl]äthersäure. Sm. 252° (A. ch. [7] 1, 107). — II, *918*.
- 4) Cetrarsäure (oder $C_{90}H_{90}O_{12}$; oder $C_{26}H_{20}O_{12}$). (NH₄)₂, Pb (A. 55, 156; 300, 356; B. 23, 464). II, 2082.
- 5) Tetracetat d. 1,2,5,8-Tetraoxynaphtalin. Sm. 277-279° u. Zers. (B. 27, 3463; 28, 1457; A. 286, 38).
- 6) Verbindung (aus Acetaldehyd u. β -Resorcylsäure) (B. 31, 150).

C 55,1 - H 4,1 - O 40,8 - M. G. 392. $\mathbf{C}_{18}\mathbf{H}_{16}\mathbf{O}_{10}$

1) Säure (aus Vasculose) (Bl. 37, 409). — I, 1079. $C_{18}H_{16}N_2$ C 83,1 — H 6,1 — N 10,8 — M. G. 260.

- 1) 1,3-Di[Phenylamido] benzol. Sm. 95°. 2HCl (B. 16, 2795). IV, 572. 2) 1,4-Di[Phenylamido] benzol. Sm. 146°. 2HCl (B. 16, 2805; 21, 2615; 22, 2911; 25, 2717; M. 8, 475; 9, 418). IV, 585.
- 3) 4-Amido-1-Diphenylamidobenzol (4-Amidotriphenylamin). HCl (B. 23, 2537). — IV, 584.
- 4) α Methylimido α [2 Naphtyl] amido α Phenylmethan (Benzenylβ-Naphtylamid-Methylimidin). Sm. 204°. Pikrat (B. 28, 2368). — IV, 845.
- 5) α-[2-Naphtyl]hydrazon-α-Phenyläthan. Sm. bei 150° u. Zers. (A. 253, 42). **— IV**, 930.
- 6) α -Phenylhydrazon- α -[1-Naphtyl]äthan. Sm. 173° (146°) (B. 19, 2898, 3180). — IV, 775.
- 7) 4-Phenyl-s-Diphenylhydrazin. Sm. 127° (B. 21, 911). IV, 1504.
- 8) Di[2, 3-Dihydro-1-Indenylen]hydrazin (Hydrindonazin). Sm. 164 bis 165° u. Zers. (Soc. 71, 250). 9) Cinnamalazin. Sm. 162° (J. pr. [2] 39, 49). — III, 61.
- 10) 2,5-Dimethyl-3,6-Diphenyl-1,4-Diazin. Sm. 125—126°. (2 HCl, PtCl₄), Pikrat (A. 291, 268, 272; Bl. [3] 17, 70; B. 22, 3253). — IV, 1041.
 11) 3-[2-Naphtyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 155—158°
- (J. pr. [2] **52**, 413). IV, 637. 12) **3-[4-Methylphenyl]**-α-Naphtimidazol. Sm. bei 200° (B. **27**, 2778). —
- IV, 918. 13) **2,2'-Dimethylbiindol.** Sm. 270° (A. **239**, 212). IV, 1041.
- 14) Dihydrobichinolin. Sm. 118° (B. 18, 1533). IV, 1041.
- 15) Nitril d. $\beta\gamma$ -Diphenylbutan- $\beta\gamma$ -Dicarbonsäure. Sm. 227° (B. 25, 289). — II, 1894.
- C 75.0 H 5.6 N 19.4 M. G. 288.
 - 1) Benzenyl-2-Naphtenylhydrazidin (B. 30, 1883; A. 298, 41). -IV, 1298.
 - 2) **4-Amido-4'-Phenylamidoazobenzol.** Sm. 90—91^o (Soc. **43**, 440). IV, 1362.
 - 3) 3-Methyl-2-[4-Amidophenyl]-2,3-Dihydro-1,2,4-Naphtisotriazin. Sm. 173—174°. $+\frac{1}{2}$ CH₄O (Soc. **59**, 712). — IV, 1396.
 - 4) Dinitril d. 2,3-Diphenyl-2,3,5,6-Tetrahydro-1,4-Diazin-1,4-Dicar-
 - bonsäure. Sm. 203—204° (Soc. 63, 1296). III, 284.
 - C 68,3 H 5,1 N 26,6 M. G. 316. 1) Phenylazo-m-Diamidoazobenzol. Sm. 185°. 2 HCl, (2 HCl, PtCl₄) (B. 16, 2033). — IV, 1371.
 - 2) 1,3-Diamido-?-Di[Phenylazo]benzol. Sm. 250°. HCl, (2HCl, PtCl₄) (B. 16, 2028). — IV, 1371.

18 II. 1788 -C18H18N8 3) 5.5'-Dimethyl-1.1'-Diphenyl-3.3'-Bi-1.2.4-Triazol. Sm. $222-223^{\circ}$. 2 HCl, (2 HCl, PtCl₄ + ¹/₂ H₂0) (B. **21**, 3064). — **IV**, 1331. 4) **Verbindung** (aus Tetrazobenzolchlorid) (B. **19**, 317). — **IV**, 1528. Dibromreten. Sm. 180° (A. 185, 83). — II, 276.
 Dibromretentetrabromid (A. 185, 84). — II, 277.
 Hexabromdimesityl. Sm. 280° (B. 27, 2525). $\mathbf{C}_{18}\mathbf{H}_{16}\mathbf{Br}_{2}$ $\mathbf{C}_{18}\mathbf{H}_{16}\mathbf{Br}_{6}$ 1) 2,5-Di[4-Methylphenyl]thiophen. Sm. 171° (R. 6, 74). — III, 749. C18H16S 2) 2,4-Dimethylphenyläther d. 1-Merkaptonaphtalin. Sd. 239,5%, (B. 28, 2329). 3) 2,5-Dimethylphenyläther d. 1-Merkaptonaphtalin. Sm. 36.20: Sd. 235°₁₁ (B. **28**, 2329). 4) 3,4-Dimethylphenyläther d. 1-Merkaptonaphtalin. Sd. 246° (B. 28, 2328). 5) 2,4-Dimethylphenyläther d. 2-Merkaptonaphtalin. Sm. 39,6; Sd. 243,5°₁₁ (B. **28**, 2329). 6) 2,5-Dimethylphenyläther d. 2-Merkaptonaphtalin. Sm. 36,7°; Sd. 240°₁₁ (B. 28, 2329).
7) 3,4-Dimethylphenyläther d. 2-Merkaptonaphtalin. Sm. 68°; Sd. C18 H17 N 1) 1-[?-Dimethylphenyl] amidonaphtalin. Sd. 243—245° (Bl. 20, 68).— II, 600. 2) 5-Methyl-2-Phenyl-1-[2-Methylphenyl]pyrrol. Sm. 44°; Sd. 325 bis 328° (B. 18, 2596). — IV, 333. 3) 5-Methyl-2-Phenyl-1-[4-Methylphenyl]pyrrol. Sm. 91°; Sd. oberh. 350° (B. **18**, 2597). — **IV**, *333*. 4) **2,5-Di**[**4-Methylphenyl**]pyrrol. Sm. 1970 (R. **6**, 73). — IV, 444. 5) **2-**[**4-Isopropylphenyl**]chinolin. Sm. 60°. (2HCl, PtCl₄+2H₂O), $H_2Cr_2O_7$, Pikrat (A. 249, 103). — IV, 444. 6) Nitril d. $\delta \varepsilon$ -Diphenyl- α -Penten- δ -Carbonsäure. Sd. 320—330° (B. **23**, 2069). — II, 1477. C 78,5 — H 6,2 — N 15,3 — M. G. 275. C18H17N8 1) 4-Amido-1, 3-Di Phenylamido benzol. 177). — IV, 1122. II, 1365. 4) 2-[Methyl-4-Methylphenyl]amidodiazonaphtalin. Sm. 114° (Soc. 57,

Sm. 107° (A. 255, 146; 286, 2) P-Diamidotriphenylamin. Sm. 187° u. Zers. 2HCl (B. 23, 2539). —

3) $Di[\alpha-Cyan-\beta-Phenyläthyl]$ amin ($\alpha-Phenylimidopropionitril). Sm. 86 bis$ 87° (105—106° u. 108—109°). HCl (A. 219, 191; J. 1883, 482). —

797). — IV, 1574.

5) 2-Aethylamido-1-Phenylazonaphtalin. Sm. 106° (102—103°) (B. 17.

2669; **26**, 193). — IV, 1393, 1396. 6) 4-Aethylamido-l-Phenylazonaphtalin. Sm. 58-59° (B. 17, 2671). —

IV, 1396. 7) isom. 4-Aethylamido-l-Phenylazonaphtalin. Sm. 88° (A. 256, 256; B. 23, 3803), — IV, 1396.

8) 4-Dimethylamido-1-Phenylazonaphtalin. HCl (B. 23, 3803).

IV, 1396. 9) 1-[4-Dimethylamidophenyl]azonaphtalin (B. 23, 1908). — IV, 1396.

10) 2-[4-Dimethylamidophenyl]azonaphtalin. Sm. 1740 (B. 25, 1373). — IV, 1396.

11) 6-Methylphenylamido-4-Methyl-2-Phenyl-1,3-Diazin. Sm. 113°. HJ $+2H_2O$ (Am. 20, 486). — IV, 1168.

12) 2-Methyl-4,6-Di[4-Methylphenyl]-1,3,5-Triazin. Sm. 159° (152 bis 153°); Sd. 245°₁₅ (B. 21, 2657; 23, 2387; A. 298, 9). — IV, 1192. 13) 2-Propyl-4,6-Diphenyl-1,3,5-Triazin. Sm. 78,5°; Sd. 239°₁₅. (2 HCl,

 $PtCl_4$) (B. **22**, 807). — IV, 1192. 14) $3-[\alpha-Phenylhydrazonathyl]-2-Methylchinolin. Sm. 130° (B. 25, 1757).$

- IV, 374.

15) 6-[α-Phenylhydrazonäthyl]-2-Methylchinolin. Sm. 1930 (B. 25, 2549). — IV, 374. C 71,3 — H 5,6 — N 23,1 — M. G. 303.

 $C_{18}H_{17}N_5$

1) P-Di[4-Methylphenylazo]pyrrol. Sm. 1790 (B. 19, 2254). — IV, 1483.

 $C_{18}H_{18}O$

 $C_{18}H_{18}O_{2}$

C 86,4 - H 7,2 - O 6,4 - M. G. 250.

1) $\text{Di}[\gamma\text{-Phenylallyl}]$ äther (Styryläther). Fl. (J. 1858, 447). — II, 1070. 2) Aethyläther d. 10-Oxy-9-Aethylanthracen. Sm. 77°. Pikrat (B. 21, 2506). — II, *902*.

3) 10-Keto-9, 9-Diathyl-9, 10-Dihydroanthracen. Sm. 136° (B. 21, 1180). - III, 250.

C 81.2 - H 6.7 - O 12.0 - M. G. 266

1) Dimethyläther d. αδ-Di[4-Oxyphenyl]-αγ-Butadiën. Sm. 225° (A. **255**, 307). — II, 1001.

2) Diäthyläther d. $\alpha\beta$ -Di[4-Oxyphenyl] äthin, Sm. 162° (A. 279, 338). - II, 999.

3) 9,10-Dioxyreten (9,10-Dioxy-8-Methyl-5-Isopropylphenanthren) (A. 229, 125). — II, 1001.

4) Diäthyläther d. 9,10-Dioxyanthracen (B. 18, 3038). — II, 1000.

5) Diäthyläther d. isom. Dioxyanthracen. Sm. 229° (B. 15, 1809). — II, 1000.

6) Isobutyloxanthranol. Sm. 130° (A. 212, 72; B. 14, 462). — III, 244.
 7) αζ-Diketo-αζ-Diphenylhexan. Sm. 102—103° (C. 1896 [2] 1091).

8) $\alpha \delta$ -Diketo- $\alpha \delta$ -Di[4-Methylphenyl] butan. Sm. 159° (B. 20, 1377; R. 6, 76). — III, 300.

9) $\alpha \gamma$ -Diketo- $\alpha \gamma$ -Di[?-Methylphenyl]- β -Methylpropan. Sm. 192°; Sd.

240-250°₂₀ (A. ch. [6] **22**, 352). — III, 300. 10) Retensäure. Sm. 222°. Na, Ba, Pb, Ag (A. 185, 111). — II, 1477.

11) 1,2-Diphenyl-R-Pentamethylen-4-Carbonsäure. Sm. 186-1870 (B. 28, 2105).

12) Allo-1, 2-Diphenyl-R-Pentamethylen-4-Carbonsäure. Sm. 150—152° (B. 28, 2105).

13) α -[P-Isopropylphenyl]- β -Phenylakrylsäure. Sm. 183—184°. Ca, Ag (G. 15, 509). - II, 1476.

14) Diäthylcarbobenzonsäure. Sm. 102°; Sd. 238—240°, Ag (A. 155, 67; **184**, 164; B. **20**, 1392). — II, 1476.

15) Isodiäthylcarbobenzonsäure. Sm. 132—134° (A. 155, 67; 261, 301). - II, 1476.

16) γ -Phenylpropylester d. β -Phenylakrylsäure. Fl. (A. 189, 353; B. 15, 2624). — II, 1406.

17) Verbindung (Phenol aus α-Hydrindon). Sm. bei 104° (A. 275, 349). — II, 1001. C 76,6 —

H 6,4 - O 17,0 - M. G. 282.

1) 3-Methyläther-4-Benzoylmethyläther d. 3,4-Dioxy-1-Allylbenzol (Phenacyleugenol; Eugenolacetophenon). Sm. 47,50 (B. 27, 2461).

2) 3-Methyläther-4-Benzoylmethyläther d. 3,4-Dioxy-1-Propenylbenzol (Isoeugenolacetophenon). Sm. 83° (B. 27, 2462). — III, 133.

3) Acetat d. β-Oxy-α-Keto-αβ-Di[4-Methylphenyl]äthan. Sm. 100° (B. 22, 381). — III, 235. 4) 2-[2,3,5,6-Tetramethylbenzoyl]benzol-1-Carbonsäure.

260°. Ca + H₂O, Ba + H₂O (A. ch. [6] 14, 454). — Π , 1718. 5) Dibenzylacetessigsäure. Sm. 89° (B. 6, 1085; 10, 785; A. 187, 24;

268, 123). — II, 1717.

6) Retenoxyessigsäure. Cu, Ag (A. 229, 132). — II, 1718.

7) Methylester d. γ-Benzoyl-γ-Phenylbuttersäure. Sm. 63-64° (B. 21, 1352). — II, 1716.

8) Methylester d. Dihydrocornicularsäure. Sm. 67-68° (B. 14, 1691; A. 219, 28). — II, 1717.
9) Aethylester d. β-Phenyl-α-Benzoylpropionsäure. Sd. 265—270%

(Soc. 59, 1006). — II, 1713.

10) Aethylester d. α-Phenyl-β-Benzoylpropionsäure. Sm. 37° (A. 284, 3; B. **28**, 963). — **II**, 1713.

11) Aethylester d. β-Keto-αγ-Diphenylpropan-α-Carbonsäure. Sm. 78 bis 79° (Λ. 296, 1; J. pr. [2] 55, 348, 354).
 12) Eugenolester d. 1-Methylbenzol-4-Carbonsäure (Λ. 108, 322).

II, 1340. C 72,5 — H 6,0 — O 21,5 — M. G. 298.

 $C_{18}H_{18}O_4$

C18 H18 O3

1) Dibenzylidenerythrit. Sm. 201—2020 (cor.) (B. 27, 1535). — III, 8.

 $C_{18}H_{18}O_6$

- 2) Dimethyläther d. $\alpha\delta$ -Diketo- $\alpha\delta$ -Di[4-Oxyphenyl]butan. Sm. 1540 $C_{18}H_{18}O_4$ (R. 10, 216). — III, 298.
 - 3) α^4 -Methyläther- γ^4 -Aethyläther d. γ -Keto- γ -[2,4-Dioxyphenyl]- α -[4-Oxyphenyl]propen. Sm. 110—111° (B. 32, 323).
 - 4) β -Acetoxyl- $\alpha \gamma$ -Diphenylpropan- β -Carbonsäure. Sm. 106° (B. 14, 1688; A. **219**, 47). — **II**, 1701.
 - 5) 1,2-Dioxy-1,2-Diphenyl-R-Pentamethylen-4-Carbonsäure. Sm. bei 200° u. Zers. (B. 28, 2103). — II, 1894.
 - 6) Allo-1, 2-Dioxy-1, 2-Diphenyl-R-Pentamethylen-4-Carbonsaure. Sm. 162—164° (B. **28**, 2104).
 - 7) $\alpha \delta$ -Diphenylbutan-2,2'-Dicarbonsäure. Sm. 196—198°. Ag. (B. 10, 2208). — II, 1894.
 - 8) Retendiphensäure. Ag₂ (A. 229, 129). II, 1894.
 - 9) Hydropolyporsäure. Sm. $162-163^{\circ}$. Na₂ + 4H₂O, Mn + 3H₂O, Ag₂ (A. 195, 366). — II, 1907. 10) Methylester d. 2-[4-Isopropylbenzoyl] oxybenzol-1-Carbonsäure (A.
 - 89, 362). II, 1497.
 - 11) Dimethylester d. $\alpha\beta$ -Diphenyläthan-2,2'-Dicarbonsäure. Sm. 100 bis 101° (A. 239, 67). — II, 1889.
 - 12) Aethylester d. α -Acetoxyl- $\alpha\alpha$ -Diphenylessigsäure. Sm. 65° (B. 22, 1539). — II, 1697.
 - 13) Aethylester d. αα-Dibenzoylpropionsäure. Fl. (Soc. 59, 1005). II, 1900.
 - 14) Aethylester d. 6-0xy-3-Benzoylbenzoläthyläther-1-Carbonsäure. Sm. 56° (A. 290, 167).
 - 15) Monäthylester d. $\alpha\beta$ -Diphenyläthan- $\alpha\beta$ -Dicarbonsäure. Sm. 140° (B. 5, 1048, 1050). — II, 1890.
 - 16) Diäthylester d. Biphenyl-2, 2'-Dicarbonsäure. Sm. 42° (A. 193, 128). **– II**, 1884.
 - 17) Diäthylester d. Biphenyl-2,3'-Dicarbonsäure. Fl. (A. 200, 11). II, 1883.
 - 18) Diäthylester d. Biphenyl-3, 3'-Dicarbonsäure. Sm. 68° (B. 31, 2577).
 - 19) Diäthylester d. Biphenyl-?-Dicarbonsäure. Sm. 112° (A. 172, 121). - II, 1887.
 - 20) Dibenzylester d. Bernsteinsäure. Sm. 41,5-42,5° (B. 14, 2242; G. 11, 256). — II, 1052.
 - 21) Diacetat d. 4,4'-Dioxy-3,3'-Dimethylbiphenyl. Sm. 131° (B. 21, 1067). — II, *993*.
 - 22) Diacetat d. $\alpha\beta$ -Diphenyl- $\alpha\beta$ -Dioxyäthan. Sm. 15 168, 73; 182, 275; B. 15, 1818; 16, 636). II, 1101. Sm. 134° (A. 160, 275;
 - 23) Diacetat d. Isohydrobenzoin. Sm. 117—118° (A. 168, 77; 182, 282). - II, 1102.
- 24) Dibenzoat d. $\alpha \delta$ -Dioxybutan. Sm. 81—82° (R. 9, 101). II, 1141. C 68,8 — H 5,7 — O 25,5 — M. G. 314. 1) Sesamin. Sm. 118° (B. 26 [2] 591). $C_{18}H_{18}O_{5}$

- 2) Dimethyläther d. Brasilin (B. 21, 3012; 27, 526). III, 652.
- 3) 2-[2,4-Dioxybenzoyl] benzol-2,4-Diäthyläther-1-Carbonsäure. Sm. 175—176° (B. **28**, 29). — II, 1972
- 4) Monacetat d. 2,4,6-Trioxy-4'-Methyldiphenylketondimethyläther. Sm. 150° (B. 27, 418). — III, 216.
- 5) Diacetat d. 2-Acetyl-1,8-Dioxy-3,6-Dimethylnaphtalin. Sm. 167 bis 168° (Soc. 63, 335). — III, 176.
- 6) Dibenzoat d. Di [α-Oxyäthyl] äther (A. 226, 227). II, 1153.

C 65,5 - H 5,4 - O 29,1 - M. G. 330.

- 1) Di[4-Acetoxylphenyläther] d. $\alpha\beta$ -Dioxyäthan. Sm. 137—138° (A. **280**, 203). — **II**, 941.
- 2) Dehydrodiacetovanillin. Sm. oberh. 300° (B. 24, 2868). III, 138. 3) Dimethyläther d. Dehydrovanillin. Sm. 137-138° (B. 18, 3494). -
- III, 110. 4) α -Hydrocumarinsäure. Na₂ + 10 H₂O, Ca + 2 H₂O, Pb, Cu + 2 H₂O, Ag₃ (A. Spl. 8, 32). — II, 2024.
- 5) $\alpha \delta^2$ -Di[2-Oxyphenyl] butan- $\beta \gamma$ -Dicarbonsäure (β -Hydrocumarinsäure). Na₂, Ca + 6 H₂O, Ag (Soc. 51, 68). II, 2023.

C18H18O6

 $C_{18}H_{18}O_{8}$

 $C_{18}H_{18}N_2$

C18H18N4

- 6) Diäthylester d. 2,5-Dimethyl-o-Benzdifuran-1,6-Dicarbonsäure.
- Sm. 155° (B. 20, 1337). III, 734.
 7) Diäthylester d. 2,4-Dimethyl-m-α-Benzdifuran-1,5-Dicarbonsäure.
 Sm. 186° (B. 19, 2931). III, 735.
- Diäthylester d. 2,6-Dimethyl-m-β-Benzdifuran-1,5-Dicarbonsäure. Sm. 140-141° (B. 19, 2932). III, 735.
 Diäthylester d. 2,3-Dimethyl-p-α-Benzdifuran-1,4-Dicarbonsäure.
- Sm. 150° (B. **20**, 1335). III, 736. 10) Diäthylester d. **1,4**-Dimethyl-p-β-Benzdifuran-**2**,5-Dicarbonsäure. Sm. 184° (J. pr. [2] 45, 78). — III, 735.
- 11) Di 2-Methoxylphenylester d. Bernsteinsäure. Sm. 136° (C. 1895) 17 209).
- 12) Diacetat d. Curcumin (oder C₂₅H₂₄O₈). Sm. 154° (Am. 6, 78; B. 30, 193). — III, 660.
- 13) 4,4'-Diacetat d. $\alpha\beta$ -Dioxy- $\alpha\gamma$ -Di[4-Oxyphenyl]äthan. Sm. 192° (B. **19**, 356). — **II**, 1118.
- 14) Diacetat d. Verbindung C₁₄H₁₄O₄. Sm. 282° (A. ch. [7] 1, 99). II, 919.
- 15) Dibenzoat d. Erythrit. Sm. 154—157° (A. 301, 102).
- $C_{18}H_{18}O_7$ C 62,4 — H 5,2 — O 32,4 — M. G. 346.

 - 1) Asebogenin + H₂O (R. 2, 99). III, 572. 2) Vasculose (Bl. 37, 409). I, 1079. 3) Gyrophorsäure. Sm. 202° (A. 300, 332; J. pr. [2] 58, 476).
 - 4) β-Usninsäure (Cladoninsäure). Sm. 175° (A. 117, 346; 155, 58). Existirt nicht nach (B. 30, 357). II, 2054.
 5) Verbindung (aus Aloïn). Zers. oberh. 260° (C. 1896 [1] 561, 562).
 - C 59.7 H 5.0 O 35.3 M. G. 362.
- Asebofuscin (R. 2, 201). III, 572.
 Katechin. Sm. 140° (M. 2, 547). III, 687.
 - 3) 3,4-Dioxybenzoldimethyläthylenäther-1-Carbonsäure (Bl. 29, 270). **— II**, 1744.
- $C_{18}H_{18}O_{9}$
- C 57,1 H 4,8 O 38,1 M. G. 378.

 1) Atranorinsäure + H₂O. Sm. 157° (B. 30, 359; J. pr. [2] 57, 292).

 2) Trimethyltricumarinsäure. Na₃ + 6H₂O (B. 20, 1331). II, 2091. C 50,7 H 4,2 O 45,1 M. G. 426.

 1) Hexacetat d. Hexacybenzol. Sm. 203° (B. 18, 507, 1836). II, 1040. $C_{18}H_{18}O_{12}$
 - - 2) Tetramethylester d. 3,6-Diacetoxylbenzol-1,2,4,5-Tetracarbonsäure. Sm. 147° (A. 258, 291). II, 2095.
 - 3) Hexamethylester d. Benzolhexacarbonsäure. Sm. 187º (J. 1862, 281; A. 177, 273; J. pr. [2] 40, 353; B. 31, 502). — II, 2105. C 82.4 - H 6.9 - N 10.7 - M. G. 262.
 - 1) 1-Aethylamido-2-Phenylamidonaphtalin. Sm. 71°. HBr (B. 26, 189).
 - 2) Diallylidendiphenyldiamin. (2HCl, PtCl₄) (A. Spl. 3, 359). II, 445.
 - 3) s-Phenylhydrazon- α -Phenyl- $\alpha\gamma$ -Hexadiën. Sm. 180° (B. 18, 2323). **- IV**, 774.
 - 4) 2-Methyl-1-Aethyl-4,5-Diphenylimidazol. Sm. 125,5°. (2 HCl, PtCl₄)
 - (Soc. 67, 43). IV. 1031. 5) 2,5 Dimethyl 3,6 Diphenyl 2,5 Dihydro 1,4 Diazin (Dimethyldiphenyldihydropyrazin). Sm. 102°. 2HCl, (2HCl, PtCl₄ + 2H₂O), (HCl, AuCl₃ + H₂O) (A. 291, 274). — IV, 1034.
 - 6) Hydrochinolin = $(C_9H_9N)_2$. Sm. 161—162° (B. 12, 101, 252, 1481; 14, 100; G. 24 [2] 97). IV, 253.
 - 7) p-Tetrolditolyl. Sm. 86° (J. pr. [2] 6, 154; B. 14, 933, 2093, 2094). IV, 1034.
 - 8) Base (aus d. Base $C_{18}H_{19}N_2Cl$). (2 HCl, PtCl₄) (A. 214, 207). IV, 1035. C 74,5 H 6,2 N 19,3 M. G. 290.
 - 1) Tri[P-Amidophenyl] amin. Sm. 230°. 3HCl, 3(2HCl, PtCl₄), 3 Pikrat (B. 18, 2157; 19, 759). — IV, 1295.
 - 2) 4,6-Diamido-1,3-Di[Phenylamido] benzol. Sm. 207° (B. 30, 1668). —
 - 3) 1-Phenylhydrazon-5-Benzolazo-1, 2, 3, 4-Tetrahydrobenzol (A. 278, 40). — II, 906.

C 67.9 - H 5.7 - N 26.4 - M. G. 318. $C_{18}H_{18}N_6$

1) 1,4-Di[2,5-Diamidophenyl]-1,4-Azophenylen + H_2O . Sm. 230-231° (B. **27**, 480; M. **10**, 124). — **IV**, 595. C 62,4 — H 5,2 — **N** 32,4 — M. G. 346.

 $C_{18}H_{18}N_8$

1) 1,3-Di[m-Diamidophenylazo]benzol (Phenylen-m-disazo-m-Phenylendiamin). $3 + 2C_6H_6$ (Sm. 118°); $+C_6H_6O$ (Sm. 136°) (B. 30, 2115, 2901). - IV, 1372

2) P-Di[3-Amidophenylazo]-1,3-Diamidobenzol. $+ C_6H_6$ (Sm. $116-118^{\circ}$)

(B. 31, 190). — IV, 1372. 3) ?-[3-Amidophenyl]azo-3-[m-Diamidophenyl]azo-1-Amidobenzol.

 $3 + 2 C_6 H_6$ (Sm. 134°) (B. 31, 189). — IV, 1372. 1) $\beta\beta$ -Dichlor- $\alpha\alpha$ -Di[1,3-Dimethylphenyl]äthen. Sm. 112° (*J. pr.* [2] 39, 300; [2] 47, 47). — II, 253. $\mathbf{C}_{18}\mathbf{H}_{18}\mathbf{Cl}_{2}$

2) $\beta\beta$ -Dichlor- $\alpha\alpha$ -Di[2,5-Dimethylphenyl]äthen. Sm. 93° (*J. pr.* [2] 39, 300; [2] 47, 47). — II, 254. 1) 9,10-Dibrom-?-Tetramethyl-9,10-Dihydroanthracen (A. 235, 321). $\mathbf{C}_{18}\mathbf{H}_{18}\mathbf{Br}_{2}$ - II, 254.

 $\mathbf{C}_{18}\mathbf{H}_{18}\mathbf{Br}_{4}$

1) Tetrabromdimesityl. Sm. 170—171° (B. 27, 2525). 1) Di[γ -Phenylallyl]sulfid (Styrylsulfid). Fl. (J. 1858, 447). — II, 1070. 1) Harz (aus Tolubalsam) = $(C_{18}H_{19}O_4)_x$. Sm. 60° (J. 1847/48, 736). — $C_{18}H_{18}S$ $C_{18}H_{19}O_4$ III, 564.

 $C_{18}H_{19}N$

C 86,7 - H 7,6 - N 5,6 - M. G. 249. 1) Di[γ -Phenylpropenyl]amin. Fl. HCl (B. 26, 1863). — II, 585.

2) γ-[2,4,5-Trimethylphenyl]imido-α-Phenylpropen. Sm. 105—106° (A. 239, 384). — III, 61.

3) Nitril d. α-Phenyl-α-Benzylvaleriansäure. Sm. 63°; Sd. 330-340° (B. **22**, 1236). — **II**, 1472. C 78,0 — H 6,9 — N 15,1 — M. G. 277.

 $C_{18}H_{19}N_3$

1) ?-Phenylazo-1,3,4-Trimethyl-1,2-Dihydrochinolin? Pikrat (G. 24 [2] 195). — IV, 1485.

1) $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[1,3-Dimethylphenyl]äthan. Sm. 106° (*J. pr.* [2] $\mathbf{C}_{18}\mathbf{H}_{19}\mathbf{Cl}_{3}$ 39, 300; [2] 47, 47, 77). — II, 242.

2) $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[2,5-Dimethylphenyl]äthan. Sm. 87° (J. pr. [2] 39, 300; [2] 47, 47, 77). — II, 242. C 87,7 — H 7,9 — O 6,3 — M. G. 252.

C18H20O

1) 10-Oxy-10-Isobutyl-9,10-Dihydroanthracen. Sm. 71-72° (B. 14,

802; A. 212, 103). — II, 900. 2) Methyläther d. P-Oxy-4-Isopropyl-s-Diphenyläthan. Sm. 151—152° (G. 15, 513). - II, 900.

3) ε -Keto- $\delta \varepsilon$ -Diphenyl- β -Methylpentan (Isobutyldesoxybenzoïn). Sm. 78°; Sd. 329,5—330,5° (B. 21, 1299). — III, 239. C 80,6 - H 7,4 - O 11,9 - M. G. 268.

 $\mathbf{C}_{18}\mathbf{H}_{20}\mathbf{O}_{2}$

1) Diäthyläther d. αα-Di[4-Oxyphenyl]äthen. Sm. 142° (B. 22, 1132). **– II**, 998.

2) Diäthyläther d. $\alpha\beta$ -Di[4-Oxyphenyl]äthen. Sm. 207° (A. 279, 343). · II, 998.

3) Methyläther d. 6-Oxy-3-[tert.] Butyldiphenylketon. Sd. 315° (Am. **17**, 116). — **III**, 238.

4) 1-[P-Isobutylbenzyl]benzol-P-Carbonsäure. Sm. 172°. Ca, Ba, Ag (J. **1877**, 815). — II, 1472.

5) Aldehyd d. 4-Oxy-l-tert. Butylbenzolbenzyläther-3-Carbonsäure. Sm. $70-71^{\circ}$ (Am. 16, 641). — III, 91.

6) Propylester d. $\alpha\beta$ -Diphenylpropionsäure. Sd. 338-339° (B. 21, 1314). **— II**, 1467.

7) Benzylester d. δ-Phenylvaleriansäure. Sd. 330-340° (A. 193, 318). - II, *1392*.

8) Benzylester d. α -Benzylisobuttersäure. Sd. $280-285^{\circ}$ ($200-210^{\circ}_{40}$) A. 201, 171). — II, 1394.

9) Acetat d. α -Oxy-2, 4, 6-Trimethyldiphenylmethan. Sm. 52° (A. ch. [6] **6**, 216). — **II**, 1081.

10) Benzoat d. 4-Oxy-1-tert. Amylbenzol. Sm. 60°; Sd. 205°₁₁ (B. 18, 1717; **28**, 408). — **II**, *1148*.

11) Benzoat d. γ-[4-Oxyphenyl] pentan. Sm. 54-55° (J. r. 23, 539). -II, 1148.

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C18H20O2 12) Verbindung (aus Phenylessigsäureäthylester). Sd. 250% (Soc. 37, 481). · II, 1310. C 76,1 — H 7,0 — O 16,9 — M. G. 284. 1) Ostruthin. Sm. 118—119°. 2HCl, 2HBr (A. 183, 321). — III, 638. $C_{18}H_{20}O_3$ 2) Diäthyläther d. 4-Oxyphenyl-4-Oxybenzylketon. Sm. 102° (A. 279, 342). — III, 227. 3) α -Oxy- α -Phenyl- α -[2,3,4,6-Tetramethylphenyl]essigsäure (Phenylisodurylglykoläure). Ag (Bl. 42, 172). — II, 1702. 4) Aethylester d. β-Oxy-αγ-Diphenylpropan-β-Carbonsäure. Sm. 45.5° (A. 113, 69). — II, 1701. 5) α-Benzoat d. Oxymethylcampher. Sm. 119—120°; Sd. 370° (A. 281, 372). — III, 115. 6) β -Benzoat d. Oxymethylencampher. Sm. $91-92^{\circ}$ (A. 281, 375). — 7) Verbindung (aus Sequoia gigantea). Sd. 227—230° (B. 14, 2205). — C 72,0 - H 6,7 - O 21,3 - M. G. 300. 1) Resinotannol. K + H_2 O (B. 26 [2] 679; 27 [2] 31). - III, 554. C18H20O4 2) Bismethylbenzoylcarbinol. Sm. 2010 (B. 28, 1161). — III, 132. 3) Diäthyläther d. ?-Dioxy-?-Dimethylbiphenyldioxyd. Sm. 139° (B. 23, 3247). — II, 955. 4) αε-Dioxypentandiphenyläther-γ-Carbonsäure. Sm. 88°. Ag (Soc. 69, 169, 1502). 5) Benzoat d. 3,4,5-Trioxy-1-Propylbenzol-?-Dimethyläther. Sm. 91° (B. 11, 331). — II, 1152. 6) Verbindung (aus 3,5-Dioxy-1-Methylbenzol u. Acetaldehyd) (Am. 5, 349). — II, 962. C 68.4 - H 6.3 - O 25.3 - M. G. 316. $C_{18}H_{20}O_{5}$ 1) Peruresinotannol. K (B. 27 [2] 312).
2) Trimethyläther d. Phloretin. Sm. 152° (B. 28, 1396). — III, 230.
3) 6-Benzoat-5-Methyläther d. 2,4-Diketo-5,6-Dioxy-1,1,3,3-Tetramethyl-1, 2, 3, 4-Tetrahydrobenzol. Sm. 840 (B. 26, 2032). — II, 1152. 4) Harz (aus Tolubalsam). Sm. oberh. 100° (J. 1847/48, 736). — III, 564. C 65,1 — H 6,0 — O 28,9 — M. G. 332. 1) Pentamethyläther d. 3,4,2',4',6'-Pentaoxydiphenylketon (B. 25, $C_{18}H_{20}O_6$ 1132). — III, 208. 2) Dicampherylsäure $+ H_2O$. Sm. 254°. $Ag_2 + H_2O$ (Soc. 75, 179). 3) Säure (aus Sulfocamphersäure (B. 27 [2] 594). Diäthylester d. γ-Benzoyl-δ-Keto-α-Penten-αβ-Dicarbonsäure. Sd. 233-235°₁₀ (Soc. 73, 730).
 Diäthylester d. 3, 5-Diketo-1-Phenylhexahydrobenzol-2, 6-Dicarbonsäure. Sm. 156° (B. 27, 2340; 31, 2771). — II, 2020.
 Diäthylester d. Aponsäure. Sm. 119-120° (B. 23, 325). — II, 1036.
 Triäthylester d. Säure C₁₂H₈O₆. Sm. 155° u. Zers. Na, Ag (B. 24, 604). — II, 2020. 604). — II, 2020. C 59.3 - H 5.5 - O 35.2 - M. G. 364. $C_{18}H_{20}O_{8}$ 1) Xanthophansäure. Sm. 143—144°. Na, K (A. 297, 49). C 56.8 - H 5.2 - O 37.9 - M. G. 380. $C_{18}H_{20}O_{9}$ 1) Leucodrin (Proteacin). Sm. 212° (A. 290, 314). — III, 636. C 54,5 - H 5,0 - O 40,4 - M. G. 396. $\mathbf{C}_{18}\mathbf{H}_{20}\mathbf{O}_{10}$ 1) Apoglucinsäure, siehe $C_{18}H_{22}O_{11}$. 2) Tetraäthylester d. 1,4-Diketo-1,4-Dihydrobenzol-2,3,5,6-Tetracarbonsäure. Sm. 148—149° (A. 237, 28; Am. 11, 8). — II, 2096. C 50,5 — H 4,7 — O 44,8 — M. G. 428. $\mathbf{C}_{18}\mathbf{H}_{20}\mathbf{O}_{12}$ 1) Tetramethylester d. 2,5-Diacetoxyl-?-Dihydrobenzol-1,3,4,6-Tetracarbonsäure. Sm. 173° (Am. 12, 404). — II, 2094. C 45,4 - H 4,2 - O 50,4 - M. G. 476. $\mathbf{C}_{18}\mathbf{H}_{20}\mathbf{O}_{15}$ 1) Dicitromannitan (J. 1858, 436). — I, 840. C 81.8 - H 7.6 - N 10.6 - M. G. 264. $\mathbf{C}_{18}\mathbf{H}_{20}\mathbf{N}_{2}$ 1) $\alpha\beta$ -Di[α -Phenyläthylidenamido]äthan. Sm. 103—105° (B. 20, 273). — III, 130.
2) Di[2,4-Dimethylbenzyliden]hydrazin. Sm. 154° (Bl. [3] 17, 369). 3) Di [2,5-Dimethylbenzyliden] hydrazin. Sm. 124° (Bl. [3] 17, 941).

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4) 1-Isoamyl-2-Phenylbenzimidazol. HCl, HJ, HNO₃, H₂SO₄ + 2H₂O $\mathbf{C}_{18}\mathbf{H}_{20}\mathbf{N}_{2}$ (A. 210, 349). - IV, 1007.

5) Verbindung (Base aus Paraldehyd u. salzsaurem Anilin) (B. 16, 2601).

 $C_{18}H_{20}N_4$

C 74.0 - H 6.8 - N 19.2 - M. G. 292.

1) 1,4-Di[Phenylhydrazon]hexahydrobenzol. Sm. 150--1516. 2 HCl (B. 22, 2173). — IV, 782. 2) 1,1'-Diphenyl-4,5,4',5'-Tetrahydrobipyrazol? Sm. 221°. HCl (J. pr.

[2] 50, 552). — IV, 488.

3) 5,5'-Diphenyl-4,5,4',5'-Tetrahydrobipyrazol. $(2HCl, PtCl_4 + 7H_2O)$ (J. pr. [2] 52, 53). - IV, 885.

4) Diallyldiphenyltetrazon. Sm. 86° u. Zers. (B. 22, 2238). — IV, 1308. 5) 3-[2,4,6-Trimethylphenyl]azo-5,7-Dimethylindazol. Sm. 2580 (A.

305, 316). 6) 1, 2, 3, 4 - Tetrahydrochinolintetrazon. Sm. 160° (B. 16, 731). IV, 854.

7) Base (aus 3,4-Diamido-1-Methylbenzol u. Formaldehyd). Sm. 222°. 2 HCl (B. **25**, 2713). — **IV**, 619. C 67,5 — H 6,2 — N 26,2 — M. G. 320.

 $C_{18}H_{20}N_6$

1) 1,4-Di[2,5-Diamidophenylamido] benzol. Sm. 230° u. Zers. (B. 27, 482). — IV, 1122.

2) Glyoxalendi-p-Tolenylhydrazidin. Sm. 2520 (B. 27, 3277; A. 298, 4). **- IV**, 1139.

 $C_{18}H_{20}S_2$ $C_{18}H_{21}N_3$ 1) Hexamethyldiphenylendisulfid. Sd. 275° (Bl. [3] 15, 1039). C 77,4 — H 7,5 — N 15,0 — M. G. 279.

1) 1-[Aethyl-1, 2, 3, 4-Tetrahydro-2-Naphtyl]amidodiazobenzol. Pikrat (B. 22, 1302). - IV, 1574.

2) P-Phenylazo-1, 3,4-Trimethyl-1, 2, 3,4-Tetrahydrochinolin. Fl. Pikrat

(G. 21 [2] 324). — IV, 1484. 3) 4,5,7-Trimethyl-2-[2,3,5-Trimethylphenyl]-2,1,3-Benztriazol. Sm. 83-85° (B. 21, 547). — IV, 1152.

4) Nitril d. Di[4-Dimethylamidophenyl] essigsäure. Sm. 1240 (B. 27,

 $C_{18}H_{21}N_5$

1407). — II, 1465. C 70,3 — H 6,8 — N 22,9 — M. G. 307.

1) 2,4,5,2',4',5'-Hexamethyl-6-Diazoazobenzolimid. Sm. $90-91^{\circ}$ u. Zers. (B. 21, 546). — IV, 1534.

 $\mathbf{C}_{18}\mathbf{H}_{21}\mathbf{Cl}$

1) β -Chlor- $\alpha \alpha$ -Di[P-Methylphenyl] äthan (B. 7, 1416). — II, 242.

Verbindung (aus Aethylbenzol u. Dichloräthyläther) (B. 7, 1414). -II, 242.

 $C_{18}H_{22}O$

C 85.0 - H 8.6 - O 6.3 - M. G. 254.1) Aethyläther d. α -Oxy-2,4,6-Trimethyldiphenylmethan. Sm. 32° (A. ch. [6] 6, 214). — II, 1081.

2) Isoamyläther d. α-Oxydiphenylmethan. Sd. 310° u. Zers. (Bl. 33, 340). — II, 1078.

 $C_{18}H_{22}O_{2}$

C 80.0 - H 8.1 - O 11.9 - M. G. 270.1) $\beta\gamma$ -Dioxy- $\beta\gamma$ -Di[4-Methylphenyl]butan (Methyl-p-Tolylpinakon). Sm. 90° (*J. pr.* [2] **41**, 403). — II, 1103. 2) **5**, **5**'-Dioxy-**1**, **2**, **4**, **1**', **2**', **4**'-Hexamethyl-?-Biphenyl (Dipseudocumenol).

Sm. 170° (B. 17, 2982; 18, 2659; 29, 1104). — II, 996.

3) Diäthyläther d. 4,4'-Dioxy-3,3'-Dimethylbiphenyl. Sm. 156° (B. 17,

468). — II, 993. 4) Diphenyläther d. αε-Dioxyhexan. Sd. 220—230°_{20—25} (C. 1899 [1]

25, 248). 5) Diphenyläther d. αζ-Dioxyhexan. Sm. 830 (B. 26, 2987; C. 1899 [1]

25, 248). — II, 655.

6) Diphenyläther d. $\beta \varepsilon$ -Dioxyhexan. Sm. 86—86,5° (C. 1899 [1] 248). 7) Di[2,4-Dimethylphenyläther] d. αβ-Dioxyäthan. Sm. 110° (B. 29,

8) Methyläther d. 2-Oxybenzylidencampher (C. 1896 [2] 381). 9) Methyläther d. 4-Oxybenzylidencampher (C. 1896 [2] 381)

10) Benzyläther d. Oxymethylencampher. Sm. 45-46°; Sd. 222-224°₁₆ (A. **281**, 368). — **III**, 115.

11) Benzoat d. Verbindung $C_{11}H_{18}O$ (aus Pinen). Sd. $210-215^{\circ}_{20}$ (B. **32**, 59).

C18H22O3

 $C_{18}H_{22}O_6$

 $C_{18}H_{22}O_8$

 $C_{18}H_{22}O_{9}$

 $C_{18}H_{22}O_{10}$

 $\mathbf{C}_{18}\mathbf{H}_{22}\mathbf{O}_{11}$

C 75,5 — H 7,7 — O 16,8 — M. G. 286. 1) Diäthyläther d. α -Oxy- $\alpha\beta$ -Di [4-Oxyphenyl] äthan. Sm. 147° (A. 279, 343). **— II**, *1114*.

2) Benzoat d. Oxymethylenmenthon. Sm. 75-76° (A. 281, 395). -III, 512.

C18H22O4 C 71.5 - H 7.3 - O 21.2 - M. G. 302.

1) Tetramethyläther d. ?-s-Di[2,5-Dioxy-l-Methyl]biphenyl. Sm. 1290 (M. 10, 177). — II, 955.

2) Diäthyläther d. Curcumin (Am. 4, 77; B. 16, 572). — III, 660.

3) Diäthyläther d. ?-s-Di[2,5-Dioxy-1-Methyl]biphenyl. Sm. 132—1330 (B. 23, 3248). - II, 956.

4) $\mathbf{Di}[\mathbf{4}-\mathbf{Aethoxylphenyl}]$ d. $\alpha\beta$ -Dioxy $\mathbf{3than}$. Sm. 149° (A. 280, 203). — II, 940.

5) Norguajakharzsäure. Sm. 1850 (M. 18, 720).

6) Methylester d. 2,6-Diketo-1,3-Diäthyl-4-Phenylhexahydrobenzol-5-Carbonsäure. Sm. 139° (B. 30, 2265).

7) d-Monoborneolester d. Benzol-1, 2-Dicarbonsäure. Sm. 164,5° (B. **22** [2] 255). — III, 471.

8) 1-Monoborneolester d. Benzol-1, 2-Dicarbonsäure. Sm. 164,5° (B. 22) 2] 255). — III, 472.

9) Monoisoborneolester d. Benzol-1, 2-Dicarbonsäure. Sm. 158° (B. 22 [2] 255). — III, 473.

10) Monogeraniolester d. Benzol-1, 2-Dicarbonsäure. Sm. 47°. Ag (Bl. [3] **19**, 637).

11) Monogeraniolester d. Benzol-1, 2-Dicarbonsäure (Rhodinolphtalsäure). Fl. Ag (J. pr. [2] 56, 15; Bl. [3] 19, 84). C 67,9 — H 6,9 — O 25,2 — M. G. 318.

 $C_{18}H_{22}O_5$

 Resacetsäure. NH₄, Na, K (A. 234, 168). — II, 1969.
 Monomethylester d. Benzoylcamphersäure. Sd. 270-315°₈₀ (B. 25 [2] 666). — II, 1154.

3) Aethylester d. ε -Acetyl- $\beta \zeta$ -Diketo- δ -Phenylheptan- γ -Carbonsäure. Sm. 156° (A. 281, 86). — II, 1968. C 64.7 - H 6.6 - O 28.7 - M. G. 334.

1) Hexamethyläther d. α-Hexaoxybiphenyl. Sm. 126° (B. 11, 1623). — II, 1041.

2) Triäthylester d. β -Phenylpropen- $\alpha\gamma\gamma$ -Tricarbonsäure. Sd. 215 bis 220°₁₁ (J. pr. [2] 49, 23; Soc. 73, 1015). — II, 2018. C 61,7 — H 6,3 — O 32,0 — M. G. 350. 1) Säure (aus Sulfocamphersäure). Sm. 254° (B. 27 [2] 594). C 59,0 — H 6,0 — O 35,0 — M. G. 366. 1) Polystichinin. Sm. 110,5° (C. 1898 [2] 1103).

C18H22O7

2) Tetraäthylester d. Benzol-1, 2, 4, 5-Tetracarbonsäure. Sm. 53° (A. Spl. 7, 36). — II, 2073. C 56,5 — H 5,7 — O 37,7 — M. G. 382.

1) Triäthylester d. Benzoyldesoxalsäure. Fl. (J. pr. [2] 20, 155). — II, 1155.

2) Verbindung (Anhydrid aus Camphoronsäure). Sm. 175-1760 (M. 6, 190). **– I**, 814.

3) Verbindung (aus Acetessigsäureäthylester). Sm. 61-62° (A. 213, 177; **222**, 4; *B*. **19**, 2402). — **I**, 597. C 54,3 — H 5,5 — O 40,2 — M. G. 398.

 Murrayin. Sm. 170° (Z. 1869, 316). — III, 598.
 Tetraäthylester d. 3,6 - Dioxybenzol - 1, 2, 4, 5 - Tetracarbonsäure. α-Modif. Sm. 133,2—133,6°; β-Modif. Sm. 123—128,5°. Na₂ (A. 237, 29; Am. 11, 10; Soc. 53, 449; B. 30, 2570). — II, 2095.
3) Tetraäthylester d. 1,4-Dihydrobenzol-2,2,5,5-Tetra-

carbonsäure. Sm. 129° (J. r. 25, 130). — II, 2096.
4) Verbindung (aus Succinylbernsteinsäureester). Sm. 129° (J. r. 25, 130).
C 52,2 — H 5,3 — O 42,5 — M. G. 414.

1) Apoglucinsäure, siehe auch $C_9H_{10}O_5$ (J. 1870, 845). — I, 871.

 2) Glukosehexacetat (A. ch. [3] 60, 98).
 C 81,2 — H 8,3 — N 10,5 — M. G. 266. $C_{18}H_{22}N_2$ 1) 4-[4-Isopropylbenzyliden]amido-l-Dimethylamidobenzol. Sm. 100,5° (99°) (B. 18, 573; A. 245, 299). — IV, 597.

C18 H29 N2

- 2) α-Phenylimido-γ-[2,4-Dimethylphenyl] amidobutan. Sm. 94-95° (B. 29, 1472).
- 3) α -Phenylhydrazon- α -[2,4-Dimethylphenyl]- β -Methylpropan. 128—129° (J. pr. [2] **46**, 482).
- 4) 4,4'-Diisopropylazobenzol. Sm. 107,5° (J. r. 18, 53). IV, 1388. 5) 2,4,5,2',4',5'-Hexamethylazobenzol (Azopseudocumol). Sm. 173-1740
- (J. r. 19, 114). IV, 1388. 6) 2,4,6,2',4',6'-Hexamethylazobenzol (Azomesitylen). Sm. 75° (B. 17,
- 477). IV, 1388.
- 7) 2-Isopropyl-1, 3-Diphenyltetrahydroimidazol (Isobutylidenäthylendiphenyldiamin). Sm. 95° (B. 20, 734). - II, 444.
- 1,4-Dibenzylhexahydro-1,4-Diazin (Dibenzylpiperazin). Sm. 92° (B. 29, 2384; C. 1898 [1] 380; 1898 [2] 743).
- 9) 1,4-Di[2-Methylphenyl]hexahydro-1,4-Diazin. Sm. 174° (170-171°) (M. 7, 233; B. 22, 1781; 23, 1982). - II, 459.
- 10) isom. 1,4-Di[2-Methylphenyl]hexahydro-1,4-Diazin. Sm. 153,5 bis 154.5° (B. 23, 2031). — II, 459.
- 11) 1,4 Di[3-Methylphenyl]hexahydro-1,4-Diazin. Sm. 126° (Soc. 71, 427).
- 12) 1,4-Di[4-Methylphenyl]hexahydro-1,4-Diazin. Sm. 189—190°; Sd. 360°. (2 HCl, PtCl₄), + CH₈J (A. Spl. 7, 94; A. 173, 139; B. 22, 1781; 23, 1984). — II, 487.
- 13) isom. 1,4-Di[4-Methylphenyl]hexahydro-1,4-Diazin. Sm. bei 60°. (2 HCl, PtCl₄) (A. 140, 95). — II, 510.
- 14) 1,4-Dimethyl-2,3-Diphenylhexahydro-1,4-Diazin. Sm. 263-264°. $(2 \text{HCl}, 2 \text{PtCl}_4 + 8 \text{H}_2 \text{O}) \text{ (Soc. 55, 104).} - \text{IV}, 996.$
- 15) isom. 1,4-Dimethyl-2,3-Diphenylhexahydro-1,4-Diazin. Sm. 108 bis
- 109°. 2 HCl, (2 HCl, PtCl₄ + 2 H₂O) (Soc. **55**, 105). **IV**, 996. 16) Base (aus Anilin und Propionsäurealdehyd). Sm. 103—104° (B. **25**, 2033). - II, 444.
- 17) Verbindung (aus Formaldehyd u. Tetramethyldiamidodiphenylmethan) = $(C_{18}H_{22}N_2)_x$. Sm. 90° (B. 27, 3166) IV, 974. C 73,5 H 7,5 N 19,0 M. G. 294.

 $C_{18}H_{22}N_4$

- 1) $\alpha\beta$ -Di [4-Dimethylamidophenylimido] äthan. Sm. 256—257° (B. 31,294).
- 2) $\alpha \beta$ -Di[β -Aethyliden- α -Phenylhydrazido]äthan. Sm. 83° (A. 254, 126). - IV, 746.
- 3) 4,4'-Di[Isopropylidenhydrazido] biphenyl. Sm. 197—199° u. Zers. (A. 239, 211). - IV, 1277.
- 4) Triäthylidendiphenylhydrazin. Sm. 109-110° (Bl. [3] 19, 146). -IV, 746.
- 5) $\beta \gamma$ -Di[Phenylhydrazon]hexan. Sm. 135—136° (136,5°) (J. pr. [2] 55, 196; B. 22, 2121; G. 28 [2] 272). — IV, 781.
- 6) $\beta_{\text{E-Di}}$ [Phenylhydrazon] hexan. Sm. 120° (B. 18, 60; A. 289, 311). IV, 781.
- 7) $\gamma \delta$ -Di[Phenylhydrazon]hexan. Sm. 160—161° (J. pr. [2] 55, 196; G. 28 [2] 272). — IV, 781.
- 8) β_{γ} -Di[2-Methylphenylhydrazon] butan. Sm. 198° (A. 247, 224). —
- IV, 804. 9) $\beta \gamma$ -Di[4-Methylphenylhydrazon] butan. Sm. 229—230° (A. 247, 224).
- \sim IV, 810. 10) $\alpha\beta$ -Di[Aethylphenylhydrazon]äthan. Sm. 149,5° (A. 227, 356). IV, 756.
- 11) 5,6,8-Trimethyl-2-[2,4,5-Trimethylphenyl]-2,3-Dihydro-1,2,3,4-Benztetrazin. Sm. 151-153° (B. 21, 547). - IV, 1264.
- 12) Nitril d. α-Amido-α α-Di[4-Dimethylamidophenyl]essigsäure (Hydrocyanauramin). Sm. 130° u. Zers. (B. 27, 3294). — II, 1465. 1) Di[2,4,5-Trimethylphenyl]disulfid. Sm. 115° (B. 11, 32).
- $C_{18}H_{22}S_2$ 2) Di[2, 4, 6 - Trimethylphenyl|disulfid. Sm. 125° (Z. 1867, 688). -II, 828.
- 1) Quecksilberdi[4-Propylphenyl]. Sm. 109—110° (J. pr. [2] 34, 103). C, H, Hg **– IV**, 1711.
 - 2) Quecksilberdi[2,4,5-Trimethylphenyl]. Sm. 189° (B. 28, 591).
 - 3) Quecksilberdi [2,4,6-Trimethylphenyl]. Sm. 236 (B. 28, 591). IV, 1712.

 $C_{18}H_{23}N_3$ C 76,9 - H 8,2 - N 14,9 - M. G. 281.1) 2,4,5,2',4',5'-Hexamethyldiazoamidobenzol. Sm. 138° (130.5°) u. Zers. (B. 17, 884; 18, 1147; 25, 1353). — IV, 1573. 2) 6-Amido-2,4,5,2',4',5'-Hexamethylazobenzol? Sm. 138—139° (B. 18,

1147). — IV, 1388. C 79,4 — H 8,8 — O 11,8 — M. G. 272. 1) Methyläther d. 2-Oxybenzylcampher (C. 1896 [2] 590).

 $C_{18}H_{24}O_{2}$

 $C_{18}H_{24}O_{8}$

 1) Methyläther d. 4-Oxybenzylcampher (C. 1896 [2] 590).
 C 75,0 — H 8,3 — O 16,7 — M. G. 288.
 1) Methylester d. Podocarpinsäure. Sm. 174° (A. 170, 223). — II, 1685.
 C 71,1 — H 7,9 — O 21,0 — M. G. 304. $\mathbf{C}_{18}\mathbf{H}_{24}\mathbf{O}_{4}$

1) Anabsinthin. Sm. 258—259° (Bl. [3] 21, 234). 2) Allylester d. Santonsäure. Sm. 45—55° (B. 13, 2209). — II, 1789. 3) Allylester d. Parasantonsäure. Sm. 149 (B. 13, 2209; G. 13, 161). **II**, 1790.

4) Monobenzylester d. Hydrocamphocarbonsäure. Sd. 250-257010. II, 1052.

5) Monocitronellolester d. Benzol-1, 2-Dicarbonsäure (Citronellolphtalsäure). Ag (J. pr. [2] 56, 40; Bl. [3] 19, 85).

6) Monomenthylester d. Benzol-1, 2-Dicarbonsäure. Sm. 110°. Mg (A. ch. [6] 7, 487). — III, 467. C 64,3 — H 7,1 — O 28,6 — M. G. 336.

C18H24O6

1) Hexakrolsäure. Na, Ca, Ba (A. Spl. 2, 123; J. 1876, 481). — I, 958, 2) Tetrahydrodicampherylsäure. Sm. 297—298°. Ag₂ (Soc. 75, 184).

3) Säure (aus Sulfocamphersäure) (B. 27 [2] 594).

4) Triäthylester d. α -Phenylpropan- $\beta\beta\gamma$ -Tricarbonsäure. Sd. 336,30 (A. 256, 92). - II, 2015.

5) Triäthylester d. β -Phenylpropan- $\alpha\alpha\gamma$ -Tricarbonsäure. Sd. 305 bis 310° (*Am.* 9, 115; *Soc.* 73, 1015). — **1**, 2015. C 61,4 — H 6,8 — O 31,8 — M. G. 352.

 $C_{18}H_{24}O_7$ Säure (aus Benzoylglykolsäure). Ba (A. 145, 350). — II, 2047.
 C 56,3 — H 6,2 — O 37,5 — M. G. 384. $\mathbf{C}_{18}\mathbf{H}_{24}\mathbf{O}_{9}$

Verbindung (aus α-Penten-αβγγε-Pentacarbonsaure). Fl. (B. 31, 51). C 54,0 — H 6,0 — O 40,0 — M. G. 400.
 Lignin. Lit. bedeutend. — I, 1078.
 Valdivin + 2½ 420. Sm. 230° u. Zers. (Bl. 35, 104). — III, 615.
 Tetraäthylester d. 1,4-Diketohexahydrobenzol-2,3,5,6-Tetracarbon-

 $\mathbf{C}_{18}\mathbf{H}_{24}\mathbf{O}_{10}$

 $\mathbf{C}_{18}\mathbf{H}_{24}\mathbf{O}_{12}$

 $C_{18}H_{24}N_2$

säure $+ xH_2O$. Sm. $142-144^{\circ}$ (wasserfrei). Na₂ (A. 237, 35; 258, 276; Am. 11, 14). $- xH_2O =$

4) Verbindung (aus Succinylbernsteinsäureester). Sm. 127° (J. r. 25, 129). C 50,0 — H 5,6 — O 44,4 — M. G. 432.

1) Hexacetat d. i-Inosit. Sm. 211-212°; Sd. 234° (i. V.) (A. ch. [6] 12, 571). — I, 1052.

2) Hexacetat d. d-Inosit (A. ch. [6] 29, 271). — I, 1052. 3) Hexacetat d. Quercin. Sm. 301° (Bl. 48, 113). — I, 1056. 4) Hexamethylester d. Isohydromellithsäure. Sm. 125° (124°) (A. Spl. **7**, 47; *B*. **28**, 1273). — **II**, *2104*. C 80,6 — H 9,0 — O 10,4 — M. G. 268.

1) 4-[4-Isopropylbenzyl]amido-l-Dimethylamidobenzol. Sm. 39°. HCl

(A. 245, 300). — IV, 587.

(A. 245), 300). — IV, 587.

2) αα - Di [Aethylphenylamido] äthan (Aethylidendiäthyldiphenyldiamin). Fl. (2 HCl, PtCl₄) (A. 140, 95 Anm.). — II, 443.

3) αβ-Di [Methyl-4-Methylphenylamido] äthan. Sm. 79,5—80,5°. (2 HCl, PtCl₄), (2 HCl, HgCl₂) (A. 224, 340). — II, 487.

4) αβ-Di [4-Dimethylamidophenyl] äthan. Sm. 50°; Sd. oberh. 300°. 2 HJ,

Dioxalat, Pikrat (B. 13, 2196). — IV, 977. 5) 4,4'-Di[Dimethylamido]-3,3'-Dimethylbiphenyl. Sm. 190° (B. 14,

2170). — IV, 981.
6) isom. 4,4'-Di[Dimethylamido]-3,3'-Dimethylbiphenyl. Sm. 80°. 2HCl, (2HCl,PtCl₄), 2HJ (B. 14, 2172). — IV, 981.
7) P-Di[Dimethylamido]-P-Dimethylbiphenyl. Sm. 57°. (2HCl,PtCl₄)

(B. 14, 2167). — IV, 983. S) s-Di[2,4,5-Trimethylphenyl]hydrazin. Sm. 124—125° (J. r. 19, 116).

- IV, 1503.

C 73,0 — H 8,1 — N 18,9 — M. G. 296. $C_{18}H_{24}N_4$

1) 1,4-Di[Phenylhydrazido]hexahydrobenzol. Sm. 147-1480 (B. 22, 2175). — IV, 783. 2) isom. 1,4-Di[Phenylhydrazido]hexahydrobenzol. Fl. Oxalat+H₂O

(B. 22, 2174). — IV, 783. 3) 1,4-Di[5-Amido-3-Methylphenyl]hexahydro-1,4-Diazin. Sm. 195

bis 196⁶ (B. **25**, 2943). — IV, 625.

4) 1,4-Di[3-Amido-4-Methylphenyl]hexahydro-1,4-Diazin. Sm. 1930 (B. **25**, 2943). — IV, 612.

5) Diisopropyldiphenyltetrazon. Sm. 79° (A. 252, 281). — IV, 1308.

6) Verbindung (aus Anilin u. Glyoxal). (2HCl,PtCl₄) (A. 140, 124; B. 11, 831). C 76,3 — H 8,8 — N 14,8 — M. G. 283.

 $C_{18}H_{25}N_{8}$

1) Isobutyldi [2-Amidobenzyl]amin. Sm. 132° (B. 26, 2586). — IV, 628. C 83,7 — H 10,1 — O 6,2 — M. G. 258. $C_{18}H_{26}O$

1) Verbindung (aus Methyldiacetyladipinsäureäthylester). Sd. 230-240₃₀ (Soc. **61**, 78). — **I**, 1014. C 78,8 — H 9,5 — O 11,7 — M. G. 274.

 $\mathbf{C}_{18}\mathbf{H}_{26}\mathbf{O}_{2}$

1) Menthylester d. Phenylessigsäure. Sd. 180₁₅ (B. 31, 1778).

2) Menthylester d. 1-Methylbenzol-2-Carbonsäure. Sd. 191°₁₅ (B. 31, 1778).

3) Menthylester d. 1-Methylbenzol-3-Carbonsäure. Sd. 1970 (B. 31, 1778).

4) Menthylester d. 1-Methylbenzol-4-Carbonsäure. Sd. 200°_{15} (B. **31**, 1778).

5) Acetat d. 5-Oxy-1-Methyl-3-[4-Isopropylphenyl]hexahydrobenzol Sd. 206°₁₄ (A. **303**, 269). C 74,5 - H 8,9 - O 16,6 - M. G. 290.

 $C_{18}H_{26}O_3$

 $C_{18}H_{26}O_5$

1) Anhydrid d. Isolauronolsäure. Sd. 210-215° (C. 1897 [1] 763). C 70,6 - H 8,5 - O 20,9 - M. G. 306.

 $C_{18}H_{26}O_4$ 1) Diäthylester d. 1-Phenylhexahydrobenzol-2,2-Dicarbonsäure. Fl.

(Soc. 57, 315). — II, 1860. 2) norm. Propylester d. Santonsäure. Sd. 2200 (i. V.) (B. 13, 2209; G.

13, 165). — II, 1788.

3) norm. Propylester d. Parasantonsäure. Sm. 113° (B. 13, 2209; G. 13, 159). — II, 1790.
 4) Diisoamylester d. Benzol-1,4-Dicarbonsäure (A. 121, 89). — II, 1832.

C 67,1 — H 8,1 — O 24,8 — M. G. 322.

1) Diäthylester d. Hydroxydibenzoësäure. Sd. 205-207° (A. 134, 331). **– II**, 1959.

2) Diäthylester d. ζ -Oxyhexanphenyläther- $\gamma\gamma$ -Dicarbonsäure. Sd. 228°₂₈ (B. **31**, 2136).

C 61,0 — H 7,3 — O 31,6 — M. G. 354. $C_{18}H_{26}O_7$

norm. Oxyhexinsäure. Sm. 173° (A. ch. [5] 20, 489).
 Isooxyhexinsäure. Sm. 186—187° (A. ch. [5] 20, 491).

C 51,7 — H 6,2 — O 42,1 — M. G. 418.

 $\mathbf{C}_{18}\mathbf{H}_{26}\mathbf{O}_{11}$ 1) Lignose (A. Spl. 5, 225; B. 8, 476). — I, 1080. C 49.8 - H 6.0 - O 44.2 - M. G. 434.

 $\mathbf{C}_{18}\mathbf{H}_{26}\mathbf{O}_{12}$

1) Dulcithexacetat. Sm. 171° (A. ch. [4] 27, 150). — I, 418.

2) Mannithexacetat. Sm. 119° (A. 160, 94; A. ch. [5] 6, 107; B. 12, 2059). - I, 417.

3) Sorbithexacetat (B. 23 [2] 24). — I, 418.

4) Aethylester d. Pentaacetylgalaktonsäure. Sm. 101-1020 (M. 16, 336).

5) Aethylester d. Pentacetyl-d-Glykonsäure. Sm. 103,50 (B. 19, 2622). • I, 826.

6) Diäthylester d. Tetraacetylzuckersäure. Sm. 61^o (A. 149, 242). —

7) Diäthylester d. Tetracetylnorisozuckersäure. Sm. 47° (B. 19, 1270; **27**, 128). — **I**, 853.

8) Diäthylester d. Tetraacetylschleimsäure. Sm. 1890 (A. 129, 195) B. 20, 3367; M. 14, 474; 19, 459). — I, 856. C 48,0 - H 5,8 - O 46,2 - M. G. 450.

 $\mathbf{C}_{18}\mathbf{H}_{26}\mathbf{O}_{13}$

1) Triacetylinulin (A. 160, 83). — I, 1096.

- $\mathbf{C}_{18}\mathbf{H}_{26}\mathbf{O}_{16}$ C 43,4 - H 5,2 - O 51,4 - M. G. 498.
 - 1) Oxycellulose (Soc. 43, 22; A. 272, 288; siehe auch A. 267, 368). I, 1077. C 80,0 — H 9,6 — N 10,4 — M. G. 270.
- C18 H26 N2
 - 1) Verbindung (aus Diäthylketon u. Pyrrol). Sm. 208—210° u. Zers. wasserfrei. 2 + AgNO₃ (B. 20, 2455). IV, 944. C 83,1 H 10,8 0 6,1 M. G. 260. 1) Desoxyphoron. Sm. 108—109° (A. 180, 10; 296, 321). I, 1013. 2) Undekylphenylketon. Sm. 47°; Sd. 132°,1 (Soc. 67, 508; B. 29, 1318). 3) Verbindung (aus. d. Wayrel, aus. Palements are identically 100.
- $C_{18}H_{28}O$

 - 3) Verbindung (aus d. Wurzel von Polygonma cuspidatum) (Soc. 67, 1089). C 78,2 H 10,1 O 11,6 M. G. 276.
- C18H28O2 1) Axinsaure (J. 1860, 324). — II, 1401.
 - 2) Phenylester d. Laurinsäure. Sm. 24,5°; Sd. 210°, (B. 17, 1378). II, 662.

 - 3) Verbindung (aus Caïncin) (Z. 1867, 539). III, 573.
 4) Verbindung (aus Diacetylcapronsäureäthylester). Sd. 265—275° 85 (Soc. **57**, 26). — **I**, 694. C 63,5 — H 8,2 — O 28,2 — M. G. 340.
- $\mathbf{C}_{18}\mathbf{H}_{28}\mathbf{O}_{6}$
 - 1) Diäthylester d. cis-2,5-Diketo-1,4-Dipropylhexahydrobenzol-1,4-Dicarbonsäure (D. d. Dipropylsuccinylbernsteinsäure). Sd. 217-218° 150 pt. 117-218° 150 pt. (B. 26, 232).
 - 2) Diäthylester d. trans-2,5-Diketo-1,4-Dipropylhexahydrobenzol-1,4-Dicarbonsäure (D. d. Dipropylsuccinylbernsteinsäure). Sm. 86-87°:
 - Sd. 217—218°₁₅ (B. 26, 232).
 3) Diäthylester d. cis-2,5-Diketo-1,4-Diisopropylhexahydrobenzol-1,4-Dicarbonsäure (D. d. Diisopropylsuccinylbernsteinsäure). Sd. 215 bis 220°₁₅ (B. **26**, 232).
 - 4) Diäthylester d. trans-2,5-Diketo-1,4-Diisopropylhexahydrobenzol-1,4-Dicarbonsäure (D. d. Diisopropylsuccinylbernsteinsäure). Sm. 116
- C18H28O7
- bis 117°; Sd. 215—220°₁₅ (B. **26**, 232). C 60,7 H 7,8 O 31,4 M. G. 356. 1) 1-Condurangin. Sm. 134° (G. **22** [1] 239). III, 577. C 58,0 H 7,5 O 35,4 M. G. 372. 1) Tetraäthylester d. Hexahydrobenzol-1,1,3,3-Tetracarbonsäure. $C_{18}H_{28}O_{8}$
- Sd. 243—245°₅₀ (Soc. **59**, 803, 994). **I**, 866. C 55,7 H 7,2 O 37,1 M. G. 388. $C_{18}H_{28}O_{9}$ 1) Tetraäthylester d. β -Ketohexan- $\gamma \delta \varepsilon \zeta$ -Tetracarbonsäure. Sd. 222
- bis 223°₁₀ (Soc. **73**, 729). C 53,5 H 6,9 O 39,6 M. G. 404. $\mathbf{C}_{18}\mathbf{H}_{28}\mathbf{O}_{10}$
- 1) Pentaäthylester d. Propan- $\alpha\alpha\beta\beta\gamma$ -Pentacarbonsäure. Sd. 234^{0}_{12} (B. 15, 1108; 21, 2113; 29, 1745; Δ. 297, 104). I, 870. 2) Pentaäthylester d. Propan- $\alpha\alpha\beta\gamma\gamma$ -Pentacarbonsäure. Sd. 265^{0}_{80} (B. 25 [2] 746; Soc. 73, 1013). I, 870. C 46,1 H 6,0 O 47,9 M. G. 468.
- $\mathbf{C}_{18}\mathbf{H}_{28}\mathbf{O}_{14}$ Quittenschleim (A. 175, 208; 249, 247; 271, 60; H. 14, 158). — I, 1103.
 Verbindung (aus Glykose). + C₂H₆O (H. 5, 125).
 C 79,4 — H 10,3 — N 10,3 — M. G. 272.
- $\mathbf{C}_{18}\mathbf{H}_{28}\mathbf{N}_{2}$
 - 1) 1,2-Di[1-Piperidylmethyl]benzol. Sd. 190—195°₂₀. (2HCl, PtCl₄), (2HCl, 2AuCl₈), Pikrat (B. 31, 427, 592). C 83,4 — H 11,2 — N 5,4 — M. G. 259. 1) β -Benzylidenamidoundekan. Sd. 197—198°₁₇ (G. 24 [2] 280).
- $\mathbf{C}_{18}\mathbf{H}_{29}\mathbf{N}$
- C 82,4 H 11,4 O 6,2 M. G. 262. C18H30O
 - 1) Laktucerylalkohol. Sm. 162° (Hesse, N. Handw. d. Ch. 4, 8). 2) Sycocerylalkohol. Sm. 90° (J. 1861, 640). II, 1067.
 - 3) norm. Oktyläther d. 3-Oxy-4-Isopropyl-1-Methylbenzol. Sd. 319,80
 - (A. 243, 49). II, 770. 4) Hydrocarotin? Sm. 137,4° (A. 117, 206; 180, 274, 277; Bl. 48, 488;
 - M. 7, 598). III, 626. 5) Verbindung (aus Jalapin) (C. 1895 [2] 495). C 77,7 H 10,8 O 11,5 M. G. 278.
- $C_{18}H_{30}O_{2}$ 1) Aethyläther d. Benzoresinol. Sm. 157-158° (B. 26 [2] 679). -III, 554.
 - 2) Linolensäure. Fl. (M. 8, 158, 267; 9, 204). I, 537.

 $C_{18}H_{30}O_{2}$

3) Verbindung (aus Campherphoron). Sm. 160—162° (A. 290, 144).
4) Verbindung (Pinakon). Sd. 230—240°₇₀ (Soc. 61, 81). — I, 272.
C 73,5 — H· 10,2 — O 16,3 — M. G. 294.
1) Ammoresitannol (B. 29 [2] 37). — III, 553.

 $C_{18}H_{30}O_{3}$

2) 2, 4, 6-Triketo-1, 1, 3, 3, 5, 5-Hexaäthylhexahydrobenzol. Sm. $65-68^{\circ}$; Sd. $200-205^{\circ}_{27}$ (M. 9, 896). — II, 1026.

3) Aethyläther d. 2,4-Diketo-6-Oxy-1,1,3,3,5-Pentaäthyl-1,2,3,4-Tetra-

hydrobenzol. Fl. (M. 9, 224). — II, 1026. 4) Säure (aus Lithofellinsäure). Sm. 152° (B. 28, 3046). C 66,3 — H 9,2 — O 24,5 — M. G. 326.

 $C_{18}H_{30}O_5$

1) Säure (aus Isobutyllävulinsäureäthylester). C 63,2 — H 8,8 — O 28,0 — M. G. 342. Ag (Soc. 73, 60).

 $C_{18}H_{30}O_6$

1) $Di[\beta\beta$ -Diäthoxyläthyläther] d. 1,2-Dioxybenzol. Sd. 195—197% (Bl. [3] 19, 764).

2) Smilacin (Pariglin) (A. 5, 204; 11, 305; 13, 84; 14, 76; 15, 74; 17, 166). - III, 649. C 60,3 - H 8,4 - O 31,3 - M. G. 358.

 $C_{18}H_{30}O_7$

1) Telaescin (J. 1862, 492; 1867, 751). — III, 613. C 57,8 — H 8,0 — O 34,2 — M. G. 374.

 $C_{18}H_{30}O_{8}$

 $C_{18}H_{30}O_{9}$

 $C_{18}H_{30}N_4$

 $C_{18}H_{32}O_{2}$

1) Dimethylester d. Dicaproylweinsäure. Fl. (Bl. [3] 11, 313).
2) Diäthylester d. Divalerylweinsäure. Sd. 214-215°₁₁ (Bl. [3] 11, 313).
3) Diäthylester d. Diisovalerylweinsäure. Fl. (Bl. [3] 11, 369).

4) Tetraäthylester d. β-Isopropylpropan-ααγγ-Tetracarbonsäure. Sd. 198°₁₂ (B. **31**, 2589).

5) Dipropylester d. Dibutyrylweinsäure. Sd. 226-227040 (B. 25 [2] 859; **26** [2] 923; *Bl.* [3] **9**, 683; [3] **11**, 312).

6) Dipropylester d. Diisobutyrylweinsäure. Fl. (Bl. [3] 11, 368).

7) Dibutylester d. Dipropionylweinsäure. Sd. 230—231° (B. 25 [2] 859; Bl. [3] 11, 311).

8) Diisobutylester d. Dipropionylweinsäure. Sd. 207-2086 (Bl. [3] **11**, 367; *B*. **25** [2] 859).

9) Tetraäthylester d. Hexan- $\beta\beta\delta\delta$ -Tetracarbonsäure. Sd. 293—295 $^{\circ}_{76}$

(B. 24, 1055). — I, 861.
 10) Tetraäthylester d. Hexan-ββεε-Tetracarbonsäure. Sm. 53—53,5° (54°)

 (B. 27, 1579; Soc. 65, 1004; A. 294, 103).
 11) Tetraäthylester d. Hexan-βγγδ-Tetracarbonsäure. Sd. bei 300° (B. **23**, 668). — **I**, 861.

12) Tetraäthylester d. Hexan- $\gamma\gamma\delta\delta$ -Tetracarbonsäure. Sd. 198—200_{11,3} (B. 21, 2085; Am. 16, 581). - I, 861.

13) Tetraäthylester d. β -Methylpentan- $\gamma\gamma\delta\varepsilon$ -Tetracarbonsäure. Sd. 204 bis 205°₁₂ (Soc. **73**, 1010).

14) Quercittributyrat (A. ch. [5] 15, 50). — I, 424. C 55,4 — H 7,7 — O 36,9 — M. G. 390.

C18H30O15

1) Verbindung (aus Oxyazelaïnsäure) (B. 22, 71). — I, 758. C 44,4 — H 6,2 — O 49,4 — M. G. 486. 1) Dextrin (aus Stärke) (Bl. [3] 17, 959). 2) Verbindung (aus Glykose) (H. 5, 126). C 71,5 — H 10,9 — N 10,2 — M. G. 274. 1) Hydrokyanconiin. (2HCl,ZnCl₂), + 2Zn(OH)₂ (J. pr. [2] 26, 341). — IV, 830.

C 65,5 - H 9,1 - N 25,4 - M. G. 330. $C_{18}H_{80}N_6$

1) Tripiperidinmelamin. Sm. 213°. (2HCl, PtCl₄) (B. 18, 2779). — IV, 14. C 77,1 — H 11,4 — O 11,4 — M. G. 280.
1) Hanfölsäure (Linolsäure). Fl. (M. 7, 217; 8, 149, 263; 9, 946). —

 2) Hirseölsäure (B. 21 [2] 142). — I, 536.
 3) Leinölsäure (Linolsäure). Fl. Ba, Zn. Lit. bedeutend. — I, 535. Stearolsäure (9-Heptadekin-α-Carbonsäure). Sm. 48°. Ca + H₂O, Ba, Ag (A. 140, 50; 190, 294; B. 2, 359; 27, 172, 3397; 28, 2249, 2250; M. 9, 953; C. 1896 [1] 1262). — 1, 535.

5) Taririnsaure. Sm. 50,5°. K, Ag (Bl. [3] 7, 233; B. 26 [2] 767; 27 [2] 20; C. 1896 [1] 1262). — I, 536.

6) Säure (aus Ricinelaïdinsäure). Sm. 53-54°. Ba (M. 15, 310; B. 27, 3474).

1801 ---18 II. $\mathbf{C}_{18}\mathbf{H}_{32}\mathbf{O}_{2}$ 7) Säure (aus Ricinolsäure). Sm. 44-45°; Sd. 230°₁₅ (B. 21, 2732; 27, 3473; *M.* **15**, 308). — **1**, 536. 8) Verbindung (aus 6-Acetyl-5-Methyl-1,2,3,4-Tetrahydrobenzol). Sd. 255 bis 265°_{50} (Soc. **57**, 21). — **I**, 1014. C 73,0 — H 10,8 — O 16,2 — M. G. 296. $C_{18}H_{32}O_3$ 1) z-Keto-η-Heptadekan-o-Carbonsäure (Ketoölsäure). Sm. 58° (B. 28. Ricinstearolsäure. Sm. 51° (53°). Ba, Ag (Z. 1867, 547; M. 15, 314;
 B. 27, 3123, 3475; 28, 1448 Anm.). — I, 625.
 Anhydrid d. Hexadekan-αβ-Dicarbonsäure. Sm. 89°; Sd. 245—248°₁₅ (B. 23, 2355). - 1, 690.C 69,2 - H 10,2 - O 20,5 - M. G. 312 $C_{18}H_{32}O_4$ 3*i*-Diketostearinsäure (Stearoxylsäure). Sm. 86°. Ba, Ag (A. 140, 63; 190, 297; M. 9, 953; B. 28, 276; 29, 813). — I, 695.
 Ricinstearoxylsäure. Sm. 78° (78—80°). Ba, Ag (Z. 1867, 550; M. 15, 315). — I, 695. C 62,8 — H 9,3 — O 27,9 — M. G. 344. $\mathbf{C}_{18}\mathbf{H}_{32}\mathbf{O}_{6}$ 1) Triisovalerat d. $\alpha\beta\gamma$ -Trioxypropan (Glycerintriisovalerin) (A. ch. [3] **41**, 257). — I, 429. 2) Triäthylester d. β-Methyloktan-εεζ-Tricarbonsäure. Sd. 300-305° (B. **29**, 976). 3) Triäthylester d. $\beta\zeta$ -Dimethylheptan- $\beta\gamma\gamma$ -Tricarbonsäure. Sd. 305 bis 310° (B. **29**, 977). 4) Triäthylester d. $\beta\zeta$ -Dimethylheptan- $\gamma\delta\delta$ -Tricarbonsäure. Sd. 285 bis 290° (B. **29**, 976). C 52,9 — H 7,8 — O 39,2 — M. G. 408. $\mathbf{C}_{18}\mathbf{H}_{32}\mathbf{O}_{10}$ 1) Säure (aus Terpentin) (J. 1869, 786). — III, 562. C 42,8 — H 6,3 — O 50,8 — M. G. 504. $\mathbf{C}_{18}\mathbf{H}_{32}\mathbf{O}_{16}$ β-Cellulose (B. 26, 2524).
 Glykogen? Ra (B. 14, 1215).

3) Melezitose $+ 2 \text{ H}_2^{\circ} \text{O}$. Sm. $147-148^{\circ}$ (wasserfrei) (A. ch. [3] 55, 282; Bl. **27**, 98; J. pr. [2] **45**, 321; J. r. **21**, 420; B. **26** [2] 694; C. **1897** [1] 30). · I, 1071.

4) Raffinose (Gossypose; Melitose; Melitriose). Sm. 118-119° (wasserfrei). Lit. bedeutend. — I, 1071.

5) Stachyose + 3 H₂O (B. 23, 1692, 1696; 24, 2705; 25 [2] 386). — I, 1104.

6) lösliche Stärke. + BaO (B. 30, 2416; 31, 1791).

1) Säure (aus Dammarharz) = (C₁₈H₃₃O₃)_x (B. 22 [2] 345). — III, 555.

C 74,2 — H 11,3 — N 14,4 — M. G. 291. $C_{18}H_{33}O_3$ $C_{18}H_{33}N_3$

1) 6-Amido-5-Isobutyl-2,4-Diisoamyl-1,3-Diazin (Kyanamylin). Sm. 53°. HCl, (2 HCl, PtCl₄) (*J. pr.* [2] **37**, 409). — **IV**, 1135. C 67,7 — H 10,3 — N 21,9 — M. G. 319.

 $C_{18}H_{38}N_5$

 $C_{18}H_{34}O$

 $C_{18}H_{34}O_{2}$

1) Base (aus Isovaleraldehydammoniak). Sm. 61-62°. HCl (A. 130, 220; J. r. 13, 507). — I, 952. C 81,2 — H 12,8 — O 6,0 — M. G. 266.

1) Mononaphtenyläther. Sd. 300,5° (J. r. 22, 130). — I, 303. C 76,6 — H 12,1 — O 11,3 — M. G. 282.

C 76,6 — H 12,1 — O 11,3 — M. G. 282.
1) Pinakolin (aus Phoron). Sm. 155°; Sd. 200—240° (A. 290, 139).
2) Elaïdinsäure. Sm. 44—45° (51—52°); Sd. 287—288°₁₀ (154°₀). Na, K, Ba, Pb, Ag (A. 4, 11; 28, 253; 35, 174; B. 22, 819; 29, 1325; J. r. 24, 515; J. pr. [2] 50, 75, 81; [2] 57, 29; Soc. 73, 629). — I, 526.
3) Oelsäure (Elaïnsäure, Oleïnsäure). Sm. 14°; Sd. 285,5—286°₁₀₀ (153°₀). Salze siehe (A. 35, 196; 57, 38; 244, 263). Lit. bedeutend. — I, 525.
4) Isoölsäure. Sm. 44—45°. Na, Ca + H₂O, Ba, Zn, Ag (J. pr. [2] 35, 386; [2] 37, 269; [2] 45, 301; [2] 50, 61, 81; C. 1897 [2] 184). — I, 527

5) Rapinsäure. Fl. Na, Zn, Ag (B. 20, 2387; M. 17, 309). — I, 614.
 6) Säure (aus Stearinsäure). Sm. 35° (J. 1863, 335). — I, 527.

7) Lakton d. β -Oxyheptadekan- α -Carbonsäure. Fl. $(\vec{J}, pr. [2] 35, 378)$.

8) Lakton d. γ-Oxyheptadekan-α-Carbonsäure. Sm. 47-48° (J. pr. [2] 37, 84; C. 1897 [1] 742; 1897 [2] 184). — I, 580.
9) Aethylester d. Gaïdinsäure (A. 99, 310). — I, 524.

10) Aethylester d. Hypogäsäure (A. 94, 234). — I, 524.

C18 H26 O2

C 72,5 — H 11,4 — O 16,1 — M. G. 298. $C_{18}H_{84}O_{8}$

1) Lichesterylsäure. Sm. 83,5—84°. NH₄, Ag (*C.* 1898 [2] 964). 2) Ricinolsäure. Sm. 16—17°; Sd. 250°₁₅. Mg, Ca, Sr, Ba, Zn, Pb, Ag (*A.* 64, 114; *B.* 9, 1916; 21, 2731; 27, 3121, 3471; *J.* 1857, 359; *M.* 9, 476; 15, 307; *C.* 1897 [1] 662). — I, 613.

3) Isoricinolsäure. Fl. (Bl. [3] 11, 283).

- 4) Pseudoricinolsäure. Ba (Ö. 1897 [1] 662).
 5) Ricinelaïdinsäure. Sm. 50° (53°). Ca, Ba, Ag (A. 60, 332; 119, 174; Z. 1867, 548; A. ch. [3] 44, 82; M. 15, 308; B. 27, 3472). I, 613.
- 6) Ricinsäure. Sm. 81°; Sd. 250-252°₁₅ u. ger. Zers. Ba, Ag (B. 21, 2736; **27**, 3472). — **I**, 614. 7) Oxyölsäure. Fl. (A. **140**, 70). — **I**, 614.

- 8) θ-Ketoheptadekan-α-Carbonsäure (Ketostearinsäure). Sm. 83° (B. **29**, 807).
- 9) ι-Ketoheptadekan-α-Carbonsäure (Ketostearinsäure). Sm. 76° (B. 27, 174; 28, 2249).

10) Säure (aus Dioxystearinsaure). Na, Ag (J. pr. [2] 33, 313). 11) Anhydrid d. Pelargonsaure. Sm. 5° (A. 85, 231). — I, 464.

12) Verbindung (aus Diacetylpentan). Sd. 305-310° 220 (Soc. 59, 229). -I, 1020.

C 68.8 - H 10.8 - O 20.4 - M. G. 314. $C_{18}H_{34}O_4$

1) ϑ -Keto- λ -Oxyheptadekan- α -Carbonsäure (Ketooxystearinsäure). Sm. 84-85°. Ba, Ag (B. 27, 3123; 29, 806).

2) α-Acetoxylpentadekan-α-Carbonsäure (α-Acetoxylpalmitinsäure).

 $62,5^{\circ}$ (B. **24**, 941). — **I**, 579. 3) Hexadekan - $\alpha\beta$ - Dicarbonsäure (Tetradekylbernsteinsäure). Sm. 121°. Ag_2 (B. 23, 2355). — I, 690.

4) Hexadekan-απ-Dicarbonsäure. Sm. 118°. K₂, Mg, Ba, Cu (A. 261, 125). — I, 690.

5) isom. Hexadekandicarbonsäure (B. 26 [2] 95-96).

6) Diäthylester d. Dodekan-αμ-Dicarbonsäure. Sm. 270 (A. 261, 123). **— I**, 689.

7) norm. Dibutylester d. Oktan- α ϑ -Dicarbonsäure (D. d. Sebacinsäure). Sd. 344—345° (Soc. 52, 801). — I, 686.

8) sec. Dibutylcarbinolester d. β -Methylpentan- $\alpha\alpha$ -Dicarbonsäure (C. **1896** [1] 186).

9) norm. Diheptylester d. Bernsteinsäure. Sd. 350,1° (A. 253, 302). — I, 656.

C 65,4 - $C_{18}H_{34}O_{5}$ – H 10,3 – O 24,2 – M. G. 330.

1) Dioxyricinolsäure (Trioxyölsäure). Sm. 64° (B. 16, 2455). — I, 761.

C 81,5 - H 13,2 - O 5,3 - M. G. 265. $C_{18}H_{35}N$

1) Curarin. (2HCl, PtCl₄), Pikrat (A. 191, 254; Z. 1865, 382). — III, 877. 2) Nitril d. Stearinsäure. Sm. 41°; Sd. 274,5°₁₀₀ (128°₀). 2 + HBr (B. 15, 1730; 26, 2847; 29, 1325). — I, 1468.

C 80,6 - H 13,4 - O 6,0 - M. G. 268.C18H36O

1) β -Ketooktadekan (Methylhexadekylketon). Sm. $51-52^{\circ}$; Sd. $251-252^{\circ}_{100}$ (B. 15, 1707). — I, 1005. 2) γ-Ketooktadekan. Sm. 53°; Sd. 197,5°₁₁ (Bl. [3] 15, 765).

3) Aldehyd d. Stearinsäure. Sm. 63,5°; Sd. 259—261° (B. 13, 1417). **I**, 957.

C 76,0 — H 12,7 — O 11,3 — M. G. 284.

1) Stearinsäure. Sm. 69,2° (71—71,5°); Sd. 359—383° (154,5—155,5°₀). Salze meist bekannt, Lit. bedeutend. — I, 444.

2) Neurostearinsäure. Sm. 84°. Ba (J. pr. [2] 25, 25; [2] 53, 87). — I. 447.

3) Heptadekan-i-Carbonsäure (Dioktylessigsäure). Sm. 38,5°; Sd. 270 bis

275°. Ba, Ag (A. 204, 11, 165). — I, 447. 4) Cetylessigsäure. Sm. 63,5—64°. Ag (A. 206, 355, 360). 5) Methylester d. Daturinsäure. Sm. 30° (B. 26 [2] 288).

6) Aethylester d. Palmitinsäure. Sm. 24,2°; Sd. 184,5-185,5° 10 (J. 1853, 502; A. 88, 299; C. 1898 [2] 757). — I, 443.

7) Aethylester d. norm. Diheptylessigsäure. Sd. 308,5-311° (A. 200, 114). — I, 444.

- 8) Cetylester d. Essigsäure. Sm. 22—23° (18,5°); Sd. 199,5—200,5° (A. 102, 220; 131, 284; B. 16, 1721). I, 411. C18 H36 O2
 - C 72,0 H 12,0 O 16,0 M. G. 300. $\mathbf{C}_{18}\mathbf{H}_{36}\mathbf{O}_{3}$
 - C 72,0 H 12,0 O 16,0 M. G. 300. 1) α -Oxyheptadekan- α -Carbonsäure (α -Oxystearinsäure). Sm. 77—79° (84—85°). Ba, Cd, Pb, Cu, Ag (J. pr. [2] 37, 277, 284; B. 24, 2392; C. 1897 [1] 742; 1897 [2] 184). I, 579. 2) β -Oxyheptadekan- α -Carbonsäure (β -Oxystearinsäure). Sm. 81—81,5° (83—85°). Na, Ca + H₂O, Ba, Zn, Cu, Ag (J. pr. [2] 35, 369, 384; [2] 37, 81; [2] 57, 31; J. r. 17, 426; 18, 41; A. ch. [2] 65, 113; D. 251, 499; C. 1897 [1] 742; 1897 [2] 184; B. 16, 2458). I, 579.

3) γ-Oxyheptadekan-α-Carbonsäure (γ-Oxystearinsäure). Cu, Pb (J. pr. [2] 37, 85; C. 1897 [1] 742; 1897 [2] 184). — I, 580.
4) Aethylester d. Jalapinolsäure. Sm. 32,5° (47—48°) (A. 116, 314; J. pr. [2] 57, 449). — III, 595.
5) Aethylester d. Tampikolsäure (Z. 1870, 668). — III, 613.

C 68,3 — H 11,4 — O 20,3 — M. G. 316.

C₁₈H₃₆O₄

 $C_{18}H_{36}O_5$

 $\mathbf{C}_{18}\mathbf{H}_{36}\mathbf{O}_{6}$

 $\mathbf{C}_{18}\mathbf{H}_{86}\mathbf{N}_{6}$

 $C_{18}H_{38}N_2$

 $C_{18}H_{39}N$

- 1) d- θ ι -Dioxyheptadekan- α -Carbonsäure. Strychninsalz (Bl. [3] 13, 1053). 2) l- θ ι -Dioxyheptadekan- α -Carbonsäure. Strychninsalz + 2 1 / $_2$ H $_2$ O (Bl. [3]
- 3) i-θι-Dioxyheptadekan-α-Carbonsäure (Dioxystearinsäure aus Oelsäure). Sm. $136,5^{\circ}$ (126°). Na, K, Ca + $3\,\mathrm{H}_2\mathrm{O}$, Ba, Zn, Ag (A. 140, 72; B. 18, 1268; J. pr. [2] 33, 304; [2] 40, 244; [2] 50, 62; Bl. [3] 13, 1052; Soc. **73**, 630). — **I**, 635.

4) isom. θι-Dioxyheptadekan-α-Carbonsäure (Dioxystearinsäure aus Elaïdinsäure). Sm. 99 — 100°. Na, Ag (J. pr. [2] 33, 315; [2] 50, 76; Soc. 73, 630). — I, 636.

5) isom. Dioxystearinsäure. Sm. 66-68° (Bl. [3] 11, 283).

6) isom. Dioxystearinsäure. Sm. 141—143°. Na (*El.* [3] 13, 238).

7) Paradioxystearinsäure. Sm. 77—78°. Na, Ca, Ag (J. pr. [2] 37, 276;

[2] **50**, 63). — **I**, 636. 8) **Aethylester d. Turpetholsäure.** Sm. 72° (A. **139**, 59). — III, 614. C 65.1 - H 10.8 - O 24.1 - M. G. 332.

1) Trioxystearinsäure. Sm. 140—142°. Na + ½H₂O, K, Ca, Ba, Ag (M. 9, 476; J. pr. [2] 39, 341). — I, 738.
2) α-Isotrioxystearinsäure. Sm. 110—111°. Na, Ba, Ag (M. 9, 477; J. pr. [2] 39, 345; B. 27, 3475). — I, 738.
3) β-Isotrioxystearinsäure. Sm. 114—115° (M. 10, 199). — I, 738.

4) Isobutylester d. Trioxyessigtriisobutyläthersäure. Sd. 146% (A. **254**, 33). — **I**, 737.

C 62.1 - H 10.3 - O 27.6 - M. G. 348.

1) Sativinsäure (Tetraoxystearinsäure). Sm. 173°. Na + H₂O, K + $\frac{1}{2}$ H₂O, Ba, Ag (M. 7, 224; 8, 159, 261; 9, 187; J. pr. [2] 41, 543; C. 1895 [1] 22). — I, 787.

C 56,8 — H 9,5 — O 33,7 — M. G. 380. $C_{18}H_{36}O_{8}$

1) Linusinsäure. Sm. 203° (M. 8, 159, 267; 9, 181). — I, 851. 2) Isolinusinsäure. Sm. 173—175° (M. 9, 181). — I, 851. C 64,3 — H 10,7 — N 25,0 — M. G. 336.

1) Isotriisoamylmelamin. (2 HCl, PtCl₄) (B. 3, 264). — I, 1445.

1) Dibromoktadekan. Sm. 24° (B. 17, 1373). — I, 180. $\mathbf{C}_{18}\mathbf{H}_{36}\mathbf{Br}_{2}$

1) Jodoktadekan. Sm. 42-43° (33,5°) (J. 1884, 1193; B. 19, 2984). - $C_{18}H_{37}J$ **I**, *196*. C 80,0 - H 14,1 - O 5,9 - M. G. 270. $C_{18}H_{88}O$

 Oxyoktadekan (Oktadekylalkohol). Sm. 59°; Sd. 210,5°, (A. 92, 299; B. 16, 1722; 17, 1628). — I, 240.

2) Aethylcetyläther. Śm. 200 (A. 102, 220). — I, 300.

C 76,6 — H 13,5 — N 9,9 — M. G. 282. 1) Stearinamidin. Sm. 85°. HCl, (2HCl, PtCl₄), HNO₃ (PINNER, Imido-

äther 130; B. 26, 2843). C 80,3 — H 14,5 — N 5,2 — M. G. 269.

 α-Aethylamidohexadekan (Cetyläthylamin). Sm. 27 – 28°; Sd. 342° u. Zers. HJ (B. 22, 814). — I, 1138.

2) α-Dihexylamidohexan (Trihexylamin). Sd. 260°. HCl, (2HCl, PtCl₄) (A. 101, 310; 102, 312; J. 1863, 527). — I, 1136.

C 67.9 — H 14.5 — N 17.6 — M. G. 318. $\mathbf{C}_{18}\mathbf{H}_{46}\mathbf{N}_{4}$

1) Pentaäthylentetraäthyltetramin. (4HCl, 2PtCl₄) (J. 1861, 521).

1) Perchlordinorm. Butylester d. Hexadekachloroktan-α ý-Dicarbon-C₁₈O₄Cl₉₄ säure (P. d. Perchlorsebacinsäure). Sm. 127°; Sd. 200° (Soc. 52, 802). - I, 687.

1) Perchlortriphenylamin (B. 9, 1494). — II, 342. C, NCl,

C₁₀-Gruppe mit drei Elementen.

 $C_{18}H_4O_8Br_{14}^{-1}$ 1) Xanthogallol. Sm. 122° (A. 177, 193; 245, 335). — II, 1013.

C 51,2 - H 1,4 - O 34,1 - N 13,3 - M. G. 422. $\mathbf{C}_{18}\mathbf{H}_6\mathbf{O}_4\mathbf{N}_4$

1) Tetranitrochrysochinon (A. 158, 314). — III, 463. C 43,4 — H 1,2 — O 38,6 — N 16,8 — M. G. 498. $C_{18}H_{0}O_{12}N_{6}$

1) Chrysocyamminsäure + 3H₂O. (NH₄)₂ + 3H₂O, K₂ + 3H₂O, Ca + 3H₂O, Ba, Ag₂ (A. 134, 229). — III, 428. 1) Salpetersaures Tetrazoresorcin (A. 162, 282, siehe auch B. 17, 1865).

 $C_{18}H_6O_{15}N_7$ **— II**, 933.

 $C_{18}H_7O_{10}Br_{11}1$) Bromdichroïnsäure. Zers. bei 100° . Ca_3 , Ba_3 , Ag_3 (B. 10, 1142). — II, 726. C 37,4 — H 1,2 — O 44,4 — N 17,0 — M. G. 577.

 $\mathbf{C}_{18}\mathbf{H}_7\mathbf{O}_{16}\mathbf{N}_7$

1) Heptanitrodiphenyläther d. 1,4-Dioxybenzol. Sm. 1900 (B. 24, 3588).

 $C_{18}H_8O_9N_9$ C 76.1 - H 2.8 - O 11.3 - N 9.8 - M. G. 284.

1) $\alpha\beta$ -Diketonaphtophenazin (Naphtophenazinchinon). Sm. 265° u. Zers. (A. 286, 79).

1) Diehlorehrysochinon (A. 158, 312). — III, 462. C₁₈H₈O₂Cl₂

2) 6,11-Dichlor-5,12-Diketo-5,12-Dihydronaphtacen. Sm. $252-254^{\circ}$ (B. 31, 1282).

1) Dibromehrysochinon. Sm. 160-165° (B. 12, 1892). — III, 462. $\mathbf{C}_{18}\mathbf{H}_{8}\mathbf{O}_{2}\mathbf{Br}_{2}$

1) Dibromanhydrobisdiketodihydroinden. Sm. 241-242° u. Zers. (A. $\mathbf{C}_{18}\mathbf{H}_8\mathbf{O}_3\mathbf{Br}_2$ **252**, 78). — III, 276. 1) 2,2'-Bi-2-Chlor-1,3-Diketo-2,3-Dihydroinden. Sm. 298° (B. 31, 1167). C₁₈H₈O₄Cl,

1) 2,2'-Bi-2-Brom-1,3-Diketo-2,3-Dihydroinden. Sm. bei 280° (B. $\mathbf{C}_{18}\mathbf{H}_8\mathbf{O}_4\mathbf{Br}_2$ **31**, 1169).

C 62,1 - H 2,3 - O 27,6 - N 8,0 - M. G. 348. $\mathbf{C}_{18}\mathbf{H}_{8}\mathbf{O}_{6}\mathbf{N}_{2}$

1) Dinitrochrysochinon. Sm. 230° (B. 12, 1893). — III, 463. C 57,4 — H 2,1 — O 25,5 — N 14,9 — M. G. 376. $\mathbf{C}_{18}\mathbf{H}_{8}\mathbf{O}_{6}\mathbf{N}_{4}$

1) Hexanitrodiphenyläther d. 1,3-Dioxybenzol. Sm. 220° (B. 24, 3587). **— II**, 917.

2) Hexanitrodiphenyläther d. 1,4-Dioxybenzol. Sm. 190° (B. 24, 3588). - II, 940.

 $C_{18}H_8O_{15}N_7$ 1) Salpetersaures Dihydrotetrazoresorcin (A. 162, 285). — II, 934. $\mathbf{H}_{18}^{\circ}\mathbf{H}_{8}^{\circ}\mathbf{N}_{2}^{\circ}\mathbf{Br}_{6}^{\circ}$ 1) Hexabromdiphenylazophenylen. Sm. 243° (M. 8, 481). — II, 338.

1) Bromanhydrobisdiketodihydroinden. Sm. 195-1960 u. Zers. (A. 252, $\mathbf{C}_{18}\mathbf{H}_{9}\mathbf{O}_{3}\mathbf{Br}$ 78). — III, 276.

 $\mathbf{C}_{18}\mathbf{H}_{9}\mathbf{O}_{4}\mathbf{N}$

C 71,3 — H 3,0 — O 21,1 — N 4,6 — M. G. 303.

1) Nitrochrysochinon. Sm. 252° (B. 24, 953). — III, 462.

2) ?-Nitro-5,12-Diketo-5,12-Dihydronaphtacen. Sm. 315° (B. 31, 1278).

3) isom. ?-Nitro-5,12-Diketo-5,12-Dihydronaphtacen. Sm. bei 240° (B. 31, 1279).

1) 2-Chlor-2, 2'-Bi-1, 3-Diketo-2, 3-Dihydroinden. Sm. 242-244° (B. $\mathbf{C}_{18}\mathbf{H}_{9}\mathbf{O}_{4}\mathbf{C}\mathbf{1}$ 31, 1170).

C 64.5 - H 2.7 - O 28.6 - N 4.2 - M. G. 335.C18HOON

 $C_{18}H_9O_{12}N_5$

1) Nitroäthindiphtalid. Sm. bei 240° (B. 19, 838). — C 44,3 — H 1,8 — O 39,4 — N 14,4 — M. G. 487.

1) Pentanitrodiphenyläther d. 1,3-Dioxybenzol. Sm. 68° (B. 24, 3587). **– II**, 917.

 $C_{18}H_9NBr_6$ 1) ?-Tetrabrom-2-[1-Naphtyl]indol-2, 3-Dibromid. Sm. oberh. 300° (A. 272, 208). — IV, 465. C 75,5 — H 3,5 — O 11,2 — N 9,8 — M. G. 286. 1) Triphendioxazin. subl. bei 250°. 2HCl (B. 23, 183; 28, 293; 32,

 $\mathbf{C}_{18}\mathbf{H}_{10}\mathbf{O}_{2}\mathbf{N}_{2}$

126). — IV, 1077.

2) Anhydroindol-2-Carbonsäure. Sm. 312-315° (B. 21, 1932). -IV, 235.

C 68.8 - H 3.2 - O 10.2 - N 17.8 - M. G. 314. $\mathbf{C}_{18}\mathbf{H}_{10}\mathbf{O}_{2}\mathbf{N}_{4}$

1) 1,4-Benzochinonhomofluorindin (Istarin) (B. 23, 2794; C. 1897 [1] 62). — III, 340. C 67,9 — H 3,1 — O 20,1 — N 8,8 — M. G. 318. 1) Dinitrochrysen. Sm. oberh. 300° (J. pr. [2] 9, 282). — II, 292. 2) Oxyphenylaposafranonchinon. Zers. bei 275° (B. 31, 2438).

 $\mathbf{C}_{18}\mathbf{H}_{10}\mathbf{O}_{4}\mathbf{N}_{2}$

3) Hippuroflavin. Sm. noch nicht bei 300°. subl. + Phenol, + Anilin, + o-Toluidin (B. 21, 3321; 26, 2320; A. 287, 68). — II, 1185.

C₁₈H₁₉O₄Cl₂ 1) Diphenyläther d. 3, 6-Dichlor-2, 5-Dioxy-1, 4-Benzochinon. Sm. 243°

(Am. 17, 595). — III, 352.

C₁₈H₁₀O₄Br₂ 1) Diphenyläther d. 3,6-Dibrom-2,5-Dioxy-1,4-Benzochinon. Sm. 266

bis 267° (Am. 17, 652). — III, 352. $\mathbf{C_{18}H_{10}O_4Br_4}$ 1) Tetrabromtriresorcin. 2+5 HBr (A. 289, 67). $\mathbf{C_{18}H_{10}O_5N_8}$ C 51,7 — H 2,4 — O 19,1 — N 26,8 — M. G. 418. $\mathbf{C}_{18}\mathbf{H}_{10}\mathbf{O}_{5}\mathbf{N}_{8}$

1) 2-Nitroso-1-Phenylazo-4-[2,4,6-Dinitrosonitrophenylazo] benzol? Sm. 175—176° u. Zers. (J. pr. [2] 44, 461). — IV, 1370.

 $C_{18}H_{10}O_5Br_2$ 1) Anhydrid d. ?-Dibrom- $\alpha\delta$ -Diketo- $\alpha\delta$ -Diphenylbutan- $\beta\gamma$ -Dicarbon**säure.** Sm. 285—287° (B. **10**, 1561). — **11**, 2034. C 61,7 — H 2,9 — O 27,4 — N 8,0 — M. G. 350. $\mathbf{C}_{18}\mathbf{H}_{10}\mathbf{O}_{6}\mathbf{N}_{2}$

 $C_{18}H_{10}O_6N_6$

 $C_{18}H_{10}O_7N_7$ $C_{18}H_{10}H_8N_2$

 $C_{18}H_{10}O_8S_2$ $\mathbf{C}_{18}\mathbf{H}_{10}\mathbf{O}_{10}\mathbf{N}_{4}$

C 61,7 — H 2,9 — O 27,4 — N 8,0 — M. G. 350.

1) Bidioxymethylenindigo (B. 23, 1566). — II, 1946.

2) Indigodicarbonsäure. Ba, Ag₄ (B. 18, 950). — II, 1624.

C 53,2 — H 2,5 — O 23,6 — N 20,7 — M. G. 406.

1) N-2,4,6-Trinitroaposafranin. HCl (B. 31, 1188). — IV, 1176.

1) Verbindung (aus 4-Amidochinolin). Sm. 285° (J. pr. [2] 56, 201).

C 56,6 — H 2,6 — O 33,5 — N 7,3 — M. G. 382.

1) Dinitrür d. Aethindiphtalid. Zers. bei 160° (B. 19, 837). — II, 2034.

1) Chrysochinondisulfonsäure. Ba (B. 12, 1894). — III, 463.

C 48,8 — H 2,3 — O 36,2 — N 12,7 — M. G. 442.

1) Di[2,4-Dinitrophenyläther] d. 1,3-Dioxybenzol. Sm. 184° (B. 24, 3586). — III 917. 3586). — II, 917.

2) Di[2,4-Dinitrophenyläther] d. 1,4-Dioxybenzol. Sm. 240° (B. 24, 3588). — II, 940.

 $C_{18}H_{10}N_2Br_2$ 1) P-Dibrom-6, 7'-Bichinolyl (M. 6, 553). — IV, 1070.

 $\begin{array}{c} \mathbf{C_{18}H_{10}N_2Br_8} & 1) & \mathbf{Oktobrom-p-Tetrolditolyl} & (B. 14, 935). & \mathbf{-IV}, 1035. \\ \mathbf{C_{18}H_{10}N_2Br_8} & 1) & \mathbf{Oktobrom-p-Tetrolditolyl} & (B. 14, 935). & \mathbf{-IV}, 1035. \\ \mathbf{C_{18}H_{10}N_2S_2} & 1) & \mathbf{Thiochinanthren.} & \mathbf{Sm.} & 306^\circ; \text{ subl. bei } 170^\circ_{28}. & \mathbf{H_2SO_4} + 2\,\mathbf{H_2O}, \text{ Pikrat} \\ & & (J.\ pr.\ [2]\ \mathbf{54},\ 342,\ 353;\ [2]\ \mathbf{56},\ 273;\ B.\ \mathbf{29},\ 2456;\ \mathbf{30},\ 2418). & \mathbf{-IV},\ 291. \\ & & \mathbf{2)} & \mathbf{isom.} & \mathbf{Thiochinanthren.} & \mathbf{Sm.} & \mathbf{oberh.} & 360^\circ (J.\ pr.\ [2]\ \mathbf{56},\ 277). \\ & & \mathbf{C_{18}H_{11}ON} & \mathbf{C} & \mathbf{84,1} & \mathbf{-H} & \mathbf{4,3} & \mathbf{-O} & \mathbf{6,2} & \mathbf{-N} & \mathbf{5,4} & \mathbf{-M}. & \mathbf{G}. & 257. \\ & & \mathbf{C_{18}H_{11}ON} & \mathbf{C} & \mathbf{84,1} & \mathbf{-H} & \mathbf{4,3} & \mathbf{-O} & \mathbf{6,2} & \mathbf{-N} & \mathbf{5,4} & \mathbf{-M}. & \mathbf{G}. & 257. \\ & & \mathbf{C_{18}H_{11}ON} & \mathbf{C} & \mathbf{84,1} & \mathbf{-H} & \mathbf{4,3} & \mathbf{-O} & \mathbf{6,2} & \mathbf{-N} & \mathbf{5,4} & \mathbf{-M}. & \mathbf{G}. & 257. \\ & & \mathbf{C_{18}H_{11}ON} & \mathbf{C} & \mathbf{84,1} & \mathbf{-H} & \mathbf{4,3} & \mathbf{-O} & \mathbf{6,2} & \mathbf{-N} & \mathbf{5,4} & \mathbf{-M}. & \mathbf{G}. & 257. \\ & & \mathbf{C_{18}H_{11}ON} & \mathbf{C} & \mathbf{84,1} & \mathbf{-H} & \mathbf{4,3} & \mathbf{-O} & \mathbf{6,2} & \mathbf{-N} & \mathbf{5,4} & \mathbf{-M}. & \mathbf{G}. & 257. \\ & & \mathbf{C_{18}H_{11}ON} & \mathbf{C} & \mathbf{84,1} & \mathbf{-H} & \mathbf{4,3} & \mathbf{-O} & \mathbf{6,2} & \mathbf{-N} & \mathbf{5,4} & \mathbf{-M}. & \mathbf{G}. & 257. \\ & & \mathbf{C_{18}H_{11}ON} & \mathbf{C} & \mathbf{84,1} & \mathbf{-H} & \mathbf{4,3} & \mathbf{-O} & \mathbf{6,2} & \mathbf{-N} & \mathbf{5,4} & \mathbf{-M}. & \mathbf{G}. & 257. \\ & & \mathbf{C_{18}H_{11}ON} & \mathbf{C} & \mathbf{84,1} & \mathbf{-H} & \mathbf{4,3} & \mathbf{-O} & \mathbf{6,2} & \mathbf{-N} & \mathbf{5,4} & \mathbf{-M}. & \mathbf{G}. & 257. \\ & & \mathbf{C_{18}H_{11}ON} & \mathbf{C} & \mathbf{0.5} & \mathbf$

1) α -Phenylpyridinphenylenketon. Sm. 68°. 2 + CrO₃ (A. 249, 124). — IV, 459. C 75,8 — H 3,8 — O 5,6 — N 14,7 — M. G. 285.

 $\mathbf{C}_{18}\mathbf{H}_{11}\mathbf{ON}_{3}$

1) Triphenazinoxazin (B. 28, 299). — IV, 1212. 2) Naphtostyriltolazin. Sm. oberh. 290° (J. pr. [2] 38, 184). — IV, 621. C 79,1 — H 4,0 — O 11,7 — N 5,1 — M. G. 273. 1) Nitrochrysen. Sm. 209° (A. 158, 306; J. pr. [2] 9, 281; B. 23, 792,

 $\mathbf{C}_{13}\mathbf{H}_{11}\mathbf{O}_{2}\mathbf{N}$

2444). — II, 292.

2) Amidochrysochinon. (2 HCl, PtCl,), HJ (B. 24, 954). — III, 463.
 3) Chinophtalon (Chinolingelb). Sm. 234—235° (B. 16, 1083). — IV, 308.

4) 1,8-Anhydrid d. 8-Benzoylamidonaphtalin-1-Carbonsaure. Sm. 1700 (J. pr. [2] 38, 168). — II, 1450. 5) Oximanhydrid d. α-Oximidophenyl-α-[1-Naphtyl]methan-2-Carbon-

säure. Sm. 175—176° (B. 29, 827).

6) Phenylimid d. Naphtalin-1,8-Dicarbonsäure. Sm. 2020 (G. 25 [1] $C_{18}H_{11}O_{2}N$ 250; B. 28, 362). — II, 1880. 7) 1-Naphtylimid d. Benzol-1,2-Dicarbonsäure. Sm. 180—181° (G. 15,

346, 480; B. 29, 827). — II, 1806. 8) 2-Naphtylimid d. Benzol-1,2-Dicarbonsäure. Sm. 216° (G. 15, 480). - II, 1806.

 $C_{18}H_{11}O_{2}Br$ 1) 2-Brom-1,1'-Diketo-2,3-Dihydro-2,2'-Biinden + $C_{6}H_{6}$. Sm. 150° u. Zers. (Soc. 71, 245).

2) Lakton d. α-Brom-α-Phenyl-α-[2-Oxy-l-Naphtyl|essigsäure. Sm. 121° (B. 31, 2823).

C 74.7 - H 3.8 - O 16.6 - N 4.8 - M. G. 289. $C_{18}H_{11}O_{8}N$

1) Oxim d. Anhydrobisdiketodihydroinden. Zers. oberh. 210° (A. 277, 370). — III, *276*. 2) 3-Furfuryl-β-Naphtochinolin-1-Carbonsäure. Sm. 275°. HCl (B. 27,

2028). — IV, 466.

3) Lakton d. Diphenylketipinsäuremononitril. Sm. 193-194° (A. 282, 61). — II, 2032.
 C 68,1 — H 3,5 — O 15,1 — N 13,2 — M. G. 317.

 $C_{18}H_{11}O_3N_3$ 1) 5-Phenyl-3-[6-Chinolyl]-1, 2, 4-Oxdiazol-54-Carbonsäure (Chinolin-6-Methenylazoximbenzenyl-4-Carbonsäure). Sm. 203° (B. 22, 2766). IV, 350.

1) Säure (aus Dehydrobenzoylessigsäure). Sm. 150-151° (Soc. 47, 292). - $\mathbf{C}_{18}\mathbf{H}_{11}\mathbf{O}_{3}\mathbf{C}\mathbf{I}$ II, 172Ì.

C 64.8 — H 3.3 — O 19.2 — N 12.6 — M. G. 333. $C_{18}H_{11}O_4N_3$

1) 5-Oximido-2,4,6-Triketo-1,3-Diathylhexahydro-1,3-Diazin + H₀O (Diäthylviolursäure). Sm. bei 90° (107° wasserfrei). NH₄, NH₄H+2H₂O, NaH + 3H₂O, KH + 2H₂O (B. 30, 1816). 2) Dinitroamidochrysen. HCl (B. 24, 952). — II, 643.

C₁₈H₁₁O₄Cl 1) Diphenyläther d. 6-Chlor-2,5-Dioxy-1,4-Benzochinon. Sm. 169 bis

 $C_{18}H_{11}O_5N$

1) Aethenylacetylamidoalizarin (Acetatd. Oxy-1-Methylanthrachinonoxazol). Sm. 238—240° (B. 18, 1666). — III, 424. $C_{18}H_{11}O_5Br$ 1) Brompulvinsäure. Sm. 208—209° u. Zers. Ba + $2H_2O$ (A. 282, 19).

- II, 2032.

C 59.2 - H 3.0 - O 26.3 - N 11.5 - M. G. 365. $C_{18}H_{11}O_6N_3$

1) Trinitro-1, 3-Diphenylbenzol. Sm. 200° (A. 203, 130). — II, 286. 2) Trinitro-1, 4-Diphenylbenzol. Sm. 195° (A. 203, 207; J. 1881, 400). - II, 286.

C₁₈H₁₁O₆Br 1) Diacetat d. ?-Brom-1,2-Dioxy-9,10-Anthrachinon (J. 1874, 486). — III, 422.

 $C_{18}H_{11}O_{7}N$

C 61,2 — H 3,1 — O 31,7 — N 4,0 — M. G. 353. 1) Phloreïn (A. 178, 93). — II, 1022. C 52,8 — H 2,7 — O 27,4 — N 17,1 — M. G. 409. $C_{18}H_{11}O_7N_5$

1) 3-Nitroso-2,5-Di[?-Nitrophenylamido]-1,4-Benzochinon (B. 16, 1557).

C 58,5 - H 3,0 - O 34,7 - N 3,8 - M. G. 369. $C_{18}H_{11}O_8N$

1) Diacetat d. 3-Nitro-1, 2-Dioxy-9, 10-Anthrachinon. Sm. 218° (B. 12, 587). — III, *423*.

2) Diacetat d. 4-Nitro-1.2-Dioxy-9,10-Anthrachinon. Sm. 194-195.5° (B. **24**, 1611). — **III**, 423.

C₁₈H₁₁N₂Cl₃ 1) 10-Chlorphenylat d. 2,8-Dichlor-5,10-Naphtdiazin (Dichlorphenyl-

phenazoniumchlorid). + AuCl₈ (B. 31, 301). - IV, 1001. C₁₈H₁₁N₂Br 1) ?-Brom-6,6'-Bichinolyl. Sm. 150—155° (B. 17, 2449). - IV, 1069. C₁₈H₁₂ON₂ C 79,4 - H 4,4 - O 5,9 - N 10,3 - M. G. 272.

1) 7-Phenylhydrazon-8-Ketoacenaphten. Sm. 179 (A. 276, 10). — III, 404.

2) 5-Phenyl-3-[2-Naphtyl]-1,2,4-Oxdiazol. Sm. 116° (B. 22, 2452). — II, 1455.

3) 1-Nitroso-2-[1-Naphtyl]indol. Sm. 248° u. Zers. (A. 272, 205). — IV, 465.

4) 6-Chinolyläther d. 2-Oxychinolin. Sm. 120°. (2HCl, PtCl₄) (M. 17, 670). — IV, 271. ·

5) 8-Chinolyläther d. 2-Oxychinolin. Sm. 175°. HCl, (2HCl, PtCl₄), $C_{18}H_{19}ON_{2}$ (2 HCl, PdCl₂ + H₂O) (M. 17, 668). — IV, 274. 6) P-Oxy-2, 3'-Bichinolyl. Sm. 208°. K + H₂O, Pb (M. 7, 314). —

IV, 1067.

7) ?-Oxy-2,5'-Bichinolyl. Sm. 186—187° (M. 8, 144). — IV, 1068.

8) 1-Keto-4-[P-Naphtyl]-1,2-Dihydro-2,3-Benzdiazin. Sm. oberh. 2500 (J. pr. [2] 51, 155). - IV, 1071.

 Aposafranon (Safranon; Benzolindon). Sm. 248—249° (242°) (B. 28, 275, 1716; 29, 1819; 30, 2623; J. pr. [2] 46, 572; A. 266, 252; 287, 193). - IV, 1002.

10) Verbindung (aus d. Nitril d. β-Imido-β-Phenylpropionsäure). Sm. 144° (J. pr. [2] 52, 107).

C 75,0 — H 4,2 — O 11,1 — N 9,7 — M. G. 288. $C_{18}H_{12}O_{2}N_{2}$

1) 2-Keto-5-Phenyl-3-[1-Naphtyl]-2, 3-Dihydro-1, 3, 4-Oxdiazol. Sm. 136° (B. **24**, 4185). — $\tilde{I}V$, 927.

2) α-Dioxy-2, 3'-Bichinolyl. Sm. 239°. HCl, 2HCl, (2HCl, PtCl₄) (M. 7, 319). - IV, 1068.

3) β-Dioxy-2, 3'-Bichinolyl. Sm. oberh. 305° (M. 7, 324). — IV, 1068.

4) 4,5-Diketo-2-Methyl-1-Phenyl-4,5-Dihydro-β-Naphtimidazol. Sm. 305-306° (B. 31, 2410). 5) Safranol (Oxybenzolindon). Sm. oberh. 330°. Na, HCl (B. 21, 1593;

- 28, 273; 29, 369; 30, 401; A. 286, 199, 210). IV, 1003.
- 6) Oxyaposafranon (Oxyphenylphenazon). Sm. 280° u. Zers. (A. 262, 252; 290, 301; B. 26, 383; 28, 1712, 2287; 29, 1605). IV, 1003.
 7) Oxybenzolindon (A. 286, 200). IV, 1002.

8) Base (aus Triphendioxazin) (B. 23, 186). - IV, 1078.

- 9) Acetat d. 5-Oxy- $\alpha\beta$ -Naphtophenazin. Sm. 217° (B. 26, 622). IV, 1057.
- 10) Acetat d. 6-Oxy- $\alpha\beta$ -Naphtophenazin. Sm. 188-189° (B. 26, 619). IV, 1054.
- 11) **2-Phenyl-** α oder β -Naphtimidazol-**2** 2 -Carbonsäure. Zers. bei 280 $^\circ$ (B. **23**, 1044). — **IV**, 1065

12) Nitril d. s-Diphenylketipinsäure. Sm. 270° u. Zers. $K_2 + 2C_2H_6O$ (A. 282, 9, 45). — II, 2031.

13) Nitril d. β -Acetoxyl- β -Phenyl- α -[2-Cyanphenyl]äthen- α -Carbonsäure. Sm. 211—213° (B. 27, 833). — II, 1977. 14) Phenylamidoimid d. Naphtalin-1,8-Dicarbonsäure. Sm. 218,5° (B.

28, 363). — **IV**, 712.

C 68.4 - H 3.8 - O 10.1 - N 17.7 - M. G. 316. $C_{18}H_{12}O_2N_4$

1) 5,5'- Diketo - 3,3'- Diphenyl - 4,5,4',5'- Tetrahydro - 4,4'- Bipyrazol (Phenylpyrazolonblau) (J. pr. [2] **52**, 37). — IV, 906. C₁₈H₁₂O₂Cl₄ 1) Tetrachlorstyracin (A. 70, 6). — II, 1407.

 $\mathbf{C}_{18}\mathbf{H}_{12}\mathbf{O}_{3}\mathbf{N}_{2}$

C 71,1 — H 3,9 — O 15,8 — N 9,2 — M. G. 304.

1) Dioxyaposafranon. Sm. oberh. 280° (B. 29, 369). — IV, 1004.

 $C_{18}H_{12}O_3N_4$

C 65,1 — H 3,6 — O 14,5 — N 16,8 — M. G. 332. 1) 9-Nitro-5-Acetylamido- $\alpha\beta$ -Naphtophenazin. Zers. bei 295—300° (B. **31**, 3092).

2) 10-Nitro-5-Acetylamido- $\alpha\beta$ -Naphtophenazin (B. 31, 3094).

 $\mathbf{C}_{18}\mathbf{H}_{12}\mathbf{O}_{3}\mathbf{Br}_{2}$ 1) Anhydrid d. Allo- α -Brom- β -Phenylakrylsäure. Sm. 72—74° (Am.

C 67,5 - H 3,7 - O 20,0 - N 8,7 - M. G. 320. $\mathbf{C}_{18}\mathbf{H}_{12}\mathbf{O}_4\mathbf{N}_2$

1) ?-Dinitro-1,4-Diphenylbenzol. Sm. 2770 (A. 203, 125; J. 1881, 400). **– II**, 286.

2) Indoxin. Sm. 223° (B. 29, 660). — IV, 238.

- 3) αβ-Di[1, 2-Phtalylamido]äthan (Aethylendiphtalimid). Sm. 232° (B. 20, 2225). — II, 1807.
- 4) 3-Phtalylamido-1-Phenyl-2,5-Diketotetrahydropyrrol(Pthalylasparaginphenylimid). Sm. 263—264° (G. 16, 7). — II, 1811. 5) Trioxyphenylaposafranon (B. 31, 2437).

- 6) 2,5-Diphenyl-1,4-Diazin-3,6-Dicarbonsäure. Sm. 190°. Ag₂ (A. 291, 278). — IV, 1050.
- 7) Aethylenimid d. Benzol-1,2-Dicarbonsäure (Diphtaläthylendiimid). Sm. 243—244° (G. 24 [1] 405; B. 27 [2] 404). — II, 1808.

C₁₈H₁₂O₄N₂ 8) Verbindung (aus Aethylendibenzoyldicarbonsäure). Sm. 270° u. Zers. (B. **20**, 1492). — **II**, 2034.

C 62.1 - H 3.4 - O 18.4 - N 16.1 - M. G. 348. $C_{18}H_{12}O_4N_4$

1) Phenylpyrazolonphenylpyridazoncarbonsäure. Sm. 245° u. Zers. (B. 27, 3454). — IV, 1265.

his 198° (Am. 17, 596). C 64.3 — H 3.6 — O 23.8 — N 8.3 — M. G. 336.

 $\mathbf{C}_{18}\mathbf{H}_{12}\mathbf{O}_{5}\mathbf{N}_{2}$

1) Di[Phtalylamidomethyl]äther. Sm. 207° (B. 31, 1232).

2) 1-Nitroso-2, 5-Diphenylpyrrol-22, 52-Dicarbonsaure. Sm. 2100 (B. 19, 842). — IV, 452. C 56,8 — H 3,2 — O 25,3 — N 14,7 — M. G. 380.

 $C_{18}H_{12}O_6N_4$

1) 2,4,6-Trinitrotriphenylamin. Sm. 62° (Soc. 59, 717). — II, 342. 2) ?-Trinitrotriphenylamin. Sm. 280° (B. 18, 2157; 23, 2539). — II, 342.

3) 2,5-Di[2-Nitrophenylamido]-1,4-Benzochinon. Sm. 305° u. Zers. (B.

23, 2794; C. 1897 [1] 62). — III, 340. $C_{18}H_{12}O_6Br_2$ 1) Monacetat d. Dibrombrasileïn + $^3/_4$ H_2O (B. 23, 1428). — III, 655. 2) ?-Dibrom- α δ -Diketo- α δ -Diphenylbutan- $\beta\gamma$ -Dicarbonsäure? Sm. 270 bis 272° u. Zers. (B. 10, 2209). — II, 2034. C₁₈H₁₂O₆P₂ 1) 1, 2-Dioxybenzolphosphin. Sd. 202—203°₁ (B. 27, 2569, 2752). —

II, 910.

C'58,7 - H 3,3 - O 30,4 - N 7,6 - M. G. 368. $\mathbf{C}_{18}\mathbf{H}_{12}\mathbf{O}_{7}\mathbf{N}_{2}$

1) Oxyresazoin (M. 8, 426). — II, 932.

2) Anhydrid d. β-[4-Nitrophenyl]akrylsäure (A. 86, 260). — II, 1415.

C 47.8 - H 2.6 - O 24.8 - N 24.8 - M. G. 452. $C_{18}H_{12}O_7N_8$

1) 4-Phenylhydrazido-2,2',4',6'-Nitrosotrinitroazobenzol. Sm. 115 bis 116° (J. pr. [2] **43**, 492). — **IV**, 1359. 2) 3'-Phenylhydrazido-2, 4, 6, 5'-Nitrosotrinitroazobenzol. Zers. bei 130°

 $C_{18}H_{12}O_8N_2$

 $C_{18}H_{12}O_8N_8$

(J. pr. [2] 44, 460). — IV, 1499. C 56,2 — H 3,1 — O 33,3 — N 7,3 — M. G. 384. 1) Dinitropolyporsäure. Sm. 230° (A. 195, 369). — II, 1907. C 46,2 — H 2,6 — O 27,3 — N 23,9 — M. G. 468. 1) 3'-Phenylhydrazido-2,4,6,5'-Tetranitroazobenzol. Zers Zers. bei 193° (J. pr. [2] 44, 462). - IV, 1499.

C₁₈H₁₀O₈Cl₄ 1) Tetracetat d. 2,4,6,7-Tetrachlor-1,3,5,8-Tetraoxynaphtalin. Sm. noch nicht bei 250° (A. 286, 49).

C₁₈H₁₂O₈P₂ 1) 1,2-Dioxybenzolphosphinoxyd. Sd. oberh. 360° (i. V.) (B. 27, 2571). **— II**, 910.

C 45.4 - H 2.5 - O 40.3 - N 11.8 - M. G. 476. $C_{18}H_{12}O_{12}N_4$ 1) Diäthyläther d. 1,6-Dioxy-9,10-Anthrachinon (A. 143, 367). — III, 428.

C 39.1 - H 2.2 - O 43.5 - N 15.2 - M. G. 552. $\mathbf{C}_{18}\mathbf{H}_{12}\mathbf{O}_{15}\mathbf{N}_{6}$

1) Aethylester d. α -Acetyl- $\alpha\alpha$ -Di[2,4,6-Trinitrophenyl]essigsäure. Sm. 205° u. Zers. (B. 23, 2720). — II, 1715.

C₁₈H₁₂N₂Cl₂ 1) 10-Chlorphenylat d. 2-Chlor-5, 10-Naphtdiazin (Chlorphenylphenazoniumchlorid) (B. 30, 1830). — IV, 1001. $\mathbf{C}_{18}\mathbf{H}_{12}\mathbf{N}_{2}\mathbf{Br}_{2}$ 1) 6,6'-Bichinolyldibromid (B. 17, 2448). — IV, 1069.

 $\begin{array}{c} \mathbf{C_{18}^{12}H_{12}^{2}N_{2}Br_{4}} \ 1) \ \ 2,7'\text{-Bichinolyltetrabromid} \ \ (B.\ 19,\ 2473). \ \ - \ \mathbf{IV},\ 1069. \\ 2) \ \ 6,6'\text{-Bichinolyltetrabromid} \ \ (B.\ 17,\ 1818,\ 2448). \ \ - \ \mathbf{IV},\ 1070. \\ 3) \ \ 6,7'\text{-Bichinolyltetrabromid} \ \ (M.\ 6,\ 553). \ \ - \ \mathbf{IV},\ 1070. \\ \mathbf{C_{18}H_{12}N_{2}S_{2}} \ \ 1) \ \ 2,2'\text{-Dichinolyldisulfid}. \ \ \mathbf{Sm}.\ 137^{\circ} \ \ (B.\ 21,\ 622). \ \ - \ \mathbf{IV},\ 291. \end{array}$

 $\textbf{C}_{18}\textbf{H}_{12}\textbf{N}_{5}\textbf{Br}_{3} \hspace{0.1cm} \textbf{1)} \hspace{0.1cm} \textbf{4-Brom-1-Di[4-Bromphenylazo]} \\ \textbf{amidobenzol} \hspace{0.1cm} \textbf{(Bis-p-Bromdiazobenzol-p-Bromdiazo$ Bromanilid) (B. 28, 831). — IV, 1521.

C 83,4 - H 5,0 - O 6,2 - N 5,4 - M. G. 259. $\mathbf{C}_{18}\mathbf{H}_{13}\mathbf{ON}$

1) Acetylphenyl- β -Naphtylcarbazol. Sm. 121° (A. 202, 7). — IV, 453.

2) Acetylphenylnaphtylcarbazol. Sm. 142° (B. 29, 270). — IV, 453.

C 75,2 — H 4,5 — O 5,6 — N 14,6 — M G 287. $C_{18}H_{13}ON_3$

1) 3-Oxy-5-Phenyl-1-[2-Naphtyl]-1,2,4-Triazol. Sm. 274—275°. Ag (Soc. 73, 371). — IV, 1158.

2) 3-[2-Naphtyl]hydrazon-2-Oxypseudoindol (β-N. d. Isatin). Sm. 234° (B. 28, 2527). - IV, 930.

C18H18ON8

- 3) Safraninon (s-Amidobenzolindon). HCl (B. 28, 275; 30, 399; A. 286, 211). - IV, 1178.
- 4) 3-Phenylhydrazo-α-Naphtoxindol. Sm. 268-270° (B. 21, 118). -II, 623.

5) 3-Acetylamido- $\alpha\beta$ -Naphtophenazin. Sm. 274° (B. 31, 2415).

6) 5-Acetylamido - αβ-Naphtophenazin. Sm. oberh. 370° (B. 23, 846; 27, 3342; 29, 295i). — IV, 1204.

7) 6-Acetylamido- $\alpha\beta$ -Naphtophenazin. Sm. 240° (B. 31, 2411).

Nitril d. 2-Oxy-1-[3-Methylphenyl]azonaphtalin-1⁶-Carbonsäure. Sm. 227⁶ (B. 26, 52). — IV, 1466.

1) Bromanhydrobishydrindon. Zers. bei 180⁶ (Soc. 65, 497). — III, 257. C 78,5 — H 4,7 — O 11,6 — N 5,1 — M. G. 275.

1) P-Amido-P-Dioxychrysen. HJ (B. 24, 953). — II, 1004.

 $C_{18}H_{13}OBr$ C18H13O2N

3,4-Methylenäther d. α-[3,4-Dioxyphenyl]-β-[2-Chinolyl]äthen (Piperonäthylenchinolin). Sm. 155° (B. 27, 1977). — IV, 455.
 1-[1-Naphtyl]imidomethylbenzol-2-Carbonsäure (B. 29, 2038).

4) 1-[2-Naphtyl]imidomethylbenzol-2-Carbonsäure (B. 29, 2038).

5) 2,6-Diphenylpyridin-4-Carbonsäure. Sm. 275°. Ag (B. 20, 2761; 29, 798). — IV, 458.

6) 2-[β-Phenyläthenyl]chinolin-4-Carbonsäure. Sm. 295° u. Zers. Mg, Ag (B. 22, 3007). — IV, 458.

7) 2- $[\beta]$ -Phenyläthenyljchinolin-6-Carbonsäure. Sm. 264° (B. 23, 2260).

- IV, 459.

8) Lakton d. 1-[1-Naphtyl]amidooxymethylbenzol-2-Carbonsäure. Sm. 155—159° (B. 29, 2038).

9) Lakton d. 1-[2-Naphtyl]amidooxymethylbenzol-2-Carbonsäure (B. **29**, 2038).

10) Lakton d. 1- $[\alpha$ -Oxy- β -2-Chinolyläthyl]benzol-2-Carbonsäure (Monophtalidylchinaldin). Sm. 104°. (2 HCl, PtCl₄), (HCl, AuCl₃) (B. 29, 188). — ÎV, 309. C 71,3 — H 4,3 — O 10,6 — N 13,8 — M. G. 303.

 $C_{18}H_{13}O_2N_3$

 $C_{18}H_{13}O_4N$

1) Acetat d. 4-Oxyphenylazimido-β-Naphtalin. Sm. 164—165° (B. 18, 3138). — IV, 1576.

2) P-Nitro-2-Methyl-1-[2-Naphtyl] benzimidazol. Sm. 162° (B. 21, 592).

— IV, 877.
3) Amidooxyaposafranon. Sm. 270—280° u. Zers. (A. 266, 256). — IV, 1179. C 65,2 - H 3,9 - O 9,7 - N 21,1 - M. G. 331. $C_{18}H_{18}O_{2}N_{5}$

1) Phenylpyrazolonrubazonsäure. Sm. 124° (127°) u. Zers. (B. 27, 784;

1) 1-Naphtylmonamid d. Benzol-1, 2-Dicarbonsäure (1-Naphtylphtalamid-

säure). Sm. 183—185° (G. 15, 480). — II, 1797. 2) 2-Naphtylmonamid d. Benzol-1, 2-Dicarbonsäure (G. 15, 480). — II, 1797.

3) Verbindung (aus d. Anhydro-1-[β-Oxyäthenyl]benzol-2-Carbonsäure). Sm. 285°. Ag (B. 27, 210). — II, 1641. C 62,2 — H 3,7 — O 13,8 — N 20,2 — M. G. 347.

 $C_{18}H_{13}O_3N_5$ Phenylpyrazolondiketohydroxypyridinphenylhydrazon. Zers. bei 245°. Phenylhydrazinsalz (B. 27, 3453). — IV, 727.

C₁₈H₁₈O₃Br 1) Acetat d. 6-Brom-1-Keto-2-[2-Oxybenzyliden]-2,3-Dihydroinden. Sm. 142° (B. 31, 722).

2) Acetat d. 6-Brom-1-Keto-2-[3-Oxybenzyliden]-2,3-Dihydroinden. Sm. 173—174° (B. 31, 722).

3) Acetat d. 6-Brom-1-Keto-2-[4-Oxybenzyliden]-2,3-Dihydroinden. Sm. 226—227° (B. 31, 723). C 70,4 — H 4,2 — O 20,8 — N 4,6 — M. G. 307.

1) Berberolin. H₂SO₄ + 2H₂O (Soc. **55**, 87). — **1II**, 803. 2) **2,5-Diphenylpyrrol-2**, **5**³-Dicarbonsäure. Sm. 230—232° (B. **19**, 840).

3) Pulvinaminsäure (Monamid d. Pulvinsäure). Sm. 226° (220°). NH₄, $K + 5H_2O$, Zn, $Ag + H_2O$ (B. 13, 1633; A. 219, 14; 282, 23, 49). II, 2031.

4) Methylester d. 4-Phenylamido-1,2-Naphtochinon-42-Carbonsäure. $C_{18}H_{13}O_{4}N$ Sm. 188° (B. 27, 3073). — III, 395. 5) Verbindung (aus Isomethylenphtalid). Sm. 179-180° (B. 17, 2666). -II, 1647. 6) Verbindung (aus d. Chinon C₁₈H₁₀O₄). Sm. 202—203° u. Zers. (A. 293, 112). C 64,5. — H 3,9. — O 19,1. — N 12,5. — M. G. 335. 1) ?-Dinitrotriphenylamin. Sm. 206—207° (B. 23, 2538). — II, 342. $C_{18}H_{13}O_4N_3$ 2) 3-Nitro-2, 5-Di[Phenylamido]-1, 4-Benzochinon. Sm. 2600 u. Zers. (B. 28, 1387). — III, 343. 3) Acetat d. 2-[4-Nitrophenyl]azo-1-Oxynaphtalin. Sm. 179,5° (B. 28, 851, 1125). — IV, 1430. 4) Acetat d. 4-[4-Nitrophenyl]azo-l-Oxynaphtalin. Sm. 165—166° (B. 28, 851, 1125). — IV, 1430. 5) Acetat d. 1-[3-Nitrophenyl]azo-2-Oxynaphtalin. Sm. 161-162° (Soc. 53, 465). — IV, 1430. 6) Acetat d. 1-[4-Nitrophenyl]azo-2-Oxynaphtalin. Sm. 192—193° (Soc. 53, 466). — IV, 1431. 1) Bromtriresorcin. $HBr + H_2O$ (A. 289, 67). C 66,9 - H 4,0 - O 24,8 - N 4,3 - M. G. 323. $\mathbf{C}_{18}\mathbf{H}_{13}\mathbf{O}_{4}\mathbf{Br}$ $C_{18}H_{18}O_5N$ 1) Pulvinhydroxamsäure. Sm. 1940 u. Zers. Anilinsalz (A. 282, 34). — II, 2031. 2) Verbindung (aus Diphtalylsäure). Sm. 150-152° (A. 242, 231). -II, 2029. C 61,6 — H 3,7 — O 22,8 — N 11,9 — M. G. 351. $C_{18}H_{18}O_5N_3$ Tartrandibenzamimid (A. 232, 165). — II, 1267.
 C 63,7 — H 3,8 — O 28,3 — N 4,1 — M. G. 339.
 Säure (aus Corydinsäure) + 2H₂O. Pb (C. 1897 [2] 133). $C_{18}H_{13}O_6N$ 2) Monacetat d. 3-Acetylamido-9,10-Anthrachinon. Sm. 268-271° u. Zers. (B. 18, 1668). — III, 424. 1) Triphloroglucinchlorid $+ 2^{1}/_{2}H_{2}O$ (A. 276, 333). — II, 1020. $C_{18}H_{18}O_6C1$ 1) Triphlorogitteinchforid + 2¹/₂ H₂O (A. 276, 333). — II, 1020.
 1) Acetat d. Bromthebaolchinon. Sm. 310° (B. 30, 1391). C 60,8 — H 3,7 — O 31,6 — N 3,9 — M. G. 355.
 1) Aristinsäure. Sm. 275°. K + 2 H₂O, Ca + 4 H₂O, Ba + 2 H₂O, Pb + 2 H₂O, Cu + 3 H₂O, Ag (B. 29 [2] 38). — III, 780.
 2) Aristidinsäure. Zers. bei 260° (B. 29 [2] 38). — III, 780. C 56,4 — H 3,4 — O 29,2 — N 11,0 — M. G. 383.
 1) 2,4,6-Trinitrophenyläther d. 2-Oxy-1,4-Dimethylnaphtalin. Sm. 100° (B. 21 160°) (B. 21 160°) $C_{18}H_{13}O_6Br$ $C_{18}H_{13}O_7N$ $C_{18}H_{13}O_7N_8$ 189—190° (B. **31**, 1679). 1) Chlorphenylat d. 5, 10 - Naphtdiazin (Phenylphenazoniumchlorid). $\mathbf{C}_{18}\mathbf{H}_{13}\mathbf{N}_{2}\mathbf{Cl}$ $+ \text{FeCl}_3$, $2 + \text{PtCl}_4$, $+ \text{AuCl}_3$ (B. 29, 2316, 2968; 30, 2622). — IV, 1001. 1) 5-Phenylamido-2-Thiocarbonyl-3-[1-Naphtyl]-2, 3-Dihydro-1, 3, 4- $C_{18}H_{13}N_3S_2$ Thiodiazol. Sm. 255° u. Zers. (B. 24, 4192). — IV, 927. $\mathbf{C}_{18}\mathbf{H}_{18}\mathbf{N}_{5}\mathbf{Cl}_{2}$ 1) Diazophenosafraninchlorid. $+2\,\mathrm{AuCl}_{8}$ (B. 16, 469). — IV, 1284. $\mathbf{C}_{18}\mathbf{H}_{14}\mathbf{ON}_{2}$ C 78,8 — H 5,1 — O 5,8 — N 10,2 — M. G. 274.

2-Phenylamido-4-Phenylimido-1-Keto-1,4-Dihydrobenzol (Anilidochinonphenylimid). Sm. 125° (B. 26, 385). — IV, 838.
 4'-Oxy-4-Phenylazobenzol. Sm. 240° (B. 31, 482; A. 300, 254). — IV, 1415.

3) 3-[2-Naphtyl]amido-1,4-Benzoxazin. Sm. 154—155° (Am. 20, 567).
4) Phenyloxydhydrat d. 5,10-Naphtdiazin (Phenylphenazoniumhydrat).

Salze, siehe diese. Chlorid, Nitrat, Bichromat (B. 29, 2316, 2968; 30, 2622). — IV, 1001.
 Aethyläther d. 9 oder 10-Oxy-αβ-Naphtophenazin. Sm. 186—1870

(B. 25, 496). — IV, 1055.

6) Aethylphenonaphtazon. Sm. 192—193° (A. 290, 300). — IV, 1055.
7) Aethylrosindon. Sm. 180° (C. 1898 [2] 920).
8) ms-Aethylisorosindon. Sm. 178° (B. 29, 2759; 31, 2478). — IV, 1055.
9) N-Acetyldihydro-α-Naphtinolin. Sm. 174° (B. 27, 2258). — IV, 1039.
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3) N-Rectyldinydro-α-Naphtholin. Sm. 174° (B. 27, 2238). — 1V, 1939. 10) Nitril d. β-Aethoxyl-β-Phenyl-α-[2-Cyanphenyl]äthen-α-Carbonsäure. Sm. 115—116° (B. 27, 834). — II, 1977. C 71,5 — H 4,6 — O 5,3 — N 18,6 — M. G. 302.

 $\begin{array}{c} \textbf{C}_{18}\textbf{H}_{14}\textbf{ON}_4 & \textbf{C}_{15}\textbf{71}, 5 - \textbf{H}_{16}\textbf{6} - \textbf{0}_{5}, 3 - \textbf{N}_{18}, 6 - \textbf{M}_{6}, \textbf{G}_{6}, 302. \\ \textbf{1)} & \textbf{4-Phenylnitrosamidoazobenzol.} & \textbf{Sm.}_{119}, 5^{\circ} & (\textbf{B.}_{12}, 261). - \textbf{IV}, 1356. \\ \textbf{2)} & \textbf{4-Oxy-1, 3-Di}[\textbf{Phenylazo}] \textbf{benzol.} & \textbf{Sm.}_{131}^{\circ} & (\textbf{A.}_{137}, 87; \textbf{263}, 237; \\ \textbf{3-Oxy-1, 3-Di}[\textbf{Phenylazo}] \textbf{benzol.} & \textbf{Sm.}_{131}^{\circ} & (\textbf{A.}_{137}, 87; \textbf{263}, 237; \\ \textbf{3-Oxy-1, 3-Di}[\textbf{Phenylazo}] \textbf{benzol.} & \textbf{Sm.}_{131}^{\circ} & (\textbf{A.}_{137}, 87; \textbf{263}, 237; \\ \textbf{3-Oxy-1, 3-Di}[\textbf{Phenylazo}] \textbf{benzol.} & \textbf{Sm.}_{131}^{\circ} & (\textbf{A.}_{137}, 87; \textbf{263}, 237; \\ \textbf{3-Oxy-1, 3-Di}[\textbf{Phenylazo}] \textbf{benzol.} & \textbf{Sm.}_{131}^{\circ} & (\textbf{A.}_{137}, 87; \textbf{263}, 237; \\ \textbf{3-Oxy-1, 3-Di}[\textbf{Phenylazo}] \textbf{benzol.} & \textbf{Sm.}_{131}^{\circ} & (\textbf{A.}_{137}, 87; \textbf{263}, 237; \\ \textbf{3-Oxy-1, 3-Di}[\textbf{Phenylazo}] \textbf{benzol.} & \textbf{Sm.}_{131}^{\circ} & (\textbf{A.}_{137}, 87; \textbf{263}, 237; \\ \textbf{3-Oxy-1, 3-Di}[\textbf{Phenylazo}] \textbf{benzol.} & \textbf{Sm.}_{131}^{\circ} & (\textbf{A.}_{137}, 87; \textbf{263}, 237; \\ \textbf{3-Oxy-1, 3-Di}[\textbf{Phenylazo}] \textbf{benzol.} & \textbf{Sm.}_{131}^{\circ} & (\textbf{A.}_{137}, 87; \textbf{263}, 237; \\ \textbf{3-Oxy-1, 3-Oxy-1,

288, 242; B. 9, 628; Soc. 37, 572). — IV, 1415.

- $C_{18}H_{14}ON_4$
- 3) 5-Oxy-1,3-Di[Phenylazo]benzol. Sm. 176-1770 (B. 22, 2193). IV, 1416.
- 4) Acetylderivat d. Verb. C₁₆H₁₂N₄. Sm. 137—139° (B. 20, 2900). IV, 1542.
- 5) Monoacetylderivat d. Base $C_{18}H_{12}N_4$ (aus d. Verb. $C_{16}H_8O_2N_4$). Sm. 260—261° (A. 255, 353). — IV, 1771. C 65,5 — H 4,2 — O 4,8 — N 25,4 — M. G. 330.

 $C_{18}H_{14}ON_6$

1) 4-[2-Amido-1-Naphtyl]azo-3-Oxy-1-Phenyl-1,2,5-Triazol (A. 295, 160). — IV, 1235. C 74,5 - H 4,8 - O 11,0 - N 9,7 - M. G. 290.

 $C_{18}H_{14}O_2N_2$

- 1) ?-Nitrotriphenylamin. Sm. 139-140° (B. 23, 2537; 31, 2988). II, 342.
- 2) 4-Nitroso-1-Phenylacetylamidonaphtalin. Sm. 81º (A. 286, 182).

- 2) 4-Nitroso-1-Prenylacetylamidolaphrami. Sin. 51. (A. 260, 152).
 3) s-Benzoyl-1-Naphtylharnstoff. Sm. 243—243,50 (Soc. 71, 1202).
 4) s-Benzoyl-2-Naphtylharnstoff. Sm. 219—2200 (Soc. 71, 1202).
 5) Benzoyl-2-Naphtenylamidoxim. Sm. 1790 (B. 22, 2451). II, 1455. 6) 2,5-Di[Phenylamido]-1,4-Benzoehinon (J. 1863, 415; B. 5, 851; 16, 1556; **21**, 2618; **22**, 1655; A. **210**, 178; **228**, 331). — III, 340,
- 7) 5-Phenylamido-2-Oxy-1, 4-Benzochinonphenylimid (B. 18, 788). -
- 8) Acetat d. 2-Oxy-1-Phenylazonaphtalin. Sm. 117° (G. 15, 407; Soc. 53, 466; 55, 117; 63, 930; B. 24, 2306). IV, 1428.
- 9) Acetat d. 4-Oxy-1-Phenylazonaphtalin. Sm. 128° (B. 17, 3030). IV, 1427.
- 10) Acetat d. 1-Oxy-2-Phenylazonaphtalin. Sm. 120-121° (Soc. 65, 840). — IV, 1429.
- 11) 2-Oxy-1-[4-Acetylphenyl]azonaphtalin (B. 18, 2695). IV, 1478.
- 12) 3,5-Diketo-4-[7-Phenylallyliden]-1-Phenyltetrahydropyrazol. Sm. 252° (B. 30, 1018). IV, 992.
- 13) Benzoat d. 6-Oxy-4-Methyl-2-Phenyl-1, 3-Diazin. Sm. 1500 (Pinner, Imidoäther 243). — IV, 957.
- 14) Aethylpseudoisatin- β -Indogenid. Sm. 197—198° (B. 16, 2200). II, 1615.

- 15) Dimethylindirubin (B. 28, 2526).
 16) Oxyaposafranon. Sm. 280° u. Zers. (A. 266, 252; B. 28, 2287).
- 17) Dimethylamidophenonaphtoxazon. Sm. 244°. HCl (A. 289, 123). IV, 1061.

18) Muscarin (B. 25, 3003). — IV, 1060.

- 19) Methylester d. 2,3-Diphenyl-1,4-Diazin-5-Carbonsäure. Sm. 115 bis 116° (Soc. 63, 1306). — IV, 1049.
- 20) Nitril d. β -Benzoylimido- α -Benzoylbuttersäure. Sm. 158° (J. pr. [2] 47, 112). — II, 1195.

21) Verbindung (aus Indirubin). Sm. 204° (B. 28, 2525).
22) Verbindung (aus Diacetonitril u. Salicylaldehyd). Sm. 179—180° (J. pr. [2] **56**, 139). C 67,9 — H 4,4 — O 10,1 — N 17,6 — M. G. 318.

 $C_{18}H_{14}O_{2}N_{4}$

- 1) 1,3-Di[Phenylnitrosamido]benzol. Sm. 102° (B. 16, 2798). IV, 572.
- 2) 1,4-Di[Phenylnitrosamido]benzol. Sm. 120° u. Zers. (M. 8, 479). IV, 585.
- 3) 3-Nitro-4'-Phenylamidoazobenzol. Sm. 136-137° (Soc. 45, 118). -IV, 1359.
- 4) 4-Nitro-4'-Phenylamidoazobenzol. Sm. 1510 (Soc. 43, 440; 45, 119).
- IV, 1359. 5) 1,4-Di[4-Oxyphenylazo]benzol. Sm. 205—207° (Soc. 47, 659). IV, 1416.

6) P-Di[4-Oxyphenylazo]benzol (B. 15, 3021). — IV, 1416.

- 7) 1-Phenylazo-4-[m-Dioxyphenylazo]benzol. Sm. 183-1840 (B. 15, 2818). — IV, 1444.
- 8) isom. 1-Phenylazo-4-[m-Dioxyphenylazo]benzol. Sm. 215° (B. 15, 2818). **— IV**, 1444.
- 9) 2,4-Di[Phenylazo]-1,3-Dioxybenzol. Sm. 220-222° (B. 17, 880; 21, 3118). — IV, 1443.
- 10) 4,6-Di[Phenylazo]-1,3-Dioxybenzol. Sm. 213—215° (217°) (B. 15, 24, 2816; **21**, 3117). — IV, 1443. 114*

- $C_{18}H_{14}O_{2}N_{4}11$) ?-Di[Phenylazo]-1,3-Dioxybenzol. Sm. 220° (B. 15, 24, 2817; 21, 3117). — IV, 1443.
 - 12) 3,3'-Bi-5-Keto-l-Phenyl-4,5-Dihydropyrazol. Sm. 275° u. Zers. (B. 28, 68). — IV, 722.
 - 13) 3,5'-Diphenyl-3',5-Aethylenbi[1,2,4-Oxdiazol]. Sm. $158-159^{\circ}$ (B. **22**, 2960). — **II**, *1210*.
 - 14) 3-Methyl-2-[4-Nitrophenyl]-2,3-Dihydro-1,2,4-Naphtisotriazin. Sm.
 - 107°. $+ C_2H_6O$ (Soc. **59**, 697). IV, 1396. 15) α -Imidobenzylamid d. 6-Oxy-2-Phenyl-1,3-Diazin-4-Carbonsäure.
 - Sm. 263° u. Zers. (B. 22, 2615). IV, 988. 16) Benzylidenhydrazid d. 5-Keto-4-Benzyliden-4,5-Dihydropyrazol-3-Carbonsäure. Sm. noch nicht bei 250° (J. pr. [2] 51, 57). — IV, 987. C 62.4 - H 4.0 - O 9.2 - N 24.3 - M. G. 346.
- $C_{18}H_{14}O_{2}N_{6}$ 1) Benzylidenhydrazid d. 4-Benzylidenhydrazon-5-Keto-4,5-Dihydropyrazol-3-Carbonsäure. Sm. 217,5° (J. pr. [2] 51, 58). — IV, 535.
- C₁₈H₁₄O₂Cl₂ 1) Chlorid d. α-Truxillsäure. Sm. 125° (B. 22, 681). II, 1901.

 2) Chlorid d. β-Truxillsäure. Sm. 96° (B. 22, 2260). II, 1902.

 3) Chlorid d. γ-Truxillsäure. Sm. 140° (B. 22, 682). II, 1893.
- $C_{18}H_{14}O_{2}Br_{2}$ 1) Dibromretenchinon. Sm. 250—252° (A. 229, 120). III, 458.
- C 70,6 H 4,6 O 15,7 N 9,1 M. G. 306. $C_{18}H_{14}O_{8}N_{2}$
 - 1) 2-Naphtylamidomethyl-3-Nitrophenylketon. Sm. 179^o (B. 30, 575). 2) 3-Acetylamido-4-Phenylamido-1,2-Naphtochinon. Sm. 308° (B. 31, 2410).
 - 3) 6-Acetylamido-4-Phenylamido-1, 2-Naphtochinon. Sm. 282° u. Zers.
 - (B. 31, 2416). 4) ?-Acetylamido-4-Phenylimido-2-Oxy-1-Keto-1,4-Dihydronaphtalin. Sm. 215° (B. 15, 286). — III, 393.
 - 5) Monacetat d. 1-Phenylazo-2, 4-Dioxynaphtalin. Sm. 1730 (A. 286,
 - 87; B. 17, 1812). IV, 1449. 6) Monoacetat d. 1-Phenylazo-2,7-Dioxynaphtalin. Sm. 181° (B. 23, 524). — IV, 1450.
 - 7) Monacetat d. 1-Phenylazo-3,4-Dioxynaphtalin. Sm. 1330 (A. 286,
 - 83). IV, 1449. 8) Monamid d. s-Diphenylketipinsäuremononitril. Sm. 199—200° u. Zers. (A. 282, 45). — II, 2032.
 - 9) $\alpha\beta$ -Phenylimid- γ -Phenylamid d. Propen- $\alpha\beta\gamma$ -Tricarbonsäure. Sm. $250-252^{\circ}$ (A. 98, 80; Soc. 55, 238; Am. 9, 192). — II, 423.
- C 64.7 H 4.2 O 14.4 N 16.7 M. G. 334. $C_{18}H_{14}O_3N_4$
 - 3,5-Di[Phenylnitrosamido]-1-Oxybenzol (G. 20, 343). - II, 724. 2) 2,4-Di[Phenylazo]-1,3,5-Trioxybenzol. Sm. 228-230° (B. 12, 226;
 - Soc. 71, 190). IV, 1450. 3) 2-Acetylamido-1-[2-Nitrophenyl]azonaphtalin. Sm. 154° (Soc. 59, 373). **— IV**, *1394*.
 - 4) 2-Acetylamido-1-[3-Nitrophenyl]azonaphtalin. Sm. 1920 (Soc. 59, 377). **— IV**, *1395*.
 - 5) 2-Acetylamido-1-[4-Nitrophenyl]azonaphtalin. Sm. 227—228° (Soc. **59**, 376). — **IV**, 1395.
 - 6) 2-Oxy-1-[3-Methylphenyl]azonaphtalin-16-Carbonsäure. Sm. 2830 u. Zers. (B. 26, 52). — IV, 1466.
 - 7) 4-Oxy-1-[3-Methylphenyl]azonaphtalin-16-Carbonsäure. Sm. 2700 u. Zers. (B. 26, 54). — IV, 1466.
 - 8) Verbindung (aus Anilin u. Trichloreitrazinamid) (B. 21, 1248; 27, 579). **— II**, 423.
- C 67,1 H 4,3 O 19,9 N 8,7 M. G. 322. $C_{18}H_{14}O_4N_2$
 - 2,4-Di[Benzoylamido]-1,3-Dioxy-R-Buten + 1/2 H₂O (Dibenzamidodioxytetrol). Sm. 137-138° (wasserfrei). Ca, Pb (B. 21, 3325; 22, 115). II, 1185.

 - 2) Dimethyläther d. Dioxyindigo. subl. (B. 22, 2351). II, 1621. 3) 1,5-Di[Acetylamido]-9,10-Anthrachinon (B. 16, 368). III, 414.
 - $4)\ 2,3,5,6 \textbf{Tetraketo-1,4-Di} [\textbf{2-Methylphenyl}] \ hexahydro-\textbf{1,4-Diazin.}$ Sm. 274°. + 2 Aceton (J. pr. [2] 47, 188). — II, 467. 5) β -Naphtolazoanissäure + 1¹/₂ H₂O. Ba + 4¹/₂ H₂O (B. 14, 2039). —
 - IV, 1471.

- C₁₈H₁₄O₄N₂ 6) Diacetat d. 9,10-Dioximido-9,10-Dihydrophenanthren. Sm. 1840 (B. 22, 1993). — III, 446.
 - 7) Verbindung (aus 5-Keto-1-Aethyl-2-Benzyliden-3,4-Diphenyl-2,5-Dihydropyrrol). Sm. 151° (B. 24, 3874). — II, 1728.
 - 8) Verbindung (aus Cymol). Sm. 125° (A. 172, 314; B. 6, 937; 20, 3361; R. **6**, 63). — III, 300.
 - 9) Verbindung (aus 1,4-Benzochinon u. 4-Amido-1-Oxybenzol). Sm. noch nicht bei 290° (A. 226, 70). III, 346.
 C 61,7 H 4,0 O 18,3 N 16,0 M. G. 350.
- $\mathbf{C}_{18}\mathbf{H}_{14}\mathbf{O}_{4}\mathbf{N}_{4}$
 - 1) 1-Phenylamido-2-[?-Dinitrophenyl]amidobenzol. Sm. 170-1710 (J. pr. [2] **46**, 572). — **IV**, 556.
 - 2) 4,6-Dinitro-1,3-Di[Phenylamido] benzol. Sm. 186° (B. 30, 1668). IV, 572.
 - 3) 4-Amido-4'-[2,4-Dinitrophenyl] amidobiphenyl. Sm. 245° (B. 9, 981). **– IV**, 963.
 - 4) 1,4-Dibenzoyl-3,6-Diamido-2,5-Diketo-1,2,4,5-Tetrahydro-1,4-Diazin (Hippuroflavindiamid). Sm. 237-238° (A. 287, 94).
 - 5) 4-[2-Nitrophenyl]azo-1-Naphtylamidoessigsäure. Sm. 94-96° u. Zers. K, HCl (B. 25, 1607). — IV, 1398.
 - 6) 4-[3-Nitrophenyl]azo-l-Naphtylamidoessigsäure. Sm. 1390 u. Zers. K, HCl (B. 25, 1609). — IV, 1398.
 - 7) 4-[4-Nitrophenyl]azo-l-Naphtylamidoessigsäure. Sm. 1250 u. Zers. K, HCl (B. 25, 1606). — IV, 1398.
- C 57,1 H 3,7 O 16,9 N 22,2 M. G. 378. $C_{18}H_{14}O_4N_6$
- 1) Dinitrophenylphenylenblau $(B.\ 28,\ 512)$. IV, 1278. C₁₈H₁₄O₄Cl₄ 1) Tetrachlorhydropolyporsäure. Sm. 108° $(A.\ 195,\ 372)$. II, 1907. C₁₈H₁₄O₄Br₂ 1) Acetat d. Dibromthebaol. Sm. 179° $(B.\ 30,\ 1389)$.
- $\mathbf{C}_{18}\mathbf{H}_{14}\mathbf{O}_{4}\mathbf{S}$
- 1) Säure (aus Thiodiglykolsäure u. Benzaldehyd). Na $_2+2^1/_2$ H $_2$ O (B. 18, 3242). II, 1638. 1) 1,3-Di[Phenylsulfon]benzol. Sm. 190-1910 (B. 19, 2421). - II, 814. $C_{18}H_{14}O_4S_2$
- 2) Phenyläthenyldisulfiddicarbonsäure (Disulfidzimmtsäure). Sm. 179°- $\mathbf{Na_{2}} \stackrel{(M. 8, 351)}{=} \mathbf{H} \stackrel{\mathbf{II}}{=} 1.1638.$ $\mathbf{C} \stackrel{(63,9)}{=} \mathbf{H} \stackrel{\mathbf{II}}{=} 0.23,7 \stackrel{\mathbf{II}}{=} \mathbf{N} \stackrel{\mathbf{8},3}{=} \mathbf{M}. G. 338.$
- $C_{18}H_{14}O_5N_2$ 1) Rhodizoanilid (B. 21, 1855). — III, 355.
- C 59,0 H 3,8 O 21,9 N 15,3 M. G. 366. $C_{18}H_{14}O_5N_4$
 - 1) Aethylester d. α-[N-Benzoyl-3-Nitrophenylhydrazon]-α-Cyanessigsäure. Sm. 174—175° (J. pr. [2] 51, 223). — IV, 1456.
 - 2) Verbindung (aus Aepfelsäurebiphenylhydrazid]. Sm. 1990 (B. 24, 4193).
- IV, 712. C₁₈H₁₄O₅Br₂ 1) 2-Acetat-3,4-Methylenäther d. $\alpha\beta$ -Dibrom- γ -Keto- γ -[2-Oxyphenyl]α-[3,4-Dioxyphenyl]propan. Sm. 113—1146 (B. 32, 316).
- 1) Phenylester d. Diphenylsulfon-3-Sulfonsäure. Sm. 106° (B. 19, 2421). $C_{18}H_{14}O_5S_2$ - II, 814.
 - 2) Verbindung (aus Benzolsulfonsäurechlorid u. Oxybenzol). Sm. 1230 (G. 11, 66). — 11, 668. C 61,0 — H 3,9 — O 27,1 — N 7,9 — M. G. 354.
- $\mathbf{C}_{18}\mathbf{H}_{14}\mathbf{O}_{6}\mathbf{N}_{2}$ 1) Dimethyläther d. 4,5-Di[4-Oxybenzoyl]-1,2,3,6-Dioxdiazol (Dianisyldinitrosacyl). Sm. 139° (B. 23, 1202; R. 10, 215). — III, 134.
- C 56.6 H 3.7 O 25.1 N 14.6 M. G. 382. $C_{18}H_{14}O_6N_4$ 1) Verbindung (aus Weinsäurediphenylhydrazid). Sm. 1820 (B. 24, 4193).
- **IV**, 721. C₁₈H₁₄O₈Br₂ 1) Monacetat d. Dibrombrasilin. Sm. 170° (B. 27, 528). — III, 653.
- 1) 1,3-Phenylenester d. Benzolsulfonsäure. Sm. 69-70° (B. 24, 417). $C_{18}H_{14}O_6S_2$ **– II**, 918.
 - 2) 1,4-Phenylenester d. Benzolsulfonsäure. Sm. 120-121° (B. 24, 418). **— II**, 941.
- C 58.4 H 3.8 O 30.3 N 7.5 M G. 370. 1) Tartrandibenzamsäure. Cu₃ (A. 232, 160). II, 1267. $C_{18}H_{14}O_7N_2$
 - 2) Dimethylester d. Azoxybenzol-4,4'-Diketocarbonsäure. Sm. 173 bis 175° (B. 22, 206). IV, 1345.
- C 56,0 H 3,6 O 33,2 N 7,2 M. G. 386.

 1) Dinitro-β-Cocasäure. Sm. 252° (A. 271, 205). II, 1404. $C_{18}H_{14}O_8N_2$
 - 2) α-Dinitro-α-Truxillsäure. Sm. 228-229° (B. 24, 2589). II, 1901.

 $C_{18}H_{15}ON_3$

C₁₈H₁₄O₈N₂ 3) β-Dinitro-α-Truxillsäure. Sm. 290° u. Zers. Ba + H₂O, Ag₂ (B. 24, 2590). — II, 1902.
4) Dinitro-β-Truxillsäure. Sm. 216° (B. 24, 2590). — II, 1902.
5) Dinitro-β-Truxillsäure. Sm. 293° (B. 24, 2590). — II, 1903.
6) Dinitro-δ-Truxillsäure. Sm. 226° (A. 271, 207). — II, 1904.

C₁₈H₁₄O₁₄Br₁₂ 1) Verbindung (aus 4, 5, 6-Tribrom-1, 2, 3-Trioxybenzol). Sm. 79—80° (A. 245, 329). — II, 1013.

C₁₈H₁₄NCl 1) Chlormethylat d. α-Chrysidin. 2 + PtCl₄ (A. 266, 165). — IV, 463.
2) Chlormethylat d. β-Chrysidin. 2 + PtCl₄ (A. 266, 168). — IV, 464.

C₁₈H₁₄NC1 1) Chlormethylat d. α -Chrysidin. $2 + \text{PtCl}_4$ (A. 266, 168). — IV, 464 C₁₈H₁₄NJ 1) Jodmethylat d. α -Chrysidin. Sm. 108° (A. 266, 165). — IV, 463. 2) Jodmethylat d. β -Chrysidin. Sm. 237° (A. 266, 168). — IV, 464.

2) Jodmethylat d. β -Chrysidin. Sm. 237° (A. 266, 168). — IV, 464. $C_{18}H_{14}N_2Cl_2$ 1) 7-Chlorphenylat d. 9-Chlor- $\alpha\beta$ -Naphtophenzin. 2+PtCl₄,+AuCl₃

(B. 31, 2478). (B. 31, 2478). 1) 2-Merkapto-3-[4-Methylphenyl]- α -Naphtimidazol. Sm. 307° (B. 25, 2832). — IV, 919.

2) 2-Thiocarbonyl-3-[1-Naphtyl]-1, 2, 3, 4-Tetrahydro-1, 3-Benzdiazin.
 Sm. 255° (J. pr. [2] 52, 409). — IV, 635.

3) 2-Thiocarbonyl-3-[2-Naphtyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 280° (J. pr. [2] 52, 413). — IV, 635.

 $\mathbf{C}_{18}\mathbf{H}_{14}\mathbf{N}_{3}\mathbf{Cl}$ 1) Aposafraninchlorid (B. 30, 2624).

C₁₈H₁₄N₄S₄ 1) Disulfid d. 5-Merkapto-3-[4-Methylphenyl]-1, 2, 4-Thiodiazol. Sm. 169° (B. 24, 392). — IV, 851.

 $C_{18}H_{15}ON$ C 82,8 — H 5,7 — O 6,1 — N 5,4 — M G. 261.

 Methyläther d. 4-Oxy-1-[2-Naphtylimido]methylbenzol. Sm. 98° (A. 241, 341). — III, 85.

2) Methyläther d. 2-Oxy-1-Phenylimidomethylnaphtalin. Sd. 262 bis 265°_{10} (Bl. [3] 17, 310).

3) Methyläther d. 4-Oxy-l-Phenylimidomethylnaphtalin. Sd. 269°₁₀ (Bl. [3] 17, 307).

4) 1-Naphtylamidomethylphenylketon. Sm. 125° (B. 30, 575). 5) 2-Naphtylamidomethylphenylketon. Sm. 150° (B. 30, 575).

6) Phenylamidomethyl-1-Naphtylketon. Sm. 130° (B. 19, 2899). — III. 174.

7) Methyloxydhydrat d. α-Chrysidin. Sm. 110°. Chlorid, Jodid (A. 266, 165) — IV 463

266, 165). — IV, 463. 8) Methyloxydhydrat d. α-Chrysidin. Sm. 133°. Chlorid, Jodid (A. 266, 168). — IV, 464.

9) 4-Methylphenylamid d. Naphtalin-2-Carbonsäure. Sm. 191° (A. 180, 324). — II, 1454.

10) Phenyl-1-Naphtylamid d. Essigsäure. Sm. 115° (A. 209, 154). — II, 607.

11) Phenyl-2-Naphtylamid d. Essigsäure. Sm. 93° (A. **209**, 157). —

12) Methyl-1-Naphtylamid d. Benzolcarbonsäure. Sm. 121° (B. 18, 687).
 II. 1168.

13) Methyl-2-Naphtylamid d. Benzolcarbonsäure. Sm. 169° (B. 18, 680).

— II, 1168.

C 74,7 - H 5,2 - O 5,5 - N 14,5 - M. G. 289.

1) 4-Nitroso-1, 3-Di[Phenylamido]benzol. Sm. 153° (A. 255, 144; 286, 176). — IV, 572.

2) 2-Acetylamido-l-Phenylazonaphtalin. Sm. 152—153° (B. 18, 799).
 IV, 1393.

3) 4-Acetylamido-l-Phenylazonaphtalin. Sm. 233° (B. 28, 2197). — IV, 1392.

Aethyläther d. 5-Oxy-3-Phenyl-β-Naphtisotriazol. Sm. 160° (B. 25, 1017). — IV, 1576.

5) Dimethylamidophenonaphtoxazin+H₂O (Methylnilblau). HCl (A. 289, 111). — IV, 1208.

C₁₈H₁₅OCl 1) 1-Keto-2- $[\alpha$ -Chlor- γ -Phenylpropenyl]-2, 3-Dihydroinden. Sm. 81 bis 82° (Soc. 65, 486). — III, 253.

C₁₈H₁₅OP 1) Phenyläther d. Diphenyloxyphosphin. Sd. 265—270°₆₂ (B. 18, 2109). — IV, 1657. $C_{18}H_{15}O_{2}N$

- C 78,0 H 5,4 O 11,5 N 5,1 M. G. 277.
- 1) Methyläther d. 4-[4-Methylphenyl]imido-2-Oxy-1-Keto-1,4-Dihydronaphtalin. Sm. 150° (B. 15, 1970). — III, 394.
- 2) Aethyläther d. 4-Phenylimido-2-Oxy-1-Keto-1,4-Dihydronaphtalin. Sm. 104° (B. 14, 1496; 15, 282). — III, 393.
- 3) β -[2-Naphtyl]äther d. α -Oximido- β -Oxy- α -Phenyläthan. Sm. 144 bis 145° (B. 28, 3032). III, 133.
- 4) Acetat d. 7-Phenylamido-2-Oxynaphtalin. Sm. 1620 (B. 26, 3088). - II, 886.
- 5) 9-Diacetylamidoanthracen. Sm. 159° (B. 23, 2525).
- 6) ?-Aethylphenylamido-1,2-Naphtochinon? Sm. 165° (B. 15, 691). —
- 7) 2-Aethylphenylamido-1,4-Naphtochinon. Sm. 155°. HCl (B. 15, 1810). - III, 376.
- 8) ?-Oxy-?-Phenyl-1,4-Naphtochinonäthylimid. Sm. 129—130° (A. 226, 40). — III, 460.
- 9) Methyläther d. 2-[β-Phenyläthenyl]-5-[4-Oxyphenyl]oxazol. Sm. 99 bis 100°. HCl (B. 29, 2102). IV, 456.
 10) 2,6-Dioxy-4-Phenyl-3-Benzylpyridin. Sm. 175° (Soc. 75, 251).
- α-[3-Methoxyl-4-Oxyphenyl]-β-[2-Chinolyl]äthen (Vanilloäthylenchinolin).
 Sm. 182°. HCl, +2½ H₂O, (2 HCl, PtCl₄) (B. 27, 1975). IV, 454.
- 12) Acetat d. 4-Methyl-2-[4-Oxyphenyl]chinolin (A. d. Flavenol). Sm. 128° (B. **16**, 69). — **IV**, 436.
- 13) Acetat d. 2-[4-Oxy-3-Methylphenyl]chinolin. Sm. 1060 (M. 9, 106). **– IV**, 434.
- 14) Aethylester d. 2 Phenylchinolin 4 Carbonsäure. Sm. 50 51°. (2 HCl, PtCl₄), Plkrat (J. pr. [2] 56, 297).
- 15) Oxim d. Verbindung $C_{18}H_{14}O_2$. Sm. 1920 u. Zers. (B. 28, 1210). III, 325.
- 2-Methyl-1,5-Diphenylpyrrol-3-Carbonsäure. Sm. 226° (B. 18, 2595). • IV, *357*.
- 17) **2,6-Diphenyl-1,4-Dihydropyridin-4-Carbonsäure.** NH₄ (B. **20**, 2760). - II, 1901.
- 18) 3 Crotonyl β Naphtochinolin 1 Carbonsäure + H₂O.
- (wasserfrei). Åg (B. 27, 2024). IV, 450. 19) Phenylester d. Diphenylamidoameisensäure. Sm. 103—104° (B. 20, 2122). — II, 663.
- 20) Benzylester d. 2-Methylchinolin-3-Carbonsäure. Sm. 82° (A. 282,
- 124). IV, 353. 21) 2-Naphtylester d. 2-Methylphenylamidoameisensäure. Sm. 1490
- (B. 25, 1087). II, 878.22) Aethylimid d. $\alpha\beta$ -Diphenyläthen- $\alpha\beta$ -Dicarbonsäure (Ae. d. Diphenyl-
- maleïnsäure). Sm. 108° (B. 26, 2478). II, 1897. 23) Aethylimid d. $\alpha\beta$ -Diphenyläthen - α , α 2 - Dicarbonsäure (Benzalhomo-
- phtaläthylimid). Sm. 97° (B. 20, 2498). III, 36. 24) Phenylamid d. 2-Oxynaphtalinmethyläther-1-Carbonsäure.
- 169° (J. pr [2] 41, 317). II, 1690. 25) Phenylamid d. 4-Oxynaphtalinmethyläther-1-Carbonsäure.
- 218° (J. pr. [2] 41, 316). II, 1689. 26) Methylphenylamid d. 3-Oxynaphtalin-2-Carbonsäure.
- (B. **25**, 3635). II, 1691. 27) 1-Naphtylamid d. α -Oxyphenylessigsäure, Sm. 140° (A. 279, 129).
- II, *1552.* 28) 2-Naphtylamid d. α-Oxyphenylessigsäure. Sm. 189° (A. 279, 129).
- · II, 1552. 29) Verbindung (aus Benzoylessigsäurealdehyd). Sm. 219—220° (B. 21, 1138). **— III**, 95.

 $C_{18}H_{15}O_{2}N_{3}$

- C 70.8 H 4.9 O 10.5 N 13.8 M. G. 305.1) 4-Acetylamido-1-[3-Oxyphenyl]azonaphtalin. Sm. 232—235° (B. 27
- [2] 596). IV, 1415. 2) 2-Phenylazo-4-Acetylamido-1-Oxynaphtalin. Sm. 267—268° (B. 29, 2949). — IV, 1431.

- $C_{18}H_{15}O_{2}N_{3}$ 3) 2-Oxyphenylacetylhydrazimido- β -Naphtalin. Sm. 198° (B. 18, 3127). - IV, 1576.
 - 4) 4-Oxyphenylacetylhydrazimido-β-Naphtalin. Sm. 218° (B. 18, 3129). - IV, 1576.
 - 5) α -[2-Naphtyl]- β -Phenylguanidin-3-Carbonsäure. HCl (B. 16, 338). - II, 1269.
 - 6) 4-Phenylazo-l-Naphtylamidoessigsäure. Sm. 1330 u. Zers. HCl, K
 - (B. 24, 2902). IV, 1398. 7) Methylester d. 5-[β-Phenyläthenyl]-1-Phenyl-1,2,4-Triazol-3-Car-
- bonsäure. Sm. 149°. IV, 1170. C 64,9 H 4,5 O 9,6 N 21,0 M. G. 333. $\mathbf{C}_{18}\mathbf{H}_{15}\mathbf{O}_{2}\mathbf{N}_{5}$
 - 1) Diamid d. 2-Methyl-4, 6-Diphenyl-1, 3, 5-Triazin-43, 63-Dicarbon-
- $\mathbf{C}_{18}\mathbf{H}_{15}\mathbf{O}_{2}\mathbf{Br}$
- Diamid d. 2-Methyl-4, 6-Diphenyl-1, 3, 5-Triazin-4°, 6°-Dicarbonsäure? (B. 17, 1434; Pinner, Imidoäther 195). IV, 1262.
 Bromretenchinon. Sm. 210—212° (Z. 1869, 73). III, 458.
 Phenylester d. Diphenylphosphinsäure. Sm. 135—136°; Sd. oberh. 360° u. Zers. (B. 18, 2113). IV, 1657.
 C 73,7 H 5,1 O 16,4 N 4,8 M. G. 293.
 α-Phenoldichroïn (B. 7, 247, 966, 1099; 17, 1877). III, 678.
 Dizimmthydroxamsäure. Sm. 152°. Na, K, Pb, Ag (A. 178, 219). III 1408 $C_{18}H_{15}O_{2}P$
- $C_{18}H_{15}O_{8}N$

 - II. 1408.
 - 3) 4-Oxy-5-Keto-3-Acetyl-1, 2-Diphenyl-2, 5-Dihydropyrrol. Zers. bei 239—240° (B. 31, 1307).
 - 4) Benzoat d. α -Oxy- α -[2-Furanyl]- β -[2-Pyridyl] äthan (Benzoylpikolylfurylalkein). Sm. 47-49°. (HCl, HgCl₂), (2HCl, PtCl₄) (B. 23, 2695).
 - IV, 333. 5) γ -Cyan- α -Keto- α δ -Diphenylbutan- γ -Carbonsäure. Sm. 178°. Ba+H₂O (Bl. [3] **15**, 777)
 - 6) Benzylbetain d. Chininsäure. Sm. 1590 (A. 276, 279). IV, 362.
 - 7) 1,4-Anhydrid d. 6-Methoxyl-1-Methyl-2-Phenylchinolinammonium-4-Carbonsäure + H₂O. Sm. 218° u. Zers. (A. 282, 87). - IV, 447.
 - 8) Methylester d. 6-Methoxyl-2-Phenylchinolin-4-Carbonsäure. Sm.
 - 111° (A. 282, 106). IV, 447.
 9) Aethylester d. 4-Oxy-2-Phenylchinolin-3-Carbonsäure. Sm. 262° (B. 18, 2633; 19, 1462). — IV, 446.
 - 10) 3-Oxy-1,2,3,4-Tetrahydro-2-Naphtylimid d. Benzol-1,2-Dicarbon-
 - säure. Sm. $217-218,5^{\circ}$ (A. 288, 132). 11) Oxim d. Verbindung $C_{18}H_{14}O_3$ (aus d. Verbind. $C_{18}H_{18}O_4$). α -Modif. Sm. 185° u. Zers.; β -Modif. Sm. $179-180^{\circ}$ u. Zers. (B. 28, 1209, 1210). - III, 325.
 - 12) Verbindung (aus Diphenacylcyanessigsäure) = $(C_{18}H_{15}O_3N)_x$. Sm. 170° u. Zers. (Bl. [3] 15, 1013). C 67,3 H 4,7 O 14,9 N 13,1 M. G. 321.
- $C_{18}H_{15}O_3N_3$
 - 1) 4-Nitro-2-Acetylamido-1-[2-Naphtyl]amidobenzol. Sm. 200° u. Zers. (B. 21, 591). — IV, 558.
 - 2) Aethyläther d. 1-Oxy-2-Phenylazonaphtalin. Sm. 151-1520 (Soc.
- 65, 841). IV, 1429.

 3) Aethylester d. Phenylbenzoylhydrazoncyanessigsäure. Sm. 158° (J. pr. [2] 49, 331). IV, 1455.

 C₁₈H₁₅O₃Br 1) Acetat d. γ-Keto-γ-[4-Methylphenyl]-α-[5-Brom-2-Oxyphenyl]-propen. Sm. 153° (B. 31, 714 Anm.).
- C₁₈H₁₅O₃Br₃ 1) Tribrompyroguajacin. Sm. 172° (M. 1, 601). III, 645.
- $C_{18}H_{15}O_{8}P$
- 1) Triphenylphosphit. Sd. 220°₁₁ (A. 218, 96; 239, 311). II, 659.
 2) Diphenylester d. Phenylphosphinsäure. Sm. 63,5° (A. 181, 338). IV, 1651.
 - 3) Triphenylester d. Phosphorigen Säure (B. 27, 493).
- - 2) 2,5-Dimethyl-1-[1-Naphtyl]pyrrol-3,4-Dicarbonsäure. Zers. bei 244°.
 - K₂, Ba, Ag (A. 236, 307). IV, 92. 3) 2,5-Dimethyl-1-[2-Naphtyl]pyrrol-3,4-Dicarbonsäure. Zers. oberb. 260°. Ba (B. 18, 304; A. 236, 306). — IV, 92.
 - 4) β , 2'-Imid d. $\alpha\beta$ -Diphenylpropan- β , 2, 2'-Tricarbonsäure. Sm. 233 bis 236° (B. 27, 2499). II, 2027.

5) Benzylimid d. Benzoyläpfelsäure. Sm. 100° (G. 23 [1] 174). — II, 530. 6) isom. Benzylimid d. Benzoyläpfelsäure. Sm. 122° (G. 23 [1] 175). $C_{18}H_{15}O_4N$ - II. 530.

7) 4-Butyroxylphenylimid d. Benzol-1,2-Dicarbonsäure. Sm. 156° (C. 1897 [1] 49). C 64,1 — H 4,4 — O 19,0 — N 12,5 — M. G. 337.

 $C_{18}H_{15}O_4N_8$

1) Dibenzoat d. 2,5-Di[Oximido]tetrahydropyrrol. Sm. 187—189° (B. **22**, 2965). — II, 1210.

 $C_{18}H_{15}O_4Cl_3$ 1) Diacetat d. $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -[4,4'-Dioxydiphenyl]äthan. Sm. 138° (B. 7, 1202). — II, 995.

 $\mathbf{C}_{12}\mathbf{H}_{15}\mathbf{O}_4\mathbf{Br}$ 1) Aethyläther d. α -Brom- α -Oxy- $\beta\gamma\delta$ -Triketo- $\alpha\delta$ -Diphenylbutan. Sm. 101—102° (B. 27, 718). — III, $\beta 18$. 2) Aethylester d. β -Brom- $\alpha \gamma$ -Diketo- $\alpha \gamma$ -Diphenylpropan- β -Carbon-

- säure (Ae. d. Dibenzoylbromessigsäure). Sm. 109-110° (A. 282, 160). **– II**, 1896.
- 1) Triphenylester d. Phosphorsäure. Sm. 48-50 (45); Sd. 245 11 C18H15O4P 1) Triphenyester d. Phosphorsatte. Sm. 40—30° (45°); Sd. 245° n. (A. 92, 317; 224, 159; B. 8, 1523; 15, 640; 16, 1765; 18, 1718; 30, 2372; G. 11, 69; H. 25, 442). — II, 660.

 C 63,3 — H 4,4 — 0 28,2 — N 4,1 — M. G. 341.

 1) 1,4-Benzochinonamid? (Berx. J. 26, 801; A. 210, 178). — III, 330.

 2) Triacetat d. Hydroresorufin. Sm. 216° (B. 22, 3031). — II, 933. $C_{18}H_{15}O_6N$

3) Verbindung (aus 1,3-Dioxybenzol) (B. 18, 374). — II, 923.

- C₁₈H₁₈O₇Br 1) Monacetat d. ?-Brom-3,4,2',4',6'-Pentaoxydiphenylketon-3,4-Methylenäther-?-Dimethyläther (Acetylbromprotocoteïn). Sm. 1750 (B. 24, 2986). — III, *209*.
- Tri [3-Oxyphenylester] d. Phosphorsäure + H₂O. Sm. 75° (Bl. [3] 15, 363). $C_{18}H_{15}O_7P$

2) Tri[4-Oxyphenylester] d. Phosphorsäure. Sm. 149° (Bl. [3] 15, 361).

- $\mathbf{C}_{18}\mathbf{H}_{18}\mathbf{N}_{2}\mathbf{C}$ 1 7-Chlorathylat d. $\alpha\beta$ -Naphtophenazin. + FeCl₈, 2 + PtCl₄ (C. 1898) 2] 920).
- 1) Jodäthylat d. αβ-Naphtophenazin. Sm. bei 150° u. Zers. (B. 26, 180). $C_{18}H_{15}N_2J$ **- IV**, 1051.
- $\mathbf{C}_{18}\mathbf{H}_{18}\mathbf{N}_{4}\mathbf{Cl}$ 1) 5-Chlorphenylat d. 2,8-Diamido-5,10-Naphtdiazin. $2+\mathrm{PtCl}_{4}$ (Bl.
- 48, 772; B. 19, 3123; 28, 1581, 1697). IV, 1282.

 1) Siliciumtriphenylchlorid. Sm. 88—89° (B. 19, 1018). IV, 1701.

 1) Zinntriphenylchlorid. Sm. 106° (A. 194, 172; B. 12, 509). IV, 1714.

 1) Triphenylarsendichlorid. Sm. 171°. + HgCl₂ (A. 201, 242). $C_{18}H_{15}ClSi$ $C_{18}H_{15}ClSn$
- C18H15Cl2As 1) Triphenylarsendichlorid. IV, 1689.
- C₁₈H₁₅Cl₂Bi 1) Wismuthtriphenyldichlorid. Sm. 141,5° (140°) (B. 20, 56; A. 251, 329). — IV, 1698.
- C₁₈H₁₅Cl₂Sb 1) Antimontriphenyldichlorid. Sm. 143° (A. 233, 50; B. 31, 2911; G. **24** [1] 318). — **IV**, 1695.
- C₁₈H₁₅Br₂Bi 1) Wismuthtriphenyldibromid. Sm. 1220 (1190) (B. 20, 56; A. 251, 329). **– IV**, 1698.
- (A. 229, 307). - IV, 1660.
- $\mathbf{C}_{18}\mathbf{H}_{15}\mathbf{SP}_{8}$
- 1) Sulfid (aus Phenylphosphin). Sm. 138° (B. 10, 811). IV, 1648.
 1) Triphenylarsinsulfid. Sm. 162° (A. 201, 244; B. 19, 1032). IV, 1689.
 1) Triphenylperthiophosphorsäure. Sm. 86° (J. pr. [2], 10, 234). C₁₈H₁₅SAs $\mathbf{C}_{18}\mathbf{H}_{15}\mathbf{S}_{4}\mathbf{P}$
- II, 661. $\mathbf{C}_{18}\mathbf{H}_{15}\mathbf{PSe}$
- 1) Triphenylphosphinselenid. Sm. 184—186° (A. 229, 308). IV, 1660. C 78,3 H 5,8 O 5,8 N 10,1 M. G. 276.
 1) 3,5-Di[Phenylamido]-1-Oxybenzol. Sm. 94—95°. 2HCl, (2HCl, PtCl₄) (A. 256, 260; G. 20, 343). II, 724. $C_{18}H_{16}ON_{2}$
 - 2) 3-Acetylamido-1-[2-Naphtyl]amidobenzol. Sm. 135° (B. 26, 979). —
 - IV, 573.
 - 3) 4-Acetylamido-1-Phenylamidonaphtalin? Sm. 192° (A. 286, 184). IV, 922.
 - 4) s-Benzyl-1-Naphtylharnstoff. Sm. 2030 (B. 24, 3818). II, 608. 5) 1,4-Naphtochinondimethylamidophenylimid (α-Naphtolblau) (B. 16,
 - 2851; **18**, 2917; A. **289**, 129). III, 371. 6) **1-Na**phtyläther d. β-Phenylhydrazon-α-Oxyäthan (B. **30**, 1703).

7) 2-Naphtyläther d. β -Phenylhydrazon- α -Oxyäthan. Sm. 145° (B. 30, $C_{18}H_{16}ON_2$ 1702). **— IV**, 755.

8) α -Phenyl- α -Benzyl- β -[2-Fural] hydrazin. Sm. 138° (G. 27 [2] 239). **- IV**, 812.

9) Methyläther d. 4-Oxy-1-[2-Methylphenylazo]naphtalin. Sm. 930. (B. 19, 2489). — IV, 1435. 10) Methyläther d. 4-Oxy-1-[4-Methylphenylazo]naphtalin. Sm. 103

bis 104° (B. 19, 2488). — IV, 1435. 11) Aethyläther d. 2-Oxy-1-Phenylazonaphtalin (B. 20, 3177; Soc. 55, 608). - IV, 1428.

12) Aethyläther d. 4-Oxy-1-Phenylazonaphtalin. Sm. 98-100° (B. 17, 3028; **25**, 1013; **27**, 2351; Soc. **55**, 609). — IV, 1427.

13) 6-Oxy-4-Methyl-2-Phenyl-5-Benzyl-1,3-Diazin. Sm. 243° (B. 22, 1626). — IV, 1041.

14) Methyläther d. 6-Oxy-5-Methyl-2,4-Diphenyl-1,3-Diazin. Sm. 121° (*J. pr.* [2] 39, 197). — IV, 1192.
15) 2-[3-Acetylamido-4-Methylphenyl]chinolin. Sm. 176—177° (*M.* 9,

104). — IV, 1030. 16) 4-Methyl-2-[4-Acetylamidophenyl]chinolin. Sm. 162—163°. — IV. 1030.

17) Aethyloxydhydrat d. $\alpha\beta$ -Naphtophenazin. Sm. bei 185°. Jodid (B. **26**, 181). — IV, 1051.

18) N-Acetyltetrahydro-α-Naphtinolin. Sm. 240° (B. 27, 2255). — IV, 1032. 19) β -Naphtolviolet. HCl, $(2 \text{HCl}, \text{PtCl}_4)$ (B. 12, 2066; Soc. 39, 39).

II, 886. C 71,0 — H 5,3 — O 5,3 — N 18,4 — M. G. 304. $\mathbf{C}_{18}\mathbf{H}_{16}\mathbf{ON}_4$

1) Diazobenzolnitrosodiphenylamin. Sm. 112° u. Zers. (B. 21, 2614). — IV, 797.

2) 5-Phenyloxydhydrat d. 2,8-Diamido-5,10-Naphtdiazin (Phenosafranin). 2 Chlorid + PtCl₄, Nitrat (B. 16, 466, 871; 19, 3123; 21, 1593; 28, 1581, 1697; 30, 1565; Bl. 48, 339, 772). — IV, 1282. C 65,1 — H 4,8 — O 4,8 — N 25,3 — M. G. 332.

 $\mathbf{C}_{18}\mathbf{H}_{16}\mathbf{ON}_{6}$

1) Verbindung (aus 5-Keto-3-Methyl-1-Phenyl-4,5-Dihydro-1,2,4-Triazol). Sm. 140—141°. — IV, 1105.

 $C_{18}H_{16}OSi$ $C_{18}H_{16}OSn$

1) Siliciumtriphenyloxydhydrat. Sm. 139-141° (B. 19, 1019). — IV, 1702. 1) Zinntriphenyloxydhydrat + 1¹/₂ H₂O. Sm. 117-118° (A. 194, 174). -IV, 1715. C 74,0 — H 5,5 — O 10,9 — N 9,6 — M. G. 292.

 $C_{18}H_{16}O_{2}N_{2}$

1) Methylenäther d. δ -Phenylhydrazon- α -[3,4-Dioxyphenyl]- $\alpha \gamma$ -Butadiën. Sm. 190—192° (B. 28, 1369). — IV, 764.

2) 4-Phenylhydrazon-3, 5-Diketo-1-Phenylhexahydrobenzol. Sm. 1720

(A. 294, 308). — IV, 1480. 3) Methyläther d. 4-Oxy-1-[2-Naphtyl]nitrosamidomethylbenzol. Sm.

133° (A. 241, 342). — II, 754. 4) 4-Aethyläther d. 4-Oxy-1-[4-Oxyphenyl]azonaphtalin. Sm. 171° (B.

27, 2359). — IV, 1440. 5) 14-Aethyläther d. 4-Oxy-1-[4-Oxyphenyl]azonaphtalin. Sm. 168° (B.

27, 2360). — IV, 1440. 6) Monoäthyläther d. 1-Phenylazo-2,4-Dioxynaphtalin. Sm. 172 bis 173° (B. 17, 1812). — IV, 1449.

7) Monoäthyläther d. 1-Phenylazo-2,7-Dioxynaphtalin. Sm. 1370 (B. 23, 524). — IV, 1450.

8) 1-Benzoyl-3-Keto-4, 5-Dimethyl-2-Phenyl-2, 3-Dihydropyrazol. Sm. 99° (A. 266, 129). — IV, 522.

9) Acetat d. α -Phenyl- β -[4-Oxy-l-Naphtyl]hydrazin. Sm. 157° (B. 24,

2313). — IV, 1506. 10) Acetat d. 5-Methyl-3-Phenyl-1-[4-Oxyphenyl]pyrazol. Sm. 133° (A. 278, 301). — IV, 937.

11) $3-[\beta-\text{Phenylathenyl}]-4-[\alpha-\text{Oxy}-\alpha-\text{Phenylathyl}]-1,2,5-\text{Oxdiazol}$. Sm. 132° (B. 28, 1211). — III, 325.

12) 2,5-Diketo-1,4-Di[2-Methylphenyl]-1,2,4,5-Tetrahydro-1,4-Diazin. Sm. 231—232° (*J. pr.* [2] **47**, 185). — II, 471. 13) Dimethyläther d. **2**, 3-Di[**4**-Oxymethyl]-1, 4-Diazin. Sm. 134° (*Soc.*

63, 1303). — **IV**, 1038.

- C₁₈H₁₈O₂N₂14) 24-Aethyläther d. 6-Oxy-2-[4-Oxyphenyl]-4-Phenyl-1, 3-Diazin. Sm. 274° (B. **23**, 2955). — IV, 1040.
 - 15) 1-Acetyl-3-[4-Methylphenyl]imido-2-Keto-5-Methyl-2, 3-Dihydroindol. Sm. 121-122° (B. 18, 196). - II, 1652.
 - 16) Aethyläther d. 5-Benzoylamido-6-Oxychinolin. Sm. 144° (J. pr. [2]
 - 48, 30). IV, 911.

 17) Aethyläther d. 5-Benzoylamido-8-Oxychinolin (Analgen) (J. pr. [2] 48, 25). IV, 913.
 - 18) 7-Dimethylamido-2-Phenylchinolin-4-Carbonsäure. Sm. 275° u. Zers. $Zn + 2^{1}/_{2}H_{2}O$, $Pb + H_{2}O$, $Cu + H_{2}O$, Ag (A. 281, 20). — IV, 1036.
 - 19) Aethylester d. 1,5-Diphenylpyrazol-3-Carbonsäure. Sm. 90°; Sd. 400° (B. 20, 2185; 25, 3144). — IV, 946.
 - 20) Aethylester d. 6-Methyl-2-Phenyl-1, 3-Benzdiazin-4-Carbonsäure.
 - Sm. 121° (B. 28, 737). IV, 1036. 21) 4-Methylphenylimid d. 4-Methylphenylimidobernsteinsäure. Sm. 228° (B. **26**, 1766). — II, 509. C 67,5 — H 5,0 — O 10,0 — N 17,5 — M. G. 320.
- C18H16O2N4
 - 1) 1,2-Diacetyl-3,6-Diphenyl-1,2-Dihydro-1,2,4,5-Tetrazin. Sm. 228 bis 229° (B. 26, 2133; 27, 1005; A. 297, 259). — II, 1214.
 - 2) 1,4-Diacetyl-3,6-Diphenyl-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 2159 (B. 27, 1005; A. 297, 262). - II, 1215.
 - 3) 5-Methyl-1-Phenylpyrazol-4-Phenylhydrazonmethylcarbonsäure.
- Sm. 207—208° (A. 295, 322). IV, 547. C₁₈ $\mathbf{H}_{16}\mathbf{O}_2\mathbf{Br}_2$ 1) $\beta\gamma$ -Dibrom- γ -Phenylpropylester d. β -Phenylakrylsäure. Sm. 151°
- (A. 189, 344). II, 1407. $\mathbf{C_{18}H_{16}O_2Br_4}$ 1) $\alpha\beta$ -Di[3,6-Dibrom-4-Oxy-2,5-Dimethylphenyl]äthen. Sm. 234° (B. 28, 2909, 2914, 2921; 29, 1112, 2338; A. 301, 275).
 - 2) isom. $\alpha\beta$ -Di[3,6-Dibrom-4-Oxy-2,5-Dimethylphenyl]äthen? Sm. 217—220° (A. 301, 273).
 - 3) $\alpha\beta$ -Di[2,6-Dibrom-4-Oxy-3,5-Dimethylphenyl]äthen. Sm. 232° (A. 302, 85).
 - 4) $\beta \gamma$ -Dibrom- γ -Phenylpropylester d. $\alpha \beta$ -Dibrom- β -Phenylpropionsäure? (A. 189, 348). — II, 1407.
 - 5) Verbindung (aus 1,3,6-Tribrom-4-Keto-1,2,5-Trimethyl-1,4-Dihydrobenzol).
 Sm. bei 230° (B. 28, 2914; 29, 1115, 1116).
 6) Verbindung (aus d. Acetat d. 4,6-Dibrom-2-Oxy-5-Brommethyl-1,3-Di-
 - methylbenzol). Sm. 254° (A. 302, 93).
- $C_{18}H_{16}O_{2}Br_{6}$ 1) $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[3,6-Dibrom-4-Oxy-2,5-Dimethylphenyl] äthan. Sm. 179° (B. 29, 1117).
- 1) Verbindung (aus 1,4 Benzochinon u. 2 Molec. Merkaptobenzol) (J. pr. [2] $C_{18}H_{16}O_2S_2$ **53**, 482). — III, 344. C 70,1 - H 5,2 - O 15,6 - N 9,1 - M. G. 308.C18H16O3N2
- 1) 2-Alloxanylamidodi[4-Methylphenyl]amin. α -Modif. Sm. 252° u. Zers.; β -Modif. Sm. 242—247° u. Zers. (B. 26, 542). IV, 616. 2) γ -Benzoylphenylhydrazon- $\beta\delta$ -Diketopentan. Sm. 160—161° (B. 25, 3194). IV, 787.
 - 3) Monooxim d. 4-Oxy-5-Keto-3-Acetyl-1, 2-Diphenyl-2, 5-Dihydro-
 - pyrrol. Sm. 213—215° (B. 31, 1307). 4) Benzoat d. 4-Oxy-3-Keto-1,5-Dimethyl-2-Phenyl-2,3-Dihydro-
 - pyrazol. Sm. 139° (A. 293, 53). IV, 513. 5) Anhydro-α-[3-Methylphenyl]amido-α-[3-Methylphenyl]imidoäthan-
 - 6¹,6²-Dicarbonsäure. Sm. 293° (B. 30, 1189).
 6) Aethylester d. 6-Oxy-2-[2-Naphtyl]-1,3-Diazin-4-Methylcarbonsäure. Sm. 193° (B. 28, 481). IV, 1036.
 7) Imid d. β-Phenylbenzoylamidopropan-αβ-Dicarbonsäure. Sm. 190°
 - (B. 18, 1042). II, 440.
 - 8) Dioxim (aus d. Verb. $C_{18}H_{16}O_4$). Sm. 157—158° (B. 28, 1208). III, 324.
 - 9) Verbindung (aus Diacetylweinsäureanhydrid u. p-Toluidin) (Soc. 71, 1062).
 - 10) Verbindung (aus Oxybenzol u. Harnstoff). Sm. 61 0 (J. 1886, 548). -II, 651.
 - 11) Verbindung (aus d. γ -Phenylhydrazon- α -Phenylbutan- α^2 , β -Dicarbonsäureβ-Aethylester). Sm. 228—229° (A. 236, 194). — IV, 719.

 $C_{18}H_{16}O_3N_4$

C 64.3 - H 4.7 - O 14.3 - N 16.7 - M. G. 336.

1) 4-[3-Nitrobenzyliden] amido-3-Keto-1, 5-Dimethyl-2-Phenyl-2, 3-Dihydropyrazol. Sm. 213° (A. 293, 62). — IV, 1109.

2) Acetat d. 3-Oxy-5-[3-Acetylamidophenyl]-1-Phenyl-1,2,4-Triazol. Sm. 117° (Soc. 71, 212). — IV, 1271.

3) Acetat d. 3-Oxy-5-[4-Acetylamidophenyl]-1-Phenyl-1,2,4-Triazol. Sm. 215° (Soc. 71, 208). — IV, 1271.

4) Aethylester d. 4-Phenylhydrazon-5-Keto-1-Phenyl-4,5-Dihydro-

pyrazol-3-Carbonsäure. Sm. 152-154° (B. 24, 4212; 25, 1979). -IV, 729.

 $C_{18}H_{16}O_3Br_2$ 1) $\alpha\beta$ -Dibrom- ζ -Oxy- $\gamma\delta$ -Diketo- $\alpha\zeta$ -Diphenylhexan. Sm. 127° u. Zers. (B. 28, 1211). — III, 325.

2) Acetat d. $\beta \gamma$ -Dibrom - α - Keto- α -[4-Methylphenyl]- γ -[2-Oxyphenyl]propan. Sm. 136—137° (B. 29, 259). — III, 234. C 66,7 — H 4,9 — O 19,7 — N 8,6 — M. G. 324.

 $C_{18}H_{16}O_4N_2$

1) $\alpha \delta$ -Dioximido- $\beta \gamma$ -Diketo- $\alpha \delta$ -Di[4-Methylphenyl] butan. Sm. 181° u. Zers. + C₂H₆O (B. 25, 3474). — III, 324.

Diacetat d. αβ-Dioximido-αβ-Diphenyläthan (D. d. α-Benzildioxim). Sm. 147—148° (B. 21, 798). — III, 294.
 Diacetat d. isom. αβ-Dioximido-αβ-Diphenyläthan (D. d. β-Benzildioxim). Sm. 124—125° (A. 252, 46; B. 21, 799). — III, 294.

4) Diacetat d. isom. $\alpha\beta$ -Dioximido- $\alpha\beta$ -Diphenyläthan (D. d. γ -Benzil-Sm. 114—115° (B. 22, 714). — III, 294.

5) Di[4-Methylbenzyliden]hydrazin-αα'-Dicarbonsäure. Sm. 280° (C. 1896 [2] 380; Bl. [3] 17, 368).

6) α , 2-Lakton d. β -Phenylhydrazon - α -Oxy- α -Phenyläthan - β , 2-Dicarbonsäure-β-Aethylester. Sm. 157—159° (A. 246, 344). — IV, 724.
7) Aethylester d. Phenylazobenzoylbrenztraubensäure. Sm. 116 bis

 117° (B. **21**, 1705). — **IV**, 1475.

8) Phenylmonamid d. Citronensäurephenylimid (Citrodianil) (A. 82, 87; 98, 88). — II, 423.

9) Diphenyldiamid d. Akonitsäure. Sm. 188—1890 (Am. 9, 193). — II, 423.

10) ?-Nitro-2-Isopropyl-4-Methylphenylimid d. Benzol-1,2-Dicarbonsäure. Sm. 167° (A. 221, 169). — II, 1806. C 61,3 — H 4,5 — O 18,2 — N 15,9 — M. G. 352.

 $C_{18}H_{16}O_4N_4$

1) 1,4-Dibenzoyl-3,6-Diamido-2,5-Dioxy-1,4-Dihydro-1,4-Diazin (Dihydrohippuroflavindiamid). Sm. 240° u. Zers. (A. 287, 90).

2) 3,6-Diketo-2,5-Diacetyl-1,4-Diphenylhexahydro-1,2,4,5-Tetrazin. Sm. 153° (B. 21, 2330). — IV, 676.
 3) Diazotruxillsäure (B. 24, 2591). — IV, 1557.

Verbindung (aus Diathylendi[2-Methylphenyl]diamin). Sm. 2820 (B. 23, 1982). — II, 459.

5) Verbindung (aus Diathylendi[4-Methylphenyl]diamin). Sm. 166—167° (B. **23**, 1984). — **II**, 487.

 $C_{18}H_{16}O_4N_6$

C 56.8 - H 4.2 - O 16.8 - N 22.1 - M. G. 380.

1) Dinitrodiäthenyltetraamidodimethylbiphenyl. Sm. 242°. 2 HCl, 2HNO₃ (B. **21**, 2407). — **IV**, 1295.

 $C_{18}H_{18}O_4Cl_2$ 1) Di[4-Chloracetylphenyläther] d. $\alpha\beta$ -Dioxyäthan. Sm. 160—165° (B. 31, 171).

 $\mathbf{C}_{18}\mathbf{H}_{16}\mathbf{O}_4\mathbf{Br}_2$ 1) 2-Acetat-4-Methyläther d. lphaeta-Dibrom- γ -Keto- γ -[2,4-Dioxyphenyl]α-Phenylpropan. Sm. 130,5—131,5° (B. 32, 312).

2) 2-Acetat-4-Methyläther d. $\alpha\beta$ -Dibrom- γ -Keto- γ -[2-Oxyphenyl]- α -[4-Oxyphenyl]propan. Sm. 104-105° (B. 32, 319).

3) Diäthylester d. ?-Dibrombiphenyl-2,2'-Dicarbonsäure. Sm. 105 bis 106° (\mathring{B} . 19, 3154). — II, 1885. C 63,5 — H 4,7 — O 23,5 — N 8,2 — M. G. 340.

 $C_{18}H_{16}O_5N_2$

1) 1-Benzoyl-4-Benzoylamido-3,5,5-Trioxy-4,5-Dihydropyrrol. Sm.

153,5—158,5°. Ba, Pb, Cu (B. 21, 3325; 22, 1957). — II, 1186. 2) Aethylester d. Furfurincarbonsäure. Sm. 124° (J. pr. [2] 27, 319).

3) Diacetat d. Anhydro-o-Phenylendiimidoglykopyrogallol. Sm. 1430

(B. 27, 1985). - IV, 565.4) 4,4'-Biphenylendiamid d. Citronensäure (Citrobenzidylsäure). Zers. oberh. 300°. Ag (B. 21, 663). — IV, 966.

 $C_{18}H_{16}O_6N_2$

C 60,7 - H 4,5 - O 26,9 - N 7,9 - M. G. 356.

- 1) Bis-2-Aldehydophenoxyessigsäurehydrazon. Sm. 222° u. Zers. (B. **31**, 2810).
- 2) Méso- $\alpha \beta$ -Di[Benzoylamido] bernsteinsäure. Sm. 213° u. Zers. (B. 26, 1986). — II, 1192. 3) isom. $\alpha\beta$ -Di[Benzoylamido]bernsteinsäure + H₂O. Sm. 182° u. Zers.
- (B. **26**, 1998). II, 1192.
- 4) 4,4'-Di[Acetylamido]biphenyl-3,3'-Dicarbonsäure. Sm. bei 300° (B. 31, 2582).
- 5) Bernsteinsäurediphenylamid-3,3'-Dicarbonsäure (Succindi-3-Amidobenzol-1-Carbonsäure). Sm. bei 300° u. Zers. Ca + 7H₂O, Ba + 5H₂O $(J. \ r. \ 4, \ 295, \ 300; \ \acute{G}. \ 15, \ 547). - II, \ 1266.$
- 6) Dinitrodiäthylcarbobenzonsäure. Sm. 155-156° (A. 184, 170). II, 1476.
- 7) αβ-Di[Benzoylamido]äthan-2,2'-Dicarbonsäure (Aethylendiphtalamidsäure) (B. **21**, 2670). — **II**, 1798.
- 8) Diäthylester d. 1,2-Phtalyldi[cyanessigsäure]. Sm. 158-160° (A. ch.
- [7] 1, 499). II, 2018. 9) Diäthylester d. 1,3-Phtalyldi[cyanessigsäure]. Sm. 191—192°. (NH₄)₂,
- Fe₂, Cu + 2H₂O, Ag₂ (Bl. [3] 11, 1097). II, 2019. 10) Diäthylester d. 1,4-Phtalyldi[cyanessigsäure]. Sm. 179° (Bl. [3] 11, 927). — II, 2019.
- 11) Di[2-Acetoxylphenylamid] d. Oxalsäure. Sm. 2010 (B. 29, 2644).
- 12) Di[4-Acetoxylphenylamid] d. Oxalsäure. subl. bei 260° (G. 25 [2] 533). 13) Phenylhydrazonderivat (aus d. α , α ⁸-Lakton d. α -Oxy- α -[2,4,6-Trioxy-
- phenyl]äthen- α^3 , β -Dicarbonsäure- β -Aethylester). Sm. 243° (\tilde{Soc} . 71, 1112). $C_{18}H_{16}O_6N_4$ C 56,3 - H 4,1 - O 25,0 - N 14,6 - M. G. 384.1) 2,5-Diketo-1,4-Di[?-Nitro-2-Methylphenyl]hexahydro-1,4-Diazin.
- Sm. 253—254° (B. 23, 1992). II, 471. $\mathbf{C}_{18}\mathbf{H}_{16}\mathbf{O}_{6}\mathbf{Cl}_{2}$ 1) Diäthylester d. 3,6-Dichlor-1,4-Dimethyl-p- β -Benzdifuran-2,5-Dicarbonsäure. Sm. 175° (J. pr. [2] 45, 72). — III, 735.
- $\mathbf{C}_{18}\mathbf{H}_{16}\mathbf{O}_{6}\mathbf{Br}_{2}$ 1) \mathbf{Di} [?-Brom-4-Acetoxylphenyläther] d. $\alpha\beta$ -Dioxyäthan. Sm. 156° (A. **280**, 203). — **II**, 941.
- C 58,1 H 4,3 O 30,1 N 7,5 M. G. 372. $C_{18}H_{16}O_7N_2$
 - 1) Triacetat d. Tetraoxyazobenzol. Sm. 240—242° (C. 1897 [2] 588). IV, 1363.
 - 2) Oxybernsteinsäurediphenylamid-3, 3'-Dicarbonsäure. Cu (A. 232, 166). — II, 1266.
- 3) Verbindung (aus Oxyresazoïn) (M. 8, 428). II, 932.
- C₁₈H₁₆O₇Si₄ 1) Trisilicobenzoylkieselsäure? (B. 19, 1016). IV, 1702.
- C 55.7 H 4.1 O 33.0 N 7.2 M. G. 388. $C_{18}H_{16}O_8N_2$
 - 1)-αβ-Dioxybernsteinsäurediphenylamid-3,3'-Dicarbonsäure. (CuOH)₂ (Å. **232**, 159). — II, 1267.
 - 2) Diäthylester d. $\alpha\beta$ -Di[?-Nitrophenyl] äthan-2, 2'-Dicarbonsäure. Sm. 60° (A. **239**, 70). — II, 1889.
 - 3) Diacetat d. $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[4-Nitrophenyl]äthan. Sm. bei 340° (*J. pr.* [2] **34**, 345). — **II**, 1101.
 - 4) Schwarzer Farbstoff (aus Haaren) (J. 1876, 936; J. Th. 1886, 333). III, 669.
- C 51.9 H 3.8 O 30.8 N 13.5 M. G. 416. $C_{18}H_{16}O_8N_4$
 - 1) Diäthylester d. ?-Dinitroazobenzol-3,3'-Dicarbonsäure. Sm. 104° (J. r. 6, 197). - IV, 1459.
- C 45,4 H 3,3 O 33,6 N 17,6 M. G. 476. $\mathbf{C}_{18}\mathbf{H}_{16}\mathbf{O}_{10}\mathbf{N}_{6}$ 1) Di[?-Dinitro-4-Methylphenylamid] d. Bernsteinsäure (A. 209, 380). - II, 502.
- $\mathbf{C}_{18}\mathbf{H}_{16}\mathbf{O}_{10}\mathbf{S}_{2}$ 1) α -Truxillsäure- α -Disulfonsäure (γ -Isatropasulfonsäure). Ba $_{2}$ + $4\,\mathrm{H}_{2}\mathrm{O}$ (B. **22**, 128). — II, 1902.
 - 2) α -Truxillsäure- β -Disulfonsäure. Ba + 4 H₂O (*B.* 22, 128). II, 1902. 3) β -Truxillsäure- β -Disulfonsäure. Ba₂ + 4 H₂O (*B.* 22, 129). II, 1903.
- 1) 2-Brommethyl-1-[1-Naphtylamido]methylbenzol. Sm. 240-242° (B. $\mathbf{C}_{18}\mathbf{H}_{16}\mathbf{NBr}$ **31**, 423).
- 1) Jodmethylat d. 2,6-Diphenylpyridin. Sm. 2030 (B. 20, 2765; 28, $\mathbf{C}_{18}\mathbf{H}_{16}\mathbf{NJ}$ 1732). - IV, 455.

- C₁₈H₁₆N₂Cl₂ 1) 2,4-Dichlor-1,3-Di[4-Methylphenylimido]tetrahydrotetren. Sm. 1330 (A. 279; 64).
- 1) α -Methyl- α -Phenyl- β -[2-Naphtyl]thioharnstoff. Sm. 127° (B. 17, 2091). $\mathbf{C}_{18}\mathbf{H}_{16}\mathbf{N}_{2}\mathbf{S}$ - II, 619.
 - 2) s-[2-Methylphenyl]-1-Naphtylthioharnstoff. Sm. 165—168° (B. 15, 1416). — II, 609.
 - 3) s-[4-Methylphenyl]-1-Naphtylthioharnstoff. Sm. 168° (B. 15, 1416). - II, 610.
 - 4) s-[2-Methylphenyl]-2-Naphtylthioharnstoff. Sm. 193-194° (B. 15, 1418). — II, 619.
 - 5) s-[4-Methylphenyl]-2-Naphtylthioharnstoff. Sm. 163-1640 (B. 15, 1419). — II, 619.
 - 6) s-Benzyl-I-Naphtylthioharnstoff. Sm. 172-1730 (Soc. 59, 558). -II, 610.
 - 7) s-Benzyl-2-Naphtylthioharnstoff. Sm. 165-1660 (Soc. 59, 559). -II, 619.
 - 8) 2-Merkapto-1-Allyl-4,5-Diphenylimidazol. Sm. noch nicht bei 240°. K (A. 284, 28). — III, 224.
 - 9) Methyläther d. a-Phenylamido-[1-Naphtyl]imidomerkaptomethan. Sm. 96° (B. **21**, 1870). — **II**, 609.
- 1) 4-Amido-4'-Phenylamidodiphenyldisulfid. Sm. bei 120°. 2HCl (B. $C_{18}H_{16}N_2S_2$ 27, 3322).
- $C_{18}H_{16}N_3Cl$ 1) 7-Chloräthylat d. 5-Amido- $\alpha\beta$ -Naphtophenazin. 2 + PtCl₄ (J. r. 30, 549). — IV, 1204. 2) 7-Chloräthylat d. 9-Amido-αβ-Naphtophenazin. 2 + PtCl₄ (C. 1898)
 - [2] 919; B. **29**, 2759). IV, 1201.
 - 3) 3-Chlorathylat d. 3-Phenyl- β -Naphtisotriazol. Sm. 212° u. Zers. $2 + \text{PtCl}_4$ (A. 255, 347). IV, 1171.
- 1) 3-Jodäthylat d. 3-Phenyl-β-Naphtisotriazol. Sm. 1920 u. Zers. (A. $\mathbf{C}_{18}\mathbf{H}_{16}\mathbf{N}_{3}\mathbf{J}$ **255**, 346). — **IV**, 1171.
- 1) Sulfid d. 3-Merkapto-1-[4-Methylphenyl]-1,2,4-Triazol. Sm. 1880 C18 H16 N6S (G. 28 [2] 561).
 - 2) Verbindung (aus 2,5-Di-[2-Methylphenylamido]-1,3,4-Thiodiazol). Sm. 89° (B. 23, 368). - IV, 1236.
 - 3) Verbindung (aus 2, 5-Di-[4-Methylphenylamido]-1,3,4-Thiodiazol). Sm. 190° (B. **23**, 365). — **IV**, 1236.
- C 82.1 H 6.5 O 6.1 N 5.3 M. G. 263. $C_{18}H_{17}ON$ 1) 6-Phenylamido-4-Keto-2-Phenyl-1,2,3,4-Tetrahydrobenzol.
 - 240° (A. **294**, 305). Methyläther d. 2-Oxy-1-[2-Naphtylamido]methylbenzol. Sm. 92°;
 Sd. 220—225° u. Zers. (A. 247, 352). — II, 742.
 - 3) Methyläther d. 4-Oxy-1-[2-Naphtylamido]methylbenzol (A. 241, 341). **— II**, 754.
 - 4) β-Phenylamidoäthyläther d. 2-Oxynaphtalin. Sm. 75° (B. 13, 1955)
 - bis 1956). II, 877.
 5) 6-Benzoylamido-2, 3-Dimethylinden. Sm. 198° u. Zers. (B. 23, 1885). **- II**, 1167.
 - 6) Retenchinonimid. Sm. 109-1110 (A. 229, 121). III, 458.
 - 7) 5-Phenyl-2-[4-Isopropylphenyl]oxazol. Sm. 50°; Sd. oberh. 360°. HCl (B. 29, 2101). — IV, 445.
 - 8) Phenyläther d. 1-Oxy-3-Propylisochinolin. Fl. Pikrat (B. 29, 2397). **– IV**, 338.
 - 9) Phenyläther d. 1-Oxy-3-Isopropylisochinolin. Fl. (B. 30, 894). IV, 339.
- C 74,2 H 5,8 O 5,5 N 14,4 M. G. 291. $\mathbf{C}_{18}\mathbf{H}_{17}\mathbf{ON}_3$ 1) ?-Nitro-1-Aethylamido-2-Phenylamidonaphtalin. Sm. 145-146° (B. **26**, 190). — IV, 918.
 - 2) β -[2-Naphtyl]amido- α -[2-Methylphenyl]harnstoff. Sm. 215°. —
 - IV, 928. 3) β -[2-Naphtyl]amido- α -[4-Methylphenyl]harnstoff. Sm. 187°. — IV, 928.
 - 4) 1-[4-Dimethylamido-2-Oxyphenyl]azonaphtalin. Sm. 176° (B. 31, 2777). — IV, 1414.

- 5) 2-[4-Dimethylamido-2-Oxyphenyl]azonaphtalin. Sm. 1960 (B 31, C18H17ON3 2778). **— IV**, *1414*.
 - 6) 4-Benzylidenamido-3-Keto-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol. Sm. 173° (A. 293, 61). — IV, 1109.
 - 7) 1-Acetyl-2,5-Di[4-Methylphenyl]-1,3,4-Triazol. Sm. 129-130° (B. 27, 3285; A. 298, 13). — IV, 1188.
 - 8) Aethyläther d. 3-Oxy-1-Phenyl-5- $[\beta$ -Phenyläthenyl]-1,2,4-Triazol. Sm. 89—90° (Soc. 71, 216). — IV, 1167.
 - 9) Dimethyldiamidonaphtophenoxazin (A. 289, 115). C 67,7 - H 5,3 - O 5,0 - N 21,9 - M. G. 319.

 $C_{18}H_{17}ON_5$

 $C_{18}H_{17}O_{2}N_{3}$

- 1) 2-[2-Amido-1-Naphtyl]azo-4-Methylnitrosamido-1-Methylbenzol. Sm. 179° (B. 31, 2929). — IV, 1400.
- 1) Isobutyloxanthranolchlorid. Sm. 78° (A. 212, 87; B. 14, 463). C18H17OCL III, 244. C 77,4 — H 6,1 — O 11,5 — N 5,0 — M. G. 279. $C_{18}H_{17}O_2N$
- 1) β -Oximido- α -Oxy- $\alpha \alpha \beta$ -Triphenyläthan. Sm. 153,5° (Bl. [3] 13, 859).
 - 2) β -Phenylamido- δ -Keto- γ -Benzoyl- β -Penten. Sm. 87—89° (A. 291, 98). - III, 316.
 - 3) 2-Diäthylamido-9,10-Anthrachinon. Sm. 162° (Bl. [3] 19, 831).
 - 4) Retenchinonoxim. Sm. 128,5° (A. 229, 122). III, 458.
 - 5) Dimethyläther d. 2,5-Di[4-Oxyphenyl]pyrrol. Sm. 223° (R. 10, 217).
 - 6) 3-Isobutyl-β-Naphtochinolin-1-Carbonsäure. Sm. 251° (B. 27, 2022). - IV, 423.
 - 7) Aethylester d. 3-Benzylindol-2-Carbonsäure. Sm. 144-146° (B. 31,
 - 8) 2-Isopropyl-4-Methylphenylimid d. Benzol-1,2-Dicarbonsäure. Sm. 145° (A. 221, 169). — II, 1806. C 70,4 — H 5,5 — O 10,4 — N 13,7 — M. G. 307.
 - 1) ε-Phenylhydrazon-α-[4-Nitrophenyl]-αγ-Hexadiën. Sm. 209—210° (A. 253, 355). IV, 775.
 - 2) 4-[2-Oxybenzyliden]amido-3-Keto-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazol. Sm. 194° (A. 293, 62). — IV, 1109.
 - 3) 1,4-Diacetyl-3,5-Diphenyl-4,5-Dihydro-1,2,4-Triazol. Sm. 930 (950) (B. 30, 1877; A. 297, 268). — II, 1215; IV, 1184.
 - 4) 5-[4-Methylbenzoyl]-2-[2,4-Dimethylphenyl]-1,2,3,6-Oxtriazin (R.**16**, 325).
 - 5) Anhydro- α -[3-Methylphenyl]amido- α -[3-Methylphenyl]imidoäthan-6',6'-Dicarbonsäure-6'-Amid. Sm. 278° (B. 30, 1190).
 - 6) Nitril d. Imidodi[2-Methoxylphenylessigsäure] (o-Methoxylphenylimidoacetonitril). Sm. 123° (B. 15, 2025). — II, 1750. 7) γ -Phenylallylidenhydrazid d. Benzoylamidoessigsäure (Hippuryl-
 - cinnamalhydrazin). Sm. 201,5° (J. pr. [2] 52, 247). III, 62
 - 8) Verbindung (aus 2-Acetylbenzol-1-Carbonsäure). Sm. 204-210° (B. 18, 1258 Anm.). — II, 1646.
- 1) Triphenyloxyphosphoniumhydroxyd. Sm. 153,5°. Nitrat (B. 15, 803; $C_{18}H_{17}O_{2}P$ 18, 2120; 27, 274; A. 229, 306). — IV, 1659. C₁₈H₁₇O₂As 1) Triphenyloxyarsoniumoxydhydrat. Sm. 108°. Nitrat (B. 19, 1032;
- A. 201, 243). IV, 1689. C₁₈H₁₇O₂Bi 1) Wismuthtriphenyldioxydhydrat. Chlorid, Bromid, Nitrat (B. 20, 56;
- A. 251, 329). IV, 1698.
- C₁₈H₁₇O₂Sb 1) Antimontriphenyldioxydhydrat. Sm. 212°. Chlorid, Bromid, Jodid, Nitrat (A. 233, 51; B. 31, 2911; G. 24 [1] 318). — IV, 1695. C 73,2 — H 5,8 — O 16,3 — N 4,7 — M. G. 295.

 1) Difuraltropinon. Sm. 138°. HCl (B. 30, 2715).

 2) Aethylester d. α-Benzoylamido-β-Phenylakrylsäure. Sm. 149° (A. 275, 11). — II, 1420.
- $C_{18}H_{17}O_{8}N$

 - 3) β -[2,4-Dimethylphenoxyl] äthylimid d. Benzol-1,2-Dicarbonsäure.
- Sm. 113-114° (B. **29**, 2400). C 66,9 H 5,3 O 14,8 N 13,0 M. G. 323. $C_{18}H_{17}O_{8}N_{8}$ 1) Verbindung (aus Natriumbenzoylessigsäurealdehyd). Sm. 197—198° (B.
- **24**, 137). III, 95. C 61,6 H 4,8 O 13,7 N 19,9 M. G. 351. $C_{18}H_{17}O_3N_5$ 1) ?-Tri[Acetylamido]-5,10-Naphtdiazin (B. 22, 858). — IV, 1326.

C18H17O4N

C 69,4 — H 5,5 — O 20,6 — N 4,5 — M. G. 311. 1) Benzoylhydrastinin. Sm. 98—99° (A. **271**, 387). — III, 106.

2) α -Benzylidenamido- β -Acetoxyl- β -Phenylpropionsäure. Sm. 160 bis

170° u. Zers. Na (A. 284, 43). — II, 1576. 3) 1,2-Lakton d. 3,4-Dioxy-1-[1,2,3,4-Tetrahydro-1-Chinolyl]oxymethylbenzol-3[oder 4]-Methyläther-2-Carbonsäure (Methylnoropiansäuretetrahydrochinolid). Sm. 231°. Na (B. 29, 2035; 30, 693). — IV, 195.

4) Aethylester d. β-Phenylamidoformoxyl-α-Phenylakrylsäure. Sm. 1160 (A. 291, 200).

C₁₈H₁₇O₄Br 1) Diäthylester d. ?-Brombiphenyl-2, 2'-Dicarbonsäure. Sm. 65° (B.

19, 3151). — II, 1885. C 66,0 — H 5,2 — O 24,5 — N 4,3 — M. G. 327. $C_{18}H_{17}O_5N$

1) Indiretin (J. 1858, 469). — III, 596.

2) Mekoninmethylphenylketonoxim. α-Derivat Sm. 146°; β-Derivat Sm. 198° (M. 13, 670, 672). — II, 2022.

3) Benzoyloxyhydrastininhydrat. Sm. 169—170° (A. 271, 387). — III, 106.

4) Diacetat d. Acetyldi[4-Oxyphenyl]amin. Sm. 128,5° (B. 32, 690).
5) Diacetat d. 3,4-Dioxy-6-Aethylphenoxazin. Sm. 110° (B. 31, 497).
6) Benzylmonamid d. Benzoyläpfelsäure. Sm. 117° (G. 22 [1] 176). —

II, 530.

C 62,9 - H 5,0 - O 28,0 - N 4,1 - M. G. 343. $C_{18}H_{17}O_6N$

1) Corydinsäure $+ \frac{1}{2}$ H₂O. Sm. 218°. Ag₂ (Soc. 71, 661).

2) α , 2'-Lakton d. α -Oxy-4'-Methoxyl-3²-Dimethylamido-1²-Oxydiphenylmethan-2', a-Dicarbonsäure. Sm. 180° (A. 296, 360).

3) Diacetat d. 1-Diacetylamido-2,7-Dioxynaphtalin. Sm. 1350 (B. 30, 1123).

C 60,2 - H 4,7 - O 31,2 - N 3,9 - M. G. 359.C18H17O7N

1) Triacetat d. 3-Acetylamido-1, 2, 4-Trioxynaphtalin. Sm. 145° (J. pr.

[2] 40, 182). — II, 1027. 2) Dimethylester d. 2-[3,4-Dimethoxylbenzoyl]pyridin-3,4-Dicarbonsäure (D. d. Papaverinsäure). Sm. 122-1240 (M. 14, 521; 17, 492). -

3) 3-Aethylester d. 2-[3,4-Dimethoxylbenzoyl]pyridin-3,4-Dicarbonsäure (β -Ae. d. Papaverinsäure). Sm. 187—188° (M. 10, 160; 13, 699).

4) 4-Aethylester d. 2-[3,4-Dimethoxylbenzoyl]pyridin-3,4-Dicarbon-

säure (γ-Ae. d. Papaverinsäure). Sm. 184° (M. 18, 464). C 55,8 — H 4,4 — O 28,9 — N 10,8 — M. G. 387. $C_{18}H_{17}O_7N_8$

1) Monamid d. $\alpha\beta$ -Dioxybernsteinsäurediphenylamid-3,3'-Dicarbon-

 $\mathbf{C}_{18}\mathbf{H}_{17}\mathbf{O}_{10}\mathbf{N}_{3}$

säure. Cu + H_2 O (4. 232, 165). — II, 1267. C 49,7 — H 3,9 — O 36,8 — N 9,6 — M. G. 435. l) Trinitrotruxen. Zers. bei 235° (Soc. 65, 288). C 46,6 — H 3,7 — O 34,6 — N 15,1 — M. G. 463. $\mathbf{C}_{18}\mathbf{H}_{17}\mathbf{O}_{10}\mathbf{N}_{5}$

1) 2,4-Dinitrophenylamid d. Oxyessig-?-Dinitro-4-Isobutylphenyläthersäure. Sm. 176,5° (Am. 19, 74).

 $C_{18}H_{17}N_2Cl_3$ 1) $\alpha\beta\delta$ -Trichlor- $\alpha\gamma$ -Di[4-Methylphenylimido]butan. Sm. 263—265° (A. 279, 63).

1) α-Phenyl-β-[2,4-Dimethyl-5 oder 7-Chinolyl]thioharnstoff. Sm. 173 bis 174° (A. 274, 372). — IV, 938. $C_{18}H_{17}N_3S$

2) α-Phenyl-β-[5,8-Dimethyl-6-Chinolyl]thioharnstoff. Sm. 157—159°.

(2HCl, PtCl₄) (B. 23, 1025). — IV, 939. $\mathbf{C}_{18}\mathbf{H}_{17}\mathbf{N}_4\mathbf{Cl}$ 1) 7-Chlorathylat d. 5,10-Diamido- $\alpha\beta$ -Naphtophenazin. 2 + PtCl₄ (C. 1898 [2] 920). — IV, 1296. C 77,7 — H 6,5 — O 5,7 — N 10,1 — M. G. 278.

 $C_{18}H_{18}ON_{2}$

1) Aethyläther d. 3-Phenylamido-4-Amido-1-Oxynaphtalin. Sm. 167°. HCl (B. 25, 1013). — II, 866.

2) Aethyläther d. 4-Amido-3-Oxy-1-[?-Amidophenyl]naphtalin. Sm. 72°. 2 HCl (B. 20, 3178). — II, 903.

3) 2-Phenylhydrazon-3-Oxy-1,4-Dimethyl-2,3-Dihydronaphtalin. Sm. 83—84° (G. 26 [1] 26).

4) 2-Phenylhydrazon-3-Isopropyl-1,2-Benzpyron. Sm. 1120 (B. 24, 3464). — IV, 698.

5) 3-[4-Aethylphenyl]imido-2-Keto-5-Aethyl-2, 3-Dihydroindol (p-Phenäthyl-p-Aethylimesatin) (B. 17, 2805). — II, 1660.

- $C_{18}H_{18}ON_{2}$ 6) 3-[4-Methylphenyl]imido-2-Keto-5-Methyl-1-Aethyl-2, 3-Dihydro-

 - 5) 3-14-160 Mg 1983 1 Mg 1983 H, 1652.
 7) m-Tolylmethyloxychinizin. Sm. 143° (B. 19, 2141). IV, 1503.
 8) Base (aus α-Oximidoäthylphenylketon). Fl. (B. 22, 563). III, 140.
 9) Verbindung (aus α-Amidoäthylphenylketonchlorhydrat). Sm. 125-126° (B. **30**, 1524).
 - 10) Verbindung (aus d. Verb. C₁₈H₁₉ON₃). Sm. 117°. (2HCl, PtCl₄) (B. 21, 1596). — IV, 1284. C 70,6 — II 5,9 — O 5,2 — N 18,3 — M. G. 306.
- $\mathbf{C}_{18}\mathbf{H}_{18}\mathbf{ON}_{4}$
 - 1) 3,5-Di[Phenylhydrazido]-l-Oxybenzol. Sm. 143-1440 (B. 22, 2191).
 - 2) 4-[4-Methylphenyl]hydrazon-5-Keto-2-Methyl-1-[4-Methylphenyl]-
 - 4,5-Dihydropyrazol. Sm. 216—217° (Soc. 59, 340). IV, 807.
 3) Verbindung (aus s-Diacetylphenylhydrazin). Sm. 192° (Bl. [3] 11, 115;
 J. pr. [2] 55, 165). IV, 666.
 - 4) Verbindung (aus Glyoxal u. 2,4-Diamido-1-Methylbenzol) (B. 11, 831). **- IV**, 607.
- C 73,5 H 6,1 O 10,9 N 9,5 M. G. 294. $\mathbf{C}_{18}\mathbf{H}_{18}\mathbf{O}_{2}\mathbf{N}_{2}$
 - 1) $\alpha\beta$ -Di [4-Acetylamidophenyl] äthen. Sm. 312° u. Zers. (B. 16, 945; 19, 3237). **— IV**, 994.
 - 2) α Acetylimido α Acetylphenylamido α [4 Methylphenyl] methan. Sm. $121-122^{\circ}$ (J. pr. [2] **54**, 129). — IV, 851.
 - 3) Dehydroacetylisomethylpäonolphenylhydrazon. Sm. 150° (B. 25,
 - 1299). IV, 772. 4) 2,5-Diketo-1,4-Dibenzylhexahydro-1,4-Diazin. Sm. 170° (Soc. 65, 190). — II, 525.
 - 5) 2,3-Diketo-1,4-Di[2-Methylphenyl]hexahydro-1,4-Diazin. Sm. 183,5 bis 184° (B. 22, 1805). — II, 467.
 - 6) 2,5-Diketo-1,4-Di[2-Methylphenyl]hexahydro-1,4-Diazin. Sm. 159 bis 160°. (2HCl, PtCl₄ + 4H₂O) (*J. pr.* [2] 38, 299; *B.* 22, 1787; 23, 1992). — II, 470.

 7) 2,3-Diketo-1,4-Di[4-Methylphenyl]hexahydro-1,4-Diazin. Sm. 263°
 - (B. **23**, 2036). **II**, 501.
 - 8) 2,5-Diketo-1,4-Di[4-Methylphenyl]hexahydro-1,4-Diazin. Sm. 252 bis 253° (B. 21, 1260; 22, 1806; 25, 2287; J. pr. [2] 40, 433). II, 506.
 - 9) 2, 6-Diketo-1, 4-Di [4-Methylphenyl]hexahydro-1, 4-Diazin. Sm. 185° (B. 25, 2287). - II, 506.
 - 10) 2,5-Diketo-1-[2-Methylphenyl]-4-[4-Methylphenyl]hexahydro-1,4-
 - Diazin. Sm. 179—180° (J. pr. [2] 40, 443). II, 506. 11) 3,6-Diketo-2,5-Dimethyl-1,4-Diphenylhexahydro-1,4 Diazin. Sm. 183,5° (B. 22, 1793; 23, 2012, 2016; 25, 2300). — II, 432.
 - 12) isom. 3,6-Diketo-2,5-Dimethyl-1,4-Diphenylhexahydro-1,4-Diazin. Sm. 144—146° (B. 22, 1794; 23, 2013, 2017; 25, 2299). — II, 432.
 - 13) isom. 3,6-Diketo-2,5-Dimethyl-1,4-Diphenylhexahydro-1,4-Diazin.
 - Sm. 172—173° (B. 23, 2019; 25, 2301). II, 433. 14) 1-4-Dibenzoylhexahydro-1,4-Diazin. Sm. 191° (B. 23, 3301; 26, 725). **— II**, 1169.
 - 15) Dimethyläther d. 5,6-Di[4-Oxyphenyl]-2,3-Dihydro-1,4-Diazin.
 - Sm. 126—127° (Soc. 63, 1301). III, 295. 16) **5-Methyl-1-[4-Methylphenyl]**benzimidazol-2-[Aethyl- β -Carbon-
 - säure]. Sm. 228° (B. 27, 2781). IV, 616.
 17) Amid d. α-Truxillsäure. Sm. 265° (B. 22, 2261). II, 1901.
 - 18) Phenylamid d. β -Methylbenzoylamidocrotonsäure. Sm. 175° u. Zers. (B. **25**, 1874). — II, 1192.
 - 19) **4-Methylphenylamid d. Fumarsäure.** Sm. oberh. 330° (B. **23**, 2045;
 - 24, 2004; A. 279, 134). II, 502. 20) 4-Methylphenylamid d. Maleïnsäure. Sm. 142° (G. 23 [1] 170; A. **279**, 134).
 - 21) Methylphenylaminfumarid? Sm. 187,5° (G. 16, 14). II, 416.
 - 22) β -[m-Dimethylphenyl]amidoäthylimid d. Benzol-1, 2-Dicarbonsäure. Sm. 123° (B. 24, 2197). — II, 1800.
 - 23) γ-[4-Methylphenyl]amidopropylimid d. Benzol-1, 2-Dicarbonsäure. Sm. 134—136°. HCl (B. 30, 2498).

C 67.1 - H 5.6 - O 9.9 - N 17.4 - M. G. 322. $C_{18}H_{18}O_{2}N_{4}$

1) 3,5-Dioximido-4-Phenylhydrazon-1-Phenylhexahydrobenzol. Sm. 228° u. Zers. (A. **294**, 309). — IV, 1480. 2) Diacetyldibenzenylhydrazidin. Sm. 98° (B. **27**, 997). — II, 1214.

- 3) p-Xylylendimethyloxypyrimidin. Sm. oberh. 250° (B: 21, 2661). IV, 1295.
- 4) Di Benzylidenhydrazid] d. Aethan- $\alpha\beta$ -Dicarbonsäure (J. pr. [2] 51, 191). — III, 40.

 $C_{18}H_{18}O_{2}Br_{2}$ 1) Diathyläther d. $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[4-Oxyphenyl]äthen. Sm. 210° (A. **279**, 342). — **II**, 998.

C₁₈H₁₈O₂Cl₄ 1) Diäthyläther d. $\alpha\alpha\beta\beta$ -Tetrachlor- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 172° (A. 279, 342). — II, 993. C₁₈H₁₈O₂Br₄ 1) Dimethyläther d. $\alpha\beta\gamma\delta$ -Tetrabrom- $\alpha\delta$ -Di[4-Oxyphenyl]butan (A.

255, 309). — **II**, 1001.

C 69.7 - H 5.8 - O 15.5 - N 9.0 - M. G. 310. $C_{18}H_{18}O_{3}N_{2}$

- 1) 4-Acetylamido-4'-[Diacetylamido] biphenyl. Sm. 215-216° (B. 31, 663). — IV, 964.
- 2) α -Benzoylamido- β -Acetylbenzoylamido \ddot{a} than. Sm. 113—114° (B. 28, 3068).

3) Dihydroindendioxynitrosamin (B. 26, 1542). — II, 170.

- 4) Methylfurfurin. (2 HCl, P(Cl₄), Dioxalat (A. **258**, 123). III, 726. 5) Hydromethylfurfuramid. Sm. 86—87° (A. **258**, 123; Am. 15, 163). —
- () 5-Benzoat d. 5-Oxy-3-Methyl-1-Phenylpyrazol-2-Methyloxydhydrat. Chlorid, Jodid, Pikrat (A. 293, 42). — IV, 513.
- 7) 1-Nitroso-2, 6-Diphenylhexahydropyridin-4-Carbonsäure. Sm. 159° (B. 20, 2763). — IV, 403.
- 8) Aethylester d. 2-Phenylureïdozimmtsäure. Sm. 112º (B. 28, 3228). 9) Aethylester d. 3-Phenylureïdozimmtsäure. Sm. 1980 (B. 28, 3230).
- 10) Aethylester d. 4-Phenylureïdozimmtsäure. Sm. 204° (B. 28, 3231).

11) Aethylester d. α-[4-Benzoylphenyl] hydrazonpropionsäure. Sm. 145° u. Zers. (Soc. 55, 616). — III, 187.

12) Phenylmonamid d. β-Phenylamidoäthen-αα-Dicarbonsäuremon-äthylester. Sm. 118° (B. 27, 2745; A. 285, 123, 127, 128, 145, 147). C₁₈H₁₈O₃Br₂ 1) 5-Benzoat-2-Aethyläther d. 3,6-Dibrom-5-Oxy-2-Oxymethyl-1,4-Dimethylbenzol. Sm. 109—110° (B. 28, 2905).

C₁₈H₁₈O₂Br₄ 1) Di[3,6-Dibrom-4-Oxy-2,5-Dimethylbenzyl]äther. Sm. 252° (B. 28, 2917).

C 66,3 - H 5,5 - O 19,6 - N 8,6 - M. G. 326. $C_{18}H_{18}O_4N_2$

1) Anilinfurobenzamat (A. 239, 361). — III, 724.

- 2) Tetramethyldiacetylpyrokoll. Sm. 206-208° (G. 24 [1] 551). -IV, 102.
- 3) Oxim d. Benzoylhydrastinin. Sm. 146° (A. 271, 387). III, 106.

4) α -Diamido- α -Truxillsäure. 2 HCl (B. 24, 2591). — II, 1902. 5) β -Diamido- α -Truxillsäure. 2 HCl (B. 24, 2591). — II, 1902.

- 6) Säure (aus Azobenzol-3,3'-Dicarbonsäure). Ba, Ag₂ (J. r. 6, 251; 16, 412). — IV, 1459.
- 7) Aethylester d. $\beta\beta$ -Dibenzoylhydrazidoessigsäure. Sm. 113° (B. **31**, 166).
- 8) Diäthylester d. Azobenzol-2,2'-Dicarbonsäure. Sm. 138-139° (J. pr. [2] **17**, 216). — **IV**, 1458.
- 9) Diäthylester d. Azobenzol-3,3'-Dicarbonsäure. Sm. 97° (90-92°) (B. 8, 252; J. r. 6, 251). — IV, 1458.
- 10) Diäthylester d. Azobenzol-4, 4'-Dicarbonsäure. $-\mathrm{Sm}$. 88° (114,5°) (A. 132, 148; B. 8, 252; J. r. 23, 93). — IV, 1459.
- 11) Diphenylester d. Hexahydro-1,4-Diazin-1,4-Dicarbonsäure (Phenolpiperazindiurethan). Sm. 177—178° (Bl. [3] 19, 186).
- 12) Dibenzoat d. 2,5-Dioxyhexahydro-1,4-Diazin. Sm. 230—250° u. Zers. (B. 27, 171). 13) polym. Phenylamid d. Brenztraubensäure. Sm. 209° (A. 279, 78).
- 14) Verbindung (aus Azobenzol-3,3'-Dicarbonsäure). Sm. 74-76° (J. r. 6,
- 251; 16, 412). IV, 1459. C 61,0 H 5,1 O 18,1 N 15,8 M. G. 354. $C_{18}H_{18}O_4N_4$ 1) s-Di[Benzoylamidoacetyl]hydrazin. Sm. 268—269° (J. pr. [2] 52, 251).

 $\mathbf{C}_{18}\mathbf{H}_{18}\mathbf{O_4N_4}$ 2) 4,4'-Biphenylen- $\alpha\alpha$ -Dihydrazonpropionsäure. Sm. 197—198° u. Zers. (A. 239, 211). - IV, 1276.

3) 2,4-Lakton d. 2-Oxy-1,2-Di[4-Aethoxylphenyl]-2,2-Dihydro-1,2,3,5-Tetrazol-4-Carbonsäure + 2H₂O. Sm. 113° (B. 28, 1694). — IV, 1241. 4) Diacetat d. $\alpha\beta$ -Dioximido $\alpha\beta$ -Di[Phenylamido] äthan. Sm. oberh.

200° u. Zers. (B. 26, 1406). — II, 410.

5) Dibenzoat d. $\alpha \delta$ -Diamido- $\alpha \delta$ -Dioximidobutan. Sm. 192° (B. 22, 2960). **– II**, 1210.

6) Di[β-Formyl-α-Phenylhydrazid] d. Bernsteinsäure. Sm. 246-247°

(B. **26**, 2496). — IV, 704.

7) $\mathbf{D}i[\mathbf{4}-\mathbf{O}\mathbf{x}\mathbf{y}\mathbf{b}\mathbf{e}\mathbf{n}\mathbf{z}\mathbf{y}\mathbf{l}\mathbf{i}\mathbf{d}\mathbf{e}\mathbf{n}\mathbf{h}\mathbf{y}\mathbf{d}\mathbf{r}\mathbf{a}\mathbf{z}\mathbf{i}\mathbf{d}]$ d. Aethan - $\alpha\beta$ -Dicarbonsäure. Sm. 216° (J. pr. [2] 51, 192). — III, 86.

8) Di[Benzylidenhydrazid] d. $\alpha\beta$ -Dioxyäthan- $\alpha\beta$ -Dicarbonsäure. 225° (B. **26**, 2058). — III, 41. C 56,6 — H 4,7 — O 16,7 — N 22,0 — M. G. 382. Verbindung (aus Eulyt). Sm. 110—111° (B. **24**, 1304). — I, 710.

C18 H18 O4 N6

C₁₈H₁₈O₄Br₄ 1) Tetrabromgeraniolmonoester d. Benzol-1,2-Dicarbonsäure. $114-115^{\circ}$ (Bl. [3] **19**, 638).

 $\mathbf{C}_{18}\mathbf{H}_{18}\mathbf{O}_4\mathbf{S}$ 1) Diacetat d. Di[?-Oxy-?-Methylphenyl]sulfid. Sm. 83-840 (G. 19, 347). **– II**, 967.

1) Diäthylester d. Diphenyldisulfid-2,2'-Dicarbonsäure. Sm. 119 bis $C_{18}H_{18}O_4S_2$ 120° (B. 31, 1670).

 $C_{18}H_{18}O_5N_2$ C 63,1 - H 5,3 - O 23,4 - N 8,2 - M. G. 342.

1) Diäthylester d. Azoxybenzol-3, 3'-Dicarbonsäure. Sm. 76-78° (J. r.

23, 93). — IV, 1344.
2) Di[Phenylamid] d. Monacetylweinsäure. Sm. 148° (Soc. 71, 1060).
3) Phenylamid d. Isozuckersäure. Sm. 231° (B. 19, 1265; 27, 124). — II, 424.

4) Diphenyldiamid d. Citronensäure (α-Citrodianilsäure). Sm. 1830 (1530). Ba, Ag, Anilinsalz (A. 82, 89; 98, 89; Soc. 61, 1006). — Π, 423. 5) isom. Diphenyldiamid d. Citronensäure (β-Citrodianilsäure). Sm. 184°

 $C_{18}H_{18}O_5S_2$ $C_{18}H_{18}O_6N_2$

 $C_{18}H_{18}O_6S$

(B. 22, 985, 986; Soc. 61, 1006; 63, 699). — II, 423.

1) Diphenyldimerkaptodilaktylsäure. Fl. Ag (B. 18, 266). — II, 788. C 60,3 — H 5,0 — O 26,8 — N 7,8 — M. G. 358.

1) αβ-Di[4-Nitro-2-Aethylbenzoyl]hydrazin. Sm. 245-245,5° u. Zers. (B. **29**, 2540).

2) Dibenzoat d. γ-Methylnitramido-αβ-Dioxybutan. Sm. 102° (R. 15, 204).

3) Aethylester d. $\beta\beta'$ -Di[2-Nitrophenyl]isobuttersäure. Sm. 62° (B. 27, 2250). — II, *1471*.

4) Diäthylester d. 1,4-Naphtylendioxaminsäure. Sm. 2030 (B. 30, 773). **– IV**, 922.

5) Diäthylester d. 1,5-Naphtylendioxaminsäure. Sm. 206-208° (B. 30, 774). — IV, 924. C 55,9 — H 4,7 — O 24,9 — N 14,5 — M. G. 386.

C18 H18 O6 N4

1) $\alpha\beta$ -Di[Acetylamido]- $\alpha\beta$ -Di[2-Nitrophenyl]äthan. Sm. 215—216° (J. pr. [2] **48**, 197). — II, 368.

2) 5,5'-Dinitro-4,4'-Di[Acetylamido]-3,3'-Dimethylbiphenyl. Zers. bei 320° (B. 21, 748). — IV, 981.

3) $\alpha\beta$ -Di[4-Methylphenylnitrosamido]bernsteinsäure. Sm. 125° (B. 26,

1767). — II, 509. 4) Methylester d. α-Phenylhydrazon-3,5-Dinitro-2,4,6-Trimethylphenylessigsäure. Sm. 197—198° (A. 264, 144). — IV, 698.

5) Di[?-Nitro-4-Methylphenylamid] d. Bernsteinsäure. Sm. 217° (A. **209**, 381). — II, 502.

1) Diacetat d. s-Di[P-Oxy-P-Methylphenyl]sulfon. Sm. 132—1330 (G. **19**, 346). — **II**, 967.

2) Diacetat d. s-Di[? Oxy-?-Methylphenyl]sulfon. Sm. 206—208° (G. **19**, 348). — **II**, 967

1) Retendisulfonsäure + 10 H₂O. Salze meist bekannt (J. 1860, 476; A. $C_{18}H_{18}O_6S_2$ **185**, 86). — II, 277. C 51,7 — H 4,3 — O 30,6 — N 13,4 — M. G. 418. $C_{18}H_{18}O_8N_4$

1) Dimethyläther d. 6,6'-Dinitro-4,4'-Di[Acetylamido]-3,3'-Dioxybiphenyl. Zers. oberh. 220° (J. pr. [2] 58, 218).

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- C₁₈H₁₈O₈Cl₂ 1) Diäthylester d. 2,5-Dichlor-1,4-Benzochinon-3,6-Di[Acetylessig
 - säurel. Sm. 127—128° (J. pr. [2] 45, 71). II, 2077. 2) Diäthylester d. 3,6-Dichlor-1,4-Benzochinondi[Methylfuranearbon-
- säure]. Sm. 171° (*J. pr.* [2] **45**, 75). **II**, 2078.

 1) Verbindung (aus 1,4-Dioxybenzol u. SO₂) (*A.* **110**, 358). C18 H18 O8S
- 1) Retentrisulfonsäure. $Ba_3 + 18H_2O$, $Pb_3 + 18H_2O$ (A. 185, 93). $C_{18}H_{18}O_9S_3$ II, 277.
- $\mathbf{C}_{18}\mathbf{H}_{18}\mathbf{N}_{2}\mathbf{Cl}_{2}$ 1) 1,2-Xylylendipyridoniumchlorid. 2 + PtCl₄, 2 + 2AuCl₃ (B. 31, 430).
- $\mathbf{C}_{18}\mathbf{H}_{18}\mathbf{N}_{2}\mathbf{Br}_{2}$ 1) 1,2-Xylylendipyridoniumbromid. Sm. 134° (B. 31, 430) C₁₈H₁₈N₂Br₆1) Tetrabromid d. 1, 2 - Xylylendipyridoniumbromid.
- **31**, 430).
- $\mathbf{C}_{18}\mathbf{H}_{18}\mathbf{N}_{2}\mathbf{S}$ 1) 2-Dibenzylamido-4-Methylthiazol. Sm. 50° (G. 24 [1] 65). — IV, 520.
 - 2) 2-Benzylimido-4-Methyl-3-Benzyl-2, 3-Dihydrothiazol. HCl, HBr (G. 24 [1] 67). - IV, 520.
 - 3) 2-Methyläther d. 2-Merkapto-1-Aethyl-4,5-Diphenylimidazol. Sm. 106° (A. 284, 27). — III, 224.
- 1) γ -Phenylhydrazon- $\beta\beta$ -Dithiënylbutan. Fl. (B. 30, 2040). $C_{18}H_{18}N_2S_2$
- $\mathbf{C}_{18}\mathbf{H}_{18}\mathbf{N}_{3}\mathbf{J}$ 1) Jodmethylat d. 6-Phenylamido-4-Methyl-2-Phenyl-1, 3-Diazin + $2H_2O$. Sm. 210—213° u. Zers. (Am. 20, 486). — IV, 1167.
- $C_{18}H_{18}N_3P$ 1) Triphenylamid d. Phosphorigensäure. 3HCl, (6HCl, 3ZnCl_o), (6HCl, 3 PtCl₄) (Z. 1865, 648). — II, 356.
- C₁₈H₁₈N₈As 1) Tri[?-Amidophenyl]arsin. Sm. 176°. 3HCl, (6HCl, 3PtCl₄) (B. 19, 1034). — IV, 1689.
- 1) Sulfid d. 5-Merkapto-2-Methyl-3-Phenyl-2, 3-Dihydro-1, 3, 4-Thio- $\mathbf{C}_{18}\mathbf{H}_{18}\mathbf{N}_{4}\mathbf{S}_{4}$ diazol. Sm. 140° (B. 28, 2641). — IV, 746. C 81,5 — H 7,2 — O 6,0 — N 5,3 — M. G. 265.
- $\mathbf{C}_{18}\mathbf{H}_{19}\mathbf{ON}$ 1) β -Benzoyl- α -Methylphenylamido- α -Buten. Sm. 72—73° (A. 281, 398).
 - III, 166.
- 2) Verbindung (aus p-Tetrolditolyl) (B. 14, 2093). IV, 1035. C 73,7 H 6,5 O 5,5 N 14,3 M. G. 293. $\mathbf{C}_{18}\mathbf{H}_{19}\mathbf{ON}_{8}$
 - 1) Aethyläther d. 5-Oxy-3-Phenyl-6,7,8,9-Tetrahydro- β -Naphtisotri
 - azol. Sm. 125—126° (B. 31, 901). IV, 1576.

 2) Verbindung (aus Phenosafranin). Sm. 130° (B. 21, 1595). IV, 1284. C 76,8 H 6,8 O 11,4 N 5,0 M. G. 281.

 1) Dihydroindendioxyamin. Sm. 188,5° (B. 26, 1542). II, 170.
- $C_{18}H_{19}O_2N$
 - 2) α -Phenylamido- γ -Oxy- β -Acetyl- α -Phenyl- β -Buten. Sm. 109° (B. **31**, 1393).
 - Aethyläther d. α-Keto-γ-Phenylimido-α-[2-Oxyphenyl] butan (Anilid d. o-Aethoxybenzoylaceton). Sm. 110—111° (B. 27, 3037). III, 271.
 - 4) α -Phenylamido- β -Acetyl- γ -Keto- α -Phenylbutan. Sm. 83—84° (B. **31**, 1392).
 - 5) ?-Acetylamido-2,4,5-Trimethyldiphenylketon. Sm. 1700 (B. 17, 2674). **– III**, 236.
 - 6) N-Benzoylbenzimidoisobutyläther. Sm. 54,5°; Sd. 228-235°, (Am. 20, 75).
 - 7) Acetat d. anti-α-Oximido-4-Propyldiphenylmethan. Sm. 66° (B. 24, 4034). — III, 236.
 - 8) Acetat d. syn-α-Oximido-4-Propyldiphenylmethan. Sm. 116° (B. 24, 4034). — III, 236.
 - 9) Acetat d. anti-a-Oximido-4-Isopropyldiphenylmethan. Sm. 90° (B. **24**, 4036). — III, 236.
 - 10) Acetat d. syn-α-Oximido-4-Isopropyldiphenylmethan. Fl. (B. 24, 4036). — III, 236. 11) Apocodeïn. HCl, (2 HCl, PtCl₄ + 4 H₂O) (A. 158, 131). — III, 907. 12) Pinenphtalimid. Sm. 90—100° (G. 21, 1). — IV, 77.

 - 13) 2, 6-Diphenylhexahydropyridin-4-Carbonsäure (B. 20, 2762; 29, 798). — IV, 403.
 - 14) Aethylester d. β -Benzylamido- β -Phenylakrylsäure. Sm. 68° (B. 30, 3005).
 - 15) Phenylamid d. δ -Keto- β -Phenylpentan- α -Carbonsäure. Sm. 135° (A. 294, 329).

- $\mathbf{C}_{18}\mathbf{H}_{19}\mathbf{O}_{2}\mathbf{N}$ 16) **2-Naphtylimid d.** $\beta\gamma$ -Dimethylbutan- $\beta\gamma$ -Dicarbonsäure. Sm. 152° (A. 292, 177).
 - 17) Piperidid d. β -Furanyl- α -Phenylakrylsäure (P. d. Furalphenylessigsäure). Sm. 105° (B. 31, 282). C 70,0 — H 6,1 — O 10,3 — N 13,6 — M. G. 309.
- $C_{18}H_{19}O_2N_3$
 - 1) Aethyläther d. γ-Phenylallenylphenyluramidoxim. Sm. 155-156° (B. **22**, 2398). — II, 1409.
 - 2) 2,7-Di[Acetylamido]-3,6-Dimethylcarbazol. Sm. oberh. 300° (B. 24. 1035). — **IV**, *1175*.
 - 3) Verbindung (aus Phenylcarbonimid u. β-Methylamidocrotonsäureanilid). Sm. 173° (B. 25, 1873). II, 383.
 1) Diäthyläther d. β-Chlor-αα-Di[4-Oxyphenyl]äthen. Sm. 67° (A. 279,
- $\mathbf{C}_{18}\mathbf{H}_{19}\mathbf{O}_{2}\mathbf{C}\mathbf{I}$ 342). — II, 998. $C_{18}H_{19}O_3N$
 - 1) Berbamin + $2 \, \text{H}_2\text{O}$. Sm. $197 210^{\circ}$ (156°) wasserfrei. 11Cl, (2 HCl, PtCl₄ + $5 \, \text{H}_2\text{O}$), (HCl, AuCl₅ + $5 \, \text{H}_2\text{O}$), (HCl, AuCl₅ + $5 \, \text{H}_2\text{O}$), $\frac{1}{2} \, \text{S} \, \text{G} \, \text{C} \, \text{$ - III, 803.
 - 2) Curin. Sm. 212° . + $C_{2}H_{6}O$ (Sm. $159-163^{\circ}$); + $C_{6}H_{6}$ (Sm. 161°); (2HCl, PtCl₄), (HCl, AuCl₂) (C. 1895 [2] 1085).

 - Pellutein (Flavobuxin; Siperin). (2HCl, PtCl₄) (A. 48, 109; 69, 59; J. 1859, 565; 1869, 740). III, 798.
 Thebenin. HCl + 3H₂O, (2HCl, HgCl₂ + 2H₂O), H₂SO₄ + H₂O, Dioxalat + H₂O (A. 153, 69; B. 27, 2961; 30, 1375; 32, 180). III, 910.
 3-Methyläther-4-[β-Oximido-β-Phenyläthyläther] d. 3,4-Dioxy-I-
 - Allylbenzol (Eugenolacetophenonoxim). Sm. 81—826 (B. 27, 2462). III, 133.
 - 6) 3-Methyläther-4- $[\beta$ -Oximido- β -Phenyläthyläther] d. 3,4-Dioxy-1-Propenylbenzol (Isoeugenolacetophenonoxim). Sm. 141-142° (B. 27, 2462). — III, *133*.
 - 7) Aethyläther d. 4-Methylbenzoyl-4-Methylbenzhydroxamsäure. Sm.
 - 70,5° (A. **281**, 267). II, 1345. 8) Anthracenisobutylnitrat. Sm. 121° u. Zers. (Soc. **61**, 867). II, 260.
 - 9) Acetat d. β -Acetylamido- α -Oxy- $\alpha\beta$ -Diphenyläthan. Sm. $212-213^{\circ}$ (159°) (B. 20, 494; 29, 1214). — II, 1080.
 - 10) 3-Methylbenzoat d. Aethyl-3-Methylbenzhydroxamsäure. Fl. (A. **281**, 244). — II, 1336.
 - 11) 4-Methylbenzoat d. α -Aethyl-4-Methylbenzhydroxamsäure. Sm. 78° (A. 281, 244). — II, 1345.
 - 12) 4-Methylbenzoat d. β-Aethyl-4-Methylbenzhydroxamsäure. Sm. 54° (A. 281, 246). Π, 1345.
 - 13) Morphothebain (oder $C_{17}H_{17}O_3N$). Sm. 192—193°. HCl, HBr, HJ (B.
 - 32, 188). 14) 2-[4-Diäthylamidobenzoyl] benzol-1-Carbonsäure. Sm. 180° (B. 27) [2] 665; Bl. [3] 19, 830).
 - 15) Aethylester d. β -Oximido- $\alpha\gamma$ -Diphenylpropan- α -Carbonsäure. Sm. 112—113° (A. **296**, 5).
 - 16) Aethylester d. 3-Benzoyl-2,4,6-Trimethylpyridin-5-Carbonsäure.
 - Fl. HCl, (2 HCl, PtCl₄), HNO₈ (B. **24**, 1668). **IV**, 157.

 17) **A**ethylester d. **5**-Acetyl-**2**,**6**-Dimethyl-**4**-Phenylpyridin-**3**-Carbon-säure. Sm. 85—86° (B. **31**, 1028).
 - 18) Monamid d. αβ-Diphenyläthan-2, 2'-Dicarbonsäuremonäthylester.
 Sm. 65—68° (A. 239, 68). II, 1889.
 - 19) Phenylamid d. Oxyessig-2-Methoxyl-4-Allylphenyläthersäure. Sm. 54° (*Bl.* [3] **17**, 361).
 - 20) **4-Methylphenylmonam**id d. β -Phenylpropan- $\alpha\gamma$ -Dicarbonsäure. Sm. 154—155°. Ag (Am. 20, 513).
- C 61,2 H 5,4 O 13,6 N 19,8 M. G. 353. $C_{18}H_{19}O_3N_5$ 1) 2,4,3'-Tri[Acetylamido]azobenzol. Sm. 264° (B. 30, 2205). — IV, 1363.
- $\mathbf{C}_{18}\mathbf{H}_{19}\mathbf{O}_{8}\mathbf{Br}_{8} \mathbf{1}$ Tribromostruthin. Sm. 133° (A. 183, 341). III, 639. $\mathbf{C}_{18}\mathbf{H}_{19}\mathbf{O}_{4}\mathbf{N}$ C 69,0 H 6,1 O 20,4 N 4,5 M. G. 313. 1) I-Aethyläther d. 4-Acetylamygdalylamido-I-Oxybenzol. Sm. 1540
 - (B. 28 [2] 991).
 - 2) 4,4'-Diäthyläther d. $\alpha\beta$ -Dioximido- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 136° (A. **279**, 343). — III, 296.

3) α -Dimethylamido- $\alpha\beta$ -Diphenyläthan-4,4'-Dicarbonsäure. $C_{18}H_{19}O_4N$ bis 270°. HCl, (2HCl, PtCl₄), Pikrat (B. 28, 1143). — II, 1889.

4) 2-[4-Diäthylamido-3-Oxybenzoyl] benzol-1-Carbonsäure.

u. Zers. (Bl. [3] 19, 830; C. 1898 [1] 1296).

5) 1,2-Lakton d. 3,4-Dioxy-1-Aethylphenylamidooxymethylbenzol-3,4-Dimethyläther-2-Carbonsäure (Opiansäureäthylanilid). Sm. 116 bis 117° (B. 29, 182).

6) Dimethylester d. α -Phenylamido- α -Phenyläthan- $\beta\beta$ -Dicarbonsäure.

Sm. 117—118°. HCl (B. 28, 146). — II, 1850. 7) β -[2,4-Dimethylphenoxyl]äthylmonamid d. Benzol-1,2-Dicarbonsäure. Sm. 130—131° (B. 29, 2400).

8) 2-Naphtylmonamid d. Säure C₈H₁₂O₅ (aus Camphersäure). Sm. 178^o (B. 30, 1902).

- 9) Verbindung (aus Bebeerin). Zers. oberh. 260° (B. 29, 2058). III, 798. C 63.3 - H 5.6 - O 18.8 - N 12.3 - M. G. 341. $C_{18}H_{19}O_4N_8$ 1) 5-Nitro-4,4'-Di[Acetylamido]-3,3'-Dimethylbiphenyl. Sm. 290° (B.
 - **25**, 1033). **IV**, 981. 2) Diäthylester d. Diazoamidobenzol-3, 3'-Dicarbonsäure. Sm. 144° (A.

117, 11). — IV, 1577.

3) α -Phenylamidoformyl- β -Phenylhydrazid d. Malonsäuremonoäthylester. Sm. 158° (B. 24, 1800). — IV, 702.

C 65,7 — H 5,8 — O 24,3 — N 4,2 — M. G. 329. $C_{18}H_{19}O_5N$

1) 2-Acetat-5,5'-Dimethyläther d. 2'-Nitroso-2,5,5'-Trioxy-3,3'-Dimethylbiphenyl (B. 31, 1335).

2) Morphinearbonsäure (B. 25 [2] 202). — III, 900.

Dimethylcolchicinsäure $+4\frac{1}{2}H_2O$. Sm. $141-142^\circ$. HCl + H₂O (M. 9, 17). — III, 875.

4) 3,4-Dimethoxyl-1-[4-Aethoxylphenyl]imidomethylbenzol-2-Carbonsäure (Opiansäure-p-Phenetidin). Sm. 1750 (C. 1897 [1] 1121).

5) 1-Methylester-2-Benzylamid d. 3,4-Dioxybenzoldimethyläther-1,2-Dicarbonsäure. Sm. 96—97° (R. 15, 340).
6) 2-Methylester-1-Benzylamid d. 3,4-Dioxybenzoldimethyläther-1,2-

Dicarbonsäure. Sm. 113° (R. 15, 341).

7) 4-Methoxylbenzoat d. α-Aethyl-4-Methoxylbenzhydroxamsäure. Sm. 94° (A. 281, 255). — II, 1535.

8) 4-Methoxylbenzoat d. β -Aethyl-4-Methoxylbenzhydroxamsäure. Sm. 77° (A. 281, 257). — II, 1535.

C 62,6 - H 5,5 - O 27,8 - N 4,1 - M.G. 345. $C_{18}H_{19}O_6N$

1) Verbindung (aus Ketacetsäurediäthylester u. Anilin). Sm. 137—138° (A. **269**, 43). — I, 848.

 $\mathbf{C}_{18}\mathbf{H}_{19}\mathbf{O}_{6}\mathbf{C}\mathbf{I}$ 1) Verbindung (aus Chlorhexaoxybiphenyltetraäthyläther). Sm. 1590 (B. 31, 618).

C₁₈H₁₉O₆Br 1) Pentamethyläther d. ?-Brom-3,4,2',4',6'-Pentaoxydiphenylketon. Sm. 144° (B. 25, 1132). — III, 208.

1) Di[2,4-Dimethylphenyl]phosphinsäure-5,5'-Dicarbonsäure. $\mathbf{C}_{18}\mathbf{H}_{19}\mathbf{O}_{6}\mathbf{P}$ 185°. Ag₈ (A. **294**, 32). — IV, 1679. 1) Verbindung (aus Gelseminin). Sm. 238° (C. 1896 [1] 111).

 $\mathbf{C}_{18}\mathbf{H}_{19}\mathbf{O}_{9}\mathbf{N}_{2}$

 $\mathbf{C}_{18}\mathbf{H}_{19}\mathbf{NS}$ 1) Aethyläther d. Benzylchinolinammoniumsulfhydrat. (J. pr. [2] 51, 96). — IV, 252.

C₁₈H₁₉N₂Cl 1) Base (aus Essigsäure-4-Methylphenylamid). Sm. 71—72°. (2HCl, PtCl₄) (A. 214, 205, siehe auch B. 9, 1214). — II, 491.

1) Jodäthylat d. 4-Methyl-2-[4-Amidophenyl]chinolin (B. 15, 1502). $\mathbf{C}_{18}\mathbf{H}_{19}\mathbf{N}_{2}\mathbf{J}$ - IV, 1030.

 $\mathbf{C}_{18}\mathbf{H}_{19}\mathbf{N}_{3}\mathbf{Si}$ 1) Verbindung (aus Anilin u. Siliciumchloroform) (C. 1896 [1] 803). $C_{18}H_{20}ON_{2}$

C 77,1 — H 7,1 — O 5,7 — N 10,0 — M. G. 280.

1) 4- $[\beta$ -Benzoylisopropyliden]amido-1-Dimethylamidobenzol? Sm. 135 bis 136° (B. 25, 636). — IV, 598.

2) α -Phenyl- β -[1, 2, 3, 4-Tetrahydro-l-Naphtylmethyl]harnstoff. 126,5° (B. 22, 1917). — II, 589.

3) α -Phenyl- β -[1,2,3,4-Tetrahydro-2-Naphtylmethyl]harnstoff. 141° (B. 22, 1913). — II, 590. 4) γ -Phenylhydrazon - α - [2-Oxyphenyl] - α -Hexen. Sm. 1190 (B. 29, 376).

- IV, 774.

C₁₈H₂₀ON₂ 5) Aethyläther d. 8-Phenylazo-5-Oxy-1, 2, 3, 4-Tetrahydronaphtalin. Sm. 91,5° (B. 31, 899). — IV, 1426.

6) 2-Keto-4-Methyl-1,3-Di[2-Methylphenyl]tetrahydroimidazol. Sm. 93° (B. **25**, 3276). — II, 464.

7) 2-Keto-4-Methyl-1,3-Di[4-Methylphenyl]tetrahydroimidazol. Sm. 129,9° (B. **25**, 3278). — II, 495.

8) 2-Keto-1,4-Di[2-Methylphenyl]hexahydro-1,4-Diazin. Sm. 790 (B. 25, 2933). — II, 470. 9) 2-Keto-1,4-Di[4-Methylphenyl]hexahydro-1,4-Diazin. Sm. 168,5°

 $(B. \ \mathbf{22}, \ 1785). \ \mathbf{-11}, \ 506.$

10) 3-Keto-2-Aethyl-1,4-Diphenylhexahydro-1,4-Diazin. Sm. 93-940 (B. **25**, 2938). — II, 434.

11) 3-Keto-2, 2-Dimethyl-1, 4-Diphenylhexahydro-1, 4-Diazin. Sm. 1160 (B. 25, 2939). - II, 435.

12) Phenyläther d. α-Phenylimido-α-Oxy-α-[1-Piperidyl]methan (Diphenylpiperidylisoharnstoff). Sm. 86° (B. 28, 983). — IV, 13. 13) Acetylderivat (d. Base $C_{10}H_{18}N_2$ vom Sm. 126°). Sm. 188° (B. 25, 2031;

27, 1303). — II, 443. 14) Acetylderivat (d. isom. Base C₁₆H₁₈N₂ vom Sm. 85,5°). Amorph (B. **27**, 1303).

 $\mathbf{C}_{18}\mathbf{H}_{20}\mathbf{OCl}_4$ $C_{18}H_{20}O_2N_2$ 1) Tetrachlorearotin. Sm. 120° (A. 117, 228). — III, 626. C 73,0 — H 6,7 — O 10,8 — N 9,5 — M. G. 296.

1) Dimethyläther d. $\alpha\beta$ -Di[2-Oxybenzylidenamido]äthan. Sm. bei 113° (B. 20, 272). — III, 72.

2) Dimethyläther d. $\alpha\beta$ -Di [4-Oxybenzylidenamido]äthan. Sm. 110 bis 111° (B. 20, 272). — III, 85.

3) P-Di[Acetylamido]-2-Benzyl-1-Methylbenzol. Sm. 220° (B. 26, 1855). — IV, 983. 4) $\alpha\beta$ -Di[Acetylamido]- $\alpha\beta$ -Diphenyläthan. Sm. oberh. 350° (B. 22, 2300;

28, 3176). — IV, 978.

5) $\alpha\beta$ -Di[Phenylacetylamido]äthan. Sm. 158° (B. 22, 1785). — II, 368. 6) $\alpha\beta$ -Di 2-Acetylamidophenyl athan. Sm. 249-2506 (A. 305, 99).

7) 2-Acetylamido-l-[Acetyl-4-Methylphenyl] amidomethylbenzol. Sm. 185—186° (B. **23**, 2190). — **IV**, 631.

8) 4,4'-Di [Acetylamido]-2,2'-Dimethylbiphenyl. Sm. 281° (274—275°)

(B. 22, 839; 28, 2554). — IV, 980. 9) 4,4'-Di[Acetylamido]-3,3'-Dimethylbiphenyl. Sm. 314° (306°) (A. 278, 377; B. 17, 468; 21, 746, 1065). — IV, 981. 10) αδ-Di[Benzoylamido]butan. Sm. 176—177° (H. 13, 574; B. 31, 3184).

- II, 1170.

11) 4-Methylacetylamido-4'-Dimethylamidodiphenylketon. Sm. 145° (B. 24, 3199). — III, 185.

12) αζ-Dioximido-αζ-Diphenylhexan. Sm. 216—218° (C. 1896 [2] 1091). 13) β -Acetyl- α -[4-Isopropylbenzoyl]- α -Phenylhydrazin. Sm. $40-42^{\circ}$. **- IV**, 670.

14) Glyoxim-N-2, 4-Dimethylphenyläther. Sm. 198° (B. 31, 560).
 15) Glyoxim-N-2, 6-Dimethylphenyläther. Sm. 203,5° u. Zers. (B. 31, 560).

16) Hydrokurin (M. 2, 83). — IV, 270.
17) o-Kresolantipyrin. Sm. 60-62° (Bl. [3] 15, 609). — IV, 510.
18) m-Kresolantipyrin. Fl. (Bl. [3] 15, 610). — IV, 510.
19) p-Kresolantipyrin. Fl. (Bl. [3] 15, 610). — IV, 510.

20) 1-Phenyl-4,5-Camphylpyrazol-3-Carbonsäure. Sm. 197° (193 bis 194°). $+ \frac{1}{2} C_6 H_6$ (Am. 19, 405; 20, 336). — IV, 864.

21) Aethylester d. β-Diphenylhydrazonbuttersäure. Sm. 120 – 135° (B. 30, 3008). – IV, 690.
22) Aethylester d. isom. β-Diphenylhydrazonbuttersäure. Fl. (B. 30, 3008).

3008). — IV, 690.
 23) Aethylester d. β-Phenylhydrazon-α-Phenylpropan-α-Carbonsäure.
 Sm. 104° (B. 31, 3164).

24) Aethylidenamid d. Phenylessigsäure. Sm. 227-228° (A. 184, 318). - II, 1312.

25) Di[Phenylamid] d. Piperazin-1,4-Dicarbonsäure (J. pr. [2] 53, 21).

26) Diphenylamid d. s-Paradimethylbernsteinsäure. Sm. 2350 (B. 23, 644). — II, 415.

- C₁₈H₉₀O₉N₉ 27) Diphenylamid d. s-Antidimethylbernsteinsäure. Sm. 222° (B. 23, 644). — II, 415.
 - 28) Di [Methylphenylamid] d. Bernsteinsäure. Sm. $154.5 - 155^{\circ}$ (A. **292**, 192).
 - 29) Di[2-Methylphenylamid] d. Bernsteinsäure. Sm. 100° (B. 12, 323).
 II, 468.
 30) Di[4-Methylphenylamid] d. Bernsteinsäure. Sm. 256° (B. 12, 323;
 - A. 126, 165; 209, 380). II, 502.
 - 31) Dibenzylamid d. Bernsteinsäure. Sm. 205-206° (Soc. 55; 631). II, 530.

 - 32) $\overrightarrow{Di}[\alpha\text{-Phenyläthylamid}]$ d. Oxalsäure. Sm. 185° (B. 27, 2308). 33) $\overrightarrow{Di}[\beta\text{-Phenyläthylamid}]$ d. Oxalsäure. Sm. 186° (180°) (B. 19, 1826; J. pr. [2] 50, 558). — II, 540.
 - 34) Di[2,4-Dimethylphenylamid] d. Oxalsäure. Sm. 210° (204°) (B. 3, 227; M. 9, 746). — II, 544.
 - 35) Di[2,5-Dimethylphenylamid] d. Oxalsäure. subl. bci 125° (B. 11, 1538). — II, 547.
 - 36) 1-Methylamid d. 2-[2,4,5-Trimethylphenyl]amid d. Benzol-1,2-Dicarbonsäure. Sm. 215° u. Zers. (B. 17, 1808). — II, 1808.
 - 37) Verbindung (aus Furfurol, Anilin u. Methylanilin). HCl (A. 239, 356). **- III**, 723.
 - 38) Verbindung (aus 1,4-Dioxybenzol u. Amidobenzol). Sm. 89-90° (B. 15, 1973). — II, *939*.
 - 39) Verbindung (aus 2-Methylphenylcarbonimid u. anti-4-Isopropylbenzaldoxim). Sm. 70° (B. 26, 2095). III, 57.

 - 40) Verbindung (aus 4-Methylphenylcarbonimid u. anti-4-Isopropylbenzaldoxim). Sm. 115° (B. 26, 2095). III, 57.
 41) Verbindung (aus 4-Methylphenylcarbonimid u. syn-4-Isopropylbenzaldoxim). 2 isom. Formen. Sm. 113° u. 120° (B. 26, 2095). III, 57.
- C 66,7 H 6,1 O 9,9 N 17,3 M. G. 324. $C_{18}H_{20}O_2N_4$ 1) Butenyldiphenylureïd. Sm. 169—170°. — II, 378.
 - 2) αβ-Succinyldiphenylhydrazidoäthan. Sm. bei 126° (A. 254, 123). —
 - IV, 704.
 3) 3,3'-Di[Acetylamido]-2,2'-Dimethylazobenzol. Sm. oberb. 340° (Soc. 59, 1016). — IV, 1377.
 - 4) 4,4'-Di[Acetylamido]-3,3'-Dimethylazobenzol. Sm. noch nicht bei 30° (Am. 17, 450). — IV, 1377.
 - 5) 6,6'-Di[Acetylamido]-3,3'-Dimethylazobenzol (B. 22, 1397). IV, 1377.
 - 6) 3,3'-Di[Acetylamido]-4,4'-Dimethylazobenzol. Sm. bei 300° (Soc. 59, 1016). — IV, *1379*.
 - 7) $\gamma \delta$ -Di[Phenylhydrazon]- β -Methylbutan- β -Carbonsäure. Sm. 190° (B. 30, 859). — IV, 707.
 - 8) Aethylester d. α -Phenylazo- β -Phenylhydrazonbuttersäure. 108—109° (B. 32, 208).
- $C_{18}H_{20}O_2Cl_2$ 1) Diathyläther d. $\beta\beta$ -Dichlor- $\alpha\alpha$ -Di[4-Oxyphenyl]äthan. Sm. 72° (A. **279**, 341). — II, 995.
- $C_{18}H_{20}O_{2}Br_{2}$ 1) ?-Dibrom-5,5'-Dioxy-1,2,4,1',2',4'-Hexamethyl-?-Biphenyl. 186—187° (B. 18, 2690). — II, 996.
 - 2) Diäthyläther d. $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 1920 (A. 279, 344). — II, 993.
- C19H20O2S2 1) Aethylester d. $\beta\beta$ -Merkaptobutterdiphenyläthersäure. Sm. 57—58° (B. 19, 1790). — II, 788.
- $\mathbf{C}_{18}\mathbf{H}_{20}\mathbf{O}_{3}\mathbf{N}_{2}$ $0.69,2 - H_{0},4 - O_{0},15,4 - N_{0},0 - M_{0},G_{0},312.$
 - 1) Aethyläther d. 5-[4-Formylamido-3-Methylphenyl] formylamido-2-Oxy-1-Methylbenzol. Sm. 146-1470 (A. 287, 194).
 - 2) Aethyläther d. 6,4'-Di[Acetylamido]-3-Oxybiphenyl. Sm. 190-1910 (A. 303, 350).
 - 3) Aethyläther d. 4-Diacetylamido-4'-Oxydiphenylamin. Sm. 175 bis 176° (B. 26, 693). — IV, 584.
 4) Guajakolantipyrin (Bl. [3] 15, 172). — IV, 510.
 5) Orcinantipyrin. Fl. (Bl. [3] 15, 612). — IV, 510.
 6) Saligeninantipyrin. Fl. (Bl. [3] 15, 849). — IV, 510.

- C₁₈H₂₀O₈N₂ 7) Cyan-2-Nitrobenzylcampher. Sm. 104-105° (B. 24 [2] 733). -III, 514.
 - 8) Cinchotenin + 3H₂O. Sm. 197—198°. [(2HCl, PtCl₄), (2HCl, AuCl₈) (A. Spl. 7, 249; A. 176, 232; 197, 376; B. 11, 1984; 28, 12, 1072, 1985; M. 15, 787; 16, 62, 159). III, 840.

- 9) Cinchotenicin. Sm. 153° (B. 11, 1983). III, 844. 10) Cinchotenidin + $3 \, \text{H}_2 \, \text{O}$. Sm. 256° u. Zers. (2 HCl, PtCl₄), H₂SO₄ + $2^{1/2} \, \text{H}_2 \, \text{O}$ (A. 197, 237; B. 14, 1892; M. 10, 54). III, 854.
- 11) α-[α-Phenylamidopropionylphenyl]amidopropionsäure. Sm. 79-80° u. Zers. (B. 23, 2016). — II, 433.

12) 2-Methylphenylamidoacetyl-2-Methylphenylamidoessigsäure. Sm. 129° (J. pr. [2] 38, 308). — II, 470.

- 13) 2-Methylphenylamidoäthyl-[2-Methylphenyl]amidoformylameisensäure + xH₂O. Sm. 100° u. Zers. Ba + H₂O (B. 23, 2035). - II, 467.
- 14) Phenylmonamid d. Phenylamidobernsteinsäuremonäthylester. Sm.
- 144° (B. 25, 650). II, 437.

 15) Phenylmonamid d. Phenylimidodiessigsäuremonoäthylester. Sm. 121—122° (B. 22, 1801). II, 431.

 16) Benzylmonamid d. Benzylamidobernsteinsäure. Sm. 204—205°. Ba
- (C. 1896 [1] 244).
- 17) 2-Methylphenylmonamid d. 2-Methylphenylimidodiessigsäure. Sm. 146—148° (B. 23, 1994). — II, 470.
- 18) 4-Methylphenylmonamid d. 4-Methylphenylimidodiessigsäure, Sm. 222° u. Zers. (B. 23, 2001; 25, 2288). — II, 507.
- 19) Di[2-Methylphenylamid] d. Aepfelsäure. Sm. 180,5—181,5 ° (179°)
- (B. 23, 2044; G. 23, 183; C. 1899 [1] 467). II, 468.

 20) Di[3-Methylphenylamid] d. Aepfelsäure. Sm. 153° (C. 1899 [1] 467).

 21) Di[4-Methylphenylamid] d. Aepfelsäure. Sm. 195° (206°) (G. 23, 180;
- C. 1899 [1] 467). II, 503.
- 22) Verbindung (aus d. Diäthyläther d. 2-Amido-1, 3-Dioxybenzol). Sm. 2070 (B. **20**, 1149). — II, 928. C 63,5 — H 5,9 — O 14,1 — N 16,5 — M. G. 340.

 $C_{18}H_{20}O_3N_4$

- 1) 3,3'-Di[Acetylamido]-2,2'-Dimethylazoxybenzol. Sm. 307° (Soc. 59, 1016). - IV, 1339.
- 2) 6,6'-Di[Acetylamido]-3,3'-Dimethylazoxybenzol. Sm. 196° (B. 22, 1397). **— IV**, *1341*.
- 3) 3,3'-Di[Acetylamido]-4,4'-Dimethylazoxybenzol. Sm. 290° (Soc. 59, 1016). **— IV**, *1341*.
- Di[Phenylhydrazon] d. Keton C₆H₈O₅ (aus Quercit). Sm. 180° u. Zers. (B. 29, 1766). IV, 788.
- 5) α -Phenyl- β -Acetylhydrazid d. β -Acetyl- α -Phenylhydrazidoessigsäure. Sm. 198º (A. 301, 87).
- 6) Verbindung (aus Akonsäuremethylester u. Phenylhydrazin). Sm. 167°
- - 1) αβ-Di[Acetylamido]-αβ-Di[2-Oxyphenyl]äthan. Sm. oberh. 300° (Soc. 45, 680; B. 17, 2409). — II, 994; III, 286.
 - 2) Dimethyläther d. 4,4'-Di[Acetylamido]-3,3'-Dioxybiphenyl. Sm. 231° (J. pr. [2] 58, 214).
 - 3) Di[2-Acetylamidophenyläther] d. $\alpha\beta$ -Dioxyäthan. Sm. 226° (J. pr. [2] 27, 204). — II, 705.
 - 4) Di[4-Acetylamidophenyläther] d. $\alpha\beta$ -Dioxyäthan. Sm. 257° (C. 1898) 2 423).
 - 5) Tetramethyläther d. Di[3,4-Dioxybenzyliden]hydrazin. Sm. 1900 (Bl. [3] 17, 946).
 - Zers. oberh. 270°. $2HCl + H_2O$, $(2HCl, PtCl_4)$, H_2SO_4 6) Chitenol + H_2O . Zers. oberh. 27 + H_2O (*M.* 14, 603). - III, 820.
 - 7) αβ-Di[4-Methylphenylamido] bernsteinsäure. Sm. 200°. Na₂, Ca, Cu (B. 26, 1767). — II, 509.
 - 8) Dimethylester d. α -Phenylhydrazido- α -Phenyläthan- $\beta\beta$ -Dicarbonsäure. Sm. 94,5° u. Zers. (B. 28, 147). — IV, 741.
 - 9) Dimethylester d. Phenylhydrazonanemonsäure. Sm. 170° (M. 17, 294). — IV, 797.

C₁₈H₂₀O₄N₂ 10) Diäthylester d. Biphenylen-4,4'-Diamidoameisensäure (Biphenylendiurethan). Sm. 230° (A. 258, 368; Soc. 49, 256). — IV, 964.

11) 3-Nitrophenylamid d. Oxyessig-4-Isobutylphenyläthersäure. Sm. 136—139° (Am. 19, 74).

12) Di[2-Methylphenylamid] d. Weinsäure. Sm. 182—183° (200° u. Zers.) (B. 23, 2049; C. 1899 [1] 467). - II, 468.

13) Di[3-Methylphenylamid] d. Weinsäure. Sm. 1820 u. Zers. (C. 1899) [1] 467).

14) Di[4-Methylphenylamid] d. Weinsäure. Sm. 264° u. Zers. (230° u. Zers.) (B. 23, 2050; A. 279, 145; C. 1899 [1] 467). — II, 503.
 15) 4-Aethoxylphenylamid d. 4-Acetylamidophenoxylessigsäure. Sm.

198º (B. 30, 2107).

16) Di[4-Aethoxylphenylamid] d. Oxalsäure. Sm. 265° (256-258°) (B. 28 [2] 991; G. 25 [2] 536). C 60,7 — H 5,6 — O 18,0 — N 15,7 — M. G. 356.

 $\mathbf{C}_{18}\mathbf{H}_{20}\mathbf{O}_{4}\mathbf{N}_{4}$ 1) 4-Aethoxylphenylazo-4-Aethoxylphenylhydrazonessigsäure. Sm.

147—148° (B. 28, 1693). — IV, 1240. 1) Hexamethyldiphenylendisulfon. Zers. oberh. 300° (Bl. [3] 15, 1040).

C18H20O4S2 C₁₈H₂₀O₄Pb 1) Diacetat d. Bleidi[4-Methylphenyl]dioxydhydrat + 2 H₂O. Sm. 183.5° (wasserfrei) (B. 21, 3427). — IV, 1716.

C18 H20 O5 S4 1) Verbindung (aus $\beta\gamma$ -Dibrompropylphenylsulfon). Sm. 157—158° (J. pr. [2] **56**, 448). C 60,0 — H 5,6 — O 26,6 — N 7,8 — M. G. 360.

 $\mathbf{C}_{18}\mathbf{H}_{20}\mathbf{O}_{6}\mathbf{N}_{2}$

1) Diphenylamid d. Schleimsäure (Mucanilid) (J. pr. [2] 6, 138). -II, 424.

2) Di[4-Methoxylphenylamid] d. $\alpha\beta$ -Dioxyäthan- $\alpha\beta$ -Dicarbonsäure. Sm. 259° (C. 1897 [1] 49).

 $C_{18}H_{20}O_6Cl_2$ 1) Hexamethyläther d. Dichlorhexaoxybiphenyl (B. 11, 1624). — II, 1042. $C_{18}H_{20}O_6Br_2$ 1) Hexamethyläther d. Dibromhexaoxybiphenyl. Sm. 138-140° (B. 11, 1623). — II, 1042.

1) Verbindung (aus 1,4-Dioxybenzol u. H₂S) (A. 69, 297). — II, 939. C18H20O6S

1) Aethylester d. ββ-Diphenylsulfonbuttersäure. Sm. 97° (A. 259, 367). $C_{18}H_{20}O_6S_2$ **— II**, 789. C 57,4 - H 5,3 - O 29,8 - N 7,4 - M. G. 376. $\mathbf{C}_{18}\mathbf{H}_{20}\mathbf{O}_{7}\mathbf{N}_{2}$

1) 4-Benzoat d. 4-Oxy-2-Aethyl-1,2,6-Oxdiazin-3,5-Dicarbonsäurediäthylester. Sm. 69° (B. 26, 1005). — IV, 545. C 53,5 — H 4,9 — O 27,7 — N 13,9 — M. G. 404. Diäthyläther d. 4¹-Acetylamido-2,4-Dinitro-3,6-Dioxydiphenyl-

 $C_{18}H_{20}O_7N_4$

amin. Sm. 199° (B. **24**, 3828). — **II**, 949. C 50,0 — H 4,6 — O 25,9 — N 19,5 — M. G. 432.

 $C_{18}H_{20}O_7N_6$ 1) 2-Nitro-1,4-Di[Acetylamido]benzol + 2-Nitro-4-Acetylamido-1-Amidobenzol. Sm. 161° (B. 30, 985). - IV, 589.

C 55,1 - H 5,1 - O 32,7 - N 7,1 - M. G. 392. $\mathbf{C}_{18}\mathbf{H}_{20}\mathbf{O}_{8}\mathbf{N}_{2}$ 1) Verbindung (aus ?-Dichlor-?-Diamido-1,4-Dioxybenzol). Sm. 225º (A.

210, 185). C₁₈H₂₀O₈Cl₂ 1) Diäthylester d. 3,6-Dichlor-2,5-Dioxybenzoldi-1,4-[Acetylmethyl-

carbonsäure] (D. d. p-Dichlorhydrochinondiacetessigsäure). Sm. 154° (J. pr. [2] 45, 72). — II, 2076.

2) Verbindung (aus Hanf) (Soc. 43, 19; 55, 204). — I, 1080.

 $\mathbf{C}_{18}\mathbf{H}_{20}\mathbf{O}_{10}\mathbf{N}_2$ C 50,9 - H 4,7 - O 37,8 - N 6,6 - M. G. 424.

1) Tetracetat d. 3,6-Diacetylamido-1,2,4,5-Tetraoxybenzol. Sm. 240° u. Zers. (B. 18, 503). — II, 1033.

 $\mathbf{C}_{18}\mathbf{H}_{20}\mathbf{O}_{10}\mathbf{N}_{6}$ C 45,0 - H 4,2 - O 33,3 - N 17,5 - M. G. 480.1) Pyrogalleïn (J. 1858, 259). — II, 1011.

C 47,4 - H 4,4 - O 42,1 - N 6,1 - M. G. 456.

 $\mathbf{C}_{18}\mathbf{H}_{20}\mathbf{O}_{12}\mathbf{N}_{2}$ 1) Tetraäthylester d. 3,6-Dinitrobenzol-1, 2,4,5-Tetracarbonsäure. Sm. 130° (A. 237, 23). — II, 2074.

 $C_{18}H_{20}O_{16}S_2$ 1) Celluloseschwefelsäure. Ca (Berz. J. 25, 582; 26, 615; Z. 1869, 703; A. 53, 184; H. 7, 528; M. 6, 711; 7, 458). — I, 1077.

C18H20N2S 1) s-Phenyl-[1,2,3,4-Tetrahydro-2-Naphtylmethyl] thioharnstoff. Sm. $139,5-140^{\circ}$ (B. **22**, 1913). — II, 590. 2) 2 isom. Verbindungen (aus 6-Amido-1, 3, 4-Trimethylbenzol). Sm. 1830

u. 125° (B. 22, 585). — II, 827.

- $C_{18}H_{20}N_4S$
- 1) s-1,2-Naphtylendi[allylthioharnstoff]. Zers. bci 200° (B. 19, 808). IV, 919.
- 2) 2,5-Di[2,4-Dimethylphenylamido]-1,3,4-Thiodiazol. Sm. 79°. (2HCl,
- $\mathbf{C}_{18}\mathbf{H}_{21}\mathbf{ON}$
- 1) Methyläther d. 5-Oxy-4-Isopropyl-2-Phenylimidomethyl-1-Methylbenzol. Sm. 80° (B. 16, 2099). — III, 90.
- 2) a-[2,4-Dimethylphenyl]amidopropylphenylketon. Sm. 106-107° (Bl. [3] 17, 78).
- 3) ε -Oximido- $\delta \varepsilon$ -Diphenyl- β -Methylpentan. Sm. 118° (B. 21, 1299). III, 239.
- 4) Cyanbenzylcampher. Sm. 58-59° (B. 24 [2] 733). III, 514.
- 5) ?-Isoamphenylamid d. Benzolcarbonsäure. Sm. 148,5° (B. 14, 2346;
- 15, 1644, 20, 1259). II, 1167. 6) 1-Methyl-3-Isobutyl-2-Phenylamid d. Benzolcarbonsäure. Sm. 141 bis 142° (B. 17, 2340). — II, 1167.
- 7) 1-Methyl-5-Pseudobutyl-2-Phenylamid d. Benzolcarbonsäure. Sm. 168° (B. 17, 2322). — II, 1167. C 73,2 — H 7,1 — O 5,4 — N 14,2 — M. G. 295.
- $C_{18}H_{21}ON_3$
- 2-Methylphenylazocyancampher. Sm. 140° u. Zers. IV, 1482.
 4-Methylphenylazocyancampher. Sm. 137°. IV, 1482.
- 2) α -Chlor- β -Oxy- α α -Di[?-Methylphenyl]- β -Methylpropan. Sd. 265° (J. pr. [2] 37, 369). II, 1081. C 76,3 H 7,4 O 11,3 N 4,9 M. G. 283. 1) Desoxycodeïn. HBr (J. 1871, 778). III, 907. 2) α -[3-Methoxyl-4-Oxyphenyl]- β -[1,2,3,4-Tetrahydrochinolyl(2)]- äthan. Sm. 88°. HCl (B. 27, 1976). IV, 402. C18H21OC1 $C_{18}H_{21}O_2N$
 - - 3) 4-Diäthylamidodiphenylmethan-2'-Carbonsäure. Sm. 108° (C. 1898) 1] 1296).
 - 4) Aethylester d. α-Phenylbenzylamidopropionsäure. HCl (B. 31.
 - 5) Aethylester d. α-Aethylphenylamidophenylessigsäure. Sm. 38,5 bis 39,5° (B. **30**, 3179).
 - 6) Aethylester d. Phenyl-2,4-Dimethylphenylamidoessigsäure. Sm. 90,5° (B. 30, 2477).

 - 7) 2-Methylbenzoat d. r-Carvoxim (*Ph. Ch.* 14, 404). III, 114. 8) 3-Methylbenzoat d. r-Carvoxim (*Ph. Ch.* 14, 404). III, 114. 9) 4-Methylbenzoat d. r-Carvoxim (*Ph. Ch.* 14, 404). III, 114.
 - 10) Phenylacetat d. r-Carvoxim (Ph. Ch. 14, 404). III, 114.
 - 11) Phenylamidoformiat d. 5- $[\alpha$ -Oxyäthyl]-1, 2, 4-Trimethylbenzol. Sm. 108° (B. **31**, 1006).
 - 12) Phenylamidoformiat d. 2- $[\alpha$ -Oxyäthyl]-1,3,5-Trimethylbenzol. Sm. 124° (B. 31, 1009).
 - 13) Phenylamid d. 5-Oxy-4-Isopropyl-1-Methylbenzolmethyläther-2-Carbonsäure. Sm. 166° (J. pr. [2] 41, 315). — II, 1589.
 - 14) Phenylamid d. Oxyessig-4-Isobutylphenyläthersäure. Sm. 97° (Am. **19**, 73).
 - 15) Phenylamid d. Oxyessig-3-Methyl-6-Isopropylphenyläthersäure. Sm. 81° (*Bl.* [3] **17**, 360). C 69,4 — H 6,8 — O 10,3 — N 13,5 — M. G. 311.
- $\mathbf{C}_{18}\mathbf{H}_{21}\mathbf{O}_{2}\mathbf{N}_{3}$
- 1) 5-Dimethylamido-2,4'-Di[Acetylamido] biphenyl. Sm. 233° (A. 303,
- 2) Mono[4-Methylphenyl] diamid d. 4-Methylphenylimidodiessigsäure. Sm. 209° (B. 25, 2288). — II, 507.
- 3) Di[4-Methylphenylamid] d. Diglykolamidsäure. Sm. 149,5% (B. 8,
- C18H21O8N
- 1155). II, 493. C 72,2 H 7,0 O 16,0 N 4,7 M. G. 299. 1) Bebeerin (Bebirin; Buxin; Pelosin). amorph. Sm. 180°; kryst. Sm. 214°. HCl, (2HCl, PtCl₄), H₂SO₄, H₂CrO₄ + H₂O (A. 33, 81; 48, 111; 55, 105; 69, 53; 77, 333; B. 29, 2054; J. 1858, 375; 1860, 548; 1869, 738, 739; 1871, 771, 777; G. 12, 97; M. 18, 385). III, 797. 2) Codeïn (Methyläther d. Morphin) + H₂O. Sm. 153° (155° wasserfrei);
- Sd. 179%. Salze meist bek. Lit. bedeutend. III, 901. 3) Isocodeïn. Sm. 70—80% (B. 32, 196).

 $C_{18}H_{21}O_4N$

4) Pseudocodein + H_2O . Sm. 178—180°. HCl, $(2HCl+3HgCl_2+1^1/_2H_2O)$, $C_{18}H_{21}O_3N$ $(2 \text{HCl}, \text{PtCl}_4), (\text{HCl}, \text{AuCl}_3 + 3 \text{H}_2\text{O}), \text{HBr} + \text{H}_2\text{O}, \text{H}_2\text{SO}_4 + 2 \text{H}_2\text{O}, \text{Pikrat})$ (B. 24 [2] 643). - III, 906.

> 5) Methylpiperin (3,4-Methylenäther d. ε-Keto-ε-Piperidyl-α-[3,4-Dioxyphenyl]-δ-Methyl-αγ-Pentadiën). Sm. 125—126° (B. 28, 1195). — IV, 17.

> 6) 4,4'-Diäthyläther d. α -Oximido- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 119° (A. **279**, 343). — III, 227.

> 7) 4-Diäthylamido-3-Oxydiphenylmethan-2'-Carbonsäure. Sm. 188°

(B. [3] 19, 830; C. 1898 [1] 1296). 8) 4-Keto-2,6-Dimethyl-1-[2,3,4,6-Tetramethylphenyl]-1,4-Dihydro-

pyridin-3-Carbonsäure. Sm. 145° (B. 21, 1656). — II, 562. 9) Phenylamidocamphoformencarbonsäure. Sm. 174°. Anilinsalz (Am.

21, 249). 10) Pinenphtalamidsäure. Sm. 109-111° (G. 21, 2). - IV, 77.

11) Aethylester d. 3-Benzoyl-2,4,6-Trimethyl-1,4-Dihydropyridin-5-Carbonsäure. Sm. 186—187° (B. 24, 1667). — IV, 90.

12) Aethylester d. 5-Acetyl-2, 6-Dimethyl-4-Phenyl-1, 4-Dihydropyridin-3-Carbonsäure. Sm. 167°; Sd. 210—230°_{25—30} (B. 31, 1027). C 68,6 — H 6,7 — O 20,3 — N 4,4 — M. G. 315.

1) d-Cinnamylecgonin. Fl. HCl, (2HCl, PtCl₄), HNO₃ (B. 24, 8). — III, 869.

2) 1-Cinnamylecgonin. Sm. 216° u. Zers. (HCl, AuCl₃) (B. 21, 3373). — III, 868.

3) δ-Isatropylecgonin (β-Truxillecgonin). Sm. 2020 u. Zers. (HCl, AuCl₃) (B. 22, 680). — III, 869. 4) Base (aus Protopin). Sm. 148° (M. 19, 198).

5) Diäthylester d. 1-Naphtylamidobernsteinsäure. Sm. 150° (B. 25, 965). — II, 614.

6) Diäthylester d. 2-Naphtylamidobernsteinsäure. Sd. 1080, 1080 u. Zers. (B. 25, 970). - II, 622.

7) Diäthylester d. 2,5-Dimethyl-1-Phenylpyrrol-3,4-Dicarbonsäure. Sm. 37–38°; Sd. 280°_{50°} (B. **18**, 303; A. **236**, 305). — **IV**, 92. C 63,0 — H 6,1 — O 18,6 — N 12,2 — M. G. 343.

 $\mathbf{C}_{18}\mathbf{H}_{21}\mathbf{O}_4\mathbf{N}_3$

1) Isobutyldi [2-Nitrobenzyl] amin. Sm. 62° . (HCl, AuCl₃) (B. 26, 2586). — II, 521. C 65,3 — H 6,3 — O 24,2 — N 4,2 — M. G. 331.

 $C_{18}H_{21}O_5N$

1) Diäthylester d. α -Phenylamido - α - [2-Furanyl] äthan - $\beta\beta$ -Dicarbonsäure (D. d. Anilidofurylmalonsäure). Sm. 72-730 (B. 28, 1455). -III, 718.

2) Diäthylester d. 2-Keto-6-Methyl-4-Phenyl-1,2,3,4-Tetrahydropyridin-3,5-Dicarbonsäure. Sm. 149,5—150° (B. 31, 763).

3) Verbindung (aus d. Diäthyläther d. 4-Amido-1, 3-Dioxybenzol). Sm. 170° (B. **20**, 1129). — II, 929. C 62.3 - H 6.0 - O 27.7 - N 4.0 - M. G. 347.

 $C_{18}H_{21}O_6N$

1) Diäthylester d. δ -Phtalylamidobutan- $\alpha\alpha$ -Dicarbonsäure. Sm. 46 bis 48° (B. **23**, 1768). — **II**, 1812.

 $\mathbf{C}_{18}\mathbf{H}_{21}\mathbf{O}_{6}\mathbf{Cl}_{9}$ 1) Verbindung (aus α -Benzolhexachlorid) (J. 1862, 482). $\mathbf{C}_{18}\mathbf{H}_{21}\mathbf{O}_{7}\mathbf{N}_{3}$ C 55,2 — H 5,4 — O 28,6 — N 10,7 — M. G. 391. $\mathbf{C}_{18}\mathbf{H}_{21}\mathbf{O}_7\mathbf{N}_3$

1) Hexacetylderivat d. 2,4,6-Triamido-1-Oxybenzol. Sm. 1840 (M.

16, 261). C 21,6 - H 2,1 - O 60,9 - N 15,4 - M. G. 999. $\mathbf{C}_{18}\mathbf{H}_{21}\mathbf{O}_{38}\mathbf{N}_{11}$ 1) Undekanitrat d. Raffinose. Sm. 55-65° (B. 31, 85).

1) 1-Chloräthylat d. 5-Methyl-1-Aethyl-2-Phenylbenzimidazol. HCl, $\mathbf{C}_{18}\mathbf{H}_{21}\mathbf{N}_{2}\mathbf{C}\mathbf{I}$

 $2 + \text{PtCl}_4 \text{ (A. 210, 374).} - \text{IV, } 1014.$ $\textbf{C}_{18}\textbf{H}_{21}\textbf{N}_2\text{Cl}_3 \text{ 1) Verbindung (aus Chloral u. ?-Dimethyl ?-Amidobenzol). Sm. 95-990}$ (A. 173, 283). — II, 548.

1) 1-Jodäthylat d. 5-Methyl-1-Aethyl-2-Phenylbenzimidazol. $+J_3$ $\mathbf{C}_{18}\mathbf{H}_{21}\mathbf{N}_{2}\mathbf{J}$ (Sm. 128—129°) (A. **210**, 373). — IV, 1014.

1) 2-[1-Piperidyl]diphenylthioharnstoff. Sm. 174° (B. 24, 2103). $C_{18}H_{21}N_3S$ IV, 560.

 $\mathbf{C}_{18}\mathbf{H}_{21}\mathbf{N}_{3}\mathbf{S}_{2}$ 1) Dimethyläthyldiphenyldithiobiuret. Sm. 98,8° (B. 26, 1686). — II, 400.

2) α -Dimethyläthyldiphenylpseudodithiobiuret. Sm. 89,8° (B. 26, 1688). - II, 400.

 $\mathbf{C}_{18}\mathbf{H}_{21}\mathbf{N}_{3}\mathbf{S}_{2}$ 3) β -Dimethyläthyldiphenylpseudodithiobiuret. Sm. 91,2° (\mathcal{B} . 26, 1688). · II, 400.

 $\mathbf{C}_{18}\mathbf{H}_{21}\mathbf{N}_{4}\mathbf{Br}_{3}$ 1) 2,4,5,2',4',5'-Hexamethyl-6-Diazoazobenzoltribromid. Sm. 122 bis 124° (B. **21**, 546). — **IV**, 1534.

C₁₈H₂₂ON₂

C 76,6 — H 7,8 — O 5,7 — N 9,9 — M. G. 282. $1) \ \ \textbf{4-[4-Dimethylamidophenyl]} \ imido-1-Keto-2-Methyl-5-Isopropyl-$

1,4-Dihydrobenzol. Sm. 69,5° (Bl. [3] 7, 97; [3] 11, 1135). — III, 365. 2) 4-[4-Dimethylamidophenyl]imido-1-Keto-3-Methyl-6-Propyl-1,4-

Dihydrobenzol (*Bl.* [3] **13**, 896).

3) 4-[4-Dimethylamidophenyl]imidio-1-Keto-3-Methyl-6-Isopropyl-1,4-Dihydrobenzol. Sm. 87-88° (Bl. [3] 11, 1135). — III, 365.

4) s-[4-Methylphenyl]-[4-Isopropylbenzyl]harnstoff. Sm. 150° (B. 22.

932). — II, 561.

5) Aethyläther d. 8-[4-Amidophenyl]amido-5-Oxy-1,2,3,4-Tetrahydronaphtalin. Sm. 87—88° (B. 31, 904).

6) Aethylester d. 8-Amido-7-Phenylamido-5-Oxy-1,2,3,4-Tetrahydronaphtalin. Sm. 168—169° (B. 31, 901).

7) γ -Phenylhydrazon- α -[2-Oxyphenyl]hexan. Sm. 149—150° (B. 29) 377). **— IV**, 773.

8) Oxyhexamethylazobenzol. Sm. 147—148° (B. 17, 885). — IV, 1425. 9) 1-Aethyloxydhydrat d. 5-Methyl-1-Aethyl-2-Phenylbenzimidazol. Sm. 152—153°. Chlorid + HCl, 2 Chlorid + PtCl₄, Jodid, Jodid + J₂, $H_2SO_4 + H_2O$ (A. 210, 375). — IV, 1014.

10) 2,4-Dimethylphenylamid d. 2,4-Dimethylphenylamidoessigsäure. Sm. 128° (B. 16, 206). — II, 544.

 $\mathbf{C}_{18}\mathbf{H}_{22}\mathbf{ON}_{4}$

C 69.7 - H 7.1 - O 5.1 - N 18.1 - M. G. 310.

1) 2,4,5,2',4',5'-Hexamethyl-6-Diazoazobenzol. 'Tribromid, Nitrat (B. **21**, 546). — IV, *1533*. C 72,5 — H 7,4 — O 10,7 — N 9,4 — M. G. 298.

 $C_{18}H_{22}O_2N_2$

1) Acetaldehydtetramethylamidofluorimium. (2 HCl, PtCl₄) (B. 27, 2895).

2) Dimethyläther d. 1,4-Di[4-Oxyphenyl]hexahydro-1,4-Diazin. Sm. 233° (B. **22**, 1782). — **II**, 716.

3) Aethyläther d. 5-[4-Acetylamido-3-Methylphenyl]amido-2-Oxy-1-Methylbenzol. Sm. 143° (A. 287, 194).

4) Aethyläther d. 6-[4-Acetylamido-2-Methylphenyl]amido-3-Oxy-**1-Methylbenzol.** Sm. 116° (A. **287**, 208).

5) Aethyläther d. 6-[4-Acetylamido-3-Methylphenyl]amido-3-Oxy-1-Methylbenzol. Sm. 144° (A. 287, 206). 6) Aethyläther d. 5-Acetylamido-2-[4-Methylphenyl]amido-4-Oxy-

1-Methylbenzol. Sm. 125° (B. **27**, 2708).

7) Diäthyläther d. α -[4-Oxyphenyl]amido- α -[4-Oxyphenyl]imidoäthan + H₂O (Holocaïn). Sm. 121°. HCl (C. 1897 [1] 875). 8) o-Carbtoluido-r-Carvoxim (Ph. Ch. 14, 399). — III, 113.

9) m-Carbtoluido-r-Carvoxim (*Ph. Ch.* 14, 399). — III, 113. 10) p-Carbtoluido-r-Carvoxim (*Ph. Ch.* 14, 399). — III, 113.

11) Di[4-Dimethylamidophenyl] essigsäure. Sm. 171° (B. 27, 1407; C. 1895 [1] 201). — II, *1465*.

12) Base (aus Nichin). 3HJ (M. 14, 441). — III, 821.

13) Phenylhydrazid d. Oxyessig-4-Isobutylphenyläthersäure. Sm. 171,5° (Am. 19, 76). — IV, 687.

14) Verbindung (aus 4-Amido-1-Aethoxylbenzol). Sm. 140°. HCl, 2HCl (C. 1897 [2] 38).

15) Verbindung (aus schleims. p-Toluidin) (B. 14, 2094). — IV, 1035.

 $C_{18}H_{22}O_2N_4$

C 66,3 - H 6,7 - O 9,8 - N 17,2 - M. G. 326.1) $\alpha\beta$ -Di[β -Acetyl- α -Phenylhydrazido] äthan. Sm. 222° (A. 254, 121). —

IV, 665. Sm. 224—225° (B. 31, 293). 2) N-Di[4-Dimethylamidophenyl]glyoxim.

3) Resorcin + 2 Molec. Phenylhydrazin. Sm. 76° (B. 22, 2198). IV, 654.

4) Hydrochinon + 2 Molec. Phenylhydrazin. Sm. 70—71° (B. **24** [2] 904). - IV, 654.

5) Diäthyläther d. 3-Amido-6-Dimethylamido-1,4-Dioxyphenazin. Pikrat (B. 24, 3827). — II, 949.

C₁₈H₂₂O₂N₄ 6) Di[4-Dimethylamidophenylamid] d. Oxalsäure. Sm. noch nicht bei 270° (B. 12, 533). — IV, 592.

 7) 4-Dimethylamidophenylhydrazid d. β-Acetyl-α-Phenylhydrazidoessigsäure. Sm. 158° (B. 30, 1101; A. 301, 77).
 1) Di[4-Isopropylphenyl]sulfon. Sm. 109—110° (96°) (B. 26, 2945; Bl. [3] $C_{18}H_{22}O_{2}S$ 11, 513). — II, 827.

C 68.8 - H 7.0 - O 15.3 - N 8.9 - M. G. 314. $\mathbf{C}_{18}\mathbf{H}_{22}\mathbf{O}_{3}\mathbf{N}_{2}$

- 1) Diphenyläther d. Di[γ -Oxypropyl]nitrosamin. Sm. 60-61° (B. 24, 2638). — II, 653.
- 2) α -Oxy- $\alpha\alpha$ -Di[4-Dimethylamidophenyl] essigsäure. K (B. 27, 3298). II, 1697.
- 3) β -[4-Methylphenyl]amidoäthyl-[4-Methylphenyl]amidoessigsäure. $Ba + 4H_{0}O$ (B. 23, 2035). — II, 506.
- 4) Phenylhydrazoncampheroxalsäure. Sm. 214-215° (Am. 20, 328).
- 5) Methylester d. $\alpha \alpha$ -Di[4-Methylphenylamido]- α -Oxyessigmethyl-
- äthersäure. Sm. 105° (B. 28, 62). 6) Methylester d. Phenylazocamphocarbonsäure. Sm. 78° (B. 25 [2] 726). **— IV**, *1468*.
- 7) 4-Aethoxylphenylamid d. [4-Aethoxylphenyl] amidoessigsäure. Sm. 139—140° (B. **22**, 1789). — II, 721.
- 8) Acetylphenylamidoimid d. Camphersäure. Sm. 107° (B. 25, 2567). **– IV**, 708.

C 63.2 - H 6.4 - O 14.0 - N 16.4 - M. G. 342. $C_{18}H_{22}O_{3}N_{4}$

- 1) Di[Phenylhydrazon] d. Chinovose. Sm. 193-194° (B. 26, 2419). -IV, 794.
- 2) Di[Phenylhydrazon] d. Isodulcit. Sm. 1800 (B. 20, 1091, 1189; Bl. **47**, 761). — **IV**, 789. C 65,5 — **H** 6,6 — O 19,4 — **N** 8,5 — **M**. G. 330.

 $C_{18}H_{22}O_4N_2$

1) Diphenylhydrazon d. Isoduleit. Sm. 1340 (A. 258, 247). — IV, 789. 2) Diäthylester d. 1-Phenylamido-2,5-Dimethylpyrrol-3,4-Dicarbonsäure. Sm. 127° (B. 18, 304, 1568). — IV, 549.

C 60,3 - H 6,1 - O 17,9 - N 15,6 - M. G. 358. $C_{18}H_{22}O_4N_4$

- 1) Di[Phenylhydrazon] d. Akrose. Sm. bei 217° u. Zers. (B. 20, 1093, 2571, 3386, 3388; 22, 360; 23, 383). IV, 790.
- 2) isom. Di[Phenylhydrazon] d. Akrose. Sm. 148° (156-159°) (B. 20, 2573, 3387). — IV, 790.
- 3) Di[Phenylhydrazon] d. Carubinose. Sm. 198° (Bl. [3] 17, 958). IV, 792.
- 4) Di[Phenylhydrazon] d. Dulcit. Sm. 205—206° u. Zers. (B. 20, 3390; Soc. 75, 10). — IV, 791.
- 5) Di[Phenylhydrazon] d. Formose. Sm. bei 144° (B. 21, 274, 989; J. pr. [2] **33**, 339). — **IV**, 791.

- 6) Di[Phenylhydrazon] d. Galaktose. Sm. 188—191° u. Zers. (B. 17, 581; 20, 826). IV, 791.
 7) Di[Phenylhydrazon] d. Galtose. Sm. 182° (R. 16, 270).
 8) Di[Phenylhydrazon] d. d-Glykose. Sm. 205° (B. 17, 579; 19, 50, 1921; 20, 821; 21, 2632; 22, 374; 23, 385; 27, 2488). IV, 791.
 9) Di[Phenylhydrazon] d. l-Glykose. Sm. 205° u. Zers. (B. 23, 374). IV, 791.
- IV, 792.
 10) Di[Phenylhydrazon] d. Glutose. Sm. 165° (R. 16, 277).
- 11) Di[Phenylhydrazon] d. Sorbin. Sm. 164° (B. 20, 827). IV, 793.

- 12) Phenylosazon d. Zucker C₆H₁₂O₆. Sm. 144⁶ (B. 21, 990).
 13) Phenylosazon d. Zucker C₆H₁₂O₆. Sm. 200⁶ (B. 21, 990).
 14) Phenylosazon d. Zucker C₆H₁₂O₆ (aus Weinsäure). Sm. 168-170⁶ (Soc.
- $C_{18}H_{22}O_4Br_4$ 1) Tetrabromid d. Phtalsäuremonogeraniolester. Fl. Ba $+ 4H_2O$ (Bl. [3] 19, 87).
- C 62,4 H 6,4 O 23,1 N 8,1 M. G. 346. $C_{18}H_{22}O_5N_2$
 - 1) Diphenylhydrazon d. Galaktose. Sm. 157° (A. 258, 246). IV, 791.
 - 2) Diphenylhydrazon d. d-Glykose. Sm. 161-162° (A. 258, 245). -IV, 791.
 - 3) Diphenylhydrazon d. 1-Glykose. Sm. 162-163 (B. 23, 2619). -IV, 791.

- C₁₈H₉₉O₅N₂ 4) Diphenylhydrazon d. i-Glykose. Sm. 132—133° (B. 23, 2620). IV. 791.
 - 5) Diphenylhydrazon d. Mannose. Sm. 155° (A. 258, 246). IV. 793.
 - 6) 4-Biphenylhydrazon d. Galaktose. Sm. 157-158° u. Zers. (B. 27. 3108). — IV, 970.
 - 7) 4-Biphenylhydrazon d. Glykose. Sm. 143-144° u. Zers. (B. 27, 3108). **– IV**, 970.
 - 8) Diäthylester d. 5-Keto-3-Methyl-1-Phenyl-4,5-Dihydropyrazol-4-Aethyl- $\alpha\beta$ -Dicarbonsäure. Fl. (B. 23, 3758). — IV, 727.
 - 9) Diäthylester d. Phenylizinsuccinylbernsteinsäure. Sm. 159-160°
- (B. 17, 2054). IV, 723. C 57,7 H 5,9 O 21,4 N 15,0 M. G. 374. C, H, O, N,
- 1) Phenylosazon d. Methose. Sm. 205-206° (B. 22, 476). I, 1040.
- 1) Di[γ-Phenylsulfonpropyl]äther. Sm. 85° (J. pr. [2] 51, 293; B. 24. C19 H29 O5 S2 1834). — II, 784.
 - 2) Di[4-Methylphenylsulfonäthyl]äther (B. 26, 944). II. 823.
- 3) polym. Di[4-Methylphenylsulfonäthyl] äther. Sm. 83-84° (J. pr. [2] 3) polym. Bi[#-methylphonylstarionally] 30, 358). — II, 823.
 C 59,7 — H 6,1 — O 26,5 — N 7,7 — M. G. 362.
 l) Dioxim d. Dicampherylsäure. Sm. bei etwa 250°. Acetat (Soc. 75, 183).
 Dioxim d. Säure C₁₈H₂₀O₆ (B. 27 [2] 594).
 C 55,4 — H 5,6 — O 24,6 — N 14,4 — M. G. 390.
- $C_{18}H_{22}O_6N_2$
- $C_{18}H_{22}O_6N_4$
 - 1) Diäthyläther d. 3'-Dimethylamido-2,4-Dinitro-3,6-Dioxydiphenylamin. Sm. 106° (B. 24, 3830). — II, 949.
 - 2) Diäthyläther d. 4'-Dimethylamido-2,4-Dinitro-3,6-Dioxydiphenylamin. Sm. 148° (B. 24, 3826). — II, 949.
 - 3) Di[Phenylhydrazid] d. Alloschleimsäure. Sm. 213 ° u. Zers. (B. 24,
 - 2139). IV, 731.
 - 4) Di[Phenylhydrazid] d. Schleimsäure. Sm. 238—240° u. Zers. (A. 236, 196; Bl. 48, 722). IV, 731.
 5) Di[Phenylhydrazid] d. d-Mannozuckersäure. Sm. 212° u. Zers. (B.
 - 24, 544). IV, 730. 6) Di[Phenylhydrazid] d. l-Mannozuckersäure. Sm. 212-214° u. Zers.
 - (B. 20, 2714; Bl. 48, 721). IV, 731.
 - 7) Di[Phenylhydrazid] d. i-Mannozuckersäure. Sm. 220-225° (B. 24, 545). **— IV**, 731.
 - 8) Verbindung (aus d. 2-Amidobenzol-1-Carbonsäureamid u. Oxalsäuredimethylester). Sm. 80-90° (J. pr. [2] **43**, 231). — II, 1246. C 54,8 — H 5,6 — O 32,5 — N 7,1 — M. G. 394.
- $C_{18}H_{22}O_8N_2$ 1) Tetraäthylester d. 1,4-Diimido-1,4-Dihydrobenzol-2,3,5,6-Tetracarbonsäure. Sm. 161° (Am. 11, 5). — II, 2074.
- C₁₈H₂₂N₂Br₂ 1) ?-Dibrom-4,4'-Di Dimethylamido -3,3'-Dimethylbiphenyl. Sm. 1170 (B. 14, 2174). — IV, 981.
- 1) α -Aethyl- β -Propyl- $\alpha\beta$ -Diphenylthioharnstoff. Sm. 66,3° (B. 21, 103). C18H29N,S - II, 397. 2) α -[4-Methylphenyl]- β -[4-Isobutylphenyl] thioharnstoff. Sm. 137° (B.
 - 16, 2023). II, 558.
- 3) Benzylimidobenzylamidomethylpropylsulfid (B. 19, 2349). II, 529. C 80.3 - H 8.6 - O 5.9 - N 5.2 - M. G. 269. $C_{18}H_{23}ON$
 - 1) Methylphenylamidomethylencampher. Sm. 124° (A. 281, 360). III, 116.
 - 2) 4-Methylphenylamidomethylencampher. Sm. 188-1890 (A. 281, 359). — III, 116. C 72,7 — H 7,7 — O 5,4 — N 14,1 — M. G. 297.
- $C_{18}H_{23}ON_{3}$ 1) 4-[4-Isopropylbenzyl] nitrosamido-1-Dimethylamidobenzol. Sm. 870 (A. 245, 302). - IV, 587.
 - 2) β -Isoamylphenylamido- α -Phenylharnstoff. Sm. 220°. IV, 674.
- C 75.8 H 8.1 O 11.2 N 4.9 M. G. 285.C18H23O2N 1) Diphenyläther d. Di $[\gamma$ -Oxypropyl]amin. Sd. oberh. 300°. HCl (B.
 - 24, 2637). II, 653. 2) Di[4-Methylphenyläther] d. Di[β -Oxyäthyl]amin. Sm. 49-50°. HCl
 - (B. **24**, 195). **II**, 748. 3) Benzoat d. 1-Oximido-3-Isobutyl-5-Methyl-1,2,3,4-Tetrahydrobenzol. Sm. 138—140° (A. 288, 338).

C18 H24 ON4

 $C_{18}H_{23}O_2N$ 4) Benzylester d. Cyancampholsäure. Sm. 70-71° (A. eh. [6] 30, 515; [7] **2**, 386). — II, 1052. C 69,0 — H 7,3 — O 10,2 — N 13,4 — M. G. 313.

 $\mathbf{C}_{18}\mathbf{H}_{28}\mathbf{O}_{2}\mathbf{N}_{3}$

1) α-Amido-α α-Di[4-Dimethylamidophenyl]essigsäure. Sm. 1710 u. Zers. (B. 27, 3296). — II, 1465.

2) Amid d. α-Oxy-αα-Di[4-Dimethylamidophenyl]essigsäure.

bis 142° (B. 27, 3297). — II, 1697.

1) Di[4-Isopropylphenyl]phosphinsäure. Cu (A. 294, 52). — IV, 1677.
2) Di[2,4,5-Trimethylphenyl]phosphinsäure. Sm. 202—203°. NH₄ + 2H₂O, K + H₂O, Ba + 6H₂O, Pb, Co, Ni + 10H₂O, Cu + 10H₂O, Ag (A. 294, 25). — IV, 1679.

C 71,8 — H 7,6 — O 16,0 — N 4,6 — M. G. 301. $C_{18}H_{23}O_{2}P$

 $\mathbf{C}_{18}\mathbf{H}_{28}\mathbf{O}_{8}\mathbf{N}$

1) Propylphenyltetrahydroazindoncarbonsäure. Sm. 85°. Pb + H₂O (B. $\hat{\mathbf{29}}$, 818). — IV, $\hat{\mathbf{367}}$. C 60.5 — H 6.4 — O 13.4 — N 19.6 — M. G. 357.

 $\mathbf{C}_{18}\mathbf{H}_{23}\mathbf{O}_{3}\mathbf{N}_{5}$

1) Verbindung (aus Acetylcyanessigsäuremethylester u. Phenylhydrazin). Sm. 87° (C. 1895 [2] 83). C 68,2 — H 7,2 — O 20,2 — N 4,4 — M. G. 317. 1) Morphinmethyloxydhydrat + 5H₂O. Salze siehe (4. 88, 338; 222,

 $C_{18}H_{23}O_4N$

208; B. 13, 96; 30, 354). — III, 898.

2) α -Cocathylin. Fl. (2 iICl, PtCl₄), (HCl, AuCl₃) (B. 29, 2227). III, 873.

3) Methylester d. Phenylacetylecgonin. Fl. (2HCl, PtCl₄) (B. 21, 3337). **– III**, 869. 4) Aethylester d. Benzoylecgonin. Sm. 108-109°. (2HCl, PtCl₄) (B. 18,

2954; **21**, 48). — III, 867.

5) Aethylester d. d-Benzoylecgonin. Sm. 57°. $HCl + H_2O$ (B. 23, 986). **- III**, 867.

6) Propylester d. Cocaylbenzoxylessigsäure. Sm. 56-58°. HCl, HBr (B. 21, 3443). — III, 863. C 62,6 — H 6,6 — O 18,6 — N 12,2 — M. G. 345. 1) Diphenylhydrazon d. Glykosamin. Sm. 162° u. Zers. (B. 31, 2199).

 $\mathbf{C}_{18}\mathbf{H}_{23}\mathbf{O}_4\mathbf{N}_3$

1) Di[2-Isopropylphenyl]phosphorsäure. Ba $+ 6 H_2 O$ (G. 16, 130). ${}^{\bullet}C_{18}H_{28}O_{4}P$

 $C_{18}H_{23}O_5N$

 $C_{18}H_{28}O_5N_3$

II, 761. C 64,9 — H 6,9 — O 24,0 — N 4,2 — M. G. 333. 1) Anisyleocaïn. Fl. (HCl, AuCl₃) (B. 22, 132). — III, 870. C 59,8 — H 6,4 — O 22,2 — N 11,6 — M. G. 361. 1) d-Cocainharnstoff. Sm. 72°. HCl (B. 27, 1884). - C 61,9 — H 6,6 — O 27,5 — N 4,0 — M. G. 349. **– III**, 868.

 $\mathbf{C}_{18}\mathbf{H}_{23}\mathbf{O}_{6}\mathbf{N}$ 1) Aethylester d. Acetylhydrocotarninessigsäure. Sm. 1130 (B. 20,

2432). — III, *917*. C 59,2 - H'6,3 - O 30,7 - N 3,8 - M. G. 365. $\mathbf{C}_{18}\mathbf{H}_{23}\mathbf{O}_{7}\mathbf{N}$ 1) Verbindung (aus d. Trimethyläther d. 5-Amido-1,2,3-Trioxybenzol) (G.

27 [2] 356). 1) $P-Jod-\alpha\beta-Di[4-Dimethylamidophenyl]$ äthan. (2 HCl, $PtCl_4$), (HJ, J_2) (B.

 $\mathbf{C}_{18}\mathbf{H}_{23}\mathbf{N}_{2}\mathbf{J}$ 13, 2198). — IV, 978. 2) Jodäthylat d. 1,4-Diphenylhexahydro-1,4-Diazin. Sm. 100° (J. 1858,

353). - II, 344.

1) β -Isoamylphenylamido- α -Phenylthioharnstoff. Sm. 160° (A. 252, 285). $\mathbf{C}_{18}\mathbf{H}_{23}\mathbf{N}_{3}\mathbf{S}$ · IV, 680.

2) Dimethyldiäthylindaminsulfid. $(2 \text{HCl}, \text{ZnCl}_2 + 3 \text{H}_2\text{O})$ (A. 251, 84). · II, 801.

C 69,2 - H 7,7 - O 5,1 - N 18,0 - M. G. 312.

1) Amid d. α -Amido- α α -Di[4-Dimethylamidophenyl]essigsäure. Sm. 170° (B. **27**, 3295). — II, 1465. C 72,0 — H 8,0 — O 10,7

- N 9,3 — M. G. 300. $\mathbf{C}_{18}\mathbf{H}_{24}\mathbf{O}_{2}\mathbf{N}_{2}$

1) Napharin. Erweicht bei 65° (*J.* 1882, 1156; *B.* 16, 969). — III, 894. 2) Menispermin. Sm. 120°. H₂SO₄ (*A.* 10, 198). — III, 893. 3) Paramenispermin. Sm. 250° (*A.* 10, 200). — III, 894.

4) $\alpha \alpha$ -Di[4-Dimethylamido-2-Oxyphenyl]äthan. Sm. 167° (140°) (B. 27, 2895, 3304; J. pr. [2] **54**, 228).

5) Diäthyläther d. $\alpha\beta$ -Di[4-Oxyphenylamido]äthan. Sm. 98° (B. 23, 1979). — II, 717.

6) $\delta \varepsilon$ -Dioxy- $\delta \varepsilon$ -Di[2-Pyridyl]oktan. Sm. 146° (B. 24, 2538). — IV, 985.

 $\mathbf{C}_{18}\mathbf{H}_{24}\mathbf{O}_{2}\mathbf{N}_{2}$ 7) 1-[lpha-Phenylhydrazonamyl]-1,2,3,4-Tetrahydrobenzol-6-Carbonsäure (Phenylhydrazon d. Sedanonsäure). Sm. 130-131° (B. 30, 500, 1423). 8) Dipiperidid d. Benzol-1,2-Dicarbonsäure (Phtalylpiperidin). Fl. (A.

227, 197). — IV, 16.
9) Verbindung (aus Aceton u. 3,3'-Dihydrazido-4,4'-Dioxybiphenyl). Sm. 200° (B. 21, 3333). - II, 989.

C 60,7 - H 6,7 - O 9,0 - N 23,6 - M. G. 356. $C_{18}H_{24}O_2N_6$

1) Diacetylhexaamidobitolyl. Sm. 196°. 2HCl+2H₂O, Pikrat (B. 21, 2409). — IV, *1332*. C 68,4 — H 7,6 —

 $C_{18}H_{24}O_3N_2$ - O 15,2 — N 8,8 — M. G. 316.

 $C_{18}H_{24}O_4N_2$

1) Verbindung (aus Blut) (B. 25 [2] 476). C 65,0 — H 7,2 — O 19,3 — N 8,4 — M. G. 332. 1) Dipiperidid d. Resorcindikohlensäure. Sm. 122° (A. 300, 153). C 60,0 — H 6,7 — O 17,8 — N 15,5 — M. G. 360. $C_{18}H_{24}O_4N_4$

1) Verbindung (aus Hexamethylenamin u. 1,2-Dioxybenzol). Zers. bei 140° (A. 272, 281). — II, 909.

C₁₈H₂₄O₄Br₂ 1) Dibromid d. Phtalsäuremonocitronellolester. Al (Bl. [3] 19, 87).

C 62,1 - H 6,9 - O 23,0 - N 8,0 - M. G. 348. $C_{18}H_{24}O_5N_2$

1) 2,6-Tetracetyldiamido-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 216

 $C_{18}H_{24}O_6N_2$

bis 220° (G. 20, 425). — II, 773. C 59,3 — H 6,6 — O 26,4 — N 7,7 — M. G. 364. I) Hydrobenzursäure (A. 134, 303, 310). — II, 1189. C 54,5 — H 6,1 — O 32,3 — N 7,1 — M. G. 396. $C_{18}H_{24}O_8N_2$

1) Tetraäthylester d. 3,6-Diamidobenzol-1,2,4,5-Tetracarbonsäure. Sm. 134° (A. 237, 25; Soc. 53, 444). — II, 2074.

1) Diäthyldibenzylammoniumjodid (B. 10, 314). — II, 520. $\mathbf{C}_{18}\mathbf{H}_{24}\mathbf{NJ}$

C₁₈H₂₄N₂Hg 1) Quecksilberdi [6-Dimethylamido-3-Methylphenyl]. Sm. 60° (G. 28 [2] 105). — IV, 1711.

 $C_{18}H_{24}ClP$ 1) Diäthyldibenzylphosphoniumchlorid. 2 + PtCl₄ (Soc. 53, 724). —

C 79,7 — H 9,2 — O 5,9 — N 5,2 — M. G. 271. $\mathbf{C}_{18}\mathbf{H}_{25}\mathbf{ON}$

1) Methyläther d. 1-2-Oxybenzylidenfenchylamin. Sm. 56° (A. 276, 321). — IV, 59.

2) Methyläther d. 1-4-Oxybenzylidenfenchylamin. Sm. 54-55° (A. 276, 321). — IV, 59.

3) Acetylphenylfenchylamin. Sd. 190—193°₂₄ (Soc. 73, 277).

C 72,2 — H 8,4 — O 5,3 — N 14,0 — M. G. 299.

1) 2-Keto-3,3-Di[1-Piperidyl]-2,3-Dihydroindol (Dipiperidylisatin) (B. $\mathbf{C}_{18}\mathbf{H}_{25}\mathbf{ON}_{3}$

24, 1367). — **IV**, *16*. C 65,3 — H 7,5 — O 14,5 — N 12,7 — M. G. 331. $C_{18}H_{25}O_3N_3$

1) o-Toluolazooxycamphocarbamidsäure. Na, Ag. — IV, 1473.

C 64,5 - H 7,4 - O 23,9 - N 4,2 - M. G. 335. $C_{18}H_{25}O_5N$ 1) 4-Methylphenylmonamid d. γ -Acetoxyl- $\beta\delta$ -Dimethylpentan- $\beta\delta$ -Dicarbonsäure. Sm. 157—159° (C. 1898 [2] 885).

C 61,6 - H 7,1 - O 27,3 - N 4,0 - M. G. 351. $C_{18}H_{25}O_6N$

1) Triäthylester d. β -Phenylamidopropan- $\alpha\alpha\gamma$ -Tricarbonsäure. Fl. HCl (J. pr. [2] 58, 414).

1) Tetrachlorhydrocarotin (A. 117, 211). — III, 626. C₁₈H₂₆OCl₄ C 71.5 - H 8.6 - O 10.6 - N 9.3 - M. G. 302. $\mathbf{C}_{18}\mathbf{H}_{26}\mathbf{O}_{2}\mathbf{N}_{2}$

1) 2,5-Dimethylhexahydro-1,4-Diazin + 2 Molec. Phenol. Sm. 86° (Bl. [3] **19**, 619).

2) Aethylester d. ζ-Phenylhydrazon-β-Methyl-β-Okten-β-Carbonsäure.

Sm. 93°; Sd. 235—240°₁₅ (Bl. [3] 17, 751). 1) Senecionin = $(C_{18}H_{26}O_6N)_x$ (Bl. [3] 13, 942). — III, 931. $C_{18}H_{26}O_6N$

C 54,2 — H 6,6 — O 32,2 — N 7,0 — M. G. 398. $C_{18}H_{26}O_8N_2$ 1) Tetraäthylester d. 3,6-Diamido-?-Dihydrobenzol-1,2,4,5-Tetracarbonsäure. Sm. 213° (A. 258, 274). — II, 2070.

 $\mathbf{C}_{18}\mathbf{H}_{26}\mathbf{O}_{8}\mathbf{Cl}_{2}$ 1) Diacetat d. Dichlorhexaoxydihydrobenzoltetraäthyläther (Dichlorhexaoxydihydrobenzoltetra diäthoxychinondiäthyldiacetylacetal). Sm. 120—121° (Am. 20, 422).

 $\mathbf{C}_{18}\mathbf{H}_{26}\mathbf{N}_{2}\mathbf{Cl}_{2}$ 1) Aethylendiäthyldiphenyldiammoniumchlorid. $2 + \text{PtCl}_{4}$ (J. 1859, 389). — II, *344*.

2) Tetramethyläthylendiphenyldiammoniumehlorid.2+3HgCl2,+PtCl4 (A. **224**, 348). — II, 343.

C₁₈H₂₆N₂Br₂ 1) Tetramethyläthylendiphenyldiammoniumbromid (A. 224, 346). — II, 344.

 $C_{18}H_{26}N_2J_2$ 1) Aethylendiäthyldiphenyldiammoniumjodid. Sm. 70° (J. 1859, 389). **- II**, 344.

2) Tetramethyläthylendiphenyldiammoniumjodid (A. 224, 350). — II, 344. 3) Dijodmethylat d. 2,4'-Di[Dimethylamido] biphenyl. Sm. 1966 (B.

22, 3017). — IV, 959. $\mathbf{C}_{18}\mathbf{H}_{26}\mathbf{N}_{4}\mathbf{J}_{2} \quad \text{1) Di[Jodmethylat] d. 3,3'-Di[Dimethylamido]azobenzol.} \quad \text{Sm. 230}^{\circ} \text{ u.}$ Zers. (B. 30, 2939). — IV, 1361.

 $C_{18}H_{26}Br_{2}P_{2}$ 1) Tetramethyläthylendiphenyldiphosphoniumbromid. Sm. oberh. 300° (B. 15, 199). — IV, 1656.

C₁₈H₂₆Br₆P₂ 1) Tetramethyläthylendiphenyldiphosphoniumhexabromid. Sm. 171° (B. 15, 200). — IV, 1656.

1) Chlormethylpentaäthylphenylketon. Sm. 104° (B. 30, 579). $\mathbf{C}_{18}\mathbf{H}_{27}\mathbf{OCl}$ 1) Brommethylpentaäthylphenylketon. Sm. 86° (B. 30, 1714). $\mathbf{C}_{18}\mathbf{H}_{27}\mathbf{OBr}$

 $\mathbf{C_{18}^{1}H_{27}^{2}OBr_{8}}$ 1) Tribromhydrocarotin (A. 117, 212). — III, 626. $\mathbf{C_{18}H_{27}O_{2}N}$ C 74,7 — H 9,3 — O 11,1 — N 4,8 — M. G. 289.

1) Menthylester d. 2-Methylphenylamidoameisensäure (Ph. Ch. 14, 397). **– III**, 467.

2) Menthylester d. 3-Methylphenylamidoameisensäure (Ph. Ch. 14, 397). **— III**, 467.

3) Menthylester d. 4-Methylphenylamidoameisensäure (Ph. Ch. 14, 397).

C 67.3 - H 8.4 - O 19.9 - N 4.4 - M. G. 321. $\mathbf{C}_{18}\mathbf{H}_{27}\mathbf{O}_4\mathbf{N}$

1) Verbindung (Säure aus Cholesterin). K, Cu, Ag (M. 15, 110). — II, 1074. C₁₈H₂₇O₇Br 1) Hexaglycerinbromhydrin (A. 101, 73). — I, 315.

 $C_{18}H_{27}O_{10}Cl$ 1) Pentaäthylester d. α -Chlorpropan- $\alpha\alpha\beta\beta\gamma$ -Pentacarbonsäure (B. 21, 2115). — I, 870.

C 44,9 - H 5,6 - O 46,6 - N 2,9 - M. G. 481. $\mathbf{C}_{18}\mathbf{H}_{27}\mathbf{O}_{14}\mathbf{N}$

1) Chondroïtin (B. 25 [2] 473). — IV, 1628. C 71,1 — H 9,2 — O 10,5 — N 9,2 — M. G. 304. $C_{18}H_{28}O_2N_2$

1) Tetramethyläthylendiphenyldiammoniumhydrat. Salze siehe (A. 224, 346). — II, *343*.

 $C_{18}H_{28}O_3N$ $C_{18}H_{28}O_8N_2$

Capsaïcin. Sm. 63—63,5° (C. 1899 [1] 293).
 C 54,0 — H 7,0 — O 32,0 — N 7,0 — M. G. 400.
 Tetraäthylester d. αβ-Aethylendi[amidoäthen-αα-Dicarbonsäure].
 Sm. 126° (B. 28, 823).

C 50,4 - H 6,5 - O 29,9 - N 13,1 - M. G. 428. $C_{18}H_{28}O_8N_4$

1) Orylsäure. Zn, Cu, Ag₃ + 3 H₂O (*H*. 22, 260). — IV, 1641. C 50,0 — H 6,5 — O 37,0 — N 6,5 — M. G. 432. $\mathbf{C}_{18}\mathbf{H}_{28}\mathbf{O}_{10}\mathbf{N}_{2}$

1) 1,2-Diglykodiamidobenzol $+ 2 H_2 O$ (B. 20, 2206). — IV, 565.

2) Phenylhydrazon d. Melibiose. Sm. 145° (B. 23, 1439). — IV, 794. 3) Phenylhydrazon d. Milchzucker (B. 20, 2575). — IV, 794.

 $\mathbf{C}_{18}\mathbf{H}_{28}\mathbf{NJ}$ 1) Jodnethylat d. Benzylbornylamin (A. 269, 352). — IV, 56. $\mathbf{C}_{18}\mathbf{H}_{28}\mathbf{N}_4\mathbf{J}_2$ 1) Di[Jodmethylat] d. 4,4'-Diamido-2,2'-[Dimethylamido]biphenyl (B.

30, 2942). — IV, 1275. C 78,5 — H 10,5 — O 5,8 — N 5,1 — M. G. 275. 1) β -Benzoylamidoundekan. Sm. 84° (G. 24 [2] 279). $\mathbf{C}_{18}\mathbf{H}_{29}\mathbf{ON}$

2) Phenylamid d. Laurinsäure (J. pr. [2] 52, 60).

3) Isoundekylamid d. Benzolcarbonsäure. Sm. 840 (G. 24 [2] 279). — II, 1161.

 $C_{18}H_{29}OJ$ 1) Jodhydrocarotin (A. 117, 213).

1) Verbindung (aus Benzylaminrhodanid). Sm. 164° (161—162°) (Soc. 59, 552; B. 24, 2727). — II, 527. C 70,6 — H 9,8 — O 10,4 — N 9,1 — M. G. 306. C18H29N8S

 $\mathbf{C}_{18}\mathbf{H}_{30}\mathbf{O}_{2}\mathbf{N}_{2}$

1) s- $\beta\beta$ -Tetraäthyldiamidoisopropylester d. Benzolcarbonsäure. (2 HCl, PtCl₄) (B. 17, 511). — II, 1140.

2) $\beta \gamma$ -Tetraäthyldiamido-norm. Propylester d. Benzolcarbonsäure. (2HCl, PtCl₄) (B. 17, 511). — II, 1140. C₁₈H₃₀O₂Br₆ 1) Linolensäurehexabromid. Sm. 177° (M. 8, 268). — I, 537.

 $C_{18}H_{80}O_6Cl_2$ 1) Diäthyläther d. 3, 6 - Dichlor-2, 5-Dioxy-1, 4-Benzochinontetraäthylacetal. Sm. 101—102° (Am. 17, 633). — III, 351. C 46,4 — H 6,4 — O 41,2 — N 6,0 — M. G. 466. 1) Colloïdin (Bl. 22, 100). — IV, 1631.

 $\mathbf{C_{18}H_{30}O_{12}N_{2}}$

 Stärkeschwefelsäure (A. 55, 13). — I, 1087.
 C 73,7 — H 10,6 — O 10,9 — N 4,8 — M. G. 293. C₁₈H₃₀O₁₈S $C_{18}H_{31}O_2N$

1) Hydroxylaminderivat d. Desoxyphoron. Sm. 133-1340 (A. 296, 322).

C₁₈H₃₁O₂N₅ C 62,0 — H 8,9 — O 9,1 — N 20,0 — M. G. 349.

1) Diamylamidokaffeïn. Sm. 162° (B. 31, 1140). C 54,4 — H 7,8 — O 20,1 — N 17,6 — M. G. 397. $C_{18}H_{31}O_5N_5$

1) Amid d. Oxyhexinsäure. Sm. 214-215° (A. ch. [5] 20, 490). 2) Amid d. Isooxyhexinsäure. Sm. 240° u. Zers. (Å. ch. [5] 20, 492).

 α-Phenylamido-β-Isoundekylthioharnstoff. α-Modif. Sm. 80°; β-Modif. Sm. 109° (G. 24 [2] 287). — IV, 678.
 C 74,0 — H 10,9 — O 5,5 — N 9,6 — M. G. 292. $\mathbf{C}_{18}\mathbf{H}_{31}\mathbf{N}_{3}\mathbf{S}$

 $\mathbf{C}_{18}\mathbf{H}_{32}\mathbf{ON}_{2}$

1) 6-Oxy-5-Isobutyl-2,4-Diisoamyl-1,3-Diazin. (2 HCl, PtCl₄) (J. pr. [2]) 37, 410). — IV, 1135.

 $C_{18}H_{32}O_2Cl_4$ 1) Tetrachlorstearinsäure. Sm. 124,5—125° (C. 1896 [1] 953).

- I, 536.

5) Bromverbindung (d. Säure $C_{18}H_{32}O_2$ aus Ricinelaïdinsäure). Sm. 80 bis 81° (M. 15, 311).

1) Stearolsäuredijodid. Sm. 50-51°. Ag (B. 24, 4116). - I, 527. $\mathbf{C}_{18}\mathbf{H}_{32}\mathbf{O}_{2}\mathbf{J}_{2}$

 $C_{18}H_{32}O_3Br_2$ 1) $\varkappa\lambda$ -Dibrom- ϑ -Ketoheptadekan- α -Carbonsäure (Dibromketostearinsäure). Fl. (B. 28, 2249).

2) Dibromricinolsäure. Fl. (Z. 1867, 549). — I, 613.

 $C_{18}H_{32}O_3Br_4$ 1) Ricinstearolsäuretetrabromid (Z. 1867, 549). — I, 580. $\mathbf{C}_{18}\mathbf{H}_{32}\mathbf{O}_4\mathbf{N}_2$ C 63.5 - H 9.4 - O 18.8 - N 8.2 - M. G. 340.

1) Diäthylester d. Aethylendi [β -Amido- α -Aethylerotonsäure]. Sm. 106

bis 107° (Soc. 63, 1310).

C₁₈H₃₂O₈N₂

C 53,5 — H 7,9 — O 31,7 — N 6,9 — M. G. 404.

1) Rhamnodiazin. Sm. 186° (B. 22, 304, 3247). — I, 290.

C₁₈H₃₃O₂Cl 1) Chlorölsäure. Sm. 12° (C. 1896 [1] 953).

2) Chlorelaïdinsäure. Sm. 26—27° (C. 1896 [1] 953).

C₁₈H₃₉O₂Br 1) Bromölsäure (A. 140, 47). — I, 526.

C₁₈H₃₉O₂Br 1) Tribromstearinsäure. Fl (4, 140, 59) — I, 489

 $C_{18}H_{33}O_{2}Br_{3}$ 1) Tribromstearinsäure. Fl. (A. 140, 59). — I, 489.

 $C_{18}H_{33}O_3N_3$

1) Jodstearidensäure (B. 9, 1917). — I, 527. C 63,7 — H 9,7 — O 14,2 — N 12,4 — M. G. 339. $\mathbf{C}_{18}\mathbf{H}_{\mathbf{33}}\mathbf{O}_{2}\mathbf{J}$

1) Triisoamylester d. norm. Cyanursäure. Sd. oberh. 360° (J. pr. [2] 33, 131). — I, 1271.

2) Triisoamylester d. Isocyanursäure (B. 12, 1330).

 $C_{18}H_{33}O_3Cl$ 1) λ -Chlor- θ -Ketoheptadekan- α -Carbonsäure (Chlorketostearinsäure). Sm.

64° (B. 28, 2248; 29, 806). C₁₈H₃₈O₈Br 1) Bromricinolsäure. Fl. NH₄, K (Z. 1867, 546). — I, 613. 2) Bromricinelaïdinsäure. Fl. (Z. 1867, 549). — I, 613.

3) λ-Brom-θ-Ketoheptadekan-α-Carbonsäure (Bromketostearinsäure). Sm. 55° (B. 29, 806).

 $C_{18}H_{33}O_3Br_3$ 1) Bromricinolsäuredibromid (Z. 1866, 545). — I, 580. C 66,0 - H 10,1 - O 19,6 - N 4,3 - M. G. 327. $C_{18}H_{33}O_4N$

1) $\theta[\text{oder }\iota]$ -Oximido- $\iota[\text{oder }\theta]$ -Ketoheptadekan- α -Carbonsäure(Oximidoketostearinsäure). Sm. 76-81° (B. 29, 812).

2) α-Nonanoylamido-α-Ketooktan-θ-Carbonsäure (Pelargylamidoazelaïnsäure) (B. 29, 813). C 47,3 — H 7,2 — O 35,0 — N 10,5 — M. G. 457.

 $C_{18}H_{38}O_{10}N_3$

1) Verbindung (aus Blut) (B. 25 [2] 476). 1) Triisoamylester d. Trithiocyanursäure. Fl. (J. pr. [2] 33, 120). -C18 H83 N3 S3 I, 1285.

 $\mathbf{C}_{18}\mathbf{H}_{34}\mathbf{O}_{2}\mathbf{Cl}_{2}$ 1) Dichlorstearinsäure (aus Oelsäure). Sm. 36-37° (C. 1896 [1] 953) 2) Dichlorstearinsäure (aus Elaïdinsäure). Sm. 49—49,5° (C. 1896 [1] 953).
3) Dichlorstearinsäure. Sm. 32° (B. 23, 2531). — 1, 476.
C₁₈H₃₄O₂Br₂ 1) Dibromstearinsäure (aus Elaïdinsäure). Sm. 27°. Ba (J. 1864, 341;

A. 140, 61). — I, 489. 2) Dibromstearinsäure (aus Oelsäure) (A. 140, 42). - I, 488.

C₁₈H₃₄O₂Br₂ 3) Dibromstearinsäure (aus Isoölsäure). Fl. (*J. pr.* [2] 37, 275; [2] 50, 64). — I, 489.

 ${\bf C_{18}H_{34}O_3Br_2}$ 1) Ricinölsäurebromid. Fl. (Z. 1867, 545). — I, 580. 2) Ricinelaidinsäurebromid. Fl. (Z. 1867, 548). — I, 580. ${\bf C_{18}H_{34}O_4N_2}$ C 63,2 — H 9,9 — O 8,2 — N 18,7 — M. G. 342.

 $\mathbf{C}_{18}\mathbf{H}_{34}\mathbf{O}_{4}\mathbf{N}_{2}$ 1) 9 1-Dioximidostearinsaure. Sm. 153-1540 (B. 28, 277).

C18H84O5S $\mathbf{C}_{18}\mathbf{H}_{35}\mathbf{ON}$

1) Ricinoschwefelsäure. Fl. (Bl. [3] 11, 281). C 76,8 — H 12,4 — O 5,7 — N 5,0 — M. G. 281. 1) Anhydroamidostearinsäure. — IV, 1587. 2) Amid Oelsäure. Sm. 75° (78—81°) (J. 1855, 532; 1859, 368; B. 31, 2349). — I, 1250. 3) Amid d. Elaïdinsäure. Sm. 92—94° (J. 1855, 532; B. 31, 2349). —

I, 1250.

C₁₈H₈₅O₄N

 $\mathbf{C}_{18}\mathbf{H}_{37}\mathbf{NS}_{2}$

1) Chlorid d. Stearinsäure. Sm. 23°; Sd. 215° u. Zers. (B. 17, 1380). C18H85OCl Chlorid d. Stearinsaure. Sm. 23; Su. 213 15 d. Zers. (B. 17, 1360).

— I, 460.
C 72,7 — H 11,8 — O 10,8 — N 4,7 — M. G. 297.
Amid d. Ricinölsäure. Sm. 66° (A. ch. [3] 44, 96). — I, 1356.
Amid d. Ricinelaïdinsäure. Sm. 91—92° (J. 1855, 533). — I, 1356.
Chlorstearinsäure. Sm. 38° (B. 23, 2532). — I, 476.
Cetyläther d. βββ-Trichlor-αα-Oxyäthan (Chloralcetylalkoholat) (A. 157, 244). — I, 933.
Carronstearinsäure. Sm. 60° (41°) (J. 1863, 334; B. 23, 2523; 24

 $C_{18}H_{35}O_{2}N$

C18H35O2Cl

 $\mathbf{C}_{18}\mathbf{H}_{35}\mathbf{O}_{2}\mathbf{Cl}_{3}$

 $C_{18}H_{85}O_{2}Br$ 1) α -Bromstearinsäure. Sm. 60° (41°) (J. 1863, 334; B. 23, 2523; 24, 2390; **25**, 482). — I, 488. 2) Aethylester d. α-Brompalmitinsäure. Sd. 241,5% (B. 24, 939). —

I, 488.

 $\mathbf{C}_{18}\mathbf{H}_{35}\mathbf{O}_{2}\mathbf{J}$

1) α -Jodstearinsäure. Fl. (J. pr. [2] 37, 276). — I, 491. 2) β -Jodstearinsäure. Fl. (J. pr. [2] 34, 308; [2] 35, 384; J. r. 18, 45; M. 17, 310). — I, 492.

3) isom. Jodstearinsäure (J. r. 21, 212). — I, 492. C 69,0 — H 11,2 — O 15,3 — N 4,4 — M. G. 313.

 $C_{18}H_{35}O_{8}N$ 1) θ-Oximidoheptadekan-α-Carbonsäure (Oximidostearinsäure). Sm. 75 bis 85° (B. 29, 808).

2) ι-Oximidoheptadekan-α-Carbonsäure (B. 27, 174).
 C 65,7 — H 10,6 — O 19,5 — N 4,2 — M. G. 329.

1) θ-Oximido-λ-Oxyheptadekan-α-Carbonsäure (Ketoximoxystearinsäure). Fl. (B. 27, 3125).

2) Nitrostearinsäure. Na₂, K₂, Sr, Cu (J. pr. [2] 43, 161; siehe auch Bl. 24, 449; J. pr. [2] 20, 161). — I, 498.

C18 H35 O6 P 1) Diacetat d. Dioxydiönanthylunterphosphorige Säure. Sm. 940 (A. ch. [6] **23**, 312). — **I**, 1505.

 $C_{18}H_{35}NS$ $C_{18}H_{36}O_{2}N_{2}$

1) Heptadekylsenföl. Sm. 32° (B. 21, 2490). — I, 1282. C 69,2 — H 11,5 — O 10,3 — N 9,0 — M. G. 312. 1) sym. Oktylnonoxylharnstoff. Sm. 97° (B. 15, 760). — I, 1304. 2) Sebacindi[imidoisobutyläther]. 2HCl (Sm. 153° u. Zers.) (B. 26, 2841). C 65,9 — H 11,0 — O 14,6 — N 8,5 — M. G. 328. $\mathbf{C}_{18}\mathbf{H}_{36}\mathbf{O}_{3}\mathbf{N}_{2}$

1) Cetylester d. Harnstoffcarbonsäure (C. d. Allophansäure). Sm. 70° (A. 244, 41). - I, 1306.

 $C_{18}H_{36}O_5S$ 1) Oxystearoschwefelsäure (Bl. [3] 11, 285).

 $C_{18}H_{36}O_6S$ 1) ?-Oxyheptadekan-α-Carbonsäure-α-Sulfonsäure (Sulfooxystearinsäure).

C18H36O7S C₁₈H₃₇ON

Na₂, K₂, Ba, Cu (*J. pr.* [2] 37, 74; *M.* 8, 212; *J. r.* 18, 90). — I, 904.

1) Dioxystearoschwefelsäure. Fl. (*Bl.* [3] 11, 282).

C 76,3 — H 13,1 — O 5,6 — N 4,9 — M. G. 283.

1) γ-Oximidooktadekan. Sm. 44° (*Bl.* [3] 15, 766).

2) Myristinimidoisobutyläther. HCl (Sm. 69—70°) (*B.* 26, 2841).

3) Amid d. Stearinsäure. Sm. 108,5—109° (107,5°); Sd. 250—251°₁₂ (168 bis 169°₀) (*J.* 1859, 367; *B.* 15, 984, 1730; 21, 2186; 24, 2781; 26, 2840; 29, 1324; 31, 2349). — I 1249 29, 1324; 31, 2349). — I, 1249. C 72,2 — H 12,4 — O 10,7 — N 4,7 — M. G. 299. 1) Amidostearinsäure. Sm. 63°. — IV, 1587. 2) α-Amidostearinsäure. Sm. 221—222° (B. 24, 2395). — I, 1205.

C₁₈H₃₇O₂N

1) Hexadekylamidodithioameisensäure. Septedekylaminsalz (B. 21, 2489).

- I, 1262. C 72,5 - H 12,7 - O 5,4 - N 9,4 - M. G. 298. $\mathbf{C}_{18}\mathbf{H}_{38}\mathbf{ON}_{2}$ 1) Heptadekylharnstoff. Sm. 109° (B. 21, 2491). — I, 1300.

- Stearinamidoxim. Sm. 106—106,5° (B. 26, 2845).
 Heptadekylthioharnstoff. Sm. 110—111° (B. 21, 2490). I, 1321.
 Verbindung (aus Schwefelkohlenstoff u. Tetraisobutyldiamidomethan). Sm. 58° (J. pr. [2] 36, 124). I, 1151.
 C 40,9 H 7,6 O 33,3 N 18,2 M. G. 528. $\mathbf{C}_{18}\mathbf{H}_{38}\mathbf{ON}_{2} \\ \mathbf{C}_{18}\mathbf{H}_{38}\mathbf{N}_{2}\mathbf{S}$ C₁₈H₃₈N₂S₂
- $\mathbf{C}_{18}\mathbf{H}_{40}\mathbf{O}_{11}\mathbf{N}_{6}$
- Calycanthin (Am. 11, 561). III, 621.
 Siliciumtripropyloxyd. Sd. 280—290° (A. 222, 369). I, 1520. C₁₈H₄₂OSi₂
- 1) Hexapropylester d. Dikieselsäure. Sd. 195% (G. 27 [2] 445; Ph. Ch. C₁₈H₄₉O₇Si₉ **25**, 358).
- $\mathbf{C}_{18}\mathbf{H}_{49}\mathbf{N}_{4}\mathbf{Cl}_{4}$ 1) Pentaäthylentetraäthyltetrammoniumchlorid. 2 + PtCl₄ (J. 1861, 521). — I, 1166.
- $C_{18}H_{42}N_4Br_4$ 1) Pentaäthylentetraäthyltetrammoniumbromid (J. 1861, 521). I, 1166.
- $\begin{array}{c} \mathbf{C_{18}H_{42}Cl_2As_2} \mathbf{1} \\ \mathbf{H_{22}Cl_2As_2} \mathbf{1} \\ \mathbf{1} \\ \mathbf{H_{22}Cl_2As_2} \mathbf{1} \\ \mathbf{1} \\ \mathbf{H_{22}Cl_2As_2} \mathbf{1} \\ \mathbf{1} \\ \mathbf{H_{22}Cl_2As_2} \mathbf{1} \\ \mathbf{1} \\ \mathbf{H_{22}Cl_2As_2} \mathbf{1} \\$
- (B. 31, 597).
 - 2) Hexaisopropyldiarsoniumdijodid. Sm. 150° u. Zers. + 2HgJ, (B. 31, 597).
- C₁₈H₄₄O₂As₂ 1) Hexapropyldiarsoniumdihydrat. Salze, siehe diese (B. 31, 597).

C₁₈-Gruppe mit vier Elementen.

- $C_{18}H_2O_{19}N_3Br_{10}$ 1) 1, 2, 3, 5 Tetrabrom 4, 6-Dinitrobenzol + 2 Molec. s-Tribromdi-
- nitrobenzol. Sm. 165° (B. 21, 1707). II, 89. C₁₈H₄O₆Cl₂Br₁₁ 1) Trichlorxanthogallol. Sm. 104° (A. 245, 343). II, 1014.
- $\mathbf{C}_{18}\mathbf{H}_{6}\mathbf{O}_{4}\mathbf{N}_{4}\mathbf{Br}_{6}$ 1) Hexabromdinitrodiphenylazophenylen (M. 8, 481). — II, 338.
- $\mathbf{C}_{18}\mathbf{H}_7\mathbf{O_4N}_2\mathbf{Br}_3$
- $\mathbf{C}_{18}\mathbf{H}_{8}\mathbf{O}_{7}\mathbf{N}_{3}\mathbf{Br}_{11}$
- 1) Trienforkanthoganor. Sm. 104 (A. 245, 543). II, 1012.

 1) Hexabromdinitrodiphenylazophenylen (M. 8, 481). II, 338.

 1) Tribromdinitrochrysen (B. 12, 1894). II, 292.

 1) Bromdiehromazin (B. 10, 1138). II, 725.

 1) 2-Nitro-1-[4-Chlor-P-Nitrophenylazo]-4-[2,4,6-Nitrosodinitrophenylazo] benzol? Sm. 189—190° (J. pr. [2] 43, 495). IV, 1371.

 1) 2-Nitro-1-[3-Chlor-P-Nitrophenylazo]-4-[2,4,6-Trinitrophenylazo] benzol? Zers. bei 157° (J. pr. [2] 44, 464). IV, 1371.

 1) Monacetat d. Verb. C₁₀H₁O₃N₃Cl₃ (A. 286, 55). IV, 1059.

 1) 2-Nitroso-1-[4-Chlorphenylazo]-4-[2,4,6-Dinitrosonitrophenylazo] benzol? Zers. bei 146—147° (J. pr. [2] 43, 494). IV, 1371.

 1) 2-Nitroso-1-[3-Chlorphenylazo]-4-[2,4,6-Nitrosodinitrophenylazo] benzol? Sm. 202—203° u. Zers. (J. pr. [2] 43, 493). IV, 1371.

 2) 2-Nitro-1-[4-Chlorphenylazo]-4-[2,4,6-Nitrosodinitrophenylazo] benzol? Sm. 217—218° u. Zers. (J. pr. [2] 43, 494). IV, 1371.

 1) 2-Nitro-1-[3-Chlorphenylazo]-4-[2,4,6-Trinitrophenylazo] benzol? Sm. 217—218° u. Zers. (J. pr. [2] 43, 494). IV, 1371.

 1) 2-Nitro-1-[3-Chlorphenylazo]-4-[2,4,6-Trinitrophenylazo] benzol? Zers. bei 91° (J. pr. [2] 44, 464). IV, 1371.

 1) Verbindung (aus d. Nitril d. Diphenylketipinsäure). Sm. 161—162° (A. 282, 59). II, 2032.

 1) Chloraposafranon (B. 31, 302). IV, 1001. $\mathbf{C}_{18}\mathbf{H}_{8}\mathbf{O}_{9}\mathbf{N}_{9}\mathbf{C}\mathbf{1}$
- $\mathbf{C}_{18}\mathbf{H}_{8}\mathbf{O}_{10}\mathbf{N}_{9}\mathbf{Cl}$
- $C_{18}H_9O_4N_2Cl_3$
- $\mathbf{C}_{18}\mathbf{H}_{9}\mathbf{O}_{5}\mathbf{N}_{8}\mathbf{C}\mathbf{I}$
- C₁₈H₉O₆N₈Cl
- $\mathbf{C}_{18}\mathbf{H}_{9}\mathbf{O}_{7}\mathbf{N}_{8}\mathbf{C}\mathbf{1}$
- C₁₈H₉O₈N₈Cl
- $\mathbf{C}_{18}\mathbf{H}_{10}\mathbf{O}_{2}\mathbf{NCl}$
- C₁₈H₁₁ON₂Cl
- Chloraposafranon (B. 31, 302). IV, 1001.
 Chloroxyphenylphenazon. Sm. 270—272° u. Zers. (B. 24, 589). $\mathbf{C}_{18}\mathbf{H}_{11}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{Cl}$ IV, 1004. 1) 1-[1,2-Phtalyl]amidonaphtalin-4-Sulfonsäure. K + 3 H₂O (A. 248,
- C18H11O5NS 157). — II, 1806.
- 1) Diphenyläther d. ?-Brom-4, 6-Dinitro-1, 3-Dioxybenzol. Sm. 1650 $\mathbf{C}_{18}\mathbf{H}_{11}\mathbf{O}_{6}\mathbf{N}_{2}\mathbf{Br}$ (Am. 13, 178). — II, 927.
- C18H11O7N8C1
- (Am. 13, 178). 11, 927.

 3'-[3-Chlorphenyl]hydrazido-2, 4, 6, 4'-Nitrosotrinitro-s-Diphenylhydrazin. Zers. bei 169—170° (J. pr. [2] 44, 462). IV, 1500.

 2. 4-[4-Chlorphenyl]hydrazido-2, 2', 4', 6'-Nitrosotrinitroazobenzol. Sm. 110—112° u. Zers. (J. pr. [2] 43, 493). IV, 1359.

 1. 3'-[3-Chlorphenyl]hydrazido-2, 4, 6, 4'-Tetranitro-s-Diphenylhydrazin. Zers. bei 205—206° (J. pr. [2] 44, 463). IV, 1500.

 2. 4-[4-Chlorphenyl]hydrazido-2, 2', 4', 6'-Tetranitroazobenzol. Zers. bei 117—119° (J. pr. [2] 43, 493). IV, 1359 $C_{18}H_{11}O_8N_8C1$
 - bei 117—119 (*J. pr.* [2] 43, 493). **IV**, 1359. 1) **10-Phenyloxydhydrat d. 2,8-Dichlor-5,10-Naphtdiazin** (Dichlor-
- C18H19ON,Cl2 phenylphenazoniumhydrat). Chlorid + AuCl₃, Nitrat (B. 31, 301). -IV, 1001.

C18 H12 ON2 S

1) Carbonylphenyl-β-Naphtylpseudothioharnstoff. Sm. 1170 (B. 25, 1467). — II, 619.

2) 2-Thiocarbonyl-5-Phenyl-3-[1-Naphtyl]-2,3-Dihydro-1,3,4-Oxdiazol. Sm. 164° (B. 24, 4186). — IV, 927.

3) Benzoyl-1-Naphtylthiocarbizin. Sm. 175-176° (B. 24, 4188). -

IV, 928. 1) 5-Chlor-6-Acetylamido- $\alpha\beta$ -Naphtophenazin. Sm. 292° (B. 31, $\mathbf{C}_{18}\mathbf{H}_{12}\mathbf{ON_3Cl}$ 2407)

1) 3,6-Dichlor-2,5-Di[Phenylamido]-1,4-Benzochinon. Sm. 287—290° $\mathbf{C}_{18}\mathbf{H}_{12}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{Cl}_{2}$ (J. 1863, 415; A. 114, 306; 210, 187; 228, 333; J. pr. [2] 24, 431; [2] 28, 423, 427; Am. 17, 597). — III, 343.

 $C_{18}H_{12}O_{2}N_{2}Br_{2}$ 1) 3,6-Dibrom-2,5-Di[Phenylamido]-1,4-Benzochinon (A. Spl. 8, 22). **— III**, 353.

1) 2-Phenylsulfon-5,10-Naphtdiazin (2-Phenylsulfonphenazin). Sm. C18 H12 O2 N2S 244° (B. 29, 2021). — IV, 1001. 1) Säure (aus s-Diphenylketipinsäurenitril). Ba + 10H₂O (A. 282, 61).

 $\mathbf{C}_{18}\mathbf{H}_{12}\mathbf{O}_{3}\mathbf{NCl}$ **— II**, 2032.

 2,3'-Bichinolyl-β-Sulfonsäure. K₂, Cu (M. 7, 323). — IV, 1067.
 2,3'-Bichinolyl-β-Sulfonsäure. K + 2H₂O, Cu + 2H₂O (M. 7, 309). C18H12O3N2S **— IV**, 1067.

3) 2,5'-Bichinolyl-P-Sulfonsäure (M. 8, 143). — IV, 1068.

1) Phosphorigsäuretri-4-Chlorphenylester. Sm. 49°; Sd. 290-297°, 50. $\mathbf{C}_{18}\mathbf{H}_{12}\mathbf{O}_{3}\mathbf{Cl}_{3}\mathbf{P}$ (B. **31**, 1053). $C_{18}H_{12}O_4N_2Br_2$ 1) Aethylbromisatoïd. Sm. 244 -245° u. Zers. (B. 15, 2095). — II, 1606.

1) Tri [4-Chlorphenylester] d. Phosphorsäure. Sm. 99-1000 (B. 30, C18H12O4Cl3P 2375; H. **25**, 446).

 Dibromderivat d. Säure C₁₈H₁₄O₄S (B. 18, 3244). — II, 1638.
 Tri[4-Bromphenyl]phosphorsäure (A. 143, 194). — II, 672. $C_{18}H_{12}O_4Br_2S$ $\mathbf{C}_{18}\mathbf{H}_{12}\mathbf{O}_{4}\mathbf{Br}_{3}\mathbf{P}$ 1) Phenosafranol-4-Sulfonsäure (N-4-Sulfophenylsafranol) (B. 31, 1185).

 $C_{18}H_{12}O_5N_2S$ - IV, 1003.

1) 2,3'-Bichinolyl- α -Disulfonsäure. K + 5H₂O, Cu + 6H₂O (M. 2, $\mathbf{C}_{18}\mathbf{H}_{12}\mathbf{O}_{6}\mathbf{N}_{2}\mathbf{S}_{2}$ 504; 7, 317). — IV, 1067.

2) 2,7'-Bichinolyl-?-Disulfonsäure. $K_2 + 3H_2O$ (B. 19, 2473). — IV, 1069.

3) 6,6'-Bichinolyl-?-Disulfonsäure. $Na_2 + 5H_2O$ (B. 17, 1818). — IV, 1070.

4) 6, 6'-Bichinolyl-?-Disulfonsäure. K + H₂O (B. 27, 2449). -

IV, 1070.
5) 6,7'-Bichinolyl-P-Disulfonsäure. Sm. noch nicht bei 300°. Ba +

 $\mathbf{C}_{18}\mathbf{H}_{12}\mathbf{O}_{6}\mathbf{N}_{7}\mathbf{C}\mathbf{1}$

1) 2,4-Dinitrobenzolazo-3-Chlornitrodiphenylhydrazin. Zers. bei 127—128° (J. pr. [2] 44, 465). — IV, 1499. 1) Tri[2-Nitrophenyl]phosphinoxyd. Sm. 66—68° (A. 229, 326). —

 $C_{18}H_{12}O_7N_3P$ IV, 1659.
2) Tri[4-Nitrophenyl]phosphinoxyd. Sm. 242° (A. 229, 325). —

IV, 1659.

1) Tri[?-Nitrophenyl]arsinoxyd. Sm. 254° (B. 19, 1033). — IV, 1689.

 $\mathbf{C}_{18}\mathbf{H}_{12}\mathbf{O}_{7}\mathbf{N}_{3}\mathbf{A}\mathbf{s}$ 1) 1-Phenylazo-4-Oxynaphtalin-13,3-Dicarbonsäure-14-Sulfonsäure $C_{18}H_{12}O_8N_9S$

 $C_{18}H_{12}O_{10}N_3P$ 1) Tri[2-Nitrophenylester] d. Phosphorsäure. Sm. 126° (Z. 1870, 230). — II, 680.

2) Tri[4-Nitrophenylester] d. Phosphorsäure. Sm. 1550 (1480) (Z.

1870, 230; A. 224, 162). — II, 683. 1) Dibromoxyconicein. Fl. (2HCl,PtCl₄) (B. 18, 124). — IV, 37. C₁₈H₁₈ONBr₂ C18 H18 ON8 S 1) 5-Phenylamido-2-Keto-3-[1-Naphtyl]-2,3-Dihydro-1,3,4-Thiodiazol. Sm. 219° (B. 24, 4191). — IV, 927. 2) 5-Phenylamido-2-Keto-3-[2-Naphtyl]-2,3-Dihydro-1,3,4-Thio-

diazol. Sm. 198-1990 (B. 24, 4181). - IV, 929.

- 1) Acetat d. 2,4-Dichlor-I-Phenylamido-3-Oxynaphtalin. Sm. 1640 C₁₈H₁₈O₂NCl₂ (B. **21**, 3546). — III, 171.
- C18H19O9N9Cl 1) 6-Chlor-5-Phenylamido-2-Oxy-1, 4-Benzochinonphenylimid. Sm. bei 240° u. Zers. (B. 23, 900). — III, 348.
 - 2) 3-Chlor-2, 5-Di[Phenylamido]-1, 4-Benzochinon. Sm. 2620 (A. 228, 336; B. 23, 899). — III, 341.
 - 3) P-Chlor-P-Di[Phenylamido]-1,4-Benzochinon (J. pr. [2] 28, 431). **– III**, 341.
 - 4) ?-Chlor-?-Di[Phenylamido]-1,4-Benzochinon (B. 10, 1793; A. 210,
 - 181). III, 340.
 5) Acetat d. 2-Oxy-1-[4-Chlorphenylazo]naphtalin. Sm. 133° (Soc.
- 63, 933). IV, 1429.
 1) β-Phenylenpyridinketonphenylhydrazonsulfonsäure. Zers. bei 295° (B. 22, 410). IV, 388.
 1) 6-Brom-2,4-Dinitro-1,3-Di[Phenylamido] benzol. Sm. 191—192° C18 H18 O3 N3 S
- $C_{18}H_{18}O_4N_4Br$
- (B. 28, 191; Am. 18, 242). IV, 572. 1) Verbindung (aus 2,3,5-Trichlor-1,4-Benzochinon u. 2 Molec. 3-Nitro- $C_{18}^{-}H_{13}O_{6}N_{4}Cl_{3}$ 1-Amidobenzol) (A. 228, 325). — III, 334.
- 1) Diacetat d. $\beta \hat{\beta} \beta$ -Trichlor- $\alpha \alpha$ -Di[3-Nitro-4-Oxyphenyl]äthan. C₁₈H₁₈O₈N₄Cl₃
- Sm. 197° (*J. pr.* [2] **47**, 62). II, 995. 1) 3,4-Dichlor-5-[4-Methylphenyl]imido-2-Keto-1-[4-Methylphe-C18H14ON,Cl2 nyl]-2,5-Dihydropyrrol (Dichlormaleïndi-p-Toluil). Sm. 1610 (A. 295, 52).
- 1) α -[1-Naphtyl]- β -Benzoylthioharnstoff. Sm. 172—1730 (A. ch. [5]) C₁₈H₁₄ON₂S 11, 326). — II, 1172.
- $\mathbf{C}_{18}\mathbf{H}_{14}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{Cl}_{2}$ 1) ?-Dichlor-?-Di[Phenylamido]-1,4-Dioxybenzol (A. 210, 181). —
 - 2) 3,6-Dichlor-2,5-Diketo-1,4-Di[2-Methylphenyl]-1,2,4,5-Tetrahydro-1,4-Diazin. Sm. 201° (J. pr. [2] 38, 310). — II, 471.
 - 3) 3,6-Dichlor-2,5-Diketo-1-[2-Methylphenyl]-4-[4-Methylphenyl]-1,2,4,5-Tetrahydro-1,4-Diazin. Sm. 146° (J. pr. [2] 41, 86). — II, 506.
- $C_{18}H_{14}O_2N_2Br_4$ 1) 2,5-Diketo-1,4-Di[?-Dibrom-2-Methylphenyl]hexahydro-1,4-Diazin. Sm. 277° (J. pr. [2] 38, 296). — II, 471.
- 1) 4-[4-Oxyphenyl]azobiphenylsulfonsäure. Na, Ba (Soc. 49, 381). $\mathbf{C}_{18}\mathbf{H}_{14}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{S}$ - IV, 1415.
- 1) 4-[2,4-Dioxyphenyl]azobiphenyl-?-Sulfonsäure. Na, Ba (Soc. 49, $C_{18}H_{14}O_5N_2S$ 382). — IV, 1446.
 - 2) 2', 5'-Dioxy-4-Phenylazobenzol-?-Sulfonsäure (Soc. 49, 382). IV, 1447.
- 1) Sulfonsäure d. Monamid d. s-Diphenylketipinsäuremononitril. Na + 2 H₂O, Ba + 3 H₂O (A. 282, 47). II, 2032. $C_{18}H_{14}O_6N_2S$
- 1) 4-Phenylazobenzol-?-Disulfonsäure. $K_2 + 1^{1/2}H_2O$, Ba (B. 21, C18 H14 O6 N2 S2
- 1565). IV, 1402.

 1) Verbindung (aus 2,5-Dichlor-1,4-Benzochinon u. 2 Molec. 3-Nitro- $\mathbf{C}_{18}\mathbf{H}_{14}\mathbf{O}_{6}\mathbf{N}_{4}\mathbf{Cl}_{2}$ 1-Amidobenzol). Sm. 110° (A. 228, 325). — III, 333.
 - 2) Verbindung (aus 2,6-Dichlor-1,4-Benzochinon u. 2 Molec. 3-Nitro-1-Amidobenzol). Sm. 112º (A. 228, 325). — III, 334.
- β-Naphtolsulfonazoanissäure. Ba+8H₂O (B. 14, 2039). IV, 1471.
 Verbindung (aus 2,5,6-Trioxyphenylen-1,3-Disulfid u. m-Nitranilin) $C_{18}H_{14}O_7N_2S$ C18H14O8N2S4 (Bl. [3] **15**, 419).
- $\mathbf{C}_{18}\mathbf{H}_{14}\mathbf{O}_{10}\mathbf{N}_{2}\mathbf{S}_{2}$ 1) 2-Naphtol-3,6-Disulfonsäureazoanissäure $+3 H_2 O$. $K_2 + 6 H_2 O$
- (B. 14, 2040). IV, 1471.

 C₁₈H₁₄N₂Cl₂Hg 1) Quecksilberdichinolyldichlorid. +HgCl₂, +PtCl₄ (G. 25 [1] 399).

 C₁₈H₁₅ON₂Cl₃ 1) Verbindung (aus d. Di[4-Methylphenylamid] d. Weinsäure). Sm. 192 bis 192,5° (A. 279, 145).
- 1) Verbindung (aus α-?-Pentachlor-2-Keto-1-Methyl-?-Dihydro-R-Penten). Sm. 202° (A. 296, 191). IV, 770. $C_{18}H_{15}ON_4Cl$
- 1) Phenylester d. Diphenylthiophosphinsäure. Sm. 124° (B. 18, $C_{18}H_{15}OSP$ 2114). — IV, 1657.
- 1) Triphenyltrithiophosphorsäure. Sm. 72° (J. pr. [2] 10, 232). $\mathbf{C}_{18}\mathbf{H}_{15}\mathbf{OS}_{3}\mathbf{P}$ II, 661.
- Phenylester d. Diphenylselenphosphinsäure. Sm. 114-115°
 (B. 18, 2115). IV, 1657. $C_{18}H_{15}OPSe$

1) $\alpha \beta$ - Dibrom - α - [3 - Methoxyl - 4 - Oxyphenyl] - β - Chinolyl [2] äthan (Vanilloäthylenchinolinbromid). Zers. bei 200° (B. 27, 1976). — IV, 455. $\mathbf{C}_{18}\mathbf{H}_{15}\mathbf{O}_{2}\mathbf{NBr}_{2}$

1) Diphenylamid d. Benzolsulfonsäure. Sm. 124° (A. 214, 220). -C₁₈H₁₅O₂NS II, 425.

1) 2-Chlor-3,6-Di[Phenylamido]-1,4-Dioxybenzol. Zers. bei 220 bis C18H15O2N2Cl 225° (A. **210**, 182). — II, 948.

2) 4-Methylphenylimid d. Chlor-[4-Methylphenyl]amidofumar-säure. Sm. 198—199° (A. 279, 145).

1) 4-Phenylsulfonamidoazobenzol. Sm. 1330 (A. 272, 230). — IV, 1359. $C_{18}H_{15}O_2N_3S$ 1) Diphenylester d. Phenylthiophosphinsäure. Fl. (É. 9, 1054). - $\mathbf{C}_{18}\mathbf{H}_{15}\mathbf{O}_{2}\mathbf{SP}$

IV, 1653.

1) 4-Phenylamidoazobenzol-4'-Sulfonsäure. K, Anilinsalz (B. 12, $\mathbf{C}_{18}\mathbf{H}_{15}\mathbf{O}_{3}\mathbf{N}_{3}\mathbf{S}$ 262; Soc. 51, 192). — IV, 1369.

1) Dichlorid d. Triphenylphosphorsäure. Fl. (A. 253, 112). - $\mathbf{C}_{18}\mathbf{H}_{15}\mathbf{O}_{3}\mathbf{Cl}_{2}\mathbf{P}$ II, 660.

1) Triphenylphosphitbromid (A. 218, 105). — II, 659. $\mathbf{C}_{18}\mathbf{H}_{15}\mathbf{O}_{3}\mathbf{Br}_{2}\mathbf{P}$

1) Triphenylester d. Thiophosphorsäure. Sm. 53° (49°); Sd. 245° (*J. pr.* [2] 10, 233; *B.* 18, 1718; 31, 1100; *A.* 253, 118). — II, 661.

1) Phenylamid d. Diphenylsulfon-3-Sulfonsäure. Sm. 130—131° (*B.* $\mathbf{C}_{18}\mathbf{H}_{15}\mathbf{O}_{3}\mathbf{SP}$

 $C_{18}H_{15}O_4NS_2$

19, 2420). — II, 814.

1) Phenylamid d. 2-Nitro-1-Phenylamidobenzol-4-Sulfonsäure.
Sm. 157° (B. 24, 3794). — II, 576.

2) Phenylamid d. 4-Nitro-1-Phenylamidobenzol-2-Sulfonsäure.
Sm. 164° (B. 24, 3799). — II, 577. C18H15O4N3S

1) Diacetat d. N-Acetyl-Dioxythiodiphenylamin. Sm. 155-156° C18H15O5NS (A. 230, 194). — II, 812.

1) P-Diphenylsulfon-2-Amido-1-Oxybenzol. Sm. 115° (B. 29, 2029). C18H15O5NS 1) Verbindung (aus 2,5,6-Trioxyphenylen-1,3-Disulfid u. Anilin) (Bl. C18H15O6NS4 [3] **15**, 420).

1) Phenyldi[? - Nitrophenyl] wismuthdihydroxyd. Chlorid, Nitrat $\mathbf{C}_{18}\mathbf{H}_{15}\mathbf{O}_{6}\mathbf{N}_{2}\mathbf{Bi}$ (B. 30, 2845).

1) Verbindung (aus 2-Chlor-1, 4-Benzochinon u. 2 Molec. 3-Nitro-1-Amido- $\mathbf{C}_{18}\mathbf{H}_{15}\mathbf{O}_{6}\mathbf{N}_{4}\mathbf{Cl}$

benzell (A. 228, 324). — III, 332. 1) Tribenzsulfhydroxylamin. Sm. 99° (A. 141, 371; B. 11, 618, 1590; $\mathbf{C}_{18}\mathbf{H}_{15}\mathbf{O}_{7}\mathbf{NS}_{3}$ 29, 1563). — II, 109. 1) Triphenylamin-P-Trisulfonsäure. Na₃ (B. 23, 2541). — II, 577.

C₁₈H₁₅O₉N₈S 1) 1-Oximido-2-[α-Chlor-γ-Phenylpropenyl]-2,3-Dihydroinden. Sm. 163-164° u. Zers. (Soc. 65, 488). — III, 253. C₁₈H₁₆ONCl

 $\mathbf{C}_{18}\mathbf{H}_{16}\mathbf{ONBr}_{3}$ 1) Verbindung (aus Dibrompseudocumenolbromid u. Chinolin). Sm. 226° (B. 29, 1122). — IV, 250.

1) Jodmethylat d. 6-Benzoyl-2-Methylchinolin. Sm. 2200 (A. 242, $C_{18}H_{16}ONJ$ 325). — IV, 375.

C₁₈H₁₆ON₂Cl₂ 1) 4,4-Dichlor-5-Phenylimido-2-Keto-3,3-Dimethyl-1-Phenyltetrahydropyrrol (uns-Dimethyldichlorsuccindianil). Sm. 1290 (A. 295, 71).

1) Benzyläther d. α -Oxy- β -[1-Naphtyl]thioharnstoff. Sm. 132—133° C18H16ON2S (B. 24, 384). — II, 610. 2) 2-Phenylimido-4-Keto-3-Aethyl-5-Benzylidentetrahydrothiazol

(Benzylidenäthylphenylthiohydantoïn). Sm. 97° (B. 31, 137; C. 1899 2] 805).

3) Verbindung (aus Thionylamidobenzol u. Diphenylamin) (A. 274, 208). - II, 355.

C₁₈H₁₆O₂NCl 1) Benzoat d. 4-Oxy-2-Methylchinolin-1-Chlormethylat. Sm. 160 bis 161° (u. 112°) (B. 30, 927). — IV, 311. 1) Jodmethylat d. 2-Phenylchinolin-4-Carbonsäuremethylbetaïn.

 $\mathbf{C}_{18}\mathbf{H}_{16}\mathbf{O}_{2}\mathbf{NJ}$ Sm. $160-165^{\circ}$ u. Zers. (A. **276**, 286). — IV, 445.

25). — II, 416.

1) 4-Amido-4'-Phenylsulfonamidobiphenyl. Sm. 160-161° (A. 272, $C_{18}H_{16}O_{2}N_{2}S$ 231). — IV, 966.

2) Phenylsulfonhydrazobenzol. Sm. 107° (B. 30, 2555). — IV, 1348. C₁₈H₁₆O₂N₂Hg 1) Quecksilberdichinolyloxydhyrat. Salze, siehe diese u. HNO₃, H₂SO₄, Oxalat (G. 25 [1] 394).

- C₁₈H₁₆O₆N₉Hg₉ 1) 3-Quecksilberdi-1-Toluylen-4-Tetramethylmerkuridiammoniumhydrat. Sm. 117°. Chlorid, Bromid, Jodid, Nitrat, Acetat (C. 1898) [2] 546).
- 1) Chlormethylat d. 6-Methoxyl-2-Phenylchinolin-4-Carbonsäure. $C_{18}H_{16}O_3NC1$ Sm. 195° (A. 282, 86). — IV, 447.
- 1) Brombenzylat d. Chininsäure. Sm. 1480 u. Zers. (A. 276, 278). $C_{18}H_{16}O_8NBr$ **— IV**, 362.
- $C_{18}H_{16}O_{8}NJ$ 1) Jodmethylat d. 6-Methoxyl-2-Phenylchinolin-4-Carbonsäure.
- Sm. 216° (A. 282, 85). IV, 447.
 Phenylamid d. Phosphorsäurediphenylester. Sm. 129° (B. 8, 1236; 27, 2573, 2575; 29, 720). II, 660.
 2-Phenylimido-4-Keto-3-Phenyltetrahydrothiazol-5-[Aethyl-α- $C_{18}H_{16}O_8NP$
- $C_{18}H_{16}O_3N_2S$ Carbonsäure] (Diphenylthiohydantoïn-α-Propionsäure). |Sm. 1240 (M.
- 1) m-Phenylendiamindisazobenzol-p-Benzolsulfonsäure. K (B. 16. C18H16O8N6S 2032). - IV, 1372.
 - 2) Benzoldisazo-m-Phenylendiamin-p-Benzolsulfonsäure. K+2H_aO (B. 16, 2035). — IV, 1372.
- 1) Di[2-Chlorphenylester] d. Hexahydro-1,4-Diazin-1,4-Dicarbonsäure. Sm. 165—172° (Bl. [3] 19, 765). C18H16O4NoClo
- C₁₈H₁₆O₄N₂S 1) 2-Oxy-1-[2,4-Dimethylphenylazo]naphtalin-15-Sulfonsäure. Ba (B. 19, 139). — IV, 1437.
 - 2) 2-Oxy-1-[2,5-Dimethylphenylazo]naphtalin-13-Sulfonsäure? Na,
 - Ag. IV, 1437. 3) 3-Oxy-1-[P-Dimethylphenylazo] naphtalin-4-Sulfonsäure? (B. 17, 461). — IV, 1437.
 - 4) 4-Oxy-1-[P-Dimethylphenylazo]naphtalin-P-Sulfonsäure (J. 1881, 490). — IV, 1437.
- $C_{18}H_{16}O_4N_2S_2$ 1) 2,5-Diphenylsulfon-1,4-Diamidobenzol. Sm. 115° (B. 29, 2027). 2) 1,2-Di[Phenylsulfonamido]benzol (1,2-Phenylenamid d. Benzol
 - sulfonsäure). Sm. 186° (A. 287, 223). IV, 561. 3) 1,3-Di[Phenylsulfonamido]benzol. Sm. 194° (A. 287, 229). —
 - IV, 577. 4) 1,4-Di[Phenylsulfonamido]benzol. Sm. 247° (A. 265, 188). —
- Verbindung (aus α-Jod-β-Oxy-β-Phenylpropionsäure u. Zimmtsäure).
 Sm. 110-115° u. Zers. (B. 19, 2464; A. 289, 282). II, 1573. C₁₈H₁₆O₄ClJ
- $\mathbf{C}_{18}\mathbf{H}_{16}\mathbf{O}_{4}\mathbf{Cl}_{2}\mathbf{S}_{2}$ 1) Chlorid d. Retendisulfonsäure. Sm. 1750 (A. 185, 91). — II, 277. $C_{18}H_{16}O_9N_4S_2$ 1) 3-Aethylester d. 5-Keto-4-Phenylhydrazon-1-Phenyl-4,5-Dihydropyrazol-3-Carbonsäure-14,44-Disulfonsäure (3-Ae. d. Tartrazinsäure). Na₂, Ba (A. 294, 236). — IV, 730.
- 1) Säure (aus α-[4-Chlorphenyl]sulfon-α-Oxypropionsäure). Sm. 153° (H. C18H16O9Cl2S2 16, 549).
- 1) Di[Phenylamid] d. Phenylphosphinsäure. Sm. 211° (A. 293, 215). $C_{18}H_{17}ON_2P$ **IV**, 1651.
- 1) Verbindung (aus Pentachlorketomethyldihydro-R-Penten). Sm. 200° (A. 296, 170). IV, 770. C18H17ON4Cl
- 1) Dimethylamidophenyl-l-Naphtylsulfon. Sm. 91° (B. 12, 1789). $\mathbf{C}_{18}\mathbf{H}_{17}\mathbf{O}_{2}\mathbf{NS}$ II. 867. 2) Dimethylamidophenyl-2-Naphtylsulfon (B. 12, 1790). — II, 887.
- 1) Chlormethylat d. 5 oder 6-Methyl-2-Furanyl-1-Furylbenzimi- $\mathbf{C}_{18}\mathbf{H}_{17}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{C}\mathbf{I}$ dazol. 2 + PtCl₄ (B. 11, 1659). - IV, 620.
 - 2) Chloräthylat d. Phenylfurfuraldehydin. 2 + PtCl₄ (B. 11, 1656). - IV, 564.
 - 3) Benzoat d. 5-Oxy-3-Methyl-1-Phenylpyrazol-2-Chlormethylat (Antipyrinchlorbenzoylat). Sm. 129—130° (A. 293, 42). — IV, 513.
- 1) $\beta\beta\beta$ -Trichloräthylidenamid d. Phenylessigsäure (B. 10, 1651). C18H17O,N,Cl3
- 1) Jodmethylat d. 5 oder 6-Methyl-2-Furanyl-1-Furylbenzimidazol. $C_{18}H_{17}O_{2}N_{2}J$ Sm. 195,5% u. Zers. $+J_2$ (Sm. 126–128%); $+J_4$ (Sm. 109%) (B. 11, 1658). – IV, 620.
 - 2) Jodäthylat d. Phenylfurfuraldehydin (B. 11, 1656). IV, 564.
 - 3) Benzoat d. 5-Oxy-3-Methyl-1-Phenylpyrazol-2-Jodmethylat. Sm. 188° u. Zers. (J. pr. [2] 55, 151). — IV, 513.

1) Di[Phenylamid] d. Phosphorsäuremonophenylester. Sm. 1650 $C_{18}H_{17}O_{2}N_{2}P$ (B. 29, 720).

1) Phenylamid d. 4-Amido-l-Phenylamidobenzol-2-Sulfonsäure. $C_{18}H_{17}O_{2}N_{3}S$ Sm. 171° (B. **24**, 3801). — **IV**, 595.
2) Phenylamid d. **2-A**midodiphenylamin-**4-S**ulfonsäure. Sm. 157°

(B. 24, 3794). - IV, 568.

1) ε-Chlor-αδ-Di[Phenylhydrazon]-β-Penten-α-Carbonsäure (B. 22, C18H17O2N4Cl

1259). — IV, 709. 1) Phenylamid d. 2-Oxynaphtalinäthyläther-1-Sulfonsäure. Sm. C, H, O, NS 178° (C. 1895 [1] 1064).
2) Phenylamid d. 2-Oxynaphtalinäthyläther-6-Sulfonsäure.

152—153° (C. **1895** [1] 1064).

3) Phenylamid d. 2-Oxynaphtalinäthyläther-8-Sulfonsäure. Sm. 158° (C. 1895 [1] 1064).

1) Hydrobrombilirubidbilirubin (A. 181, 253). — III, 662. $\mathbf{C}_{18}\mathbf{H}_{17}\mathbf{O}_{3}\mathbf{N}_{2}\mathbf{Br}$

1) 2-Aethylamido-l-Phenylazonaphtalin-14-Sulfonsäure. K (B. 26, C18H17O3N3S 193). — **IV**, *1399*.

2) 4-Aethylamido-1-Phenylazonaphtalin-14-Sulfonsäure. Na (B. 24, 2470). — **IV**, 1399.

3) 4-Dimethylamido-l-Phenylazonaphtalin-l⁴-Sulfonsäure. 21, 3125). — IV, 1399. 1) 2-Methyl-4-[2-Aethoxylphenyl]chinolin-?-Sulfonsäure (B. 27,

C18H17O4NS 3037). **— IV**, 435.

1) β -[3-Brom-4-Diazoamidophenyl] propionsäure (B. 15, 2294). $\mathbf{C}_{18}\mathbf{H}_{17}\mathbf{O}_{4}\mathbf{N}_{3}\mathbf{Br}_{2}$ Verbindung (aus Phenylthiohydantoïnsäure). Sm. 112-115° (A. 207, $C_{18}H_{17}O_4N_3S_2$

129). — II, 402. 1) Chlorbenzylat d. 6-Oxychinolin-6-Aethyläther + 3H,O. Sm. 96° C18H18ONC1

(J. pr. [2] 56, 444).1) Acetylderivat d. Verbindung C₁₀H₁₆N₂S (aus 4-Amido-1,2-Dimethylbenzol). Sm. 227° (B. 22, 584). — II, 827. C18H18ON.S

 2) Acetylderivat d. Verbindung C₁₆H₁₆N₂S (aus 2-Amido-1,4-Dimethylbenzol). Sm. 212° (B. 22, 585). — II, 827.
 1) Tri[4-Amidophenyl]phosphinoxyd. Sm. 258° (A. 229, 327). — $\mathbf{C}_{18}\mathbf{H}_{18}\mathbf{ON}_{8}\mathbf{P}$

IV, 1660.
 Tri[Phenylamid] d. o-Phosphorsäure. Sm. 208° (A. 101, 302; 229, 335; B. 27, 2575). — II, 357.

1) 2-[2-Methylphenylacetylamido]-5-[2-Methylphenyl]-1, 3, 4-Thio- $\mathbf{C}_{18}\mathbf{H}_{18}\mathbf{ON}_{4}\mathbf{S}$ diazol. Sm. 221° (B. 23, 367). — IV, 1236. 2) 2-[4-Methylphenylacetylamido]-5-[4-Methylphenylamido]-1,3,4-

Thiodiazol. Sm. 166° (B. 23, 365). - IV, 1236.

 $C_{18}H_{18}O_2N_2Cl_2$ 1) $\alpha\beta$ -Di[Chloracetylphenylamido]äthan. Sm. 152—154° (B. 25, 3253). **II**, 368.

2) ?-Dichlor-4, 4'-Di[Acetylamido]-3, 3'-Dimethylbiphenyl. Sm. bei 290° (C. 1898 [2] 522).

 $C_{18}H_{18}O_2N_2Br_2$ 1) $\alpha\beta$ -Di[Bromacetylphenylamido]äthan. Sm. 136° (B. 25, 3254). —

II, 368. 2) Di[2-Methylphenylamid] d. Dibrombernsteinsäure. Zers. bei 200° (G. **23**, 183). — II, 468.

3) Di[4-Methylphenylamid] d. Dibrombernsteinsäure. Sm. 168° u. Zers. (G. 23, 182). — II, 502. 1) Acetylderivat d. Verb. C₁₈H₁₆ON₃Cl (B. 31, 1414).

 $\mathbf{C}_{18}\mathbf{H}_{18}\mathbf{O}_{2}\mathbf{N}_{3}\mathbf{C}\mathbf{I}$

 $\mathbf{C}_{18}\mathbf{H}_{18}\mathbf{O}_{2}\mathbf{N}_{4}\mathbf{S}_{2}$ 1) $\alpha \alpha$ -Succinyldi[β -Phenylthioharnstoff]. Sm. 210—210,5° (Soc. 67,

 $\mathbf{C}_{18}\mathbf{H}_{18}\mathbf{O}_{2}\mathbf{Cl}_{2}\mathbf{T}$ e 1) Dichlortelluro-4-Tolylmethylketon. Sm. 200° (B. 30, 2834). Di[3,6-Dibrom-4-Oxy-2,5-Dimethylbenzyl]sulfid. Sm. 243° (B. 29, 2346). $\mathbf{C}_{18}\mathbf{H}_{18}\mathbf{O}_{9}\mathbf{Br}_{4}\mathbf{S}$

C₁₈H₁₈O₈NBr₃ 1) Tribromcodeïn. (2 HCl, PtCl₄), HBr (A. 77, 365). — III, 903. C₁₈H₁₈O₈N₂Br₂ 1) Phenylmonamid d. $\alpha\beta$ -Dibrom- β -Phenylamidoäthan- $\alpha\alpha$ -Dicarbonsäuremonäthylester. Sm. 179—185° (A. 285, 131). C₁₈H₁₈O₈N₂S 1) Methylphenylhydrastylthioharnstoff. Sm. 126° (A. 271, 390). —

 $\mathbf{C}_{18}\mathbf{H}_{18}\mathbf{O}_{4}\mathbf{NCl}$ 1) Chloräthylat d. Papaverolin. Sm. 215° (J. pr. [2] 56, 344). $\mathbf{C}_{18}\mathbf{H}_{18}\mathbf{O}_{4}\mathbf{N}_{4}\mathbf{Cl}_{2}$

1) 3,6 - Dichlor -2,5 - Dioxy -1,4 - Benzochinon + 2 Molec. Phenylhydrazin (Bl. [3] 21, 91).

- $C_{18}H_{18}O_4N_4S$ 1) Sulfid d. α -[4-Merkaptophenyl]hydrazonpropionsäure (A. 270, 152). — IV, 816.
- 1) Dimethyläther d. Dichlortelluro-4-Oxyphenylmethylketon. Sm. $\mathbf{C}_{18}\mathbf{H}_{18}\mathbf{O}_{4}\mathbf{Cl}_{2}\mathbf{Te}$ 190° (B. **23**, 2833).
- Disulfonsäure (aus 8-Oxy-1,2,3,4-Tetrahydrochinolin-5-Sulfonsäure).
 Sm. noch nicht bei 360°. K₂ (*J. pr.* [2] 54, 386). IV, 297.
 Triphenylamid d. Thiophosphorsäure. Sm. 78° (Z. 1868, 539). $C_{18}H_{18}O_7N_2S_2$
- $C_{18}H_{18}N_8SP$ **- II**, 357.
 - 2) Triphenylamid d. isom. Thiophosphorsäure. Sm. 1530 (B. 20, 3353). — II, 357.
- C₁₈H₁₉ON₉Br 1) 4-Bromphenyläther d. α - Phenylimido- α -Oxy- α -[1-Piperidyl]methan (4-Bromdiphenylpiperidylisoharnstoff). Sm. 91^o (B. 28, 984). **- IV**, *13*.
- C18H19ON3S 1) Verbindung (aus Amidobenzol u. Thionylamidobenzol) (A. 274, 205). **– II**, 355.
- $C_{18}H_{19}ON_3S_2$ 1) Verbindung (aus 5-Dimethylamido-2,4'-Dithiocarbonimid). Sm. 170° (A. 303, 359).
- 1) Di[Phenylhydrazid] d. Phenylphosphinsäure. Sm. 1750 (A. 293, $\mathbf{C}_{18}\mathbf{H}_{19}\mathbf{ON}_{4}\mathbf{P}$ 219). — IV, 1651.
- 1) 2-[2,4-Dimethylphenylnitrosamido] 5 [2,4 Dimethylphenyl-C₁₈H₁₉ON₅S amido]-1,3,4-Thiodiazol. Sm. 146° (B. 23, 370). — IV, 1237.
- 1) Base (aus Codeïn). Sm. 196—197°. HCl, (2HCl, PtCl₄) (A. 210, 110). C₁₈H₁₉O₂NCl₂ - III, 907.
- 1) Cinchoteninchlorid. (2HCl, PtCl₄) (M. 16, 63). III, 842. $\mathbf{C}_{18}\mathbf{H}_{19}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{C}\mathbf{I}$ 2) 4-Methylphenylamid d. Chlorbernsteinsäure (A. 279, 136).
- 3) 4-Methylphenylamid d. Chloracetyl-[4-Methylphenyl]amidoessigsäure. Sm. 158° (B. 25, 2290). II, 505.
 1) Dijodcodeïn. (2HCl, PtCl₄ + H₂O) (A. 92, 325, 326). III, 903.
 1) α-Phenylamidothioformyl-β-Phenylhydrazid d. Malonsäuremono- $\mathbf{C}_{18}\mathbf{H}_{19}\mathbf{O}_{3}\mathbf{N}\mathbf{J}$ $\mathbf{C}_{18}\mathbf{H}_{19}\mathbf{O}_{3}\mathbf{N}_{3}\mathbf{S}$ äthylester. Sm. 141° (B. 24, 1801). — IV, 702.
- 2) Aethylester d. 3- $[\beta$ -Phenylthiouramido]-4-Methylphenyloxaminsäure. Sm. 154-155° (A. 268, 310). - IV, 605.
- 1) 2-Chlor-1, 2-Di[4-Aethoxylphenyl]-2, 2-Dihydro-1, 2, 3, 5-Tetra- $\mathbf{C}_{18}\mathbf{H}_{19}\mathbf{O_4N_4Cl}$ zol-4-Carbonsäure (Di-p-Phenetyltetrazoliumchloridearbonsäure). Sm. 194—195° (B. 28, 1691). — IV, 1240.
- 1) Phenylbenzylamid d. α-Bromisovaleriansäure. Sm. 95-96° (B. $\mathbf{C}_{18}\mathbf{H}_{20}\mathbf{ONBr}$ 31, 2677).
- 1) Oxyd d. Aethylphenylamidothioameisensäure. Sm. 143—143,5° (B. 20, 1630). $\mathbf{C}_{18}\mathbf{H}_{20}\mathbf{ON}_{2}\mathbf{S}_{2}$
- C₁₈H₂₀ON₃Cl C₁₈H₂₀O₂NCl
- 1) Aethyläther d. Verb. C₁₈H₁₈ON₃Cl (B. 31, 1414). 1) Chlorocodid. Sm. 147—148°. HCl, (2 HCl, PtCl₄), (HCl, AuCl₃) (A. Spl. 7, 366; A. 210, 107). III, 906. 1) Bromocodid. HBr (J. 1871, 777). III, 907. $\mathbf{C}_{18}\mathbf{H}_{20}\mathbf{O}_{2}\mathbf{NBr}$
- 1) 2², 3²-Dimethyläther d. 2-[2-Oxyphenyl]imido-3-[2-Oxyphenyl]tetrahydro-1, 3-Thiazin. Sm. 113—114⁰ (B. 21, 1872). II, 711. $\mathbf{C}_{18}\mathbf{H}_{20}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{S}$
 - 2) Di[2-Acetylamidobenzyl]sulfid. Sm. 209° (B. 27, 3522).
 3) Di[4-Acetylamidobenzyl]sulfid. Sm. 188° (B. 24, 726; 28, 880, 915, 1337).
 - 4) Di [6-Acetylamido-3-Methylphenyl] sulfid. Sm. 211° (B. 20, 667). - II, 821.
 - 5) $Di[\beta-Benzoylamidoäthyl]$ sulfid. Sm. 109—110° (B. 24, 3102). II, 1160.
- 1) Phenylthiourethansulfid. Sm. 102° (A. 207, 159; B. 13, 1575; 19, $\mathbf{C}_{18}\mathbf{H}_{20}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{S}_{2}$ 1076, 1813; **26**, 2364). — **II**, 384.
 - 2) Di[4-Acetylamidobenzyl]disulfid. Sm. 173-1740 (A. 305, 120).
 - 3) Di [6-Acetylamido-3-Methylphenyl] disulfid. Sm. 204-2066 (B. 22, 908). — II, 822.
 - 4) $\mathbf{Di}[\beta$ -Benzoylamidoäthyl] disulfid. Sm. 132° (B. 24, 1123). —
- II, 1160.

 1) Di $[\beta$ -Benzoylamidoäthyl] diselenid (B. 25, 3048). II, 1161. $\mathbf{C}_{18}\mathbf{H}_{20}\mathbf{O}_2\mathbf{N}_2\mathbf{Se}_2$
- 1) Tri[Phenylamid] d. Pentaoxyphosphorsäure. Sm. 217° (B. 29, $C_{18}H_{20}O_2N_3P$
- 1) $\alpha \alpha$ -Succinyldi[β -Phenylamidothioharnstoff]. Sm. 220° (Soc. 67, $C_{18}H_{20}O_2N_6S_2$ 571). — IV, 704.

C18 H23 O2 N2 S2

1) Di[3-Brom-4-Oxy-2,5-Dimethylbenzyl]sulfid. Sm. 1520 (A. 302. C, H, O, Br, S 124).

C₁₈H₂₀O₈NCl

1) Chlorcodeïn + $1^{1}/_{2}$ H₂O. Sm. 170°. (2HCl,PtCl₄), H₂SO₄ + 4H₂O (A. 77, 368; 210, 114). — III, 903. 1) Bromcodeïn + $1^{1}/_{2}$ (1 $1^{1}/_{2}$) H₂O. Sm. 161-162°. (2HCl,PtCl₄), HBr + H₂O (A. 77, 362; 210, 112). — III, 903. 1) Jodmethylat d. Morphothebaïn (B. 19, 1598; M. 18, 389). — $\mathbf{C}_{18}\mathbf{H}_{20}\mathbf{O}_{8}\mathbf{NBr}$

C18H20O8NJ III, 910.

1) Verbindung (aus Sulfotoluylenäthylen). Sm. 95° (A. 143, 219). C₁₈H₂₀O₄Br₃S₂ II, 110.

1) Tri[Phenylhydrazid] d. Phosphorsäure. Sm. 204° (196°) (A. 270. C18H21ON6P 135; **272**, 212). — IV, 662.

1) Phenylthiosemicarbazid d. β -[α -Phenylhydrazido] propionsäure-C18 H21 O2 N3S äthylester. Sm. 71-74° (B. 29, 517). - IV, 740.

1) 1-Methyl-1, 2, 3,4-Tetrahydrochinolindimethylanilinthiosulfon-C18 H21 O3 N3 S2 säureindamin (B. 23, 1382). — IV, 197.

1) Sulfocodid + 5H₂O. Zers. bei 246°. — III, 902.

 $\mathbf{C}_{18}\mathbf{H}_{21}\mathbf{O}_{5}\mathbf{NS}$

1) 2-Methylphenylamid d. Phosphorsäuredi Oxyessigsäure]. Sm. C18H21O6N2P 168—170° (A. **279**, 61).

2) 4-Methylphenylamid d. Phosphorsäuredi[Oxyessigsäure]. Sm. 255-257° (A. 279, 66).

1) Tri[Phenylhydrazid] d. Thiophosphorsäure. Sm. 154° (A. 270, C, H, N, SP 136). — IV, *662*.

1) Piperidid d. 4-Methylphenylphosphinsäuremonophenylester. Fl. $C_{18}H_{22}O_{2}NP$

(A. 293, 264). — IV, 1669.

1) Propyläther d. 2 - Methoxylphenylamido - 2 - Methoxylphenyl- $C_{18}H_{22}O_2N_2S$ imidomerkaptomethan. Sm. 58°. (2HCl, PtCl₄) (B. 21, 1864). -II, 711.

1) Chlormethylat d. Morphin $+2H_00$. $(2+P(Cl_4+H_00))$ (A. 222, C18H89ONCI 208). — III, *899*.

1) Jodnethylat d. Morphin + H₂O (A. 88, 338). — III, 898. $\mathbf{C}_{18}\mathbf{H}_{22}\mathbf{O}_{3}\mathbf{NJ}$

C18H22O4NBr ·1) β -Bromäthylester d. Benzoylecgonin. Fl. (Am. 10, 147). — III, 867.

1) 4-Oxy-2, ?, ?-Trimethyl-5-Isopropylazobenzol-?-Sulfonsäure. Ba $C_{18}H_{22}O_4N_2S$ (B. 14, 2795). — IV, 1425.

1) 1,2-Di[Phenylsulfonamido]hexahydrobenzol. .Sm. 155° (A. 295, C₁₈H₂₂O₄N₂S₂ 215). — IV, 482. C₁₈H₂₂O₄N₂Hg₂ 1) Diacetat d. Quecksilberammoniumbase C₁₄H₁₈O₂N₂Hg₂. Sm. 184°

(G. 28 [2] 111). — IV, 1711. 1) Amid d. s-Di[Acetyl-2-Methylphenyl]hydrazin-5,5'-Disulfon-

 $C_{18}H_{22}O_6N_4S_2$ säure (A. 270, 372). — IV, 1502.

 $\mathbf{C}_{18}\mathbf{H}_{22}\mathbf{N}_{3}\mathbf{ClS}$ 1) Dimethyldiäthylthioninchlorid (A. 251, 86; B. 22, 2067). — II, 811. C18H,3ON,P 1) 2,4,5-Trimethylphenylimid-2,4,5-Trimethylphenylamid d. Phos-

phorsäure. Sm. 2170 (B. 29, 727). 2) 2,4,6-Trimethylphenylimid-2,4,6-Trimethylphenylamid d. Phos-

phorsäure. Sm. 240° (B. 29, 726).

1) Methylalkoholat d. Verb. C₁₇H₁₉ONBr₂ (aus Dibrompseudocumenolbromid) + 3H₂O. Sm. 203—204° (u. 205—207°) (B. 29, 1125).

1) Phenylamid d. 1, 3-Dimethyl-?-[tert.] Butylbenzol-?-Sulfonsäure. C₁₈H₂₈O₂NBr₂ C18H.30,NS

Sm. $143.5 - 144.5^{\circ}$ (B. **25**, 791). — II, 425. 2) Phenylamid d. 1,4-Propylisopropylbenzol-α-Sulfonsäure. Sm.

 $107-109^{\circ}$ (G. 21, 21). — II, 425. 1) Dimethyldiäthylindaminthiosulfonat (A. 251, 83). — II, 802.

 $\mathbf{C}_{18}\mathbf{H}_{28}\mathbf{O}_4\mathbf{NS}_2$ 1) Di[4-Methylphenylsulfonäthyl]amin. Sm. 200—201° u. Zers. (HCl, AuUl₃) (J. pr. [2] 30, 359). — II, 823. 2) Imid d. 1,2,4-Trimethylbenzol-5-Sulfonsäure. Sm. 177° (A. 184,

185). — II, 149. 3) Imid d, 1,3,5-Trimethylbenzol-2-Sulfonsäure, Sm. 124° (A. 184,

187). — II, 151.

 $C_{18}H_{23}N_2JS$ 1) Jodmethylat d. 4,4'-Di[Dimethylamido]diphenylthioketon. Zers. bei 108° (B. 20, 1736). — III, 192. 1) Dipiperidylbromisatin (B. 24, 2605). - IV, 16. $C_{18}H_{24}ON_{3}Br$

 $\mathbf{C}_{18}\mathbf{H}_{24}\mathbf{O_2N_2Br_2}$ 1) Verbindung (aus Phtalylpiperidin) (A. 227, 200). — IV, 16.
1) Chlormethylat d. Cocain. Sm. 152,5° (B. 21, 3042). — III, 867. C₁₈H₂₄O₄NCl

- $\mathbf{C}_{18}\mathbf{H}_{24}\mathbf{O}_{4}\mathbf{NCl}$ 2) Chlormethylat d. 1-Scopolamin. + AuCl₃ (B. 27 [2] 883). -III, 796.
- Jodmethylat d. Cocaïn. Sm. 164° (B. 21, 3041). III, 866.
 Jodmethylat d. α-Cocaïn + H₂O. Sm. 202° (B. 29, 2227). - $\mathbf{C}_{18}\mathbf{H}_{24}\mathbf{O}_{4}\mathbf{N}\mathbf{J}$
 - III, 873. 3) Jodmethylat d. l-Scopolamin. Sm. 215° (B. 27 [2] 883). — III, 796.
- 1) Aethylendiäthylamid d. Benzolsulfonsäure $(\alpha\beta$ -Di[Phenylsulfon- $\mathbf{C}_{18}\mathbf{H}_{24}\mathbf{O}_4\mathbf{N}_2\mathbf{S}_2$
- äthylamido]äthan). Sm. 152,5° (A. 287, 222; B. 28, 3076).

 1) Verbindung (aus Chloralhydrat) (J. 1875, 474). I, 932. $C_{18}H_{24}O_6N_4S_{15}$ $C_{18}H_{24}N_2Cl_2Hg_21$) Chlorid d. Quecksilberammoniumbase $C_{18}H_{26}O_2N_2Hg_2$. Sm. 159
- bis 159,5° (G. **28** [2] 103). IV, 1711. $C_{18}H_{24}N_2Br_2Hg_2$ 1) Bromid d. Quecksilberammoniumbase $C_{18}H_{26}O_2N_2Hg_2$. Sm. 149 bis 150° (G. 28 [2] 104). — IV, 1711.
- 1) Jodid d. Quecksilberammoniumbase C₁₈H₂₆O₂N₂Hg₂. Sm. 126° $\mathbf{C}_{18}\mathbf{H}_{24}\mathbf{N}_{2}\mathbf{J}_{2}\mathbf{H}\mathbf{g}_{2}$ (G. 28 [2] 104). - IV, 1711.
- 1) Phenylamid d. 5-Pseudobutyl-1,3-Dimethylbenzol-?-Sulfon- $\mathbf{C}_{18}\mathbf{H}_{25}\mathbf{O}_{2}\mathbf{NS}$ säure. Sm. 143—144° (B. 27, 1608).
- 1) Jodmethylat d. m-Amido-d-Cocain. Sm. 197-198° (B. 27, 1882). $C_{18}H_{25}O_4N_2J$ - III, 868.
- 1) Phenyldi [1-Piperidyl] phosphin + 2 Molec. Schwefelkohlenstoff. $\mathbf{C}_{18}\mathbf{H}_{25}\mathbf{N_2}\mathbf{S_4}\mathbf{P}$
- Sm. 144° (B. 31, 1042). IV, 1682. 1) Di[Jodmethylat] d. 3,3'-Di[Dimethylamido]azoxybenzol. Sm. 190° u. Zers. (B. 30, 2935). IV, 1338. $\mathbf{C}_{18}\mathbf{H}_{26}\mathbf{ON_4J_2}$
- 1) Quecksilberdi[6-Dimethylamido-3-Methylphenyl]quecksilber- $\mathbf{C}_{18}\mathbf{H}_{26}\mathbf{O}_2\mathbf{N}_2\mathbf{H}\mathbf{g}_2$
- diammoniumhydrat. Sm. 117°. Chlorid, Bromid, Jodid, Nitrat Acetat (G. 28 [2] 102). IV, 1711.

 1) αα-Phtalyldi [β-sec. Butylthioharnstoff]. Fl. (Soc. 67, 574).

 1) Chlormethylat d. 2,6-Dimethyl-4-Phenylhexahydropyridin- $\mathbf{C}_{18}\mathbf{H}_{26}\mathbf{O}_{2}\mathbf{N}_{4}\mathbf{S}_{2}$ $\mathbf{C}_{18}\mathbf{H}_{26}\mathbf{O}_{4}\mathbf{NCl}$ 3,5-Dicarbonsäuredimethylester. $(2 + PtCl_4)$ (B. 25, 2791). —
- IV, 215.
 1) Jodmethylat d. 2,6-Dimethyl-4-Phenylhexahydropyridin-3,5- $\mathbf{C}_{18}\mathbf{H}_{26}\mathbf{O}_{4}\mathbf{N}\mathbf{J}$
- Dicarbonsäuredimethylester. Fl. (B. 25, 2791). IV, 215.

 1) Chondroïtinschwefelsäure. K, Cn (B. 25 [2] 473). IV, 1627. $C_{18}H_{27}O_{17}NS$ 1) Aethyläther d. 4-Oxyphenyldi [1-Piperidyl] phosphin. Sm. 840 $\mathbf{C}_{18}\mathbf{H}_{29}\mathbf{ON}_{2}\mathbf{P}$
- (B. 31, 1047). 1) Aethylphenyldi [1-Piperidyl] phosphonium jodid. Sm. 1740 (B. 31, $\mathbf{C}_{18}\mathbf{H}_{80}\mathbf{N}_{9}\mathbf{JP}$ 1044). **— IV**, 1682.
 - 2) Methyl-4-Methylphenyldi[1-Piperidyl]phosphoniumjodid. Sm.
- 186° (B. 31, 1046). IV, 1682. 1) Dibromjodstearinsäure (B. 9, 1917). I, 492. $\mathbf{C}_{18}\mathbf{H}_{33}\mathbf{O}_{2}\mathbf{Br}_{2}\mathbf{J}$
- 1) Chloräthylat d. Aethylcarpain. 2 + PtCl₄, + AuCl₃. III, 804. 1) Jodäthylat d. Aethylcarpain. III, 804. $\mathbf{C}_{18}\mathbf{H}_{34}\mathbf{O}_{2}\mathbf{NCl}$
- $\mathbf{C}_{18}\mathbf{H}_{34}\mathbf{O}_{2}\mathbf{N}\mathbf{J}$ $\mathbf{C}_{18}\mathbf{H}_{34}\mathbf{O}_{3}\mathbf{NCl}$ 1) Chloroximidostearinsäure (Nitrosylchlorid d. Elaïdinsäure). Sm.
- 99—100° (Soc. 65, 329). 1) Stearinamidoximschwefligesäure (B. 26, 2845).
- $C_{18}H_{38}O_3N_2S$
- 1) Imidoferrocyanwasserstoffäthyläther. 2HCl (B. 21, 932; siehe $\mathbf{C}_{18}\mathbf{H}_{40}\mathbf{O}_{6}\mathbf{N}_{6}\mathbf{F}\mathbf{e}$ auch A. 91, 253). — I, 1488.
- 1) Verbindung (aus Acetaldehyd). Fl. (B. 21, 330). I, 921. 1) Verbindung (aus Acetaldehyd). Fl. (B. 21, 331). I, 921. $\mathbf{C}_{18}\mathbf{H}_{42}\mathbf{O}_{9}\mathbf{Cl}_{3}\mathbf{P}$ $\mathbf{C}_{18}\mathbf{H}_{42}\mathbf{O}_{9}\mathbf{Br}_{3}\mathbf{P}$

C₁₈-Gruppe mit fünf Elementen.

- C₁₈H₈O₂N₂Br₆S₂ 1) Verbindung (aus Oktobrom-p-Tetrolditolyl) (B. 14, 936, 2093). IV, 1035.
- C₁₈H₁₂ON₃Br₆P 1) Tri[?-Dibrom-4-Amidophenyl]phosphinoxyd. Sm. 205—206° u.
 - Zers. (A. 229, 333). IV, 1660. 2) Orthophosphorsäurehexabromtrianilid. Sm. 252—253° (A. 229,
- 338). II, *357*.
- C₁₈H₁₂O₇N₆Cl₃P 1) Tri[4-Chlor-?-Nitrophenylamid] d. Phosphorsäure. Sm. 249° (B. **28**, 620). C₁₈H₁₃O₂N₂Cl₄P 1) Di[2,4-Dichlorphenylamid] d. Phenylphosphorsäure. Sm. 227° (B. **29**, 724).

1) Benzolsulfonat d. 2-Chlor-4'-Oxyazobenzol. Sm. 74° (B. 28, C18H19O3N9CIS 800). - IV, 1408.

2) Benzolsulfonat d. 3-Chlor-4'-Oxyazobenzol. Sm. 97° (B. 28. 802). — IV, 1409.

C. H. O. N. BrS

1) Benzolsulfonat d. 2-Brom-4'-Oxyazobenzol. Sm. 69° (B. 31, 2116). - IV, 1409. 2) Benzolsulfonat d. 3-Brom-4'-Oxyazobenzol. Sm. 95° (B. 28,

803). - IV, 1409.

3) Benzolsulfonat d. 4-Brom-4'-Oxyazobenzol. Sm. 136° (B. 31,

2117). — IV, 1410. C₁₈ $\mathbf{H}_{13}\mathbf{O}_4\mathbf{N}_2\mathbf{Cl}_2\mathbf{Bi}$ 1) Phenyldi[?-Nitrophenyl]wismuthdichlorid. Sm. 136° (B. 30, 2846).

 $C_{18}^{13}H_{14}^{13}O_5N_2^2ClBr$ 1) Methylester d. Verb. $C_{17}H_{12}O_5N_2ClBr$ (Bl. [3] 15, 407).

1) Tri[4-Chlorphenylamid] d. Phosphorsäure. Sm. 2300 (B. 28, 620). $C_{18}H_{15}ON_3Cl_3P$ 1) 4-Chlorphenylmonamid d. Phosphorsäurediphenylester. Sm. C₁₈H₁₆O₃NClP 117° (B. 28, 618).

C₁₈H₁₆ON₃Br₂P 1) Phenylamiddi [3-Bromphenylamid] d. Phosphorsäure. Sm. 1650 (B. **29**, 723).

1) Di [Phenylamid]-4-Chlorphenylamid d. Phosphorsäure. Sm. 1150 C18H17ON8ClP (B. 28, 620).

 $C_{18}H_{18}O_2N_2Br_2S_21$) 4-Bromphenylthiourethansulfid. Sm. 86-87° (B. 26, 2371). -II, 385.

1) Aethylester d. α-Benzoylamido-α-Merkaptopropion-4-Brom-C₁₈H₁₈O₃NBrS phenyläthersäure. Sm. 104° (H. 20, 439).

C₁₈H₁₉O₂NClBr 1) Base (aus Bromcodeïn). Sm. 131°. HCl, (2HCl, PtCl₄) (A. 210, 113). **— III**, 907.

1) Jodmethylat d. Brommorphin + H₂O. Sm. 252° (A. 297, 211). $C_{18}H_{21}O_8NBrJ$ Jodmethylat d. Verb. C₁₇H₁₉ONBr₂ (aus Dibrompseudocumenol-bromid). Sm. 190—191° (B. 29, 1124). C18H22ONBr2J

 $C_{18}H_{22}O_2N_2S_4As_21$) Verbindung (aus Thiolessigsäure) (G. 27 [2] 164).

C₁₈-Gruppe mit sechs Elementen.

C₁₈H₁₂ON₃Cl₃Br₃P 1) Tri[4-Chlor-?-Bromphenylamid] d. Phosphorsäure. Sm. 236° (B. **28**, 620).

C₁₈H₁₉O₃Cl₈SP

1) Tri[4-Chlorphenylester] d. Thiophosphorsäure. Sm. 113 bis 1146 (B. 31, 1108). 1) Tri[4-Chlorphenylester] d. Selenphosphorsäure. Sm. 88° (B. C₁₈H₁₉O₃Cl₃PSe 31, 1055).

1) 3, 6-Dichlor-2, 5-Di[Phenylamido]-1, 4-Benzochinon-24, 54-Di- $\mathbf{C}_{18}\mathbf{H}_{12}\mathbf{O}_{8}\mathbf{N}_{2}\mathbf{Cl}_{2}\mathbf{S}_{2}$ sulfonsäure. K₂ (Bl. [3] 19, 576).

1) Phenylmonamid d. Thiophosphorsäurediphenylester. Sm. 92° C18H16O2NSP (B. 31, 1102).

1) Di[Phenylamid] d. Thiophosphorsäuremonophenylester. Sm. C18H17ON,SP 126° (B. 31, 1104).

1) Di[Phenylhydrazid] d. Thiophosphorsäuremonophenylester. C18H19ONASP Sm. 136° (B. 31, 1104).

C₁₉-Gruppe mit einem Element.

C 94,2 - H 5,8 - M.G. 242. $C_{19}H_{14}$

Phenylendiphenylmethan. Sm. 148,5° (Bl. [3] 1, 775). — II, 293.
 Biphenylenphenylmethan. Sm. 145,5° (A. 194, 258; B. 5, 910, 971; 7, 1208; 11, 202, 613, 837; 14, 1522; 25, 2121, 3586; J. r. 11, 259). —

C'93,4 — H 6,6 — M. G. 244. C19H16

1) Triphenylmethan. Sm. 92°; Sd. $358-359^{\circ}_{754}$. $+ C_6H_6$. Lit. bedeutend. - II, 286.

2) 2-Benzyl-1-Phenylbenzol. Sm. 54°; Sd. 283—287°₆₅₀ (M. 2, 440). — II, 288.

- 3) 4-Benzyl-1-Phenylbenzol. Sm. 85°; Sd. 285—286°₆₅₀ (M. 2, 435). $C_{19}H_{16}$ II, 288. C 92,7 — H 7,3 — M. G. 246.
- $C_{19}H_{18}$ 1) Kohlenwasserstoff (aus d. Verb. C₁₉H₁₄0). Sm. 92° (B. 14, 462; A. **212**, 100). — **II**, 282.
- C 91,9 H 8,1 M. G. 248. $C_{19}H_{20}$ 1) 9-Isoamylanthracen. Sm. 59° (Pikrat Sm. 115°) (B. 14, 796, 802; A. 212, 104). — II, 277.
- C 91,2 H 8,8 M. G. 250. $C_{19}H_{22}$ 1) 9-Isoamyl-9,10-Dihydroanthracen. Sd. 350° u. Zers. (B. 13, 1600; 14, 457; A. 212, 79). — II, 254.
- C 90,5 H 9,5 M. G. 252. $C_{19}H_{24}$ 1) $\alpha\alpha$ -Diphenylheptan. Sm. 14°; Sd. 190—192°₁₃ (Bl. 47, 49). — II, 242. 2) Di[2,4,6-Trimethylphenyl]methan. Sm. 130° (B. 5, 1098). — II, 242.
- 3) Kohlenwasserstoff (aus Xylol u. Allylalkohol). Fl. (B. 24, 2749). II, 242. C 89,1 — H 10,9 — M. G. 256. $\mathbf{C}_{19}\mathbf{H}_{28}$
- 1) Kohlenwasserstoff (aus Cholesterylchlorid). Sd. 355-370° (M. 17, 43). C 85,1 — H 14,9 — M. G. 268. C19 H40 1) norm. Nonadekan. Sm. 32°; Sd. 330° (111°) (B. 15, 1704; 21, 2261; **29**, 1323). — **I**, 106.

C₁₀-Gruppe mit zwei Elementen.

- C19H8O4 C 76,0 — H 2,7 — O 21,3 — M. G. 300. 1) Verbindung (aus Diphenylmethan-α??-Tricarbonsäure). Sm. 260-261°
- (A. **242**, 237). II, 2025. C 68,3 H 3,0 O 28,7 M. G. 334. $C_{19}H_{10}O_6$ 1) Verbindung (aus d. Säure $C_{20}H_{14}O_{8}$). Sm. 162—163° (B. 21, 1616). — II, 2087.
- C'90,1 H 4,3 N 5,5 M. G. 253. $C_{19}H_{11}N$ 1) Pyrenolin. Sm. 152—153°. HCl, $(2 \text{HCl}, \text{PtCl}_4)$, $H_2 \text{SO}_4 + \frac{1}{2} H_2 \text{O}$, Pikrat (M. 8, 443). — IV, 472.
- 2) meso-Phenylcarbazoakridin. Sm. 186,5° (G. 20, 407). IV, 472. 1) Tribrombiphenylenphenylmethan. Sm. 167-1710 (B. 5, 971). - $\mathbf{C}_{19}\mathbf{H}_{11}\mathbf{Br}_{3}$
- C'89,1 H 4,7 O 6,2 M. G. 256. $C_{19}H_{12}O$ 1) 7-Keto-8-Benzylidenacenaphten. Sm. 107° (A. 290, 204). — III, 260.
- C 83.8 H 4.4 O 11.8 M. G. 272. $C_{19}H_{12}O_{2}$ 1) 2-Phenyl-1, 4-α-Naphtopyron (α-Naphtoflavon). Sm. 154—156° (B. 31, 707).
 - 2) Lakton d. $1-[\alpha-Oxy-\beta-(2-Naphtyl)$ äthenyl]benzol-2-Carbonsäure (β-Naphtylmethylenphtalid). Sm. 170—171° (B. **29**, 2375). C 75,0 — H 3,9 — O 21,1 — M. G. 304.
- $C_{19}H_{12}O_4$ 1) 2-Keto-1-[3,4-Dioxybenzyliden]-α-Naphtofuran. Sm. 240° u. Zers.
 - (B. 30, 1469).
 2) Acetat d. α-Oxy-α-Phenonaphtoxanthon. Sm. 216° (B. 25, 1646). III, 256.
 - 3) Acetat d. β -Oxy- β -Phenonaphtoxanthon. Sm. 206° (B. 25, 1647). —
 - 4) α , 2δ , 2'-Dilakton d. $\alpha \delta$ -Dioxy- $\alpha \delta$ -Diphenyl- γ -Methŷl- $\alpha \gamma$ -Butadiën-2,2'-Dicarbonsäure (Propindiphtalid). Sm. noch nicht bei 280° (B. 17, 2776). **— II**, 2035.

 - 5) Verbindung (aus 1,2,3-Trioxybenzol) (B. 26, 1140). II, 1044.
 6) Verbindung (aus d. Verb. C₁₉H₁₄O aus Isoamyloxanthranol). Sm. 157^o (A. 212, 98). III, 244.
 - 7) Verbindung (aus Allo- α -Brom- β -Phenylakrylsäure). Sm. oberh. 260° (B. 15, 18). — II, 1412. C 71,2 — H 3,7 — O 25,0 — M. G. 320. 1) Methyläther d. 2-Oxy-2,2'-Bi-1,3-Diketo-2,3-Dihydroinden. Sm.
- $C_{19}H_{12}O_5$ bei 230°. Na + $\frac{1}{2}$ H₂O, Ag (B. 31, 1172).

C 67.8 — H 3,6 — O 28,6 — M. G. 336.

2) Verbindung (aus 1,2,3-Trioxybenzol u. Benzaldehyd) (B. 26, 1144). -

 $C_{19}H_{12}O_5$

C, H, O,

II, 1044.

1) Verbindung (aus Resorcin u. Oxalsäure) (C. 1899 [1] 254). C 57,0 — H 3,0 — O 40,0 — M. G. 400. $\mathbf{C}_{19}\mathbf{H}_{12}\mathbf{O}_{10}$ 1) $\alpha \gamma$ -Diketo- $\alpha \gamma$ -Diphenylpropan- β , β , 2, 2'-Tetracarbonsäure. K_4 (B. 20, 1012). — II, 2100. 1) Dibrombiphenylenphenylmethan. Sm. 181-1820 (B. 5, 971). - II, 293. $\mathbf{C}_{19}\mathbf{H}_{12}\mathbf{Br}_{2}$ 1) Tetrabromtriphenylmethan? (B. 14, 1521). — II, 288. C 89,4 — H 5,1 — N 5,5 — M. G. 255. $\mathbf{C}_{19}\mathbf{H}_{12}\mathbf{Br}_{4}$ $C_{19}^{10}H_{13}^{12}N$ 1) 2-[2-Naphtyl]chinolin. Sm. 161° (B. 25, 1755). — IV, 467. 2) 2-Phenyl-α-Naphtochinolin. Sm. 68°. (2HCl, PtCl₄+2H₂O), H₂Cr₂O₇, Pikrat (A. 249, 115). — IV, 466. 3) 3-Phenyl- β -Naphtochinolin. Sm. 188°. (2 HCl, PtCl₄ + H₂O), H₂Cr₂O₇, Pikrat (A. 249, 133). — IV, 466. 4) 5-Phenylakridin. Sm. 181°; Sd. 403—404°. HCl, (2HCl, PtCl,), Nitrat, $+ C_6H_6$ (A. 192, 19; 224, 13, 28; 226, 184; B. 15, 3011; 17, 1596; 18, 2712; 20, 1552; J. pr. [2] 48, 222). - 1V, 467. 5) 9-Phenylphenanthridin. Sm. 109°; Sd. oberh. 400°. HCl + H₂O, (2 HCl, PtCl₄ + 2 H₂O), Pikrat (B. 29, 1187). — IV, 468.

1) Bromphenylendiphenylmethan. Sm. 110° (Bl. [3] 1, 775). — II, 294. C 88,4 — H 5,4 — O 6,2 — M. G. 258. $\mathbf{C}_{19}\mathbf{H}_{13}\mathbf{Br}$ $C_{19}H_{14}O$ 1) 4-Benzoylbiphenyl (4-Phenyldiphenylketon). Sm. 104° (M. 2, 437). — III, 257. 2) P-Benzoylbiphenyl. Sm. 106°. + AlCl₃ (B. 14, 2032; Bl. [3] 9, 1051). - III, 257. 3) Verbindung (aus Fluoran). Sm. 135-137° (B. 25, 3588). - II, 1984. 4) Verbindung (aus Isoamyloxanthranol). Sm. 2060 (A. 212, 97). — III, 244. C 83,2 - H 5,1 - O 11,7 - M. G. 274. $C_{19}H_{14}O_{2}$ 1) γ -Keto- α -Phenyl- γ -[1-Oxy-2-Naphtyl] propen. Sm. 125—126° (B. 31, 705). 2) γ -Keto- α -Phenyl- γ -[4-Oxy-2-Naphtyl]propen. Na + 5 H₂O (A. 275, 292). — III, 257. 3) Aethylester d. Pyrencarbonsäure (M. 4, 258). 4) 2-Naphtylester d. β-Phenylakrylsäure. Sm. 101—102° (B. 18, 1946). **– II**, 1406. 5) Benzoat d. 4-Oxybiphenyl. Sm. 152° (150°) (J. r. 5, 52; A. 257, 101). C19H14O3 C 78,6 — H 4,8 — O 16,5 — M. G. 290. 1) Aurin (Anhydro-α-Oxytri[4-Oxytriphenyl] methan). Lit. bedeutend. — II, 1119. 2) Lakton d. 3-Oxy-1-Keto-3,4-Diphenyl-2,3-Dihydro-R-Penten-2-Methylcarbonsäure. Sm. 151—152° (Soc. 71, 148). 3) Lakton d. α -Methoxyl- α -Phenyl- α -[2-Oxy-l-Naphtyl]essigsäure. Sm. 136° (B. 31, 2824).
4) Phenylester d. 2-Oxybenzolphenyläther-I-Carbonsäure. Sm. 109° (A. 257, 79). — II, 1495.
5) Phenylester d. 4-Oxybenzolphenyläther-1-Carbonsäure. Sm. 73 bis 78° (J. pr. [2] 28, 200). — II, 1527.
6) Benzoat d. Methyl-1-Oxy-2-Naphtylketon. Sm. 96,5° (B. 30, 1467).

 $\mathbf{C}_{19}\mathbf{H}_{14}\mathbf{O}_{4}$

C 74,5 — H 4,6 — O 20,9 — M. G. 306. 1) Oxyaurin (B. 9, 801; 11, 1436; 16, 2841). — III, 78. 2) α-Aurinoxyd + 2H₂O (M. 16, 371).

3) β -Aurinoxyd (M. 16, 372). — II, 1028.

- II, *1144*.

4) Acetat d. 5-Oxy-1, 3-Diketo-2, 4-Diphenyl-2, 3-Dihydro-R-Penten. Sm. 103-104°. K (A. 284, 264). — III, 320.

7) Monobenzoat d. 7,8-Dioxyacenaphten. Sm. 189—190° (Soc. 55, 580).

5) $\alpha \gamma$ -Lakton d. β -Acetoxyl- γ -Oxy- $\alpha \delta$ -Diphenyl- $\alpha \gamma$ -Butadiën- α -Carbonsäure (Acetylpulvinon). Sm. 137—139° (A. 284, 281). — II, 1899. 6) Methylester d. 2-[2-Oxynaphtoyl]benzol-l-Carbonsäure. Sm. 1990

(B. 16, 301). — II, 1909. 7) 1-Naphtylester d. 2-Acetoxylbenzol-1-Carbonsäure. Sm. 91° (B. 26, 1468). — II, *1496*.

- 8) 2-Naphtylester d. 2-Acetoxylbenzol-1-Carbonsäure. Sm. 136° (B. $\mathbf{C}_{10}\mathbf{H}_{14}\mathbf{O}_{4}$ **26**, 1468). — II, 1496.
 - 9) Verbindung (aus Isophenanthroxylenacetessigsäureäthylester). bis 226° (Soc. **59**, 11). — II, 1908. C 70,8 — H 4,3 — O 24,8 — M. G. 322.
- $C_{19}H_{14}O_{5}$

 - 3,4,3',4'-Dimethylenäther d. γ-Keto-αε-Di[3,4-Dioxyphenyl]-αδ-Pentadiën. Sm. 185° (B. 24, 617). III, 252.
 Vulpinsäure (Monomethylester d. Pulvinsäure). Sm. 148°. NH₄ + H₂0, K + H₂O, Ba + 7 H₂O, Piperidinsalz (A. 113, 56; 219, 1; 282, 1, 13; 284, 120, 173; B. 13, 1629, 1633; 14, 873; 15, 1546, 1550; J. 1864, 553, 554; J. pr. [2] 57, 316). — II, 2030.

 3) Isovulpinsäure. Sm. 124° (A. 219, 15; B. 15, 1552). — II, 2030.

 - 4) Dilakton d. α ε-Dioxy-γ-Keto-α ε-Diphenylpentan-2, 2'-Dicarbonsäure (Diphtaliddimethylketon). Sm. 156—157° (M. 19, 428). 5) 4-Acetat-3-Methyläther d. 1, 3-Diketo-2-[3,4-Dioxybenzyliden]-2, 3-
 - **Dihydroinden.** Sm. 184—185° (*B.* 30, 1186). C 67,4 H 4,1 O 28,5 M. G. 338.
- C19H14O6
 - 1) Trioxyaurin (Anhydro-α-Oxytri[o-Dioxyphenyl]methan) (B. 26, 255). —
 - 2) Resaurin (Anhydro-α-Oxytri[m-Dioxyphenyl]methan) (J. pr. [2] 23, 547; [2] **25**, 279). — II, 1124.
 - 3) Diacetat d. 6,8-Dioxy-1-Methyl-9,10-Anthrachinon. Sm. 1950 (Soc. **69**, 71). — III, 449.
 - 4) Diacetat d. 1,3-Dioxy-2-Methyl-9,10-Anthrachinon. Sm. 217—218° (Soc. 65, 184). — III, 451.
 - 5) Diacetat d. 1,4-Dioxy-2-Methyl-9,10-Anthrachinon. Sm. 185° (B. **10**, 2013). — **III**, 451.
 - 6) Diacetat d. 5,7-Dioxy-2-Methyl-9,10-Anthrachinon. Sm. 165-1670 (Soc. **65**, 863). — III, 451.

 - 7) Diacetat d. Chrysin. Sm. 185° (B. 26, 2902). III, 628. 8) Diacetat d. Chrysophansäure. Sm. 202—204° (J. 1861, 392; A. 183, 172; 212, 37; B. 11, 1607). — III, 452.

 9) Diacetat d. β-Phenyldaphnetin. Sm. 133—134° (B. 26, 2907). —
 - III. 248.
 - 10) Diacetat d. 5,7-Dioxy-4-Phenyl-1,2-Benzpyron. Sm. 1810 (1830) (B.
 - 26, 2907; 27, 423). III, 248. 11) Diacetat d. 7,8-Dioxy-2-Phenyl-1,4-Benzpyron. Sm. 201° (198—199°)
 - (B. 29, 880, 1889). III, 248. 12) Diacetat d. 7-Oxy-2-[4-Oxyphenyl]-1,4-Benzpyron. Sm. 182—183° (B. 32, 325).
 - 13) Monomethylester d. Oxypulvinsäure (Chrysocetrarsäure; Pinastrinsäure). Sm. 196—198°. K + 3 H₂O, Ca + 4 H₂O, Ba, Pb + 2 H₂O (A. 284, 107, 176; B. 30, 361; J. pr. [2] 57, 309, 314). — II, 2037. C 64,4 — H 3,9 — O 31,6 — M. G. 354.
- C19H14O7 1) Diacetat d. Emodin. Sm. 182-1840 (B. 21 [2] 842).
 - 2) Diacetylderivat d. Diphenylketon-2,4'-Dicarbonsäure. Sm. 1820 (B. **28**, 1135). — II, 1976. C 61,6 — H 3,8 — O 34,6 — M. G. 370.
- $C_{19}H_{14}O_{8}$ 1) Diacetat d. Rheïn. Sm. 236° (B. 28 [2] 1058).
 - 2) Triacetat d. 1,3,7-Trioxyxanthon (Tr. d. Gentisein). Sm. 2260 (M. **12**, 209). — III, 210. C 59,1 — H 3,6 — O 37,3 — M. G. 386.
- $C_{19}H_{14}O_{9}$ 1) Pyrogallaurin (B. 25, 2675). — II, 2100.
- Diacetylquercetinsäure (A. 119, 213). II, 2055.
 C 84,4 H 5,2 N 10,4 M. G. 270.
 9-Phenylhydrazonfluoren. Sm. 151—151,5° (M. 16, 808). IV, 778.
 2,5-Diphenylbenzimidazol. Sm. 197—198°. HCl, (2HCl, PtCl₄), H₂SO₄ $C_{19}H_{14}N_{2}$
 - (A. 209, 347). IV, 1072. 3) 3-Benzylidenamidocarbazol. Sm. 209--210° (G. 21 [2] 383). — IV, 992.
 - 4) 3-Amido-5-Phenylakridin. (2HCl, PtCl₄) (B. 18, 692). IV, 1072.
 - 5) 2-Phenylamidoakridin. Sm. 175—176° (B. 24, 2042). IV, 1012. 6) 4-Methyl-2,6'-Bichinolyl (Flavochinolin). Sm. 138° (B. 19, 1036). IV, 1072.
 - 7) Base (aus Isochinolinroth). Sm. 231° (B. 20, 14). IV, 1072.

 $\mathbf{C}_{19}\mathbf{H}_{15}\mathbf{N}_{3}$

 $C_{19}H_{16}O_{3}$

C 76,5 — H 4,7 — N 18,8 — M. G. 298. 1) Methylphenofluorindin. 2 HCl (B. 29, 1253). — IV, 1300. $C_{19}H_{14}N_4$

2) C-N-Dimethyl-5, 6-Imidazolonnaphtophenazin. Sm. 264° (B. 31, 2409).

TV, 1301.
1) 2,5-Dichlortriphenylmethan. Sm. 87° (A. 299, 354).
1) Phenylendiphenylmethandibromid. Sm. 187° (Bl. [3] 1, 775). $\mathbf{C}_{19}\mathbf{H}_{14}\mathbf{Cl}_{2}$ $\mathbf{C}_{19}\mathbf{H}_{14}\mathbf{Br}_{2}$ II, 294. C 88,7 — H 5,8 — N 5,4 — M. G. 257. $C_{19}H_{15}N$

1) α-Phenylimidodiphenylmethan (Diphenylmethylenanilin). Sm. 112 bis 113° (109°); Sd. oberh. 360° (A. 187, 201; B. 25, 2056). — III, 188. 2) γ-[1-Naphtyl]imido-α-Phenylpropen. Sm. 65° (A. 239, 384). — III, 61. 3) γ-[2-Naphtyl]imido-α-Phenylpropen. Sm. 95—96° (A. 239, 384). — III, 61.

4) 5-Phenyl-5,10-Dihydroakridin. Sm. 163-1640 (A. 224, 25). - IV, 465. C 80.0 - H 5.3 - N 14.7 - M. G. 285.

1) 5-Methyl-1-Phenyl-3-[4-Chinolyl]pyrazol. Sm. 120° (M. 17, 408). — IV, 1183. 2) 2-[4-Methylphenyl]-5-[2-Naphtyl]-1,3,4-Triazol. Sm. 190° (B. 30,

1884; A. **298**, 42). — IV, 1211.

3) 1-Phenyl-2-[4-Amidophenyl]benzimidazol. Sm. 198—199°. HCl + $1^{1}/_{4}$ H₂O, H₂SO₄ + $1^{1}/_{2}$ H₂O (Bl. [3] 19, 28; A. ch. [7] 14, 424). — IV, 1181. 4) 5-Amido-1, 2-Diphenylbenzimidazol. Sm. 191°. + H₂O (Sm. 172 bis

173°) (Bl. [3] **17**, 870). — **IV**, 1180.

5) 2-Amido-5-[4-Amidophenyl]akridin (Chrysanilin). Sm. 267—270°. + C_6H_6 , HCl, 2HCl + H_9O , HNO₃, 2HNO₃, 2Pikrat + H_9O (B. 2, 378; 12, 2241; 17, 436; 25 [2] 503; A. 226, 178, 188; J. 1862, 346). — IV, 1211.

1) α-Chlortriphenylmethan. Sm. 105—115° (B. 7, 1208; A. 194, 254; $C_{19}H_{15}Cl$ A. ch. [6] 1, 502). — II, 287.

1) α -Bromtriphenylmethan. Sm. 152°. + Br₅, + J₄ (B. 14, 1520; 16, 1276; 17, 700; A. 227, 110; J. 1884, 462; C. 1898 [2] 1131, 1132). - $\mathbf{C}_{19}\mathbf{H}_{15}\mathbf{Br}$ II, 287.

1) α-Bromtriphenylmethanpentabromid (C. 1898 [2] 1131). $\mathbf{C}_{19}\mathbf{H}_{15}\mathbf{Br}_{6}$ C 87,7 — H 6,1 — O 6,1 — M. G. 260. $C_{19}H_{16}O$

1) α-Oxytriphenylmethan (Triphenylcarbinol). Sm. 162,5° (159°); Sd. oberh. 360° (A. 194, 271; J. 1881, 518; B. 7, 1206; 14, 1522, 1944; 16, 1274; 26, 2225; 28, 2514; J. pr. [2] 36, 311; Bl. [3] 9, 374; [3] 21, 291; A. ch. [6] 1, 500; Am. 19, 702). — II, 1083.

2) 2-Oxytriphenylmethan. Sm. 118° (A. 241, 367). — II, 903.

3) ε -Keto- $\alpha \eta$ -Diphenyl- $\alpha \gamma \zeta$ -Heptatriën. Sm. 106° (B. 29, 614). — III, 257. 4) 2-Keto-1, 3-Dibenzyliden-R-Pentamethylen. Sm. 189° (B. 29, 1837). 5) Verbindung (aus Isoamyloxanthranolchlorid). Sm. 170° (A. 212, 91). —

III, 244. C 82,6 — H 5,8 — O 11,6 — M. G. 276. C19H16O2

1) 4,4'-Dioxytriphenylmethan. Sm. 161° (A. 206, 153; 217, 230; B. 12, 1464; **22**, 1944). — **II**, 1003.

2) Aethyläther d. Phenyl-?-Oxy-1-Naphtylketon. Sm. 74-75° (B. 23, 1209). — III, *254*.

3) 3,5-Diketo-4-Benzyliden-1-Phenylhexahydrobenzol. Sm. 2320 (A. **294**, 310).

4) Benzoat d. 2-Oxy-1,4-Dimethylnaphtalin. Sm. 124-125° (B. 31, 1679). C 78,1 — H 5,5 — O 16,4 — M. G. 292.

1) s-Trioxytriphenylmethan (Leukaurin) (A. 166, 286; 194, 136; 202, 197). — II, 1028.

2) α -Oxy-4,4'-Dioxytriphenylmethan (A. 217, 227; B. 18, 988). — II, 1115.

3) Triphenyläther d. Trioxymethan (Orthoameisensäuretriphenyläther). Sm. 76—77°; Sd. 260—270°_{50—55} (B. **15**, 2685; **18**, 2657). — **II**, 655. 4) Methyläther d. 5-Oxy-1, 3-Diketo-2-Methyl-2, 4-Diphenyl-2, 3-Di-

hydro-R-Penten. Sm. 79° (A. 284, 270). — III, 321. 5) Dimethyläther d. ?-Oxy-2-[2-Oxybenzoyl]naphtalin. Sm. 66—68°

(A. **257**, 91). — **III**, 256.

6) Dimethyläther d. P-Oxy-2-[2-Oxybenzoyl]naphtalin. Sm. 64-66° (A. **257**, 93). — III, 255.

C19H16O3 7) 2-Keto-4, 5-Diphenyl-2, 3-Dihydro-R-Penten-1-Methylcarbonsäure.

Sm. 126—127°. Ag (Soc. 71, 150). 8) Aethylester d. 2,5-Diphenylfuran-3-Carbonsäure. Sm. 82° (B. 21, 1490). **— III**, *713*.

9) Acetat d. γ -Keto-s-Phenyl- α -[2-Oxyphenyl]- $\alpha\delta$ -Pentadiën. Sm. 72—73° (B. 31, 729).

C 74,0 - H 5,2 - O 20,8 - M. G. 308. $C_{19}H_{16}O_4$

- 1) 1,3,1',3'-Tetraoxytriphenylmethan. Sm. 171° (B. 13, 611; A. 217, 235). — II, 1038.
- 2) 3-Oxy-1-Keto-3,4-Diphenyl-2,3-Dihydro-R-Penten-2-Methylcarbonsäure. Ag (Soc. 71, 148).
- 3) 3-Oxy-1-Keto-3,4-Diphenyl-2,3-Dihydro-R-Penten-5-Methylcarbonsäure. Sm. $178-179^{\circ}$. NH₄, Na, K, Ba + 5H₂O (Soc. 71, 147).
- 4) Aethylester d. 1,3-Diketo-2-Phenyl-1,2-Dihydroinden-2-Methylcarbonsäure. Sm. 104° (B. 26, 2579). — II, 1906. 5) Acetat d. Thebenol. Sm. 102--103° (B. 30, 1381).

6) Diacetat d. 3,10-Dioxy-1-Methylanthracen. Sm. 172—173° (B. 31, 2795).

7) Diacetat d. Methyloxanthranol. Sm. 217° (B. 21, 1172). — III, 245.

8) Benzoat d. β -Oxy- δ -Keto- γ -Benzoyl- β -Penten (2 isom. Formen). Sm. 102-103° u. 66-67° (A. 277, 69, 202; 291, 97, 106, 108). — IIÍ, 315. C 70,4 — H 4,9 — O 24,7 — M. G. 324.

 $C_{19}H_{16}O_{5}$ 1) Trimethyläther d. Dehydrobrasilin (M. 16, 913). — III, 655.

- 2) α -Acetat- β -Methyläther d. $\alpha\beta$ -Dioxy- $\gamma\delta$ -Diketo- $\alpha\delta$ -Diphenyl- α -Buten. Sm. 95° (B. 27, 715). — III, 317.
- 3) Dimethyläther d. Citrakonfluorescein (Soc. 63, 679). II, 2026. 4) Monäthylester d. γ-Keto-βγ-Diphenylpropen-αα-Dicarbonsäure (M. d. Desylmalonsäure). Sm. 124° (Soc. 67, 134). — II, 1981.
 5) Diäthylester d. 9-Ketofluoren-1,4-Dicarbonsäure. Sm. 114,5° (A.
- **229**, 154). II, 1979.

 $C_{19}H_{16}O_{6}$

 $\mathbf{C}_{19}\mathbf{H}_{16}\mathbf{N}_{2}$

- C 67,1 H 4,7 O 28,2 M. G. 340. 1) 1,2,3,1'2',3'-Hexaoxytriphenylmethan $+2H_2O$ (Hydropyrogallolbenzeïn) (A. **257**, 65). — II, 1043. 2) γ^2 - Acetat- $\alpha^{3,4}$ -Methylenäther- γ^4 -Methyläther d. γ -Keto- γ -[2,4-Dioxy-
- phenyl]- α -[3,4-Dioxyphenyl]propen. Sm. 158—159° (B. 32, 313).
- 3) Monacetat d. Apigenindimethyläther. Sm. 195-196° (Soc. 71, 812). 4) αε-Diketo-αε-Diphenylpentan-γγ-Dicarbonsäure (Diphenacylmalon-
- säure). Sm. 134° (B. 19, 3144). II, 2034. 5) Verbindung (aus Pinastrinsäure)? Sm. 171—173° (A. 284, 110). —
- II, 2037. C'64,0 - H 4,5 - O 31,4 - M. G. 356. $C_{19}H_{16}O_{7}$
- 1) Triacetat d. 2,3,4 [oder 3,4,5]-Trioxydiphenylketon. Sm. 117° (A. 269, 300). — III, 202. C 61,3 — H 4,3 — O 34,4 — M. G. 372. 1) Parellinsäure. Sm. 230° u. Zers. Ba + 6H₂O (*J. pr.* [2] 58, 524). C 58,8 — H 4,1 — O 37,1 — M. G. 388. $C_{19}H_{16}O_{8}$
- $C_{19}H_{16}O_{9}$ 1) Diacetat d. Anhydro - αα-Di[2, 3, 4(?)-Trioxyphenyl] propionsäure. Sm. 110° (B. 16, 2408). — II, 2078.
- C 56,4 H 3,9 O 39,6 M. G. 404. $\mathbf{C}_{19}\mathbf{H}_{16}\mathbf{O}_{10}$ 1) Ampelochroïnsäure. 3 Modifik. (Bl. [3] 7, 825; B. 25 [2] 478). —
 - 2) Eichengerbsäure, siehe C₁₇H₁₆O₉. III, 586. 3) Farbstoff (aus Weintrauben) oder C₁₈H₁₆O₉. K₄, Cu₄, Ag₄ (G. 27, [2] 479). C 83.8 - H 5.9 - N 10.3 - M. G. 272.
 - 1) 4-Benzylidenamido-1-Phenylamidobenzol. Sm. 107-1090 (A. 255, 189). — IV, 596. 2) α-Phenylimido-α-Phenylamido-α-Phenylmethan (Diphenylbenzenyl
 - amidin). Sm. 144°. HCl, (2HCl, PtCl₄), Pikrat (A. 108, 219; 135, \$2; 184, 83, 354; 265, 155; Z. 1866, 165; B. 15, 233; 18, 1476). IV, 842.
 - α-Imido-α-Diphenylamido-α-Phenylmethan (Isodiphenylbenzenylamidin). Sm. 111,5—112°. HCl, (2 HCl, PtCl₄), HNO₈, Rhodanid (A. 192, 4; **265**, 157). — **IV**, 842.
 - 4) α -Benzyliden- $\beta\beta$ -Diphenylhydrazin. Sm. 1220 (A. 190, 179). IV, 750.

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 $C_{19}H_{16}N_{2}$

5) 4-Benzylidenhydrazidobiphenyl. Sm. 153° (B. 27, 3107). — IV, 970. 6) α-Phenylhydrazondiphenylmethan (Benzophenonphenylhydrazon). Sm.

137° (B. 17, 576; 19, 1206; 26, 2168; A. 232, 228). — IV, 775.
7) 2-Phenylhydrazonmethylbiphenyl. Sm. 115° (118—124°) (C. 1897 [1]

413; M. 19, 588).

8) αα-Diphenylazo-α-Phenylhydrazonmethan (Formazylazobenzol). Sm. 162—163°. Cu, Ag (B. **25**, 3189, 3205, 3457; **27**, 148). — **IV**, 1492. 9) Benzhydrazoïn. Sm. 55° (B. **19**, 2239). — **IV**, 1502.

C 76,0 — H 5,3 — N 18,7 — M. G. 300.

 $C_{19}H_{16}N_4$

- 1) α-Phenylhydrazon-α-Phenylimido-α-Phenylamidomethan. Sm. 1110 (B. **25**, 3118). — **IV**, 1224.
- 2) α -Phenylazo- α -Phenylhydrazon- α -Phenylmethan (Phenylformazyl; Formazylbenzol). Sm. 174—175° (B. 25, 3456; 27, 158, 162, 322, 323, 1690). — IV, 1260. 3) 5-Amido-2-[4-Amidophenyl]-1-Phenylbenzimidazol. Sm. 270—272°.

 $_{\rm H_2SO_4}^{\rm S-Rinted-1_1/2}^{\rm H_2O}$ (Bl. [3] 19, 29). — IV, 1287. 4) ?-Diamido-1, 2-Diphenylbenzimidazol. Sm. 229—231° (Bl. [3] 17, 872). 5) 6-Amido-2, 3-Diphenyl-2, 3-Dihydro-1, 2, 4-Benztriazin. u. Zers. H₂SO₄ (B. **30**, 2596). — **IV**, 1286. 6) Methylphenosafranin. HCl (B. **30**, 402). — **IV**, 1283. 7) Methylamidoaposafranin. HBr (B. **30**, 2490). — **IV**, 1279.

1) Triphenyläther d. Trimerkaptomethan. Sm. 39,50 (B. 10, 185). - $C_{19}H_{16}S_{3}$ II, 784.

 $C_{19}H_{17}N$

- II, 784. C 88,0 H 6,6 N 5,4 M. G. 259. C 88,0 H 6,6 N 5,4 M. G. 259. HCl (B. 21, 189). II, 641.
- 1) 3-Amidotriphenylmethan. Sm. 120°. HCl (B. 21, 189). II, 641. 2) 4-Amidotriphenylmethan. Sm. 83—84°. HCl, (2HCl, PtCl₄), +C₆H₆ (A. 206, 155; B. 23, 1623). II, 641.
- 3) Triphenylmethylamin. Sm. 105° (102°). HCl, (2 HCl, PtCl₄ + 7¹/₂ H₂O) (B. 16, 1276; 17, 442, 702, 741). II, 641. 4) 2-Methyltriphenylamin (Diphenyl-o-Toluidin). Sm. 69-70° (B. 31, 2988).
- 5) Diphenylbenzylamin. Sm. 86,5-87° (95°) (B. 8, 1196; 11, 1761; 14, 1385). — II, *518*.
- 6) 2-Dimethylamido-l-Benzylbenzol. Sm. 89° (Soc. 41, 198). II, 635.
- 7) 4-[α -Amidobenzyl] biphenyl. Sm. 77°. HCl, $(2HCl, PtCl_4 + 4H, O)$,
- HNO₃, Acetat (M. 12, 508). II, 642. 8) 3,5-Dibenzylpyridin. Sm. 89°; Sd. oberh. 300°. HCl, HBr, HNO₃ (A. 280, 42; B. 24, 2186; 25, 2421). — IV, 456.
- 9) 2-Phenyl-1, 2, 3, 4-Tetrahydro-α-Naphtochinolin. Fl. (A. 249, 127). **– IV**, 457.
- 10) Base (aus α-Methylzimmtsäurealdehyd u. Anilin). (2HCl, PtCl₄) (B. 19, 529). — IV, 456. C 79,4 — H 5,9 — N 14,6 — M. G. 287.

C19H17N8

α-Phenylimido-α-Phenylamido-α-[4-Amidophenyl]methan (Carbotriphenyltriamin). Sm. 198°. HCl, (2HCl, PtCl₄) (J. 1858, 352; A. 160, 173; B. 10, 358; 12, 101, 104; 14, 2174). — TV, 1138.

2) α-Phenylimido-α-Phenylhydrazido-α-Phenylmethan. Sm. 119°. HCl, Pikrat (B. 28, 2372). — IV, 1137.

3) α-Phenylamido-α-Phenylhydrazon-α-Phenylmethan. Sm. 174—175°.

HCl, Pikrat (B. 28, 2373; J. pr. [2] 54, 122). — IV, 1137. 4) a-Triphenylguanidin. Sm. 143° (145°). HCl + H₂O, (2 HCl, PtCl₄), HNO₃, H₂SO₄, Oxalat, Acetat, Pikrat. Lit. bedeutend. — II, 349.

5) uns- β -Triphenylguanidin. Sm. 131°. HCl + H₂O, (2 HCl, PtCl₄) (B. 8, 294). — II, 351.

6) Isotriphenylguanidin. $HCl + \frac{1}{2}H_2O$ (B. 7, 1231).

- 7) $\alpha \alpha$ -Diphenyl- β - $[\alpha$ -Imidobenzyl] hydrazin (Diphenylbenzenylhydrazidin).
- Sm. 170°. HCl (*J. pr.* [2] **54**, 171). **IV**, 1137. 8) 1-Phenylbenzylamidodiazobenzol. Sm. 81° (*B.* **19**, 2037). **IV**, 1572. 9) Phenylazotetrahydro- α -Naphtochinolin. H_2SO_4 (B. 24, 2478).
- IV, 1487. 10) 4-Phenylazo-1, 2, 3, 4-Tetrahydro- β -Naphtochinolin. Sm. 96,5-97°

(B. 24, 2645). — IV, 1582. 11) 5-Aethylamido-10-Methyl- $\alpha\beta$ -Naphtophenazin. Sm. 182°. (2 HCl, $PtCl_4$), (HCl, AuCl₈), HNO₈ (B. 23, 3806). — IV, 1210.

 $\mathbf{C}_{19}\mathbf{H}_{17}\mathbf{N}_{3}$ 12) 5-Dimethylamido-10-Methyl- $\alpha\beta$ -Naphtophenazin. Sm. 230° (2 HCl, $PtCl_4$), (HČl, AuCl₃) (B. **23**, 3809). — \vec{IV} , 1210. 13) Mauvanilin + $\frac{1}{2}H_2O$ (Z. 1867, 236). — III, 677.

14) 3-Aethyl-2-Phenyl-2,3-Dihydro-1,2,4-Naphtisotriazin. Sm. 2190. $HCl, (2HCl, PtCl_4) (B. 24, 1006). - IV, 1393.$ C 72,4 - H 5,4 - N 22,2 - M. G. 315.

 $C_{19}H_{17}N_5$

1) Dibenzyladenin. Sm. 171°. HCl, HNO₃ (H. 18, 427). — IV, 1320. 2) 4-Methylphenylazophenylamidodiazobenzol. Zers. bei 72-73° (B. **28**, 171). — **IV**, 1572.

3) 5-[2-Amido-l-Naphtyl]azo-l, 2-Dimethylbenzimidazol. Sm. 260° (B.

- **29**, 1055). IV, 1490. 4) 6-Amido-3-[2-Amidophenyl]-2-Phenyl-2,3-Dihydro-1,2,4-Benztri-azin. Sm. 204° u. Zers. (B. 30, 2601). — IV, 1287.

5) 6-Amido-3-[3-Amidophenyl]-2-Phenyl-2,3-Dihydro-1,2,4-Benztriazin. Sm. 187° u. Zers. (B. 30, 2602). — IV, 1287.
6) 6-Amido-3-[4-Amidophenyl]-2-Phenyl-2,3-Dihydro-1,2,4-Benztriazin. Sm. 200° u. Zers. (B. 30, 2602). — IV, 1287.
1) Diphenyl-4-Methylphenylphosphin. Sm. 68° (B. 21, 1511). — IV, 1671. $C_{19}H_{17}P$ $C_{19}H_{18}O$

C 87,0 - H 6,9 - O 6,1 - M. G. 262.1) γ -Keto- $\alpha \varepsilon$ -Diphenyl- $\beta \delta$ -Dimethyl- $\alpha \delta$ -Pentadiën (Dibenzaldiäthylketon). Sm. 122º (B. 31, 1887).

2) 9-Keto-10-Isoamyliden-9,10-Dihydroanthracen (Isoamylenanthron). Sm. $71-72^{\circ}$ (A. **212**, 93, 94). — III, 244.

 $C_{19}H_{18}O_{2}$

 $C_{19}H_{18}O_{3}$

- C 82.0 H 6.5 O 11.5 M. G. 278. 1) 1-Oxy-3-Keto-2-Aethyl-1, 5-Diphenyl-2, 3-Dihydro-R-Penten. Sm. 156° (Soc. **51**, 432). — III, 253.
- 2) 1-Oxy-3-Keto-2, 4-Dimethyl-1, 5-Diphenyl-2, 3-Dihydro-R-Penten. Sm. 150° (Soc. 51, 432). — III, 253.
- Benzyläther d. 6-Oxy-4-Keto-2-Phenyl-1, 2, 3, 4-Tetrahydrobenzol. Sm. 129-130° (A. 294, 304).
 Formiat d. Geraniol. Sd. 112-114°₁₅ (B. 29, 907 Anm.). III, 477.
- C 77,5 H 6,1 O 16,3 M. G. 294.

1) Dimethyläther d. γ -Keto- $\alpha \varepsilon$ -Di[2-Oxyphenyl]- $\alpha \delta$ -Pentadiën. Sm. 123° (B. 31, 1511; J. pr. [2] 60, 148).

2) Butyryldibenzoylmethan. Sm. bei 115° (Am. 19, 880).

- 3) 2-Propionylphenyl-4-Propionylphenylketon. Sm. 1050 (B. 28, 1135). **- III**, 321.
- 4) Aethyläther d. Thebenol (Aethebenol). Sm. 103-105° (B. 32, 184).
- 5) Monoisovalerat d. 9,10-Dioxyphenanthren. Sm. 149° (A. 249, 142). **- II**, 1001.

C19H18O4

- C 73.6 H 5.8 O 20.6 M. G. 310.1) α -Methyläther- β -Aethyläther d. $\alpha\beta$ -Dioxy- $\gamma\delta$ -Diketo- $\alpha\delta$ -Diphenylα-Buten. Sm. 105° (B. 27, 719). — III, 317
- 2) 4-Aethyläther-2-Acetat d. γ -Keto- γ -[2,4-Dioxyphenyl]- α -Phenylpropen. Sm. 74—75° (B. 31, 698).
- 3) α^2 -Aethyläther- γ^2 -Acetat d. γ -Keto- $\alpha\gamma$ -Di[2-Oxyphenyl]propen. Sm. 68° (B. 32, 321).
- 4) Diäthyläther d. 7,8-Dioxy-2-Phenyl-1,4-Benzpyron. Sm. 115° (B. **29**, 1889).
- 5) Phenotoluchinon. Sm. 18° (C. 1898 [1] 887).
- 6) o-Kresophenochinon. Sm. 67° (C. 1898 [1] 887). 7) p-Kresophenochinon. Sm. 48° (C. 1898 [1] 887).
- 8) $\alpha \delta$ -Di[4-Methoxylphenyl] $\alpha \gamma$ -Butadiën β -Carbonsäure (p-Dianisylpentolsäure). Sm. 160°. Ca +3 H₂O, Ba +2 H₂O, Ag (A. 255, 299). II, 1899.
- 9) α -Oxy- β -Phenylakryleugenoläthersäure. Sm. 142°. Na, Ba + $^{1}/_{2}$ H₂O, Ag (G. 23 [1] 557). — II, 1637.
- 10) α -Phenyl- β -Benzyl- α -Buten- $\gamma\delta$ -Dicarbonsäure. Sm. 146—147°. Na₂, Ca, Ba, Ag₂ (B. **28**, 3194; A. **308**, 177).
- Sm. 195°. Ag (B. 27, 1414). 11) Monomethylester d. α-Truxillsäure.
- 12) Monomethylester d. γ-Truxillsäure. Sm. 180°. Ag (B. 27, 1415). II, 1903.

C,9H18O11

13) Aethylester d. $\alpha\delta$ -Diketo- $\alpha\delta$ -Diphenylbutan- β -Carbonsäure. Sm. 55 C19H18O4 bis 58° (B. 21, 1487). — II, 1899.

14) β -Monäthylester d. $\alpha\alpha$ -Diphenylpropen- $\beta\gamma$ -Dicarbonsäure (M. d. Diphenylitakonsäure). Sm. 124,5—125,5°. Ba, Ag (A. 282, 318; B. 28, 3192). — II, *1900*.

15) Verbindung (aus d. Lakton d. Dihydrocornicularsäure u. Essigsäure-anhydrid). Sm. 98—99° (A. 219, 29). — II, 1717.
16) Verbindung (aus ?-Dimethyl-6-Phenylcumalin u. 1,4-Dioxybenzol). Sm. 113° (B. 29, 1677; G. 26 [2] 343). C 69,6 — H 5,5 — O 24,5 — M. G. 326. Diäthyläther d. Apigenin. Sm. 161—162° (Soc. 71, 814).

C19 H18 O5

2) γ^2 -Acetat- $\alpha^4\gamma^4$ -Dimethyläther d. γ -Keto- γ -[2,4-Dioxyphenyl]- α -[4-Oxyphenyl] propen. Sm. 103—104° (B. 32, 322).

3) γ-Keto-αε-Diphenylpentan-βδ-Dicarbonsäure (αα-Dibenzylaceton-dicarbonsäure). Sm. 115—116°. Ag₂ (A. 261, 185). — II, 1978.
 4) Diäthylester d. 4[?]-Benzoylbenzol-1,3-Dicarbonsäure. Sm. 95° (B.

9, 1763). — II, 1975.

5) Diäthylester d. 2-Benzoylbenzol-1,4-Dicarbonsäure. Sm. 100-1010

(J. 1878, 403). — II, 1975. 6) Diäthylester d. Diphenylketomethan-2,2'-Dicarbonsäure. Sm. 73

bis 74° (A. 242, 246). — II, 1975.
7) Diacetat d. Lapachol. Sm. 131—132° (G. 12, 360; 19, 606). — III, 399. C 66,7 — H 5,2 — O 28,1 — M. G. 342. 1) Amanitin (C. 1896 [2] 307).

C19 H18 O6

2) Tetramethyläther d. Fisetin. Sm. 152-153° (B. 19, 1746). - III, 584. 3) Tetramethyläther d. Luteolin. Sm. 191-1920 (Soc. 69, 211). -

III, 584. 4) αα-Di[?-Acetoxylphenyl] propionsäure. Ba (B. 16, 2074). — II, 1882.

5) α -Keto- α -[4-Methoxylphenyl]- γ -Phenylbutan- $\delta\delta$ -Dicarbonsäure. Sm. 166° u. Zers. (A. 281, 61). — II, 2027.

6) Trimethylester d. Diphenyläthan-a??-Tricarbonsäure. Sm. 1450 (A. 242, 236). - II, 2024.

7) Monäthylester d. β-Oxy-α-Keto-αβ-Diphenylpropan-γγ-Dicarbonsäure (M. d. Benzoïnylmalonsäure). Sm. 134°. Na (Soc. 67, 133). -II. 2025.

8) Aethylester d. d-αβ-Dibenzoxylpropionsäure. Sm. 25° (Soc. 69, 107).

9) Diacetat d. Alkamin. Ba (B. 13, 1515). — III, 650.
10) Diacetat d. α-Oxylapachol. Sm. 82° (Soc. 67, 791). — III, 402. C 63,7 — H 5,0 — O 31,3 — M. G. 358.
1) Tetramethyläther d. Morin. Sm. 131—132° (Soc. 69, 796). — III, 683. C19 H18 O7 2) Tetramethyläther d. Quercetin. Sm. 156—157 (A. 196, 317; M. 5, 83; 6, 889; 9, 552; Soc. 71, 819; 73, 271). — III, 604.
3) Diacetylsolorinsäure. Sm. 147—148° (A. 284, 114). — II, 1971.

C 61,0 - H 4,8 - O 34,2 - M. G. 374.C19H18O8 Nethylester d. Atranorsäure (Atranorin, Parmelin) oder C₂₀H₁₈O₂. Sm. 195—197° (187—188°) (J. 1877, 811; G. 10, 157; 12, 19, 256; A. 284, 174; 288, 38; 295, 224; 296, 274; B. 30, 358, 1984; J. pr. [2] 57, 274, 280, 410 Anm.). — II, 2083. C 58,5 — H 4,6 — O 36,9 — M. G. 390.

C19H18O9

1) Verbindung (aus d. Trimethyläther d. ?-Trioxy-4-Methylcumarin). Sm. 253-254° (G. 23 [2] 615). — II, 2007. C 54,0 — H 4,3 — O 41,7 — M. G. 422. 1) Euxanthinsäure + 2H₂O. Sm. 156-158° u. Zers. (161-162°). (NH₄)₂, K. Mg + 5H₂O, Pb (J. pr. [1] 33, 190; A. 51, 426; 93, 87; 155, 264; 264, 267; 290, 155, 158; B. 15, 1964; 19, 2919; 25, 2569). — II, 2102. C 48,5 — H 3,8 — O 47,7 — M. G. 470. 1) Benzovlheva glyozyalbydnet (A. 172, 2).

C19H18O14 1) Benzoylhexaglyoxalhydrat (A. 172, 7). — I, 966. C 83,2 - H 6,6 - N 10,2 - M. G. 274. $\mathbf{C}_{19}\mathbf{H}_{18}\mathbf{N}_{2}$

1) 3,5-Di[Phenylamido]-1-Methylbenzol. Sm. 105° (J. pr. [2] 33, 542). - IV, 625.

2) 4', 4^2 -Diamidotriphenylmethan. Sm. 139°. + C_6H_6 (Sm. 106°), (2 HCl, PtCl₄), H_2SO_4 (B. 11, 276, 840; 12, 975, 1693; 13, 665, 985; 15, 236, 676; A. 206, 147; 217, 246; J. pr. [2] 36, 247; G. 14, 511; 15, 51). -IV, 1041.

- $C_{19}H_{18}N_2$ 3) 4-Benzylamidodiphenylamin. Sm. 1240 (A. 255, 190). — IV, 586. 4) α -Methylimido- α -[Methyl-2-Naphtyl]amido- α -Phenylmethan (Benzenyl-β-Naphtylmethylamid-Methylimidin). Fl. Pikrat (B. 28, 2369). — IV, 845. 5) $\alpha - [2 - \text{Naphtyl}] \text{imido} - \alpha - \text{Dimethylamido} - \alpha - \text{Phenylmethan (Benzenyl$
 - dimethylamid-β-Naphtylimidin). Fl. HJ, Pikrat (B. 28, 2371). IV, 845. 6) Dehydrocinchen + 3 H₂O. Sm. bei 60°. (2 HCl, PtCl₄), 2 HBr (B. 19, 2857; 28, 1077). — III, 839. C 75,5 — H 6,0 — N 18,5 — M. G. 302.
- $C_{19}H_{18}N_4$ 1) α-Phenylhydrazon-αα-Di[Phenylamido]methan (Diphenylanilguanidin). Sm. 160°. HCl, (2HCl, PtCl₄), H₂SO₄, Pikrat (B. 21, 2272; 25, 3116). **— IV**, 1224.
 - 2) α-Phenylhydrazondi[3-Amidophenyl]methan. Sm. 1830 (B. 20, 511). **— IV**, 775.
 - 3) α -Phenylhydrazido- α -Phenylhydrazon- α -Phenylmethan (Benzenyldiphenylazidin). Sm. 170° (B. 17, 183). — IV, 1246.
 - 4) 4-Methylbenzenyl-2-Naphtenylhydrazidin. Sm. 202° (B. 30, 1883; A. 298, 42). — IV, 1298. C 69,1 — H 5,4 — N 25,4 — M. G. 330.
 - 1) Benzoldisazobenzol-2,4-Toluylendiamin (B. 16, 2035). IV, 1385. 2) Phenylendiamin - Disazobenzoltoluol. Sm. 192 (B. 16, 2029). -IV, 1384.
 - 3) isom. Phenylendiamin-Disazobenzoltoluol. Sm. 225° (B. 16, 2030). **– IV**, *1385.*
 - 4) isom. Phenylendiamin-Disazobenzoltoluol. Sm. 214° (B. 16, 2030). **- IV**, 1385.
- 1) 2,4,6-Trimethylphenyläther d. 1-Merkaptonaphtalin. Sm. 120,6°; $\mathbf{C}_{19}\mathbf{H}_{18}\mathbf{S}$ Sd. 245°_{11} (B. **28**, 2329).

 $C_{19}H_{18}N_6$

C19H19N3

 $\mathbf{C}_{19}\mathbf{H}_{19}\mathbf{Cl}$

- 2) 2,4,6-Trimethylphenyläther d. 2-Merkaptonaphtalin. Sm. 87,5°; Sd. 245°₁₁ (B. **28**, 2330). C 87,4 — H 7,3 — N 5,3 — M. G. 261.
- $C_{19}H_{19}N$ 1) ?-[1-Hexahydropyridyl] anthracen. $(2HCl, PtCl_4 + 2H_2O)(B.23, 1385)$. IV, 10.
 - 2) ?-[1-Hexahydropyridyl] phenanthren. Sm. 113°. (2HCl, PtCl₄ + 6H₂O) (B. 23, 1386). — IV, 10. C 78,9 — H 6,6 — N 14,5 — M. G. 289.
 - 1) Tri[2-Amidophenyl]methan (o-Leukanilin). Sm. 165°. 3HCl, 4HCl+
 - H₂O (B. 16, 1305; 28, 1701). IV, 1193. 2) Tri [4-Amidophenyl] methan (p-Leukanilin). Sm. 148°. 3HCl + H₂O (A. 194, 268, 272; B. 12, 2241; 13, 669; 15, 678; 16, 1301; J. 1862, 349). IV, 1194.
 - 3) 3',42,43-Triamidotriphenylmethan (Pseudoleukanilin). Sm. 1500. + C6H6 (Sm. 145°), $(6 \text{ HCl}, 3 \text{ PtCl}_4)$ (B. 13, 672). — IV, 1193.
 - 4) 2-Aethylamido-1-[2-Methylphenyl]azonaphtalin. Sm. 132° (B. 17, 2670). — IV, 1400.
 - 5) 2-Aethylamido-1-[4-Methylphenyl]azonaphtalin. Sm. 112—113° (B. 17, 2670). — IV, 1400.
 - 6) 3,5-Di[4-Amidobenzyl]pyridin. Sm. 155-157°. 3HCl (A. 280, 57). - IV, 1197.
 7) 6-Aethylphenylamido-4-Methyl-2-Phenyl-1, 3-Diazin. Sm. 87° (Am.
 - 20, 488). IV, 1168. 1) 10-Chlor-9-Isoamylanthracen. Sm. 70-71° (B. 14, 797; A. 212, 111).
- **II**, 277. 1) 10-Brom-9-Isoamylanthracen. Sm. 76°. Pikrat (B. 14, 797; A. 212, $\mathbf{C}_{19}\mathbf{H}_{19}\mathbf{Br}$ 111). — II, 277. C 86,4 — H 7,6 — O 6,0 — M. G. 264.
- $C_{19}H_{20}O$ 1) 10-Keto-9-Isoamyl-9,10-Dihydroanthracen. Sm. 252-2530 (B. 21, 2509). — III, 250. C 81,4 — H 7,1 — O 11,4 — M. G. 280. $\mathbf{C}_{19}\mathbf{H}_{20}\mathbf{O}_{2}$
 - 1) Isoamyloxanthranol. Sm. 125° (B. 13, 1598; A. 212, 73). III, 244. 2) $\alpha \eta$ -Diketo- $\alpha \eta$ -Diphenylheptan. Sm. 67-68°; Sd. oberh. 300° u. ger. Zers. (Soc. 55, 347). — III, 301. 3) $\alpha \gamma$ -Diketo- $\alpha \gamma$ -Di[4-Aethylphenyl]propan. Sm. 42° (Bl. [3] 9, 700).

4) αγ-Diketo-αγ-Di[2,4(?)-Dimethylphenyl]propan. Sm. 82° (Bl. [3] C10H20O2 9, 701). — III, 301.

5) αγ-Diketo-αγ-Di[2,5-Dimethylphenyl] propan. Sm. 101-102° (Bl. [3] 9, 702). — III, 301.

6) αγ-Diketo-αγ-Di[3,4(?)-Dimethylphenyl]propan. Sm. 138° (Bl. [3] 9, 700). — III, 301.

7) Diphenyloxeton. Fl. (A. 288, 200).

8) 2,6-Diphenyl-3,5-Dimethyltetrahydro-1,4-Pyron. Sm. 106° (109°); Sd. $235 - 237^{\circ}_{20}$ (\dot{B} . **29**, 1352, 1836; **30**, 2262 Anm.; **31**, 1887). — III, 239.

9) Säure (aus Benzyl-4-Methylphenylketon). Sm. 92,5°. Ca, Ba (B. 14, 1646). **— II**. 1477.

10) Aethylester d. Distyrensäure. Fl. (A. 216, 185). — II, 1476.

3-Methyl-6-Isopropylphenylester d. β-Phenylakrylsäure. Sm. 69

bis 70°; Sd. 239—240°, (B. 18, 1946). — II, 1406.
12) Acetat d. Oxyretenfluoren. Sm. 70—71° (B. 17, 694; A. 229, 142). - II, 1082. C 77,0 — H 6,7 — O 16,2 — M. G. 296.

C10 H20 O3

- 1) Diäthyläther d. γ-Keto-γ-[2,4-Dioxyphenyl]-α-Phenylpropen. 92—93° (B. **29**, 1887).
- 2) Diäthyläther d. γ -Keto- γ -[2,5-Dioxyphenyl]- α -Phenylpropen. 50—51° (B. **32**, 329).

3) β -[2-Methoxylphenyl]- α -[4-Isopropylphenyl]akrylsäure. Sm. 198 bis 199°. Ag (G. 15, 511). — II, 1717.

4) α -Oxy- $\ddot{\beta}$ -Phenylakryl [4-Isopropyl-1-Methylphenyl-3-Aether] säure. Sm. 136° . Ba $+ 2^{1}/_{9}$ H₂O (G. 19, 357). — II, 1637.

5) Aethylester d. γ-Benzoyl-γ-Phenylbuttersäure. Sm. 33-340 (B. 21, 1353). — II, 1716.

6) Aethylester d. γ-Keto-αα-Diphenylbutan-β-Carbonsäure. Sm. 85° (Soc. 71, 676). C 73,1 - H 6,4 - O 20,5 - M. G. 312.

C19H20O4

- 1) Dibenzylidenäther d. Pentaerythrit. Sm. 160° (A. 289, 34). III, 8.
- 2) Dimethyläther d. 2,6-Di[2-Oxyphenyl]tetrahydro-1,4-Pyron. Sm. 173° (170°) (B. 31, 1510; J. pr. [2] 60, 147).

3) $\alpha \delta$ -Di[4-Methoxylphenyl]- α -Buten- γ -Carbonsäure. Sm. 101°. Ca + 2H₂O, Ag (A. **255**, 302). — II, 1892.

4) αγ-Lakton d. α-Oxy-αδ-Di[4-Methoxylphenyl]butan-γ-Carbonsäure (Dianisylpentalakton). Sm. 83° (A. 255, 306). — II, 1971.

5) Aethylester d. α -Acetoxyl- $\beta\beta$ -Diphenylpropionsäure. Sm. 53° (A. **248**, 44). — **II**, 1699.

6) Diäthylester d. Diphenylmethan-2,4-Dicarbonsäure. Fl. (B. 9, 1765). **– II**, 1888.

7) Dibenzoat d. Amylenglykol. Sm. 1230 (A. 133, 256). -

8) Dibenzoat eines isom. Amylenglykol. Sm. 40° (G. 21, 541). II, 1141.

9) Dibenzoat d. $\delta\delta$ -Dioxy- β -Methylbutan. Sm. 111°; Sd. 264° (A. 109, 299). — II, *1153*.

10) Dibenzoat d. $\alpha \gamma$ -Dioxy- $\beta \beta$ -Dimethylpropan. Sm. 53° (B. 27, 1089; A. 289, 41). — II, 1142.

11) Isoamylester d. 2-Benzoxylbenzol-1-Carbonsäure (A. 92, 314). — II, 1497.

 $C_{19}H_{20}O_{5}$

C 69,5 - H 6,0 - O 24,4 - M. G. 328.1) Isovaleryloreoselin. Sm. 95-97° (A. 174, 82). — III, 620.

Trimethyläther d. Brasilin. Sm. 138—139°; amorphe Modif. Sm. 82 bis 86° (B. 20, 3365; 21, 3009; 22, 1547; 23, 1430; 27, 525; M. 14, 56; 15, 269). — III, 652

3) Dibenzylidenadonit. Sm. 164-165° (B. 26, 638). — III, 8.

4) Guajakonsäure. Sm. 95—100°. + PbO (J. 1862, 467; M. 3, 125, 822). **- II**, 1974.

5) Diacetat d. Hydrolapachon. Sm. 161° (G. 19, 611). — II, 1028.

6) Verbindung (aus Papaverinbromäthylat). Sm. 180-181° (M. 10, 688). - IV, 441. C 66.3 - H 5.8 - O 27.9 - M. G. 344.

 $\mathbf{C}_{19}\mathbf{H}_{20}\mathbf{O}_{6}$ 1) Pinoresinol. Sm. 122°. $K_2 + 4H_2O$, Ca (M. 15, 507; 18, 481). -III, 563.

2) αε-Dioxypentandiphenyläther-γγ-Dicarbonsäure. Sr. 150-152° u. C19H20O6 Zers. Ag₂ (Soc. 69, 169, 1501). 3) Diäthylester d. Dioxymalondiphenyläthersäure. Sd. 250-260° (B. 24, 3004). — II, 667. 4) Diäthylester d. 1,3,4-Trimethyl-p- β -Benzdifuran-2,5-Dicarbonsäure. Sm. 133° (A. 283, 267). — III, 736. 5) Acetat d. Toluresitannol (C. 1895 [1] 353).
 6) Diacetat d. Verb. C₁₅H₁₈O₄. Sm. 126° (Bl. [3] 7, 564). — II, 919.
 C 63,3 — H 5,5 — O 31,1 — M. G. 360. C19H20O7 1) Monacetat d. 3,4,2',4',6'-Pentaoxydiphenylketontetramethyläther. Sm. 170° (B. 25, 1135). — III, 208. 2) Diacetat d. Osthin. Sm. 183-1860 (C. 1896 [1] 561). 3) Barbatinsäure oder C₂₂H₂₄O₈. Sm. 186° (A. 203, 302) B. 30, 358; J. pr. [2] 57, 237). — II, 2054. 4) Rhizonsäure. Sm. 185°. I 31, 664; J. pr. [2] 58, 527). K, Ca, Ba + $3 \text{ H}_{2}\text{ O}$, Pb, Cu + $4 \text{ H}_{2}\text{ O}$, Ag (B, 5) Diacetyldecarbousninsäure. Sm. 130—131° (G. 12, 236). — II, 2058. 6) Methylester d. Saligeninglykolsäure? Fl. (G. 21 [1] 258). — II, 1109. 7) Acetylderivat d. Decarbusneïn. Sm. 112° (A. 284, 166). — II, 2057. C 60.6 — H 5.3 — O 34.0 — M. G. 376. $C_{19}H_{20}O_8$ 1) 3,4-Dioxybenzoldimethyl norm. Propylenäther-1-Carbonsäure (Bl. 29, 270). — II, 1744. 2) Diacetat d. Pikrotoxinin. Sm. 254—255° (G. 9, 60; B. 31, 2969). — C19H20O10 C 55.9 - H 4.9 - O 39.2 - M. G. 408.1) Tetracetylcarminsäure? (B. 30, 1738). C 82,6 — H 7,2 — N 10,1 — M. G. 276. 1) Cinchen. Sm. 123—125°. (2HCl, PtCl₄) (B. 14, 103, 1854; 17, 1985, 1987; 18, 1219; 23, 2677; 31, 2361; J. 1882, 366). — III, 836. $\mathbf{C}_{19}\mathbf{H}_{20}\mathbf{N}_{2}$ 2) 1-Aethylamido-2-[4-Methylphenyl]amidonaphtalin. Sm. 68° (B. 27, 2778). — IV, 918. 3) 5-Pseudobutyl-1,3-Diphenylpyrazol. Sm. 77°; Sd. 229-231°, (B. 30, 2273). — IV, 943. 4) 2-Isobutyl-4,5-Diphenylimidazol. Sm. 223°. (2HCl, PtCl₄) (Soc. 49, 476). — IV, 1035. C 86,7 — H 8,0 — N 5,3 — M. G. 263. $\mathbf{C}_{19}\mathbf{H}_{21}\mathbf{N}$ 1) **3-Hexyl-\beta-Naphtochinolin**. Sm. 83° (B. **27**, 2023). C 78,3 - H 7,2 - N 14,4 - M. G. 291. $\mathbf{C}_{19}\mathbf{H}_{21}\mathbf{N}_{3}$ 1) 4-Phenylazooktohydro-β-Naphtochinolin. Sm. 95°. Pikrat (B. 24, 2656). — IV, 1581. C 85,7 - H 8,3 - O 6,0 - M. G. 266. $C_{19}H_{22}O$ 1) 10-0xy-10-Isoamyl-9,10-Dihydroanthracen. Sm. 73-74° (B. 14, 801; A. 212, 103). — II, 900. 2) α-Keto-αγ-Di[2,5-Dimethylphenyl]propan. Sm. 52°; Sd. 255-265°₃₀ (A. ch. [7] 2, 206). — III, 239.
3) Benzylidenxyliton. Sd. 230-240°₁₄ (A. 299, 230).
4) Cinnamylcampher. Sd. 280-290°₅₀ (B. 24 [2] 732). — III, 514. C 80.8 - H 7.8 - O 11.4 - M. G. 282.C19H29O2 1) Diäthyläther d. αα-Di[?-Oxyphenyl]propen. Sm. 76-77° (B. 22, 1130). — II, *999*. 2) $\alpha \alpha$ -Di[P-Aethylphenyl] propionsäure. Sm. 116° (B. 14, 1597). — II, 1472. 3) Aethylester d. αα-Di[4-Methylphenyl]propionsäure. Sm. 145° (B. **15**, 1476). — **II**, 1471. 4) Acetat d. 3-Oxy-?-Benzyl-4-Isopropyl-1-Methylbenzol. Sd. 245°_{8} (G. 11, 348). — II, 899. 5) Acetat d. α -Oxy-2,3,4,6-Tetramethyldiphenylmethan. Sd. oberh. 360° (Bl. **42**, 172). — II, 1081. C 76,5 - H 7,4 - O 16,1 - M. G. 298.C19H29O8 1) Pyroguajacin. Sm. 183° (181°). Na + H₂O, K + 1½ H₂O (A. 52, 404; 119, 277; J. 1854, 612; B. 30, 379; C. 1897 [1] 167). — II, 1878.
2) Diäthyläther d. Di[?-Oxy-?-Methylphenyl]keton. Sm. 105—106° (B. 28, 2872). — III, 232.

 $\mathbf{C}_{19}\mathbf{H}_{24}\mathbf{O}_{7}$

3) Dipropyläther d. 4,4'-Dioxydiphenylketon. Sm. 127° (B. 28, 2871). C10 H20 O3 **— III**, 199. C 69.1 - H 6.7 - O 24.2 - M. G. 330.

 $C_{19}H_{22}O_{5}$ 1) Tetramethyläther d. Phloretin. Sm. 58° (B. 28, 1397). — III, 230.

2) Diäthylester d. 1-Keto-5-Methyl-3-Phenyl-1,2,3,4-Tetrahydrobenzol-2,4-Dicarbonsäure. Sm. 87-88° (B. 18, 2584; A. 281, 77). -II, 1971.

C'65,9 - H 6,3 - O 27,7 - M. G. 346.C19H29O6 1) Tetramethyläther-Aethyläther d. 3,4,2',4',6'-Pentaoxydiphenylketon. Sm. 162° (B. **25**, 1138). — III, 208. 2) Lariciresinol. Sm. 169° (164°). K + H₂O (M. **18**, 502; **20**, 647).

 $C_{63,0} - H_{6,1} - O_{30,9} - M.G._{362}$ $C_{19}H_{22}O_7$ 1) Benzylarbutin + H₂O. Sm. 161° wasserfrei (A. 221, 366). — III, 572. 2) Triäthylester d. δ-Keto-δ-Phenyl-α-Buten-αβγ-Tricarbonsäure. Sd.

242—245°₂₀ (Soc. **69**, 1384; **71**, 324). C 57,9 — H 5,6 — O 36,5 — M. G. 394. $C_{19}H_{22}O_{9}$

1) Lignon (B. 26, 2528). 2) Diacetat d. Pikrotin + 2H₂O. Sm. 207—210° (B. 31, 2973).
 3) Verbindung (aus Pikrotoxin). Sm. 227° (G. 11, 51). — III, 643. C 55,6 — H 5,3 — O 39,0 — M. G. 410.

C19H22O10 1) Cyclopiaroth (J. 1881, 1019). — III, 629. C 51,6 — H 5,0 — O 43,4 — M. G. 442. $\mathbf{C}_{19}\mathbf{H}_{22}\mathbf{O}_{12}$

1) Oxycyclopiaroth (J. 1881, 1019). — III, 629. C 82,0 - H 7,9 - N 10,1 - M. G. 278. $\mathbf{C}_{19}\mathbf{H}_{22}\mathbf{N}_{2}$

1) Di[4-Propylphenylimido]methan, Sm. 168°, HCl (B. 17, 1228). -

2) Dihydrocinchen. Sm. 145°. Pikrat (B. 27, 1504, 2291; 31, 2363). — III, 837.

3) Desoxycinchonin. Sm. 90-92°. (2HCl, PtCl₄) (B. 28, 3145; 31, 2355). **— III**, 837.

4) Desoxycinchonidin. Sm. 61°. (2HCl, PtCl₄) (B. 29, 373; 31, 2355). - III, 852.

C 68.3 - H 6.6 - N 25.1 - M. G. 334. $C_{19}H_{22}N_6$ 1) Di[Benzylidenamido]pentamethylentetramin. Sm. 226—2270 (A. 288, 233). — III, 29.

C 80,3 - H 8,4 - O 11,3 - M. G. 284. $C_{19}H_{24}O_{2}$ 1) $\delta \delta$ -Di[?-Oxyphenyl]heptan. Sm. 155° (J. r. 23, 502). — II, 996.

2) Aethyläther d. 2-Oxybenzylidencampher (C. 1896 [2] 381). 3) Diphenyläther d. αη-Dioxyheptan. Sm. 54,5-55° (C. 1899 [1] 26).

C 72,2 — H 7,6 — O 20,2 — M. G. 316. 1) Acetylpodocarpinsäure. Sm. 152° (A. 170, 238). — II, 1685. C19H24O4

2) Methyl-Geraniolester d. Benzol-1,2-Dicarbonsäure (Methylester d. Rhodinolphtalsäure). Fl. (J. pr. [2] 56, 22). C 65.5 - H 6.9 - O 27.6 - M. G. 348.

C19H24O6 1) Diacetylmetasantonsäure. Sm. 2070 (G. 25 [2] 462).

2) Diäthylester d. $\beta\zeta$ -Dioxy- δ -Phenyl- $\beta\varepsilon$ -Heptadiën- $\gamma\varepsilon$ -Dicarbonsäure. Sm. 60° (B. 32, 88).

3) Diäthylester d. $\beta\zeta$ -Diketo- δ -Phenylheptan- $\gamma\varepsilon$ -Dicarbonsäure (Benzylidenbisacetessigsäureäthylester). Sm. 150° (152°) (B. 18, 2583; 31, 605, 608, 747, 1390, 2773; 32, 88, 333; A. 281, 76). — II, 2019.
4) isom. Benzylidenbisacetessigsäureäthylester. Sm. 120° (B. 31, 606; 200, 200).

32, 335).

5) isom. Benzylidenbisacetessigsäureäthylester. Sm. 133-134° (B. 31, 606; **32**, 335).

6) isom. Benzylidenbisacetessigsäureäthylester. Sm. 142—143° (B. 32,

7) Triäthylester d. δ-Phenyl-α-Buten-αγγ-Tricarbonsäure. Sd. 237 bis 239°_{23} (J. pr. [2] 58, 406).

C 62,6 - H 6,6 - O 30,8 - M. G. 364.1) α , 2-Lakton d. $\alpha\alpha$ -Dioxy- α -Phenylbutanäthyläther- β , β , 2-Tricarbonsäure- $\beta\beta$ -Diäthylester. Fl. (A. 242, 52). — II, 2071.

2) Triäthylester d. α -Benzoylpropan- $\alpha\beta\gamma$ -Tricarbonsäure. Sd. 250°_{16} (J. pr. [2] 53, 312; Soc. 73, 728).

- C19 H24 O7 3) Triäthylester d. β -Benzoylpropan- $\alpha\beta\gamma$ -Tricarbonsäure. Sd. 225°_{14} (J. pr. [2] **53**, 313). C 57,6 — H 6,0 — O 36,4 — M. G. 396. C19H24O9
- 1) Bastin (Soc. 38, 667; 41, 99; 43, 19; 55, 204). I, 1080. C 55,3 H 5,8 O 38,8 M. G. 412. 1) Anamirtin (M. 1, 131). III, 644. 2) Tetraäthylester d. 3,6-Dioxybenzol-3-Methyläther-1,2,4,5-Tetra-C19H24O10
- carbonsäure. Na (A. 258, 288). II, 2095. C 81,4 H 8,6 N 10,0 M. G. 280. $C_{19}H_{24}N_{2}$
- 1) 2-Methyl-1,4-Di[4-Methylphenyl]hexahydro-1,4-Diazin. Sm. 105° (B. **25**, 3278). — II, 488. C 74,0 — H 7,8 — N 18,2 — M. G. 308.
- $C_{19}H_{24}N_4$ 1) $\gamma \delta$ -Di[Phenylhydrazon]heptan. Sm. 106° (J. pr. [2]) 55, 194). — IV, 782.
 - 2) $\delta \varepsilon$ -Diphenylhydrazon- β -Methylhexan. Sm. 115—116° (116,5°) (G. 27) [1] 276; B. 22, 2122). — IV, 782. C 85,4 — H 9,3 — N 5,3 — M. G. 267.
- $C_{19}H_{25}N$ 1) Isoamyldi[4-Methylphenyl]amin. Sd. 290-300°₁₅ (Bl. 24, 120). — II, 487. C 77,3 — H 8,5 — N 14,2 — M. G. 295.
- $\mathbf{C}_{19}\mathbf{H}_{25}\mathbf{N}_{3}$ 1) 4-[4-Diäthylamidobenzyliden]amido-l-Dimethylamidobenzol. Sm. 140-141° (B. 31, 2253). 2) Di[4-Propylphenyl]guanidin. Sm. 113°. (2 HCl, PtCl₄) (B. 17, 1225).
 - II, 549. 3) Di[2,4,6-Trimethylphenyl]guanidin. Sm. 218° (B. 15, 1014). —
- II, 554. C 79,7 H 9,1 O 11,2 M. G. 286. C19H26O2
- 1) Aethyläther d. 2-Oxybenzylcampher (C. 1896 [2] 590). C 75,5 — H 8,6 — O 15,9 — M. G. 302. C19H26O8 1) Aethylester d. Podocarpinsäure. Sm. 143-146° (A. 170, 223). -
- II, 1685. C 71,7 H 8,2 O 20,1 M. G. 318. 1) Cerbertin. Sm. 85,5 (R. 12, 26). III, 573. 2) Cerberitrin (B. 26 [2] 679. $C_{19}H_{26}O_4$
- 3) Methyl-Citronellolester d. Benzol-1, 2-Dicarbonsäure (Methylester d.
- Citronellalphtalsäure). Fl. (J. pr. [2] **56**, 41). C 65,1 H 7,4 O 27,4 M. G. 350. C19H26O6 1) Diacetylisophotosantonsäure. Sm. 163-166° (B. 19, 2263). — II, 1933.
- 2) Triäthylester d. α -Phenylbutan- $\beta\beta\gamma$ -Tricarbonsäure. Sd. 337,8° (B. **23**, 654). — II, 2016. C 62,3 — H 7,1 — O 30,6 — M. G. 366. C19H26O7
- 1) Essigsäureverbindung d. Acetylsantonsäure. Sm. 126—128° (J. 1875, 608). — II, 1789. C 55,1 — H 6,3 — O 38,6 — M. G. 414. 1) Cocculin (A. 222, 353). — III, 644. C 49,4 — H 5,6 — O 45,0 — M. G. 462. $\mathbf{C}_{19}\mathbf{H}_{26}\mathbf{O}_{10}$
- C19H26O13
- Hexaacetat d. α-Glykoheptose. Sm. 156° (A. 270, 78). I, 1057.
 C 80,8 H 9,2 N 9,9 M. G. 282. $\mathbf{C}_{19}\mathbf{H}_{26}\mathbf{N}_{2}$ 1) $\alpha\alpha$ -Di[?-Amidophenyl]heptan. Fl. HNO₃ (Bl. 47, 49). — IV, 986. 2) $\alpha\gamma$ -Di[2-Dimethylamidophenyl]propan. Sd. 227—229°₄₀. (2HCl, PtCl₄)
 - (B. 25, 2408). IV, 983.
 3) ββ-Di[4-Dimethylamidophenyl]propan. Sm. 83°. 2HCl, (4HCl, 3HgCl₂), (2HCl, PtCl₄), 2HBr, 2HJ (B. 4, 743; 6, 347; 12, 813). IV, 984.
 4) Di[Aethylamidomethylphenyl]methan (aux 2-Aethylamido-1-Methylphenyl)
 - benzol). Sm. 96°; Sd. bei 300°₄₀ (M. 19, 632). C 73,5 H 8,4 N 18,1 M. G. 310.
- C19H26N4 1) 2,2-Di[4-Dimethylamidophenyl]tetrahydroimidazol (Aethylenauramin). (2 HCl, PtCl₄), Pikrat (B. 20, 2855). — IV, 1174. C 76,8 — H 9,1 — N 14,1 — M. G. 297. 1) Morrhuin. Fl. (2 HCl, PtCl₄) (Bl. [3] 2, 229). — III, 888. C 79,1 — H 9,7 — O 11,1 — M. G. 288. 1) 2,4-Divaleryl-1,3,5-Trimethylbenzol. Sm. 55°; Sd. 210—211°_{18—20} $\mathbf{C}_{19}\mathbf{H}_{27}\mathbf{N}_{3}$
- C19H28O2
 - (B. 30, 1286).

2) Abietinsäure. Sm. 153-154°. Salze meist bek. Lit. bedeutend. - $C_{19}H_{28}O_{2}$ II. 1435.

3) Menthylester d. β-Phenylpropionsäure. Sd. 203° (B. 31, 1778).

4) Benzoat d. Lanolinalkohol. Sm. 65-66° (G. 25 [1] 46). C 75,0 — H 9,2 — O 15,8 — M. G. 304.

 $C_{19}H_{28}O_{3}$ 1) Aethylester d. d-7-Aethoxyl-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Aethyl-α-Carbonsäure (Ae. d. d-Aethyläthersantonigen Säure). Sm. 31-320 (B. 16, 427). - II, 1671.

2) Aethylester d. i-7-Aethoxyl-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Aethyl-α-Carbonsäure (Ae. d. Aethylätherisosantonigen

Säure). Sm. 54° (B. 16, 428). — II, 1671. 3) Verbindung (aus Boldoglykosid) (Bl. 42, 291). — III, 573.

 $C_{19}H_{28}O_4$

C 71,2 — H 8,7 — O 20,0 — M. G. 320.

1) Strophanthidin. Sm. 195° (M. 19, 399).

2) Benzoxyllaurinsäure. Sm. 41,5° (C. 1897 [1] 419).

3) Diäthylester d. i-Dehydronaphtosantonsäure. Fl. (B. 18, 2863; G. 23 [1] 289). — H. 1932.

4) Isobutylester d. Santonsäure. Sm. 67° (B. 13, 2209). — II, 1788.

C 67,8 — H 8,3 — O 23,8 — M. G. 336.

1) Diäthylester d. α -Oxyheptanphenyläther- $\delta\delta$ -Dicarbonsäure. Sd. 279 $_{100}^{10}$ (B. 28, 1198, 1200). C19H28O5

C 59.4 - H 7.3 - O 33.3 - M. G. 384.C19H28O8

1) Triisobutyrylshikiminsäure (B. 24, 1284). — I, 769.

C19H28O10

C 54,8 — H 6,7 — O 38,5 — M. G. 416.
1) Tetraäthylester d. βζ-Diketoheptan-αγεη-Tetracarbonsäure (T. d. Methylenbisacetondicarbonsäure). Sm. 105° (A. 288, 354).
2) Pentaäthylester d. α-Buten-αβγγδ-Pentacarbonsäure. Sd. 229 bis

231°₁₀ (B. 31, 48).
3) Verbindung (aus Acetylendicarbonsäurediäthylester u. Aethantricarbonsäuretriäthylester). Fl. (J. pr. [2] 49, 22). C 52.8 - H 6.5 - O 40.7 - M. G. 432.

 $\mathbf{C}_{19}\mathbf{H}_{28}\mathbf{O}_{11}$ 1) Pentacetat d. Anhydro- $\alpha\gamma\varepsilon$ -Trioxy- $\beta\beta\delta\delta$ -Tetra[Oxymethyl]pentan. Sm. 84° (B. 27, 1089; A. 289, 49).

C 49,1 - H 6,0 - O 44,8 - M. G. 464. $C_{19}H_{28}O_{18}$ 1) Helicinglykose (A. 244, 26). — III, 68. $\mathbf{C}_{19}\mathbf{H}_{28}\mathbf{N}_{2}$

C 80,3 - H 9,8 - N 9,8 - M. G. 284.1) Oktohydrocinchen. Fl. (2HCl, CdCl₂ + H₂O), (2HCl, PtCl₄) (B. 25, 1547). — III, *840*.

2) 1-Phenylhydrazon - 3 - Hexyl - 5 - Methyl - 1, 2, 3, 4 - Tetrahydrobenzol. Sm. 157—159° (A. 288, 346). — IV, 770.

C 78,6 — H 10,3 — O 11,0 — M. G. 290. $C_{19}H_{80}O_{2}$

1) 4-Methylphenylester d. Laurinsäure. Sm. 28°; Sd. 219,5°, (B. 17, 1378). — II, 749.

 $C_{19}H_{80}O_{8}$ C 74,5 - H 9,8 - O 15,7 - M. G. 306.

1) Verbindung (aus Cholsäure) (H. 16, 492). — I, 782. C19H30O5 C 67,4 - H 8,9 - O 23,7 - M. G. 338.

1) Helleboretin, siehe auch C₁₄H₂₀O₃ (*C.* **1897** [2] 764). 2) Acetyllichesterinsäure. Sm. 124° (*J. pr.* [2] **57**, 305). 3) Diäthylester d. 1-Keto-3-Hexyl-5-Methyl-1,2,3,4-Tetrahydrobenzol-**2,4-Dicarbonsäure.** Sd. 202-204°₁₇ (A. **288**, 341). C 61,6 — H 8,1 — O 30,3 — M. G. 370.

C19H30O7 1) Panakon (A. 90, 234). — III, 640.

C 54,5 — H 7,2 — O 38,3 — M. G. 418. 1) Herniarin (C. 1895 [1] 352). $\mathbf{C}_{19}\mathbf{H}_{30}\mathbf{O}_{10}$

2) Pentaäthylester d. Butan-αββγδ-Pentacarbonsäure. Sd. 216—218% (B. **23**, 3760). — **I**, 871.

3) Pentaäthylester d. Butanpentacarbonsäure. Sd. 232-233012 (Soc. 73, 1014).

C19 H32 O4 C 70.4 - H 9.9 - O 19.7 - M. G. 324.

1) Lichesterinsäure. Sm. 124,5—125°. K, Cu, Ag (C. 1898 [2] 964). $C_{19}H_{32}O_5$ C 67,1 - H 9,4 - O 23,5 - M. G. 340.

1) Säure (aus Cholesterin). Cu (M. 17, 593).

 $C_{19}H_{39}O_{6}$ C 64.0 - H 9.0 - O 27.0 - M. G. 356. Diäthylester d. βθ-Diketo-γη-Diäthylnonan-γη-Dicarbonsäure (D. d. Diacetyldiäthylpimelinsäure). Sm. 44—45°; Sd. 249—252°_{45—50} (Soc. 57, 30). — I, 822. 2) Diäthylester d. $\beta\zeta$ -Diketo- δ -Hexylheptan- $\gamma\varepsilon$ -Dicarbonsäure (D. d. Oenanthylidendiacetessigsäure). Sm. 71° (A. 288, 340). 3) Triäthylester d. Hydrocampherylmalonsäure. Sd. 253-255% (A. **257**, 302). — **I**, 822. C 58,8 — **H** 8,2 — O 33,0 — **M**. G 388. $C_{19}H_{32}O_{8}$ 1) Tetraäthylester d. Heptan-ααεε-Tetracarbonsäure. Sd. 275°₇₅ (Soc. 2) Tetraäthylester d. Heptan-ααηη-Tetracarbonsäure. Sd. 270—275°₅₀ (Soc. 65, 104). 3) Tetraäthylester d. Heptan- $\beta\beta\zeta\zeta$ -Tetracarbonsäure. Sd. 238–240 $^{\circ}_{30}$ (Soc. **59**, 829; B. **28**, 2828). — I, 862. 4) Tetraäthylester d. Heptan-γγεε-Tetracarbonsäure. Sm. 61°; Sd. 195°, (A. 256, 185). — I, 862. 5) Tetraäthylester d. $\beta\delta$ -Dimethylpentan- $\beta\gamma\gamma\delta$ -Tetracarbonsäure. Sd. 315—334° (B. **23**, 666). — **I**, 862.

 204_{15}^{0} (B. **31**, 2590; Soc. **73**, 1012). C 79,2 — H 11,1 — N 9,7 — M. G. 288. $C_{19}H_{32}N_2$

 $\mathbf{C}_{19}\mathbf{H}_{34}\mathbf{N}_{6}$

 $\mathbf{C}_{19}\mathbf{H}_{38}\mathbf{O}_{2}$

η-Phenylhydrazontridekan. Fl. (Soc. 57, 536). — IV, 769.
 C 63,7 — H 9,5 — O 26,8 — M. G. 358.

 $C_{19}\overline{H_{34}O_{6}}$ Triäthylester d. βη-Dimethyloktan-γδδ-Tricarbonsäure. Sd. 290 bis 295° (B. 29, 977).
 C 65,9 — H 9,8 — N 24,3 — M. G. 346.

1) Verbindung (Base aus Isobuttersäurenitril). Sm. 241°. (2HCl, PtCl₄ + $2^{1}/_{2}$ H₂O) (*J. pr.* [2] **37**, 400). — **I**, 1466. C 77,0 — H 12,2 — O 10,8 — M. G. 296.

6) Tetraäthylester d. β -Isobutylpropan- $\alpha \alpha \gamma \gamma$ -Tetracarbonsäure. Sd.

 $C_{19}H_{36}O_{2}$ 1) Döglingsäure. Ba (J. 1847/48, 568). — I, 527.
2) Methylester d. Oelsäure (A. 28, 257). — I, 526.
3) Methylester d. Elaïdinsäure (A. 28, 256). — I, 527.
C 69,5 — H 11,0 — O 19,5 — M. G. 328. $C_{19}H_{36}O_4$

Heptadekan-αα-Dicarbonsäure (Cetylmalonsäure). Sm. 121,5—122° (115—117°). Ba, Cd, Zn, Cu, Ag₂ (A. 206, 359; B. 24, 2781). — I, 690.
 Heptadekan-ι-Dicarbonsäure (Dioktylmalonsäure). Sm. 75°. Ca (A.

204, 164). — **I**, 690.

3) Diäthylester d. β_{\varkappa} -Dimethylundekan- $\delta \vartheta$ -Dicarbonsäure. Sd. 235 bis 237°₁₀₀ (Soc. **59**, 842). — **I**, 689. C 50,0 — H 7,9 — O 42,1 — M. G. 456.

 $C_{19}H_{88}O_{19}$ 1) Oenantholsaccharose (A. 244, 23). — I, 1070. C 80,8 — H 13,5 — O 5,7 — M. G. 282. $C_{19}H_{38}O$

β-Ketononadekan (Methylseptdekylketon). Sm. 55,5°; Sd. 266,5°, 110 (B. 12, 1672; 15, 1707, 1724). — I, 1005.
 δ-Ketononadekan. Sm. 50,5°; Sd. 211°, (Bl. [3] 15, 766).
 κ-Ketononadekan (Dinonylketon; Caprinon). Sm. 58°; Sd. über 350°

(A. 157, 270). — I, 1005.

4) β -Keto- γ -Oktylundekan (Dioktylaceton). Sd. 325-330° (A. 204, 10). **- I**, 1005.

C 76,5 — H 12,7 — O 10,7 — M. G. 298. 1) Oktadekan-P-Carbonsäure. Sm. 66,5°; Sd. 297—299°₁₀₀. Ba, Cu, Ag

(J. 1884, 1193). — I, 447. 2) Methylester d. Stearinsäure. Sm. 38° (J. 1858, 301). — I, 445. 3) Aethylester d. Daturinsäure. Sm. 27° (Bl. [3] 5, 96; B. 26 [2] 288).

 $C_{19}H_{38}O_4$ C 69.1 — H 11,5 — O 19,4 — M. G. 330.

1) Säure (aus Dorschleberthran) (C. 1896 [1] 171). 2) Methylester d. Dioxystearinsäure. Sm. 106-108° (J. pr. [2] 40, 245; Bl. [3] **13**, 239). — **I**, 637.

3) Glycerinmonopalmitin. Sm. 63° (58°) (A. ch. [3] 41, 238; Am. 6, 225). - I, 444. C 65,9 - H 11,0 - O 23,1 - M. G. 346.

C₁₉H₃₈O₅ 1) Methylester d. Trioxystearinsäure. Sm. 110° (J. pr. [2] 39, 341). — I,738.

C₁₉-Gruppe mit drei Elementen.

 $\mathbf{C}_{19}\mathbf{H}_8\mathbf{O}_6\mathbf{Br}_4$ 1) Tetrabromderivat d. Verb. $\mathbf{C}_{19}\mathbf{H}_{12}\mathbf{O}_6$ (aus Resorcin) (C. 1899 [1] 254). $\mathbf{C}_{19}\mathbf{H}_{9}\mathbf{O}_4\mathbf{Br}_5$ 1) Pentabromresorcinbenzeïn (J. pr. [2] 48, 393). — II, 1123. $\mathbf{C}_{19}\mathbf{H}_{10}\mathbf{O}_3\mathbf{Br}_4$ 1) Tetrabromaurin. Ag₂ (A. 196, 81; M. 3, 466; B. 17, 1626). — II, 1120. C₁₉H₁₀O₄Br₄ 1) Tetrabromresorcinbenzein. Sm. 290-300° (J. pr. [2] 48, 392). — II, 1123. $C_{58,4} - H_{2,6} - O_{24,6} - N_{14,4} - M.G.$ 390. C19H10O6N4 1) ?-Trinitro-5-Phenylakridin (A. 224, 29). — IV, 468. C₁₉H₁₀O₁₀Br₄I) Tetrabromdehydroeichenrindengerbsäure (A. 240, 336). — III, 588. C 48,5 - H 2,1 - O 37,5 - N 11,9 - M. G. 470.

1) Tetranitroaurin. Sm. bei 140°. Ba (B. 17, 1625). - II, 1120.

C 84,7 - H 4,1 - O 5,9 - N 5,2 - M. G. 269. $\mathbf{C}_{19}\mathbf{H}_{10}\mathbf{O}_{11}\mathbf{N}_{4}$ C, H, ON 1) Chrysylisocyanat. Sm. oberhalb 280° (B. 24, 950). — II, 643. C 80,0 — H 3,9 — O 11,2 — N 4,9 — M. G. 285. C19H11O2N 1) 2-Furanylphenanthrenoxazol (Furenylamidophenanthrol). Sm. 2310 (Soc. 39, 227). — III, 724. 2) Acetylderivat d. Phenylnaphtylcarbazolcarbonsäure. Sm. noch nicht bei 350° (B. **29**, 269). — IV, 458. C 75,7 — H 3,7 — O 16,0 — N 4,6 — M. G. 301. $C_{19}H_{11}O_{3}N$ 1) α-Phenylpyridinphenylenketoncarbonsäure. Sm. 226°. Ag (A. 249, 123). — IV, 459. C 69,3 — H 3,3 — O 14,6 — N 12,8 — M. G. 329, $C_{19}H_{11}O_{8}N_{8}$ 1) peri-Naphtoylmethylen-m-Nitroisobenzalazin. Sm. 253° u. Zers. (C. 1899 [1] 114). C 71,9 — H 3,5 — O 20,2 — N 4,4 — M. G. 317. $C_{19}H_{11}O_4N$ 1) Phtalon d. 2-Methylchinolin-4-Carbonsäure. Sm. oberh. 300° u. Zers. (J. pr. [2] 56, 292). Zers. (J. pr. [2] 56, 292). C $_{60,1}$ — H $_{3,2}$ — O $_{18,5}$ — N $_{12,2}$ — M. G. 345. 1) P-Dinitro-5-Phenylakridin (A. 224, 29). — IV, 468. C $_{19}$ H $_{11}$ O $_{9}$ Br $_{1}$ 1) Verbindung (aus 1,2,3-Trioxybenzol) (B. 26, 1143). — II, 1044. C $_{19}$ H $_{11}$ O $_{9}$ Br $_{1}$ 1) Diacetat d. P-Pentabrom- $\alpha\alpha$ -Di[2,3,4(P)-Trioxyphenyl]propionsäure (B. 16, 2409). — II, 2078.

1) Chrysylsenföl. Sm. 176° (B. 24, 955). — II, 643.

C 49,6 — H 2,6 — O 41,7 — N 6,1 — M. G. 460.

1) Dichinolylketon. Sm. 174°. 2HCl (B. 24, 1609). — IV, 376.

C 73,1 — H 3,8 — O 5,1 — N 17,9 — M. G. 312. $\mathbf{C}_{19}\mathbf{H}_{11}\mathbf{NS}$ $C_{19}H_{12}ON_{2}$ $C_{19}H_{12}ON_4$ 1) Leukonditoluylenchinoxalin. Sm. oberh. 300° (B. 19, 776). — IV, 1302. 1) Heakonditoluyleneninoxaiin. Sm. opern. 300° (B. 19, 770). — IV, 1302.

1) Verbindung (aus Phenanthrenchinon u. Methylthiophen) (B. 16, 1624; 17, 1338). — III, 448.

C 76,0 — H 4,0 — O 10,7 — N 9,3 — M. G. 300.

1) Methyltriphendioxazin (B. 29, 2077). — IV, 1078.

C 72,2 — H 3,8 — O 15,2 — N 8,8 — M. G. 316.

1) P-Nitro-9-Benzoylcarbazol. Sm. 181° (B. 24, 280). — IV, 393.

2) 2-Oxybenzylidenamidobenzolazoxindol. Sm. oberh. 300° (B. 28, 298).

— IV 1005 C19H19OS $\mathbf{C}_{19}\mathbf{H}_{12}\mathbf{O}_{2}\mathbf{N}_{2}$ $C_{19}H_{12}O_3N_2$ **- IV**, 1005. 3) Benzoylamidobenzolazoxindon. Sm. 264,5° (A. 226, 65). — IV, 1005. C 68,7 - H 3,6 - O 19,3 - N 8,4 - M. G. 332. $C_{19}H_{12}O_4N_2$ 1) Dinitrophenylendiphenylmethan. Sm. bei 240° u. Zers. (Bl. [3] 1, 775). - II, 294. 2) 7-Oxy-5-Phenylphenazon-8-Carbonsäure (N-Phenylsafranolcarbonsäure). Na (B. **31**, 1184). — **IV**, 1020. C 63,3 — H 3,3 — O 17,8 — N 15,6 — M. G. 360. $\mathbf{C}_{19}\mathbf{H}_{12}\mathbf{O}_4\mathbf{N}_4$

2,7-Dinitro-9-Phenylhydrazonfluoren. Sm. 257—258° u. Zers. (M. 16, 825).
 P-Dinitro-9-Phenylhydrazonfluoren. Sm. 227—228° u. Zers. (M. 16, 826).

3) 5,?-Dinitro-1,2-Diphenylbenzimidazol. Sm. 220° (Bl. [3] 17, 872). — IV, 562.

4) 5-Nitro-1-Phenyl-2-[3-Nitrophenyl]benzimidazol. Sm. 218—220° (Bl. [3] 19, 519). — IV, 1008.

- $\mathbf{C}_{19}\mathbf{H}_{12}\mathbf{O}_{4}\mathbf{N}_{4}$ 5) 5-Nitro-1-Phenyl-2-[4-Nitrophenyl]benzimidazol. $+\mathbf{C}_{6}\mathbf{H}_{6}$ (Sm. 195°) (Bl. [3] 17, 1029). — IV, 1008.
- $\mathbf{C}_{10}\mathbf{H}_{12}\mathbf{O}_{4}\mathbf{Br}_{2}$ 1) Dibromresorcinbenzein (J. pr. [2] 48, 390). II, 1123. $\mathbf{C}_{10}\mathbf{H}_{12}\mathbf{O}_{5}\mathbf{N}_{2}$ C 65,5 H 3,4 O 23,0 N 8,0 M. G. 348.
 - 1) $\alpha \gamma$ -Di[1, 2-Phtalylamido]- β -Ketopropan. Sm. 264—268° (B. 27, 1042). - II, 1814.
 - 2) Verbindung (aus Nitrophenylacetylen). Zers. bei 165° (B. 15, 213). II, 174.
- 1) 1,2-Phtalylasparagin 3 Amidobenzol-1-Carbonsäure. Ag (G. 16, 7).
- **II**. 1813. C₁₉H₁₂O₆Cl₂ 1) Diacetat d. 7,8-Dioxy-2-[?-Chlorphenyl]-1,4-Benzpyron. Sm. 189 bis 191° u. Zers. (B. 29, 2434).
- 1) Sulfonfluoresceïn + H_2O . Sm. oberh. 300° (Am. 11, 78; 14, 471; 18, 802; Bl. [3] 17, 822). III, 200. $C_{19}H_{19}O_6S$
- $C_{19}H_{12}O_8N_2$
- 2) Resorcinsulfonphtalein (Am. 20, 266). C 57,6 H 3,0 O 32,3 N 7,1 M. G. 396. 1) Dinitroresorcinbenzein (J. pr. [2] 48, 395). II, 1123. C 53,8 H 2,8 O 30,2 N 13,2 M. G. 424. 1) Benzoat d. 2-[2,4,6-Trinitrophenylamido]-1-Oxybenzol. Sm. 1570 $\mathbf{C}_{19}\mathbf{H}_{12}\mathbf{O}_{8}\mathbf{N}_{4}$
 - (Soc. 59, 722). II, 1147. Benzoat d. 4-[2,4,6-Trinitrophenylamido]-l-Oxybenzol. Sm. 191° (Soc. 59, 720). — II, 1147.
- C19H12O8S
- Pyrogallolsulfonphtalein (Am. 20, 268).
 C 55,3 H 2,9 O 34,9 N 6,8 M. G. 412. $C_{19}H_{12}O_{9}N_{2}$ 1) 3,4,3',4'-Dimethylenäther d. γ-Keto-αε-Di[P-Nitro-3,4-Dioxy-phenyl]-αδ-Pentadiën. Sm. 218° u. Zers. (B. 24, 618). — III, 252. C 53,3 — H 2,8 — O 37,4 — N 6,5 — M. G. 428.
 1) Diacetat d. Dinitrochrysin. Sm. 229° (B. 27, 22). — III, 628.
- $\mathbf{C}_{19}\mathbf{H}_{12}\mathbf{O}_{10}\mathbf{N}_{2}$
- C₁₉H₁₂N₂Cl₂ 1) ?-Dichlor-9-Phenylhydrazonfluoren. Sm. 185-186° (M. 16, 811). IV, 778.
- $C_{19}H_{12}N_2Br_2$ 1) ?-Dibrom-9-Phenylhydrazonfluoren. Sm. 190° (M. 16, 812). IV, 778.
 - 2) ?-Dibrom-9-Phenylhydrazonfluoren. Sm. 252° u. Zers. (M. 16, 822). **— IV**, 778.
- $C_{19}H_{13}ON$
- C 84,1 H 4,8 O 5,9 N 5,2 M. G. 271. 1) 7-Oximido-8-Benzylidenacenaphten. Sm. 48° (A. 290, 204). III, 260.
 - 2) 3-[2-Oxyphenyl]- β -Naphtochinolin. Sm. 217° (B. 27, 2029).

 - 3) 2-Oxy-5-Phenylakridin. HCl (B. 24, 2046). IV, 468. 4) 3-Oxy-5-Phenylakridin. Sm. oberh. 275° (B. 18, 695). IV, 468. 5) 9-Benzoylcarbazol. Sm. 95,5° (98,5°) (G. 20, 413; B. 24, 279). —
- IV, 392. C 76,3 H 4,3 O 5,4 N 14,0 M. G. 299. $\mathbf{C}_{19}\mathbf{H}_{13}\mathbf{ON}_{3}$

 - 1) P-[2-Naphtyl]azo-6-Oxychinolin (B. 21, 1643). IV, 1486. 2) P-[2-Naphtyl]azo-8-Oxychinolin (B. 19, 1645). IV, 1486. 3) 8-Keto-5,7-Diphenyl-7,8-Dihydro-1,6,7-Benztriazin. Sm. 233—235°
- (M. 17, 525). IV, 799. C 79,4 H 4,5 O 11,1 N 4,9 M. G. 287. $C_{19}H_{13}O_{2}N$
 - 1) 3.5-Dibenzoylpyridin. Sm. 123°. (2HCl, PtCl₄) (A. 280, 47, 69). IV, 186.
 - 2) 2,4-Dimethylchinolinphtalon. Sm. 237—238° (J. pr. [2] 33, 407). IV, 328.
 - 3) 2,6-Dimethylchinolinphtalon. Sm. 203° (B. 16, 2603). IV, 329. 4) Benzyllmid d. Naphtalin-1,8-Dicarbonsäure. Sm. 196,6° (G. 25 [1]

 - 251; B. 28, 362). II, 1880. 5) 2-Methylphenylimid d. Naphtalin-1,8-Dicarbonsäure. Sm. 214° (G. **25** [1] 251; B. **28**, 362). — II, 1880.
- $C_{19}H_{13}O_9N_9$ 1) Verbindung (aus Salicylaldehydphenylhydrazon = $(C_{19}H_{13}O_2N_2)_x$. Sm. 1846 (A. 305, 183).
- C 72,4 H 4,1 O 10,2 N 13,3 M. G. 315. $\mathbf{C}_{19}\mathbf{H}_{13}\mathbf{O}_{2}\mathbf{N}_{3}$ 1) 2-Nitro-9-Phenylhydrazonfluoren. Sm. 257-258 ° u. Zers. (M. 16, 825). — IV, 778.

 $C_{19}H_{14}ON_4$

 $C_{19}H_{13}O_2N_8$ 2) isom. Nitro-9-Phenylhydrazonfluoren. Sm. 227—228° u. Zers. (M. 16, 826). — IV, 778.

3) 5-Nitro-1,2-Diphenylbenzimidazol. Sm. 181° (Bl. [3] 17, 867). —

4) 1-Phenyl-2-[4-Nitrophenyl]benzimidazol. Sm. 1740 (Bl. [3] 17, 1028). **– IV**, 1007.

5) α-Cyan-ββ'-Di[2-Cyanphenyl]isobuttersäure. Sm. 160° u. Zers. (B. 25, 3026). — П, 1470. С 66,5 — Н 3,8 — О 9,3 — N 20,4 — М. G. 343.

 $\mathbf{C}_{19}\mathbf{H}_{13}\mathbf{O}_{2}\mathbf{N}_{5}$

1) peri-Naphtylenhydrazimethylen-m-Nitroisobenzalazin. Sm. 215 bis 216° u. Žers. (C. **1899** [1] 114). C 71,5 — H 4,1 — O 20,0 — N 4,4 — M. G. 319.

 $C_{19}H_{13}O_4N$ 1) 1-[1-Naphtyl]imidomethylbenzol-2, 6-Dicarbonsäure. Sm. 202-207°. Ba, Ag₂ (B. 30, 695).

2) Dibenzoat d. 2,4-Dioxypyridin. Sm. 103° (B. 31, 1690). C 62.8 - H 3.6 - O 22.0 - N 11.6 - M. G. 363.

 $C_{19}H_{13}O_5N_8$ 1) ?-Dinitro-4-Benzoylamidobiphenyl. Sm. 206° (A. 209, 346; B. 8, 873). — **II**, *1169*.

2) Monobenzoat d. 4'-Nitro-2,5-Dioxyazobenzol. Sm. 195-1970 (B. **26**, 1910). — **IV**, *1447*.

3) Di[2-Nitrophenyl]amid d. Benzolcarbonsäure (A. 132, 166; B. 15, 829). — II, 1164.

4) Di 4-Nitrophenyl amid d. Benzolcarbonsäure. Sm. 224° (A. 132, 167; B. 15, 828). — II, 1164. C 60,1 — H 3,4 — O 25,3 — N 11,1 —

- M. G. 379. $C_{19}H_{13}O_6N_3$ 1) ?-Trinitrotriphenylmethan. Sm. 203° (206-207°) (A. 194, 254; B. 7,

1208; **21**, 2476). — II, 288. C 57,7 — H 3,3 — O 28,3 — N 10,6 — M. G. 395. $C_{19}H_{13}O_7N_3$ 1) α-Oxytri[4-Nitrophenyl]methan. Sm. 171-1720 (A. 194, 256; B. 21, 2476). — II, 1084.

2) Fluorenpikrat. Sm. 79—80° (A. ch. [5] 7, 486). — II, 245. C 53,9 — H 3,1 — O 26,5 — N 16,5 — M. G. 423.

C19H18O7N5 1) 2, 4, 6-Trinitrophenyläther d. 2-Oxybenzylidenphenylhydrazin. Sm. 217° (G. 26 [2] 559). — IV, 759. C. 59,5 — H. 3,4 — O. 33,4 — N. 3,6 — M. G. 383.

1) Diacetat d. 7,8-Dioxy-2-[3-Nitrophenyl]-1,4-Benzpyron. Sm. 218 bis 219° (B. 29, 2434). C. 53,4 — H. 3,0 — O. 33,7 — N. 9,8 — M. G. 427.

 $C_{19}H_{13}O_8N$

 $C_{19}H_{13}O_{9}N_{3}$ 1) Tri[2-Nitrophenyläther] d. Trioxymethan. Sm. 1820 (J. pr. [2] 26,

> 445). — II, 680. 2) Tri[4-Nitrophenyläther] d. Trioxymethan. Sm. 2320 (J. pr. [2] 26, 446). — II, 682.

 $C_{19}H_{13}O_{9}Br_{3}$ 1) Diacetat d. ?-Tribrom- $\alpha\alpha$ -Di[2,3,4(?)Trioxyphenyl]propionsäure (B. 16, 2409). — II, 2078.

 $C_{19}H_{18}N_{3}Cl$ 1) ?-Chlor-9-Phenylhydrazonfluoren. Sm. 139—141° (M. 16, 810). — IV, 778.

 $C_{19}H_{13}N_6Cl_3$ 1) Tri[4-Diazophenyl]methan (A. 199, 269). — IV, 1544. $C_{19}H_{14}ON_{2}$ C 79,7 - H 4,9 - O 5,6 - N 9,8 - M. G. 286.

1) 9-Phenylhydrazon-1-Oxyfluoren. Sm. 173-1740 (B. 31, 3034).

2) 2-Phenyläther d. 2-[2-Oxyphenyl]benzimidazol. Sm. 1476. (A. 257, 81). — II, 1495.

3) 3-Benzoylamidocarbazol. Sm. 250-251° (G. 21 [2] 385). -**- IV**, 992. 4) Methyläther d. 6-Oxy-?-Bichinolyl. Sm. 120° (2 HCl, PtCl₄) (B. 20, 1926). — IV, 1071.

5) Methyläther d. 6-Oxy-?-Bichinolyl. Sm. 151°. $2HCl + 2H_2O$, (2HCl, $PtCl_4 + 2H_2O$) (B. **20**, 1925). — **IV**, 1071.

6) Chrysophenol + 2 H₂O. HCl, 2 HCl (A. 226, 181). — IV, 1072. C 72,6 — H 4,4 — O 5,1 — N 17,8 — M. G. 314.

1) 4-Phenylazo-5-Keto-3-Methyl-1-Phenyl-2, 5-Dihydrobenzol. Sm. 155° (B. **29**, 1662).

2) 5-Keto-4-[1-Naphtyl]hydrazon-3-Phenyl-4, 5-Dihydropyrazol. Sm. 216° (B. 27, 784; J. pr. [2] 51, 62). — IV, 1940. 3) 5-Keto-4-[2-Naphtyl]hydrazon-3-Phenyl-4,5-Dihydropyrazol. Sm.

oberh. 250° (B. 27, 784; J. pr. [2] 51, 62). — IV, 1490.

- C 75,5 H 4,6 O 10,6 N 9,3 M G 302. $C_{19}H_{14}O_{2}N_{2}$
 - 1) 4-Benzoylphenylhydrazon-1-Keto-1, 4-Dihydrobenzol. Sm. 1710 (B. **28**, 2415). — IV, 795.
 - 2) 2-Phenylacetylamido- α -Naphtoxazol. Sm. 104—105° (B. 22, 3242). - II, 865.
 - 3) 2-Oxy-1[oder 4]-Methylphenylphenazon. Sm. 245—265° (A. 290, 303). - IV, 1009.
 - 4) Methyläther d. Safranol. Sm. 266° (A. 286, 213; B. 29, 369 Ann.). **- IV**, 1003.
 - 5) Methyläther d. Oxyaposafranon. Sm. 246-248° (B. 29, 365). -IV, 1004.
 - 6) Benzoat d. 4-Oxyazobenzol. Sm. 1360 (1380) (B. 6, 561; 28, 2416). **IV**, 1408.
 - 7) P-Nitrosodiphenylamid d. Benzolcarbonsäure. Sm. 156° (A. 277. 103). — II, 1164.
 - 8) Nitril d. β -Acetoxyl- β -[4-Methylphenyl]- α -[2-Cyanphenyl]akrylsäure (p-Methyl-o-α-Dicyan-β-Acetoxylstilben). Sm. 186-1880 (B. 29,
- C 71,7 H 4,4 O 15,1 N 8,8 M. G. 318. $C_{19}H_{14}O_{8}N_{9}$
 - 1) 3-Nitro-4-Benzoylamidobiphenyl. Sm. 143° (B. 8, 873; A. 209, 346). - II, 1169.
 - 2) 3-Nitro-4-Phenylamidodiphenylketon. Sm. 157° (B. 24, 3772). III, 183.
 - 3) Monobenzoat d. 2,5-Dioxyazobenzol. Sm. 110-1120 (B. 26, 1910).
 - IV, 1447. 4) Phenylester d. 4-Oxyazobenzol-3-Carbonsäure. Sm. 121° (A. 263, 229). — IV, 1468.
 - 5) 4-Nitrodiphenylamid d. Benzolcarbonsäure. Sm. 129° (A. 132, 167; B. 15, 825). — II, 1164.
- 1) 2-Benzoyldiphenylsulfon. Sm. 183,5—184° (186°) (Am. 17, 363; B. 29, $C_{19}H_{14}O_{8}S$ 2298; **31**, 1663). — **III**, 192.

 - 2) 4-Benzoyldiphenylsulfon. Sm. 133° (Am. 20, 310).

 3) Verbindung (aus d. Chlorid d. Benzol-1-Carbonsäure-2-Sulfonsäure). Sm. 162° (Am. 17, 366; B. 29, 2298; 31, 1664). C 68,2 H 4,2 O 19,2 N 8,4 M. G. 334.
- $\mathbf{C}_{19}\mathbf{H}_{14}\mathbf{O}_{4}\mathbf{N}_{2}$ 1) αγ-Di[1,2-Phtalylamido] propan (Trimethylendiphtalimid). bis 198° (B. 21, 2669). — II, 1807.
 - 2) 1-Benzoyl-4-Benzoylimido-2, 6-Diketo-2, 3, 5, 6-Tetrahydropyridin (Dibenzoylglutazin). Sm. 215-216° (B. 20, 2658). - II, 1174.
 - 3) 1-Acetoxyl-2-Phenylazonaphtalin-23-Carbonsäure. Sm. 2100 (B. 24, 1600). **— IV**, 1463.
 - 4) 2-Nitrophenylester d. Diphenylamidoameisensäure. Sm. 112-1140 (B. 20, 2122). — II, 680.
 - 5) 3-Nitrophenylester d. Diphenylamidoameisensäure. Sm. 90° (B. 24, 2111). — II, *681*.
 - 6) 4-Nitrophenylester d. Diphenylamidoameisensäure. Sm. 116° (B. **24**, 2111). — **II**, 683.
 - 7) 2-Nitrophenylamid d. 2-Oxybenzolphenyläther-1-Carbonsäure. Sm. 121° (A. 257, 81). — II, 1495. C 63,0 — H 3,9 — O 17,7 — N 15,4 — M. G. 362.
- $C_{19}H_{14}O_4N_4$
 - 1) α -[2,4-Dinitrophenyl]hydrazondiphenylmethan. Sm. 229° (G. 24 [1] 570).
 - 2) α-Phenylhydrazondi[3-Nitrophenyl] methan. Sm. 219-220° (B. 20, 510). — IV, 775.
- 3) α-Phenylhydrazondi[?-Nitrophenyl]methan. Sm. 234° (A. 279, 327). C 65.1 - H 4.0 - O 22.9 - N 8.0 - M. G. 350.C₁₉H₁₄O₅N₂
 - 1) $\alpha \gamma$ Di [1, 2 Phtalylamido] β Oxypropan (β Oxytrimethylendiphtalimid). 8m. 205° (B. 21, 2690; 22, 224). — II, 1807. 1) Phenolsulfonphtaleïn (Am. 20, 263).
- $C_{19}H_{14}O_5S$ 2) Diphenylester d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm. 117,5
 bis 118,5° (Am. 17, 353; 18, 798; B. 31, 1661).
 C 62,3 — H 3,8 — O 26,2 — N 7,6 — M. G. 366.
- $C_{19}H_{14}O_6N_2$ 1) ?-Dinitro-4,4'-Dioxytriphenylmethan. Sm. 133-134° (B. 22, 1946). **— II**, 1003.

C 57.8 — H 3.6 — O 24.4 — N 14.2 — M. G. 394. C10H14O6N4 1) Methylester d. ?-Naphtylazo-2,4-Dinitrophenylessigsäure. Sm. 940 (B. **22**, 326). — **IV**, 1465. C 54,0 — H 3,3 — O 22,7 — N 19,9 — M. G. 422.

1) Tri[3-Nitrophenyl]guanidin. Sm. 1890 (B. 16, 50). — II, 351.

 $C_{59.7} - H_{3.7} - O_{29.3} - N_{7.3} - M_{6.382}$ C19H14O7N2

1) Acetonyldiphtalaminsäure? Sm. 105-107°. Ag. (B. 27, 1043). 2) $\alpha \gamma$ - Di[Benzoylamido] - β - Ketopropan - 2, 2'- Dicarbonsaure (Acetondiphtalamidsaure). Sm. 105—107°. Ag₂ (B. 27, 1043). — II, 1798. 1) Hydrochinonsulfonphtaleïn (Am. 20, 268).

 $\mathbf{C}_{19}^{(1)}\mathbf{H}_{14}^{(1)}\mathbf{O}_{10}\mathbf{Br}_{2}\mathbf{I})$ Dibromeichenrindengerbsäure (A. 240, 331). — III, 588.

 $\mathbf{C}_{10}^{19}\mathbf{H}_{14}^{14}\mathbf{N}_{2}^{2}\mathbf{Br}_{2}^{21}$ α -Phenylhydrazondi[4-Bromphenyl]methan. Sm. 138° (B. 24, 3768). - IV, 775.

C₁₀H₁₄N₀S 1) Chrysylthioharnstoff. Sm. 238° (B. **24**, 956). — II, 643.

 $C_{19}H_{14}N_3Cl_3$ 1) Tri[4-Chlorphenyl]guanidin. HCl, HJ, H_2SO_4 (A. 176, 51). — II, 350. C₁₉H₁₄N₃Br₃1) Tribromisotriphenylguanidin. HCl, (2 HCl, PtCl₄) (B. 13, 233).

II. 351.

2) 2.4.6-Tribrom-4'-Methylphenylamidoazobenzol. Sm. 138° (J. pr. [2] **27**, 125). — IV, 1356.

 $C_{18}H_{14}N_{3}J_{8}$ 1) Tri[4-Jodphenyl]guanidin (B. 5, 158). — II, 350.

C. H. N. Cl. 1) 4, 4' - Bidiazotriphenylmethanchlorid. + 2 AuCl. (G. 15, 45).

IV, 1544. $C_{19}H_{14}Br_2S_2$ 1) Di[4-Bromphenyläther] d. Dimerkaptomethylbenzol. Sm. 79 bis 80° (B. 18, 885). — III, 10.

C 83.5 - H 5.5 - O 5.9 - N 5.1 - M. G. 273.C10H15ON

1) γ-[2-Naphtyl]imido-α-Keto-α-Phenylpropan. Sm. 180—182° (B. 21. 2193). — III, *95*.

2) Phenyläther d. Phenylimido-α-Oxyphenylmethan. Sm. 1040 (B. 26. 927). — II, 1162.

3) P-Benzoylamidoacenaphten. Sm. 210° (B. 21, 1458). — II, 1169.

4) 2-Benzoylamidobiphenyl. Sm. 85-86° (B. 29, 1187). 5) 4-Benzoylamidobiphenyl. Sm. 226° (230°) (B. 13, 1968; A. 209, 345). - II, 1169.

6) Oxim d. 4-Benzoylbiphenyl. Sm. 193—194° (M. 12, 502). — III, 257. 7) meso-Keto-N-Aethyldihydrophenonaphtakridin. Sm. 174—175° (B.

26, 2594). — IV, 464.

8) Acetyldihydrophenonaphtakridin. Sm. 181-181,5° (B. 27, 2842). -IV, 456.

9) Phenylamid d. 1-Phenylbenzol-2-Carbonsäure. Sm. 100° (A. 279, 265). — II, 1462. 10) Phenylamid d. 1-Phenylbenzol-4-Carbonsäure. Sm. 212° (224°)

(J. pr. [2] 41, 309; M. 12, 504). — II, 1463.

11) Diphenylamid d. Benzolcarbonsäure. Sm. 180° (176,5-177°). +5 PCl₅ (A. 132, 166; 192, 13; B. 14, 2368; 15, 1288, 3013; 20, 2119). -

 C^{7} 5,7 — H 5,0 — O 5,3 — N 14,0 — M. G. 301 $C_{19}H_{15}ON_{8}$

1) 4-[2-Oxybenzyliden]amidoazobenzol. Sm. 155° (G. 28 [1] 243). — IV, 1357.

2) Benzoyldiazoamidobenzol. Sm. 131° u. Zers. (B. 27, 2315). — IV, 1561.

C19H15ON5 C 69.3 - H 4.6 - O 4.8 - N 21.3 - M. G. 329.

1) $5-[\beta-Phenyläthenyl]-3-[5-Methyl-1,2,4-Oxdiazolyl-3-]-1-Phenyl-$ 1,2,4-Triazol. Sm. 201-202°. - IV, 1170.

2) Azofarbstoff (aus 2-Amidonaphtalin u. 5-Methyl-3-[2-Amidophenyl]-1,2,4-Oxdiazol). Sm. 153—154° (B. 29, 629). — IV, 1138.

 $C_{19}H_{15}O_{2}N$

C 78,9 — H 5,2 — O 11,0 — N 4,8 — M. G. 289. 1) 3-Nitrotriphenylmethan. Sm. 90° (B. 21, 188). — II, 288. 2) 4-Nitrotriphenylmethan. Sm. 93° (B. 23, 1622). — II, 288.

3) Diphenyläther d. $\alpha\alpha$ -Dioxy- α -Phenylimidomethan (D. d. Phenyl-

imidokohlensäure). Sm. 136° (B. 28, 977).

4) Aethylester d. Phenylnaphtylcarbazolcarbonsäure. Sm. 175° (B. 29, 268). — IV, 458.

5) Phenylamid d. 2-Oxybenzolphenyläther-1-Carbonsäure. Sm. 97°

(A. 257, 80). — II, 1495.

 $C_{19}H_{15}O_{2}N_{3}$

C 71.9 - H 4.7 - O 10.1 - N 13.2 - M. G. 317.

1) 4-[3-Nitrobenzyliden]amido-1-Phenylamidobenzol. Sm. 123° (A. 255, 190). — IV, 596.

2) 4-[4-Nitrobenzyliden]amido-1-Phenylamidobenzol. Sm. 1720 (A. 255, 190). — IV, 596.

3) α -Phenylimido- α -Phenylamido- α -[3-Nitrophenyl]methan (B. 12, 103). **— IV**, 843.

4) α -[3-Nitrophenyl]imido- α -Phenylamido- α -Phenylmethan (Benzenyl-3-Nitrodiphenylamidin). Sm. 1180 (B. 30, 1785). — IV, 843.

5) 4,4'-[4-Nitrobenzyliden]diamidobiphenyl. Sm. 221-2220 (J. r. 23,

69). — IV, 967. 6) 3-Aethyl-2-[4-Nitrophenyl]-α-Naphtimidazol. Sm. 225° (B. 26, 194). **IV**, 1062

7) Phenylamidoformiat d. 4-Oxyazobenzol. Sm. 149° (B. 23, 489). — IV, 1408.

8) Nitril d. 4-Phenylhydrazon-3,5-Diketo-1-Phenylhexahydrobenzol-

2-Carbonsäure. Sm. 110° (A. 294, 290). — IV, 1475. 9) Phenylamid d. 4-Oxyazobenzol-3-Carbonsäure. Sm. 188—189° (A.

263, 231). — IV, 1468. 10) Di[Phenylamid] d. Pyridin-3,4-Dicarbonsäure. Sm. 199—206 (M.

 $C_{19}H_{15}O_{2}N_{5}$

- 11, 145). IV, 165. C 66,1 H 4,3 O 9,3 N 20,3 M. G. 345. 1) III-2-Nitroformazylbenzol. Sm. 150° (B. 31, 1756).
- 2) III-3-Nitroformazylbenzol. Sm. 180° (B. 31, 1756). 3) III-4-Nitroformazylbenzol. Sm. 165-170° (B. 31, 1756).

4) 6-Amido-3-[2-Nitrophenyl]-2-Phenyl-2, 3-Dihydro-1, 2, 4-Benztriazin. Sm. 118-1190 u. Zers. (B. 30, 2601). - IV, 1287.

5) 6-Amido-3-[3-Nitrophenyl]-2-Phenyl-2, 3-Dihydro-1, 2, 4-Benztriazin. Sm. 204—205° u. Zers. (B. 30, 2601). — IV, 1287. 6) 6-Amido-3-[4-Nitrophenyl]-2-Phenyl-2,3-Dihydro-1,2,4-Benztri-

azin. Sm. 211° u. Zers. (B. 30, 2602). — IV, 1287. C 74,7 — H 4,9 — O 15,7 — N 4,6 — M. G. 305.

 $C_{19}H_{15}O_{8}N$

- 1) α-Oxy-3-Nitrotriphenylmethan. Sm. 75° (B. 21, 190). II, 1084. 2) α-Oxy-4-Nitrotriphenylmethan. Sm. 136° (B. 23, 1623). II, 1084.
- 3) Benzoat d. 8-Oxy-10-Keto-3,4-Dihydrojulol (Benzoat d. γ_1 -Oxy- α_1 -Ketojulolin). Sm. 151° (B. 25, 1199). — IV, 195.

4) 3-Phenylacetylamidonaphtalin-2-Carbonsäure. Sm. 225-227° (B. **26**, 2595). — **II**, *145*8.

5) 1-Naphtylamid d. Benzoxylessigsäure. Sm. 190—191,5° (C. 1896[1] 996). 6) 2-Naphtylamid d. Benzoxylessigsäure. Sm. 1630 (C. 1896 [1] 996).

C 68.4 - H 4.5 - O 14.4 - N 12.7 - M. G. 333. $C_{19}H_{15}O_{8}N_{8}$

1) 4-Nitro-2-Benzoylamido-1-Phenylamidobenzol. Sm. 201-202° (Bl. .[3] **17**, 866). — **IV**, 562.

2) $\alpha \alpha$ -Diphenyl- β -[3-Nitrophenyl]harnstoff. Sm. 154—155° (B. 20, 2121). **— II**, 381.

3) $\alpha \alpha$ -Diphenyl- β -[4-Nitrophenyl]harnstoff. Sm. 175-176° (B. 20, 2121). **- II**, 381.

4) Phenylamid d. 5-Nitro-2-Phenylamidobenzol-1-Carbonsäure. Sm.

159° (B. 24, 3810). — II, 1283. 5) Phenylamid d. 3-Nitro-4-Phenylamidobenzol-1-Carbonsäure. Sm. 215—216° (B. 23, 3445, 3448). — II, 1285. C 63,1 — H 4,1 — O 13,3 — N 19,4 — M. G. 361.

 $\mathbf{C}_{19}\mathbf{H}_{15}\mathbf{O}_{3}\mathbf{N}_{5}$

1) α -Phenyl- β -Phenylazo- β -[3-Nitrophenyl]harnstoff. Sm. 104° (B. **21**, 2573). — **IV**, 1563.

2) α -Phenyl- β -Phenylazo- β -[4-Nitrophenyl]harnstoff. Sm. 115° (B. 21, 2572). — **IV**, 1563.

3) α -Phenylhydrazon- α -[4-Oxyphenyl]azo- α -[4-Nitrophenyl]methan.

Sm. 194° (B. 31, 479). — IV, 1419. C 71,0 — H 4,7 — O 19,9 — N 4,4 — M. G. 321. C19H15O4N

1) 3-Nitro-4',42-Dioxytriphenylmethan. Sm. 59-60° (G. 21, 175). II, 1003.

2) γ-Cyan-αε-Diketo-αε-Diphenylpentan-γ-Carbonsäure (Diphenacylcyanessigsäure). Sm. 172–174°. $NH_4 + 2^{1}/_2H_2O$, $Na + 2H_2O$, $Ba + H_2O$ (Bl. [3] 15, 1008).118*

- 3) 1-Methyl-2, 5-Diphenylpyrrol-22, 52-Dicarbonsäure. Sm. 2310 (B. 20, C19H15O4N 1487). — IV, 452.
 - 4) 2-Methyl-1, 5-Diphenylpyrazol-1, 3-Dicarbonsäure. Sm. 210° (B. 19, 3162). — IV, 358.
 - 5) Säure (aus Apocinchenäthyläther). Sm. bei 230° u. Zers. (B. 20, 2683). **– III**, 839.
 - 6) 1,2-Lakton d. 3,4-Dioxy-1-[2-Naphtyl]amidooxymethylbenzol-3 [oder 4]-Methyläther-2-Carbonsäure(Methylnoropian- β -Naphtalidsäure). Sm. 225° (B. 29, 2033).
 - 7) Aethylester d. β -Cyan- β -Benzoyl- β -Phenyl- α -Ketoäthan- α -Carbonsäure. Sm. 102—103° (A. 282, 79). II, 1642.
 - 8) Monamid d. Pulvinsäuremonomethylester. Sm. 216-217° (A. 282, 49). - II, 2031.
 - 9) Monomethylamid d. Pulvinsäure. Sm. 237°. Methylaminsalz (A. 282, 25). — II, 2031.
 - 10) Benzoylimid d. Phenyloxymaleïnäthyläthersäure. Sm. 105-106° (A. 282, 78).

C 65,3 - H 4,3 - O 18,3 - N 12,0 - M. G. 349. $C_{19}H_{15}O_4N_8$

- 1) 3,5-Di[4-Nitrobenzyl] pyridin. Sm. 144-146°. HNO₃, Pikrat (A. **280**, 52). IV, 456. HCl, (2HCl, PtCl₄),
- 2) Acetat d. 2-[4-Nitro-2-Methylphenyl]azo-1-Oxynaphtalin. Sm. 172 bis 173° (B. 28, 854, 1125). — IV, 1436.
- 3) Acetat d. 4-[4-Nitro-2-Methylphenyl]azo-1-Oxynaphtalin. Sm. 163° (B. 28, 854, 1125). — IV, 1436.

4) β -Naphtolazohippursäure (B. 14, 2040). — IV, 1464.

 $C_{19}H_{15}O_4N_5$ C 60,5 - H 4,0 - O 17,0 - N 18,5 - M. G. 377.

- 1) 3-Nitro-1-[Benzyl-3-Nitrophenyl]amidodiazobenzol. Sm. 1420 (B. 19, 3250). — IV, 1572
- 2) 4-Nitro-1-[Benzyl-3-Nitrophenyl]amidodiazobenzol. Sm. 180° (B. 19, 3251). — IV, 1572.
- 3) 4-Nitro-1-[Benzyl-4-Nitrophenyl]amidodiazobenzol. Sm. 187—190°
- $(B.\ 19,\ 3249). \text{IV},\ 1572. \\ \textbf{C}_{19}\textbf{H}_{15}\textbf{O}_{4}\textbf{Br}\ 1) \ 2^{3}\text{-} \textbf{Methyläther-} \textbf{2}^{4}\text{-} \textbf{Acetat d. 6-Brom-1-Keto-} \textbf{2}-[\textbf{3},\textbf{4}\text{-}\textbf{Dioxybenzyli-}]$ den]-2,3-Dihydroinden. Sm. $201-202^{\circ}$ (B. 31, 725). C 67,6 — H 4,4 — O 23,7 — N 4,2 — M. G. 337. $C_{19}H_{15}O_5N$
 - Dilakton d. αε-Dioxy-γ-Oximido-αε-Diphenylpentan-2, 2'-Dicarbon-säure. Sm. 197—203° (M. 19, 432).
 C 64,6 H 4,2 O 27,2 N 4,0 M. G. 353.
- C19H15O8N
 - 1) 32-Nitro-1, 3, 1', 3'-Tetraoxytriphenylmethan. Sm. 97-100° (G. 21, 180). — II, 1039.
 - 2) 4²-Nitro-1, 3, 1', 3'-Tetraoxytriphenylmethan (G. 21, 341). II, 1039. 3) 2²-Nitro-1, 4, 1', 4'-Tetraoxytriphenylmethan (G. 21, 343). II, 1039.
 - 4) 32-Nitro-1, 4, 1', 4'-Tetraoxytriphenylmethan. Zers. bei 2640 (G. 21 [2] 331). — II, *1039*.
 - 5) 42-Nitro-1, 4, 1', 4'-Tetraoxytriphenylmethan. Zers. bei 260° (G. 21 [2] 335). — II, *1039*.
 - 6) Methylimid d. $\alpha\beta$ -Dibenzoxyläthan- $\alpha\beta$ -Dicarbonsäure. α -Modif. Sm. 56°; β -Modif. Sm. 106—108°. $4 + 3 C_2 H_6 O$ (B. **29**, 2716).

C19H15O7N C 61.8 - H 4.1 - O 30.0 - N 3.8 - M. G. 369.

- 1) Methylester d. Aristinsäure. Sm. 250° (B. 29 [2] 38). III, 780. $\mathbf{C}_{19}\mathbf{H}_{15}\mathbf{O}_{8}\mathbf{N}$ C 59,2 - H 3,9 - O 33,2 - N 3,6 - M. G. 385.
- 1) 32-Nitro-1,2,3,1',2',3'-Hexaoxytriphenylmethan. Sm. 245° (G. 21, 173). — II, *1044*.

C₁₉H₁₅O₉Cl₄ 1) Verbindung (aus Hanf) (Soc. 43, 19; 55, 204).

- $C_{19}H_{15}NBr_2$ 1) $\alpha\beta$ -Dibrom- γ -[1-Naphtyl]imido- α -Phenylpropan. Sm. bei 154° u. Zers.
 - (A. 239, 384). III, 54. 2) αβ-Dibrom-γ-[2-Naphtyl]imido-α-Phenylpropan. Sm. bei 191° u. Zers. (A. 239, 384). III, 54.
- C19H15NS 1) Diphenylamid d. Benzolthiocarbonsäure. Sm. 150-151° (A. 192, 37). **– II**, 1293.
- $C_{10}H_{15}N_2Cl$ 1) 4-Chlor-4'-Benzylidenamidodiphenylamin. Sm. 144° (A. 303, 315). 2) α-Phenylhydrazon-4-Chlordiphenylmethan. Sm. 106° (B. 26, 27). - IV, 775.

- C₁₉H₁₅N₉Cl 3) 5-Chlorphenylat d. 2-Methyl-5,10-Naphtdiazin (Phenyltoluphenazo-
- niumchlorid). + FeCl₃ (B. 31, 973). IV, 1009.

 1) Jodmethylat d. 2, 3'-Bichinolyl. Sm. 286° u. Zers. (A. 287, 44; M. C19 H15 N2 J 2, 499). — IV, 1067. 2) Jodmethylat d. 2,5'-Bichinolyl + H₂O. Sm. 231—232° u. Zers. (M.
 - 8, 142). IV, 1068.

 - 3) Jodmethylat d. 6,6'-Bichinolyl (M. 5, 422). IV, 1069. 4) Jodmethylat d. 6,7'-Bichinolyl. Sm. 126° (M. 6, 552). - IV, 1070.
 - 5) Jodmethylat d. isom. Bichinolyl (vom Sm. 159%). Sm. 263% (B. 18, 1913). — IV, 1070.
- 1) 6-Phenylamido-2-Merkapto-1-Phenylbenzimidazol, Sm. 208° (A. C19H15N3S
- 286, 182). IV, 1123. 1) 2-Chlorphenylat d. 1,4-Diphenyl-1,2,3,5-Tetrazol. Sm. 243° u. Zers. $C_{19}H_{15}N_4Cl$ $+ C_2 H_6 O_7 + CHCl_3$, $2 + PtCl_4$ (B. **27**, 323, 2928). — IV, 1268.
- $C_{19}H_{15}N_4Br$ 1) 2-Bromphenylat d. 1,4-Diphenyl-1,2,3,5-Tetrazol + $1^{1}/_{2}H_{2}O$. 255° u. Žers. $+ C_2H_6O$ (B. 27, 323, 2929). - IV, 1268.
- C₁₉H₁₅N₆Cl 1) 2-Chlorphenylat d. 4-Phenylazo-l-Phenyl-1,2,3,5-Tetrazol. 249° u. Žers. (B. **27**, 2930). — **IV**, 1492.
- 1) α -Bromtriphenylmethantetrajodid. Sm. 121—122° (C. 1898 [2] 1132). C 79,2 H 5,5 O 5,5 N 9,7 M. G. 288. $\mathbf{C}_{19}\mathbf{H}_{15}\mathbf{BrJ}_{4}$ $\mathbf{C}_{19}\mathbf{H}_{16}\mathbf{ON}_{2}$
 - 1) 4-[2-Oxybenzyliden]amido-1-Phenylamidobenzol. Sm. 1200 (A. 255,
 - 190). IV, 597. 2) 4-Amido-1-Benzoylphenylamidobenzol (B. 15, 826). IV, 594.
 - 3) α -[2-Naphtyl]imido- α -Acetylamidophenylmethan. Sm. 1376 (Am. 20,
 - 4) Triphenylharnstoff. Sm. 136° (B. 9, 398, 715; 17, 2093). II, 381.
 - 5) P-Phenylamido-2-Methyl-1,4-Benzochinonphenylimid. Sm. 151° (A. **256**, 259). — III, 359.
 - 6) $\alpha \alpha$ -Diphenyl- β -[2-Oxybenzyliden]hydrazin. Sm. 138.5° (A. 258, 248). **- IV**, 759.
 - 7) β-Benzoyl-αα-Diphenylhydrazin. Sm. 192° (183°) (A. 190, 178; B. 25, 415, 1078). — IV, 669.
 - 8) α -Phenylhydrazon-2-Oxydiphenylmethan. Sm. 155° (M. 17, 108). **- IV**, 776.
 - 9) 5-Keto-3-Methyl-1-Phenyl-4-[γ-Phenylallyliden]pyrazol. Sm. 159° (A. **238**, 180). — IV, 993.
 - 10) 3-Aethyl-2-[2-Oxyphenyl]- α -Naphtimidazol. Sm. 133° (B. 26, 194).
 - **IV**, 1062. 11) Aethyläther d. 5-Oxy-3-Phenyl-α-Naphtimidazol. Sm. 184—186° (B. 25, 1017). - II, 866.
 - 12) γ -Phenylamido α -Keto- α -[4-Chinolyl]- β -Buten. Sm. 129,5°. 2HCl (M. 17, 412). — IV, 374.
 - 13) α -[4-Acetylamidophenyl]- β -[2-Chinolyl]äthen. Sm. 194° (B. 22, 287). - IV, 1040.
 - 14) 5-Phenyloxydhydrat d. 2-Methyl-5,10-Naphtdiazin. Chlorid, Chlorid $+ \text{ FeCl}_3$, Nitrat (B. 31, 973). — IV, 1009.
 - 15) Aethyläther d. 5-Oxy-10-Methyl- $\alpha\beta$ -Naphtophenazin. Sm. 1950 (B.
 - 19, 916). IV, 1063. 16) Nitril d. 6-Phenylamido-4-Keto-2-Phenyl-1,2,3,4-Tetrahydrobenzol-3-Carbonsäure. Sm. 230° (A. 294, 288).
- C 72,2 H 5,0 O 5,0 N 17,7 M.G. 316. $C_{19}H_{16}ON_4$
 - 1) α -Phenylhydrazon- α -[4-Oxyphenylazo]phenylmethan (p-Monoxyformazylbenzol). Sm. 153—155° (B. 29, 1855).
 - β-Nitroso-αα-Diphenyl-β-[α-Imidobenzyl] hydrazin. Sm. 206° u. Zers.
 pr. [2] 54, 174). IV, 1137.
 - 3) Phenylamidoformyldiazoamidobenzol. Sm. 125° (B. 21, 2559). —
 - 4) Benzoldisazobenzolazo-4-Kresol. Sm. 160° (B. 17, 354). IV, 1424.
 - 5) 4-Phenylazo-2-[4-Methylphenyl]azo-1-Oxybenzol. Sm. 121° (B. 9, 628; **25**, 1336). — **IV**, 1416.
 - 6) 2-Phenylazo-4-[4-Methylphenyl]azo-l-Oxybenzol. Sm. 115-116° (B. 25, 1337). - IV, 1416.
 - 7) 3,5-Di[Phenylazo]-2-Oxy-1-Methylbenzol. Sm. 114—115° (B. 17, 364). **— IV**, 1423.

- 8) 4,6-Di[Phenylazo]-3-Oxy-1-Methylbenzol. Sm. 1490 (B. 17, 367). C19H16ON4 IV, 1424.
 - 9) Methyläther d. 4-Oxy-1, 3-Di[Diphenylazo] benzol. Sm. 1100 (B. 17, 368). — IV, 1415.

10) 4-Phenylureïdoazobenzol. Sm. 216° (B. 23, 500). — IV, 1357.

- 11) 2-Oxy-1, 2, 4-Triphenyl-1, 2-Dihydro-1, 2, 3, 5-Tetrazol. Salze, siehe diese (B. 27, 323, 2929).
- 12) 3-[2-Oxy-1-Naphtyl]azo-5,7-Dimethylindazol. Sm. 261—2620 (266 bis 267° (A. 305, 331). 13) Verbindung (aus Benzenylanilidoxim). Na (B. 31, 245). — IV, 1582.
- 14) Verbindung (aus 3-Oxyhexahydrobenzol-1-Carbonsäure u. Diazobenzolchlorid). Sm. 131° (A. 291, 302). - IV, 1468.
- $C_{19}H_{18}OBr_4$ 1) 1,3-Dibrom-2-Keto-1,3-Di[α -Brombenzyl]-R-Pentamethylen. Sm. 175° u. Zers. (B. 29, 1837).

C 75,0 — H 5,3 — O 10,5 — N 9,2 — M G 304. $C_{19}H_{16}O_{2}N_{2}$

- 1) P-Nitro-2-Methyltriphenylamin. Sm. 164—165° (B. 31, 2989).
- 2) ?-Di[Phenylamido]-2-Methyl-1,4-Benzochinon. Sm. 2320 (A. 287, 153; B. 16, 1559). — III, 360.
- 3) 5,6[?]-Di[Phenylamido]-2-Methyl-1,4-Benzochinon. Sm. noch nicht bei 300° (A. 287, 152). — III, 359.
- 4) ?-Phenylamido-?-Oxy-2-Methyl-1, 4-Benzochinonphenylimid (B. 16, 1561). — III, *361*.
- 5) Methyläther d. 5-Phenylamido-2-Oxy-1, 4-Benzochinonphenylimid. Sm. 1940 (188—1890) (B. 18, 788; 21, 677). — III, 347.
- 6) α-Diphenylhydrazondi[2-Oxyphenyl] methan. Sm. 152° (B. 19, 2610). **– IV**, 776.
- 7) 3',4'-Dioxy-2-Benzylazobenzol (Diphenylmethan-o-Azodioxybenzol). Sm. 170° (B. **27**, 2788). — IV, 1446.
- 8) Phenylazopropionyl- α -Naphtol. Sm. 110° (J. pr. [2] 43, 96). IV, 1478.
- 9) Acetat d. 2-Oxy-1-[2-Methylphenyl]azonaphtalin (Soc. 63, 929). IV, 1435.
- 10) Acetat d. 2-Oxy-1-[4-Methylphenyl]azonaphtalin. Sm. 99° (Soc. 63,
- 925). **IV**, *1435*. 11) Acetat d. 4-Oxy-1-[4-Methylphenyl]azonaphtalin. Sm. 101—102° (B. 19, 2488). — IV, 1435.
- 12) 3,5-Dimethyl-1,4-Dibenzoylpyrazol. Sm. 124—125,5° (G. 24 [1] 9). - IV, 551.
- 13) 4-Phenylhydrazon-2-Phenyl-1,4-Dihydrobenzol-6-Carbonsäure (B. 17, 2762). — IV, 698.
- 14) Aethylester d. 2,3-Diphenyl-1,4-Diazin-5-Carbonsäure. Sm. 91 bis 92° (Soc. 63, 1307). — IV, 1049.
- 15) 2-Amidophenylester d. Diphenylamidoameisensäure. Sm. 189—1910 (B. 20, 2125). — II, 706.
- 16) 3-Amidophenylester d. Diphenylamidoameisensäure. Sm. 132-1330 (B. 24, 2111). — II, 715.
- 17) 4-Amidophenylester d. Diphenylamidoameisensäure. Sm. 146° (B. 24, 2111). — II, 716.
- 18) Benzoat d. 4-Oxy-s-Diphenylhydrazin. Sm. 1730 (B. 24, 2310; 28,
- 2416). IV, 1504. 19) β , 2'-Methylimid d. α -[Cyanphenyl]- β -Phenylpropan- β , 2'-Dicarbonsäure. Sm. 117—118° (B. 27, 2497). — II, 2027. C 68,7 — H 4,8 — O 9,6 — N 16,9 — M. G. 332.
- C,9H,6O2N4
 - 1) 3,5-Di[Phenylnitrosamido]-1-Methylbenzol. Sm. 170° u. Zers. (J. pr. [2] 33, 545). — IV, 625.
 - 2) 3-Nitrotriphenylguanidin. Sm. 159°. (2HCl, PtCl₄) (B. 7, 1236; 16, 50). — II, *350*.
 - 3) Resorcindisazobenzoltoluol. Sm. 195-196° (B. 15, 2823). IV, 1444. 4) isom. Resorcindisazobenzoltoluol. Sm. 204-206° (B. 15, 2822).
 - IV, 1444. 5) isom. Resorcindisazobenzotoluol. Sm. 240-241° (B. 15, 2824). IV, 1444.
 - 6) 2-Methyläther d. 4,6[P]-Diphenylazo-1,2-Dioxybenzol (Guajakoldisazobenzol). Sm. 150-150,5° (B. 29, 2686). - IV, 1441.

- C₁₉H₁₈O₂N₄ 7) 4⁴-Methyläther d. 2-Phenylazo-4-[4-Oxyphenyl]azo-1-Oxybenzol. Sm. 117° (B. 32, 124).
- $\mathbf{C}_{19}\mathbf{H}_{16}\mathbf{O}_{2}\mathbf{N}_{6}$ C 63.3 - H 4.4 - O 8.9 - N 23.3 - M. G. 360.
 - 1) Phenylendiamindisazobenzol-3-Carbonsäure (B. 16, 2032). IV, 1461.
- $\mathbf{C}_{19}\mathbf{H}_{16}\mathbf{O}_{3}\mathbf{N}_{2}$
- C 71,2 H 5,0 O 15,0 N 8,7 M. G. 320. 1) Diacetylderivat d. 5-Imido-3,4-Diphenyl-4,5-Dihydroisoxazol. Sm. 144—145° (J. pr. [2] 55, 313).

 2) Acetat d. 6-Oxy-2-[4-Acetylamidophenyl]chinolin (M. 9, 149). —
 - IV, 1025.
 - 3) Benzoat d. 6-Oxy-4-Methyl-2- $[\alpha$ -Oxybenzyl]-1,3-Diazin. Sm. 205 bis 208°. HCl (PINNER, Imidoather 284). — IV, 972. Aethylester d. 2-Oxy-1-Phenylazonaphtalin-18-Carbonsäure. Sm. 104° (B. 14, 2035). — IV, 1463.
- C19H16O3S2 1) Phenyläther d. α-Merkapto-γ-[2-Naphtyl]sulfon-β-Ketopropan. Sm. 141° (J. pr. [2] 55, 413).
- C 67.8 H 4.8 O 19.1 N 8.3 M. G. 336. $C_{19}H_{16}O_4N_2$
 - 1) 2,3-Di[4-Methoxyl]-1,4-Diazin-5-Carbonsäure. Sm. 224 225°. Ag

 - (Soc. 63, 1308). IV, 1049.
 Aethylester d. 3-Nitro-4-[1-Naphtyl]amidobenzol-1-Carbonsäure. Sm. 109° (B. 23, 3458). II, 1286.
 Aethylester d. 3-Nitro-4-[2-Naphtyl]amidobenzol-1-Carbonsäure. Sm. 127,5° (B. 23, 3457). II, 1286.
 C 62,6 H 4,4 O 17,6 N 15,4 M. G. 364.
- $\mathbf{C}_{19}\mathbf{H}_{16}\mathbf{O}_{4}\mathbf{N}_{4}$
 - Di [Carbonylphenylhydrazid] d. Propan-αα-Dicarbonsäure. 112—113° (B. 21, 1243). IV, 704.
 Benzylidendi [phenylsulfon]. Sm. 262° (B. 25, 355). III, 10.
- $\mathbf{C}_{19}\mathbf{H}_{16}\mathbf{O}_{4}\mathbf{S}_{2}$
- 1) Phenyläther d. α-Merkaptodiphenylsulfonmethan. Sm. 174-175° $C_{19}H_{16}O_4S_3$ (B. 25, 347; J. pr. [2] 51, 315). — II, 784. C 64,8 — H 4,5 — O 22,7 — N 7,9 — M. G. 352.
- $C_{19}H_{16}O_5N_2$
- 1) Nitroderivat d. Kohlenw. $C_{19}H_{18}$ (A. 212, 100). C 55,9 H 3,9 O 19,6 N 20,6 M. G. 408. $C_{19}H_{16}O_5N_6$
 - 1) s-Harnstoff d. 2-Keto-5-Methyl-3-[4-Amidophenyl]-2,3-Dihydro-
- 1,3,4-Oxdiazol. Sm. 290° (B. 26, 1320). IV, 1127. 1) α -Phenylsulfon- γ -[2-Naphtyl]sulfon- β -Ketopropan. Sm. 144° (J. p? $C_{19}H_{16}O_5S_2$ [2] 55, 411).
- C 61,9 H 4,3 O 26,1 N 7,6 M. G. 368. $C_{19}H_{16}O_6N_2$ 1) Aethylester d. 4,5-Diketo-2-Phenyl-1-[3-Nitrophenyl]tetrahydro
 - pyrrol-3-Carbonsäure. Sm. 199-200° (B. 30, 604). IV, 368. 2) Aethylester d. 4,5-Diketo-2-[3-Nitrophenyl]-1-Phenyltetrahydro-
- pyrrol-3-Carbonsäure. Sm. 208-209° (B. 30, 604). IV, 368.
- $\mathbf{C}_{19}\mathbf{H}_{16}\mathbf{O}_{6}\mathbf{Br}_{2}$ 1) ?-Dibrom- $\alpha\alpha$ -Di[?-Acetoxylphenyl]propionsäure (B. 16, 2074).
 - 2) γ^2 -Acetat- $\alpha^{3,4}$ -Methylenäther- γ^4 -Methyläther d. $\alpha\beta$ -Dibrom- γ -Keto- γ -[2,4-Dioxyphenyl]-α-[3,4-Dioxyphenyl]propan. Sm. 137—138° (B. 32, 313).
- 1) Tri[Phenylsulfon]methan. Sm. 215°. K, Ba, Ag (B. 25, 348). II, 784. $C_{19}H_{16}O_6S_8$
- C₁₉H₁₆O₈Br₂ 1) Tetracetat d. 2,4-Dibrom-3,5,7,8-Tetraoxy-1-Methylnaphtalin. Sm. 206° (B. **26**, 2671). — II, 1036.
- $C_{19}H_{16}O_9S_3$ 1) Triphenylmethantrisulfonsäure. $Ba_3 + 8H_2O$ (B. 5, 908; 7, 1205). II, 288.
- $C_{19}H_{16}O_{11}Cl_{1}$ Dichloreuxanthinsäure (J. pr. [1] 37, 392). II, 2103.
- $C_{19}H_{16}O_{11}Br_{2}1$) Dibromeuxanthinsäure (J. pr. [1] 37, 392). II, 2103.
- Jodäthylat d. Anthrachinolin (A. 201, 348). IV, 461.
 Jodäthylat d. Phenonaphtakridin (B. 27, 2844). IV, 464. $\mathbf{C}_{19}\mathbf{H}_{16}\mathbf{N}\mathbf{J}$
- $C_{19}H_{16}N_2Cl_2$ 1) 23,53-Dichlor-4',42-Diamidotriphenylmethan. Sm. 1070 (A. 299, 351).
- IV, 1043. 2) Chinolinmethylenchlorid. Sm. 168°. 2 + PtCl₄ (B. 16, 2004). -
- IV, 250. 1) Chinolinmethylenjodid. Sm. 132° (B. 16, 880, 2004). — IV, 250. $C_{19}H_{16}N_2J_2$
- 1) Triphenylthioharnstoff. Sm. 1520 (B. 17, 2092). II, 397. $C_{19}H_{16}N_2S$
- 2) 2-[1-Naphtyl]imido-3-Phenyltetrahydrothiazol. Sm. 134,5°. (2HCl, PtCl₄) (B. 21, 1869). — II, 609.

3) 2-Phenylimido-3-[1-Naphtyl]tetrahydrothiazol. Sm. 184,5°. (2HCl, $C_{19}H_{16}N_2S$ PtCl₄) (B. 21, 1869). — II, 609.

4) 2-Thiocarbonyl-1-Methyl-3-[1-Naphtyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. HJ (J. pr. [2] 52, 410). — IV, 635.

5) 2-Thiocarbonyl-1-Methyl-3-[2-Naphtyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 140°. HJ (J. pr. [2] 52, 414). — IV, 635.

6) 2-Thiocarbonyl-1-Aethyl-3-Phenyl-1,2-Dihydro-α-Naphtimidazol (Aethylphenylnaphtylenthioharnstoff). Sm. über 300° (B. 27, 2775). -IV, 919.

1) 5-Chlorphenylat d. 3-Amido-2-Methyl-5,10-Naphtdiazin (Methyl- $\mathbf{C}_{19}\mathbf{H}_{16}\mathbf{N}_{3}\mathbf{Cl}$

 $\mathbf{C}_{19}\mathbf{H}_{16}\mathbf{N}_{4}\mathbf{S}$ $\mathbf{C}_{19}\mathbf{H}_{17}\mathbf{ON}$

aposafraninchlorid). 2 + PtCl₄ (B. 31, 967, 974). — IV, 1182. 1) 4-Phenylthioureïdoazobenzol. Sm. 179° (B. 17, 1405). — IV, 1357. C 82,9 - H 6,2 - O 5,8 - N 5,1 - M. G. 275.

1) α -Oxy-3-Amidotriphenylmethan. Sm. 155°. HCl (B. 21, 190). — II, 1084.

2) α -Oxy-4-Amidotriphenylmethan. Sm. 116°. HCl + H₂O, H₂SO₄ + H₂O (B_{-}^{π} 23, 1625). — II, 1084.

3) Aethyläther d. 4-Oxy-1-Phenylimidomethylnaphtalin. Sm. 720 (Bl. [3]

4) α -[1-Naphtyl]amidoäthylphenylketon. Sm. 161—163° (Bl. [3] 17, 74). 5) α -[2-Naphtyl]amidoäthylphenylketon. Sm. 120—121° (Bl. [3] 17, 74).

6) ε -Oximido- $\alpha \eta$ -Diphenyl- $\alpha \gamma \zeta$ -Heptatriën. Sm. 127—128° (B. 29, 615). - III, 257.

7) [4-Methylphenyl]-[2-Naphtyl]amid d. Essigsäure. Sm. 85° (B. 16, 2079). — II, 616.

C 75,2 — H 5,6 — O 5,3 — N 13,9 — M. G. 303. C19H17ON3

1) β -Diphenylamido- α -Phenylharnstoff. Sm. 193°. — IV, 674.

2) Verbindung (aus p-Rosanilin) (M. 17, 10).

1) Diphenylbenzylphosphinoxyd. Sm. 192-193° (B. 18, 2116). $C_{19}H_{17}OP$ IV, 1662.

2) Diphenyl-4-Methylphenylphosphinoxyd. Sm. 129—130° (B. 21, 1511). **— IV**, 1671.

 $C_{19}H_{17}O_{2}N$

C 78,3 - H 5,8 - O 11,0 - N 4,8 - M. G. 291.1) Aethyläther d. 4-Benzoylamido-1-Oxynaphtalin. Sm. 214-2150

(J. pr. [2] 45, 549). - II, 1180.

2) Aethyläther d. 4-[4-Methylphenyl]imido-2-Oxy-1-Keto-1,4-Dihydronaphtalin. Sm. 135—137° (B. 15, 287, 1970). — III, 394.

3) Propyläther d. 4-Phenylimido-2-Oxy-1-Keto-1, 4-Dihydronaphtalin. Sm. 103—104° (B. 15, 283). — III, 393.

4) Isopropyläther d. 4-Phenylimido-2-Oxy-1-Keto-1,4-Dihydro-naphtalin. Sm. 99—100° (B. 15, 283). — III, 393. 5) 2-Methyl-5-Phenyl-1-[2-Methylphenyl]pyrrol-3-Carbonsäure.

199° (B. 18, 2596). — IV, 357.
6) 2-Methyl-5-Phenyl-1-[4-Methylphenyl]pyrrol-3-Carbonsäure. Sm.

 227° (B. 18, 2597). — IV, 357. 7) 2-[4-Isopropylphenyl]chinolin-4-Carbonsäure. Sm. 201°. Ag (A.

249, 102). — IV, 450. 8) Aethylester d. α -Cyan- $\beta\gamma$ -Diphenylpropen- α -Carbonsäure. Sm. 163°

(J. pr. [2] 54, 549).

9) Aethylester d. Phenyl-2-Naphtylamidoameisensäure. Sm. 93° (B.

24, 2919). — II, 617. 10) Aethylester d. **2**,5-Diphenylpyrrol-3-Carbonsäure. Sm. 159° (B. 21, 3060). — IV, 449.

 $C_{19}H_{17}O_{2}N_{8}$ C 71,5 - H 5,3 - O 10,0 - N 13,2 - M. G. 319.

1) 2'-Nitro-4², 4³-Diamidotriphenylmethan (B. 16, 1305). — IV, 1043. 2) 3'-Nitro- 4^2 , 4^3 -Diamidotriphenylmethan. Sm. 136° . $+ C_6H_6$ (Sm. 81°)

(B. 13, 671). — IV, 1043. 3) 4'-Nitro-4²,4³-Diamidotriphenylmethan. + Toluol. 2HCl, (2HCl, PtCl₄) (B. 15, 678). — IV, 1043.

4) $\alpha\alpha$ -Diphenyl- β -[2-Nitrobenzyl]hydrazin. Sm. 143° (B. 28, 933). —

5) 2-Oxy-1-[5-Acetylamido-2-Methylphenylazo]naphtalin. Sm. 275 bis 276° (B. 15, 2830). — IV, 1436.

C₁₉H₁₇O₂N₃ 6) Methyläther d. 4-Acetylamido-2-Phenylazo-1-Oxynaphtalin. Sm. 218—220° u. Zers. (B. 29, 2950). — IV, 1431.

7) Methyläther d. 2-Oxyphenylacetylhydrazimido-β-Naphtalin. Sm. $198-199^{\circ}$ (B. 18, 3131). — IV, 1576.

8) Aethylester d. 5- $[\beta$ -Phenyläthenyl]-1-Phenyl-1, 2, 4-Triazol-3-Car-

bonsäure. Sm. 148°. — IV, 1170.

9) Phenylamidoformiat d. 4-Oxy-s-Diphenylhydrazin (Carbanilidooxy-hydrazobenzol). Sm. 155° (B. 23, 491). — IV, 1504.

10) Isocarbanilidooxyhydrazobenzol. Sm. 218—220° (B. 23, 494). —

IV, 1504. C 65,7 — H 4,9 — O 9,2 — N 20,2 — M. G. 347.

 $C_{19}H_{17}O_{2}N_{5}$

- 1) Acetat d. 3-Oximidoamidomethyl-5- $[\beta$ -Phenyläthenyl]-1-Phenyl-1,2,4-Triazol. Sm. 158° u. Zers. — IV. 1170.
- 2) Di[Phenylhydrazid] d. Cinchomeronsäure. Zers. bei 100-110° (M.

C19H17O8N

- 11, 146). IV, 799. C 74,3 H 5,5 O 15,6 N 4,6 M. G. 307. 1) Cusparin (oder C₂₀H₁₉O₃N). Sm. 92° (G. 13, 363). III, 777. 2) Cusparidin. Sm. 79°. HCl + 3H₂O, (2HCl, PtCl₄), (HCl, AuCl₃), HBr, H₂SO₄ (B. 25 [2] 201). III, 778. 3) Methylapocinchensäure (B. 18, 2383). III, 838.

- 4) 2-Oximido-4,5-Diphenyl-2,3-Dihydro-R-Penten-1-Methylcarbonsäure. Sm. 183—184° (Soc. 71, 151).
- 5) 6-Phenylamido-4-Keto-2-Phenyl-1, 2, 3, 4-Tetrahydrobenzol-3-Carbonsäure. Sm. 1900 u. Zers. (A. 294, 280).
- 6) Methylester d. γ -Cyan- α -Keto- α δ -Diphenylbutan- γ -Carbonsäure. Sm. 133—134° (C. 1895 [2] 918).
- 7) Aethylester d. 3-Phenylamido-1-Oxynaphtalin-2-Carbonsäure. Sm. 185° (A. **298**, 385).
- 8) Aethylester d. 4-Oxy-6-Methyl-2-Phenylchinolin-3-Carbonsäure.
 Sm. 236° (B. 19, 1542). IV, 448.
 9) Aethylester d. 4-Oxy-8-Methyl-2-Phenylchinolin-3-Carbonsäure.
- Sm. 208,5° (B. 19, 1545). IV, 449. 10) Aethylester d. 6-Methoxyl-2-Phenylchinolin-4-Carbonsäure. Sm. 105° (A. 282, 106). — IV, 447. C 68,1 — H 5,1 — O 14,3 — N 12,5 — M. G. 335.

C19H17O8N8

- 1) 1-Nitro-2-Naphtyläther d. β -Phenylhydrazon- α -Oxypropan. Sm.
- 120° (B. 31, 759). 2) Amid d. 2,3-Di[4-Methoxyl]-1,4-Diazin-5-Carbonsäure. Sm. 240 bis 241° (Soc. 63, 1308). — IV, 1049.
- 1) Diphenylester d. 4-Methylphenylphosphinsäure. Sd. oberh. 360° C19H17O8P (A. 293, 262). — IV, 1668.
 - 2) Diphenylester d. Benzylphosphinsäure. Sm. 60° (B. 31, 1051). IV, 1663. C 70,6 — H 5,3 — O 19,8 — N 4,3 — M. G. 323. 1) Opiansäuremethylketolid. Sm. 194° (B. 29, 2035). — IV, 221.

C19H17O4N

- 2) Dimethylester d. α -Cyan- $\alpha\beta$ -Diphenyläthan- $\alpha\beta$ -Dicarbonsäure. Sm. 101° (B. **23**, 115). — **II**, 1891.
- 3) Aethylester d. 4,5-Diketo-1,2-Diphenyltetrahydropyrrol-3-Carbon-
- säure. Sm. 171°. Na (B. 30, 602). IV, 368. 4) β ,2'-Methylimid d. $\alpha\beta$ -Diphenylpropan- β ,2,2'-Tricarbonsäure. Sm. 145—147° (B. **27**, 2495). — II, 2027.
- 5) Verbindung (aus 2-Nitrobenzoylbenzylmalonsäurediäthylester). Sm. 1470
- u. Zers. (A. **251**, 384). II, 1978. C 65,0 H 4,8 O 18,2 N 12,0 M. G. 351. C19H17O4N3
 - 1) Aethylester d. 4-Benzoylamido-5-Keto-l-Phenyl-4,5-Dihydropyra-
 - zol-3-Carbonsäure. Sm. 194—195° (B. 24, 1260). IV, 713.

 2) Aethylester d. 3-Methyl-1-Phenyl-5-[2-Nitrophenyl]pyrazol-4-Carbonsäure. Sm. 146° (B. 18, 2260). — IV, 949.
 - 3) Aethylester d. 3-Methyl-1-Phenyl-5-[4-Nitrophenyl]pyrazol-4-Carbonsäure. Sm. 128° (B. 18, 2257). — IV, 949.
 - 4) Dibenzoat d. 2,6-Di[Oximido] hexahydropyridin (Dibenzoylglutarenimidodioxim). Sm. 179-180° (B. 22, 2971). - II, 1210.
- $\mathbf{C_{10}H_{17}O_4Br_3} \text{ 1) } \alpha\gamma\text{-Lakton d. } \beta\gamma\delta\text{-Tribrom-}\alpha\text{-Oxy-}\alpha\delta\text{-Di}[4\text{-Methoxylphenyl}] \text{ butan-}\alpha\text{-Oxy-}\alpha\delta\text{-Di}[4\text{-Methoxylphenyl}]$ γ-Carbonsäure. Sm. 140° u. Zers. (A. 255, 302). — II, 1971.

C19 H18 ON4

C₁₉H₁₇O₅Br₃ 1) Trimethyläther d. Tribrombrasilin. Sm. 109-112^o (B. 27, 527). -III, 654.

C 59.5 - H 4.4 - O 25.1 - N 11.0 - M. G. 383. $C_{19}H_{17}O_6N_3$

1) Aethylester d. α -Cyan- $\beta\beta'$ -Di[2-Nitrophenyl]isobuttersäure. Sm. 81° (B. **29**, 638).

C 61,4 - H 4,6 - O 30,2 - N 3,8 - M. G. 371. $C_{19}H_{17}O_{7}N$

1) Nornarkotin (A. Spl. 7, 59, 62) - III, 916.

2) Triacetat d. α-Oximido-2,3,4[oder 3,4,5]-Trioxydiphenylmethan. Sm. 135° (A. 269, 303). — III, 202.
3) Phenylamid d. 3,4,5-Triacetoxylbenzol-1-Carbonsäure. Sm. 161

bis 162° (A. **272**, 206; Bl. [3] **9**, 847). — II, 1923. C 45,0 — H 3,4 — O 37,8 — N 13,8 — M. G. 507.

 $\mathbf{C}_{19}\mathbf{H}_{17}\mathbf{O}_{12}\mathbf{N}_{5}$

1) Diäthylester d. 2,4,6-Trinitro-3-Phenylamidophenylnitromethandicarbonsäure. Sm. 119° u. Zers. (Am. 14, 342). — II, 1842. C 48,8 — H 3,6 — O 44,5 — N 3,0 — M. G. 467.

C19H17O13N

1) Nitroeuxanthinsäure. Pb (J. pr. [1] 37, 392). — II, 2103.

1) Triphenylmethylamindibromid (B. 17, 750). — II, 641.

1) Triphenylmethylamindijodid (B. 17, 749). — II, 641. $\mathbf{C}_{19}\mathbf{H}_{17}\mathbf{NBr}_{2}$ $C_{19}H_{17}NJ_{2}$

1) α -Chlor-4', 42-Diamidotriphenylmethan (A. 217, 245). — II, 1084. $\mathbf{C}_{19}\mathbf{H}_{17}\mathbf{N}_{2}\mathbf{C}\mathbf{I}$ $\mathbf{C}_{19}\mathbf{H}_{17}\mathbf{N}_{2}\mathbf{P}$ 1) Phenylbenzylhydrazonphenylphosphin. Sm. 141° (A. 270, 132). -

IV, 1647. 1) α -Phenylamido - $\alpha\beta$ -Diphenylthioharnstoff. Sm. 173—174° (B. 25, $C_{19}H_{17}N_3S$

3115). — IV, *1496*. 2) β -Diphenylamido- α -Phenylthioharnstoff. Sm. 181° (B. 25, 3113). — IV, 680.

3) α -Phenyl- β -[4-Biphenylamido]thioharnstoff. Sm. 1820 (B. 27, 3106). IV, 970.

C₁₉H₁₇Cl₂P 1) Diphenylbenzylphosphindichlorid. Sm. 1870 (B. 21, 1506). - IV, 1662. $C_{19}H_{17}SP$ 1) Diphenyl-4-Methylphenylphosphinsulfid. Sm. 139° (B. 21, 1512). IV, 1671. C 78,6 — H 6,2 — O 5,5 — N 9,7 — M. G. 290.

 $C_{19}H_{18}ON_{2}$

1) ?-Diamido-2-Oxytriphenylmethan (B. 16, 1307). — II, 904.

2) α-Oxy-4,4'-Diamidotriphenylmethan. Sm. unter 100°. HCl (B. 15, 234; A. 217, 241). — II, 1084.

3) α-Phenylhydrazon-α-[1-Oxy-2-Naphtyl]propan. Sm. 128° (J. pr. [2] 43, 96). - IV, 775.

4) 2-Naphtyläther d. β -Phenylhydrazon- α -Oxypropan. Sm. 1540 (B. 28, 1254).

5) 2-Oxy-1-[2,4,5-Trimethylphenyl]azonaphtalin. Sm. 163—164° (Soc. 63, 934). — IV, 1438.

6) Aethyläther d. 4-Oxy-1-[2-Methylphenyl]azonaphtalin. Sm. 940 (B. 19, 2488). — IV, 1435.

7) Aethyläther d. 4-Oxy-1-[4-Methylphenyl]azonaphtalin. Sm. 126 bis 127° (B. 19, 2487; 27, 2353). — IV, 1435.

8) 6-Oxy-4-Phenyl-2-[4-Isopropylphenyl]-1, 3-Diazin. Sm. 2270 (B. 30, 2008). — IV, 1045.

9) 6-Oxy-4-Methyl-2, 5-Dibenzyl-1, 3-Diazin. Sm. 1920 (B. 22, 1623). IV, 1044.

10) 6-Oxy-4-Methyl-2-[4-Methylphenyl]-5-Benzyl-1,3-Diazin. Sm. 240° (B. 23, 3826). — IV, 1045. 11) 2-Oxy-1-Aethyl-3-Phenyl-1, 2-Dihydro-α-Naphtimidazol. Sm. 161°.

(2 HCl, PtCl₄) (B. 27, 2776). — IV, 918.

12) Phenylimid d. Phenylacetylamidopropan - $\alpha\beta$ - Dicarbonsäure. Sm.

1) Benzoldiazo-4-Nitrosophenyl-4-Tolylamin. Sm. bei 125° u. Zers. (A.

255, 165). — IV, 798. C₁₉H₁₈OBr₂ 1) Verbindung (aus Isoamyloxanthranol). Sm. 120° u. Zers. (A. 212, 95).

- III, 244. $C_{19}H_{18}OBr_4$ 1) $\alpha\beta\delta\varepsilon$ -Tetrabrom- γ -Keto- $\alpha\varepsilon$ -Diphenyl- $\beta\delta$ -Dimethylpentan. Sm. bei 180° u. Zers. (B. 31, 1888). $\mathbf{C}_{19}\mathbf{H}_{18}\mathbf{O}_{2}\mathbf{N}_{2}$

C 74.5 - H 5.9 - O 10.4 - N 9.1 - M. G. 306.

1) Methylenäther d. ε -Phenylhydrazon- α -[3, 4 - Dioxyphenyl]- $\alpha \gamma$ -Hexadiën. Sm. 141° (B. 28, 1193). — IV, 775.

- C₁₉H₁₈O₂N₂ 2) Aethylester d. 5-Methyl-1, 3-Diphenylpyrazol-4-Carbonsäure. Sm. 110° (B. 18, 932). — IV, 949.
 - 3) Aethylester d. 3-Methyl-1,5-Diphenylpyrazol-4-Carbonsäure. Sm. $121-122^{\circ}$ (B. 18, 312). - IV, 948.
- C₁₀H₁₈O₂Br₀ 1) ?-Dibrom 2, 6-Diphenyl 3, 5-Dimethyltetrahydro-1, 4-Pyron,
- 144° u. Zers. (B. **29**, 1353). III, 239. C 70,8 H 5,6 O 14,9 N 8,7 M. G. 322. $C_{19}H_{18}O_{3}N_{9}$
 - 1) Dehydrodiacetylpäonolphenylhydrazon. Sm. 2130 (B. 25, 1298). -
 - 2) Aethylester d. 5-Keto-3-Benzyl-1-Phenyl-4, 5-Dihydropyrazol-4-
 - Carbonsaure. Sm. 124—127° (B. 29, 1990). IV, 718.

 3) Aethylester d. 5-Keto-4-Benzyl-1-Phenyl-4,5-Dihydropyrazol-3-
- Carbonsäure. Sm. 194° (B. 31, 556). IV, 949. C 65,1 H 5,1 O 13,7 N 16,1 M. G. 350. $C_{19}H_{18}O_3N_4$
 - 1) αγ-Di[Acetylphenylhydrazon]-β-Ketopropan. Sm. 167—168° u. Zers. (B. 27, 220). — IV, 762.
- C₁₉H₁₈O₃Br₄ 1) Dimethyläther d. $\alpha'\beta\delta\varepsilon$ -Tetrabrom- γ -Keto- $\alpha\varepsilon$ -Di[2-Oxyphenyl]pentan. Sm. 197° (B. 31, 1511; J. pr. [2] 60, 148).
- C 67,4 H 5,3 O 18,9 N 8,3 M. G. 338. $C_{19}H_{18}O_4N_2$
 - 1) 4 [oder 5]-Oximido-5 [oder 4]-Keto-1, 2-Diphenyltetrahydropyrrol-3-Carbonsäure. 2 isom. Formen. Sm. 110° u. 224° (B. 30, 603). —
- IV, 368. $\mathbf{C}_{19}\mathbf{H}_{18}\mathbf{O}_4\mathbf{Br}_2 \ 1) \ \mathbf{4-Aethyl} \\ \mathbf{d} \cdot \alpha\beta \mathbf{Dibrom} \gamma \mathbf{Keto} \gamma [2, \mathbf{4-Dioxyphenyl}] \mathbf{C}_{19}\mathbf{H}_{18}\mathbf{O}_4\mathbf{Br}_2 \ 1) \\ \mathbf{d} \cdot \alpha\beta \mathbf{Dibrom} \gamma \mathbf{Keto} \gamma [2, \mathbf{4-Dioxyphenyl}] \mathbf{C}_{19}\mathbf{H}_{18}\mathbf{O}_4\mathbf{Br}_2 \ 1) \\ \mathbf{d} \cdot \alpha\beta \mathbf{Dibrom} \gamma \mathbf{Keto} \gamma [2, \mathbf{4-Dioxyphenyl}] \mathbf{C}_{19}\mathbf{H}_{18}\mathbf{O}_4\mathbf{Br}_2 \ 1) \\ \mathbf{d} \cdot \alpha\beta \mathbf{Dibrom} \gamma \mathbf{Keto} \gamma [2, \mathbf{4-Dioxyphenyl}] \mathbf{C}_{19}\mathbf{H}_{18}\mathbf{O}_4\mathbf{Br}_2 \ 1) \\ \mathbf{d} \cdot \alpha\beta \mathbf{Dibrom} \gamma \mathbf{Keto} \gamma [2, \mathbf{4-Dioxyphenyl}] \mathbf{C}_{19}\mathbf{H}_{18}\mathbf{O}_4\mathbf{H}_{18}\mathbf{O}_4\mathbf{H}_{18}\mathbf{O}_4\mathbf{$ α-Phenylpropan. Sm. 118—119° (B. 31, 698).
- $C_{19}H_{18}O_4S_2$ 1) β -Phenylsulfon- α -[2-Naphtylsulfon] propan. Sm. 123° (*J. pr.* [2] 53, 498).
- $C_{19}H_{18}O_5N_2$ C 64.4 - H 5.1 - O 22.6 - N 7.9 - M. G. 354.
 - 1) α -[3-Methylphenyl]amido- α -[3-Methylphenyl]imido- β -Ketopropan-6',62-Dicarbonsäure (Pyrotraubenmetadihomoanthranilsäure). Sm. 280° u. Zers. (B. 30, 1192).
- C 61,6 H 4,9 O 25,9 N 7,6 M. G. 370. $\mathbf{C}_{19}\mathbf{H}_{18}\mathbf{O}_{6}\mathbf{N}_{2}$
 - 1) αγ-Di[Benzoylamido] propan-2,2'-Dicarbonsäure (Trimethylenphtal-
 - amidsäure). Ag₂ (B. 21, 2670). II, 1798. 2) Di[4-Acetoxylphenylamid] d. Methandicarbonsäure. Sm. bei 210° (G. 25 [2] 538).
- $\mathbf{C}_{19}\mathbf{H}_{18}\mathbf{O}_{6}\mathbf{Br}_{4}$ 1) Dibrompinoresinoldibromid. Sm. 254° (M. 18, 492).
- C 59.1 H 4.7 O 29.0 N 7.2 M. G. 386. $\mathbf{C}_{19}\mathbf{H}_{18}\mathbf{O}_{7}\mathbf{N}_{2}$ 1) $\alpha \gamma$ -Di[Benzoylamido]- β -Oxypropan-2,2'-Dicarbonsäure (β -Oxytrimethylendiphtalamidsäure). Sm. 120° (u. 205°). 2 HCl, Ag₂ (B. 21, 2690).
- C 55,1 H 4,3 O 27,1 N 13,5 M. G. 414. $C_{19}H_{18}O_7N_4$
- 1) Carboxamidohippursäure. Ba (*J. pr.* [2] 1, 235). II, 1188. C₁₉H₁₈O₉Cl₄ 1) Verbindung (aus Hanf) (*Soc.* 43, 19; 55, 204; *B.* 26, 2525). I, 1080.
- C 49,3 H 3,9 O 34,6 N 12,1 M. G. 462. $\mathbf{C}_{19}\mathbf{H}_{18}\mathbf{O}_{10}\mathbf{N}_{4}$ 1) Diäthylester d. 2,4,6-Trinitro-3-Phenylamidophenylmethandicarbonsäure. Sm. 133° (Am. 14, 354). — II, 1842.
- C 47.7 H 3.8 O 36.8 N 11.7 M. G. 478.
- C₁₉ \mathbf{H}_{18} O₁₁ \mathbf{N}_4 C 47,7 H 3,8 O 36,8 N 11,t M. O. 416.

 1) Diäthylester d. α -Oxy- α -[?-Trinitro-?-Amidophenyl]methan- $\alpha\alpha$ -Dicarbonsäure. α -Modif. Sm. 143°; β -Modif. Sm. 122°. Na₂, K (Am. 14, 347). — II, *194*7.
- C₁₉H₁₈N₂Cl₂ 1) Verbindung (Base aus 4-Amido-1-Methylbenzol). Acetat (B. 23, 1483). **- II**, *511*.
- $\mathbf{C}_{19}\mathbf{H}_{18}\mathbf{N}_{2}\mathbf{Br}_{2}$ 1) Dehydrocinchendibromid. (2 HCl, PtCl₄) (B. 25, 1549). III, 840. 1) s-[4-Aethylphenyl]-l-Naphtylthioharnstoff. Sm. 148° (B. 16, 2023). C19H18N.S
 - II, 610. 2) s-[4-Aethylphenyl]-2-Naphtylthioharnstoff. Sm. 158—159° (B. 16,
- 2022). II, 619. C₁₉H₁₈N₃Cl 1) Chlormethylat d. 3-Methyl-2-Phenyl-2, 3-Dihydro-1, 2, 4-Naphtiso-
- triazin. 2 + PtCl, (B. 24, 1006). IV, 1393.

 1) Jodmethylat d. 3-Methyl-2-Phenyl-2,3-Dihydro-1,2,4-Naphtiso- $\mathbf{C}_{19}\mathbf{H}_{18}\mathbf{N}_{3}\mathbf{J}$ triazin. Sm. 244° (B. 24, 1006). — IV, 1393.
- 1) Methyltriphenylphosphoniumchlorid + H₂O. Sm. 212-2130 (wasser-C₁₉H₁₈ClP frei). $2 + PtCl_4$ (A. 229, 310; B. 27, 273). - IV, 1660.

1) Methyltriphenylphosphoniumjodid. Sm. 182-1830 (A. 229, 310). $C_{19}H_{18}JP$ IV, 1660.

 $C \pm 82.3 - H \pm 6.8 - O \pm 5.8 - N \pm 5.1 - M. G. 277.$ C, H, ON

1) γ -Oximido - $\alpha \varepsilon$ -Diphenyl- $\beta \delta$ -Dimethyl- $\alpha \delta$ -Pentadiën. Sm. 157—159° (B. **31**, 1888).

2) 6-[4-Methylphenyl]amido-4-Keto-2-Phenyl-1,2,3,4-Tetrahydrobenzol. Sm. 215° (A. 294, 307).

3) Acetylderivat d. 2-Methylen-1, 3-Dimethyl-3-Phenyl-2, 3-Dihydroindol. Sm. 142° (G. 28 [2] 397).

4) Benzoyltrimethyldihydrochinolin. Sm. 137-1380 (G. 28 [1] 193), 5) Apocinchen. Sm. 209 – 210°. HCl, (2HCl, PtCl₄), HBr, HJ (B. 14, 1855; 18, 1226; 20, 2675; 27, 903). — III, 837.

6) Base (aus Dimethyleinchoninjodmethylat). (2 HCl, PtCl,) (A. 277, 288).

- III, 833.

 $C_{74,7} - H_{6,2} - O_{5,2} - N_{13,8} - M.G.$ 305. C19H19ON3 1) α-Oxytri[4-Amidophenyl]methan (p-Rosanilin). Chlorid, Jodid, Sulfat +8H₂O (*A.* 194, 274; *A. ch.* [5] 8, 192; *Bl.* [3] 9, 690; *B.* 15, 678; 17, 2936; 18, 997; 19, 110; 26, 1789; 28, 521, 1696, 1703, 1705; *M.* 17, 5). — II, 1087. C 68,5 — H 5,7 — O 4,8 — N 21,0 — M. G. 333.

C19H19ON5

1) 5-[2-Amido-1-Naphtyl]azo-4-Methylnitrosamido-1, 3-Dimethyl-

benzol. Sm. 184° (B. 31, 2933). — IV, 1400. 1) Verbindung (aus Isoamyloxanthranol). Sm. 85° (B. 14, 459, 798; A. C₁₉H₁₉OCl 212, 88). — III, 244. $C_{19}H_{19}O_{2}N$

C 77,8 - H 6,5 - O 10,9 - N 4,8 - M. G. 293.

1) Apochinen. Sm. 246°. HBr (B. 18, 1226; 20, 2686; 23, 2671). III, 817.

2) Oxyapocinchen. Sm. 267° (B. 14, 1858; 18, 2385; 20, 2685). III, 838.

3) Ditamin. Sm. 75°. (2HCl, PtCl₄) (A. 178, 56; 203, 147). — III, 880,

4) α -Phenybenzylamido - γ -Keto - β -Aethanoyl - α -Buten. Sm. 106° (4. 297, 69).

5) Methyläther d. 2-[4-Isopropylphenyl]-5-[4-Oxyphenyl]oxazol. Sm. 55°. HCl (B. **29**, 2101). — **1V**, 445. C 71,0 — H 5,9 — O 10,0 — N 13,1

 $C_{19}H_{19}O_{9}N_{9}$ - M. G. 321.

1) 1-Phenylhydrazon-5-Methyl-3-[3-Nitrophenyl]-1, 2, 3, 4-Tetrahydrobenzol. Sm. 135-150° u. Zers. (A. 303, 235).

2) 1-Phenylhydrazon-5-Methyl-3-[4-Nitrophenyl]-1,2,3,4-Tetrahydrobenzol. Sm. 173° (A. 303, 239).

3) Benzoat d. 3-Oxy-5-Butyl-1-Phenyl-1, 2, 4-Triazol. Sm. 87-88° (B.

 $C_{19}H_{19}O_{3}N$

3) Benzoat d. 3-Oxy-5-Butyl-1-Phenyl-1, 2, 4-Triazol. Sm. 87—88° (B. 29, 1951). — IV, 1111.
C 73,8 — H 6,1 — O 15,5 — N 4,5 — M. G. 309.
1) Galipidin. Sm. 182°. HCl + 3H₂O, (2HCl, PtCl₄), (HCl, AuCl₃), HBr (B. 25 [2] 201). — III, 778.
2) Acetylapomorphin. HCl + H₂O, (2HCl, PtCl₄ + 4H₂O). — III, 901. C 70,2 — H 5,8 — O 19,7 — N 4,3 — M. G. 325.
1) Bulbocapnin. Sm. 199°. HCl, (2HCl, PtCl₄), HBr, HJ, HNO₃, H₂SO₄ + 2H₂O (A. 277, 10; C. 1896 [2] 793; M. 18, 385). — III, 877.
2) Naudinin. (2HCl, PtCl₄) (R. 3, 196). — III, 894.
3) Acetylmorphothebaïn. Sm. 183° (B. 17, 531). — III, 910.
4) 2.3.4.5-Tetracetyl-1-[4-Methylphenyllpyrrol (B. 14, 935). — IV, 67. C, H, O, N

4) 2,3,4,5-Tetracetyl-1-[4-Methylphenyl]pyrrol (B. 14, 935). — IV, 67. 5) 4-Oximido-1-Oxy-1, 2-Diphenyl-R-Pentamethylen-3-Methylcarbonsäure. Sm. 122-1230 u. Zers. K, Ag (Soc. 71, 149).

6) 1,2-Lakton d. 3,4-Dioxy-1-[1,2,3,4-Tetrahydro-1-Chinolyl]oxymethylbenzol-3,4-Dimethyläther-2-Carbonsäure (Opiansäuretetra-

hydrochinolid). Sm. 180° (B. **29**, 182). — **IV**, *195*. C 64,6 — H 5,4 — O 18,1 — N 11,9 — M. G. 353. $C_{19}H_{19}O_4N_3$

1) Aethylester d. β -[2-(4-Nitrobenzyliden)amidophenyl]imidobutter-

säure. Sm. 99° (B. 29, 1501). — IV, 563. C₁₉H₁₉O₄Br 1) $\alpha\gamma$ -Lakton d. β -Brom- α -Oxy- $\alpha\delta$ -Di[4-Methoxylphenyl]butan- γ -Carbonsäure (Dianisylbrompentalakton). Sm. 1360 (A. 255, 306). II, 1971.

 $C_{19}H_{19}O_5N$ C'66.9 - H 5.5 - O 23.5 - N 4.1 - M. G. 341.1) Benzoylcotarnin + $\frac{1}{2}$ H₂O. Sm. 122—123° (A. **254**, 335). — III, 917,

- C 63,9 H 5,3 O 26,9 N 3,9 M. G. 357. $C_{19}H_{19}O_6N$
 - 1) Verbindung (aus 1,4-Dioxybenzol u. CHN) (B. 19, 1008). II, 939.
- 1) Diäthylester d. 3-Brom-1, 4, 6-Trimethylisobenzdifuran-2, 5-Dicar- $\mathbf{C}_{19}\mathbf{H}_{19}\mathbf{O}_{6}\mathbf{Br}$ bonsäure (A. 283, 267).
- C 54.7 H 4.5 O 30.7 N 10.1 M. G. 417. $C_{19}H_{19}O_8N_3$
 - 1) Diäthylester d. 4,6-Dinitro-3-Phenylamidophenylmethandicarbonsäure. Sm. 118°. Na (Am. 11, 102). — II, 1841.
- 1) Dehydrocinchoninchlorid. Sm. 148-1490 (B. 19, 2857). III, 839. $\mathbf{C}_{19}\mathbf{H}_{19}\mathbf{N}_{2}\mathbf{C}\mathbf{1}$ Verbindung (Base aus 4-Amido-1-Methylbenzol). Sm. 135°. HCl, Diacetat (B. 23, 1480). — II, 511.
- 1) $\alpha [4 Methylphenyl] \beta [2, 4 Dimethyl 5 oder 7 Chinolyl] thioharn-$ C19H19N8S stoff. Sm. 142° (A. 274, 372). — IV, 938.
- C 78.0 H 6.8 O 5.5 N 9.6 M. G. 292. $\mathbf{C}_{19}\mathbf{H}_{20}\mathbf{ON}_{2}$ 1) Aethyläther d. 4-Amido-3-[4-Methylphenyl]amido-1-Oxynaphtalin.
 - Sm. 118—119° (B. 27, 2354).
 - Aethyläther d. 5-Oxy-3-Phenyl-6,7,8,9-Tetrahydro-α-Naphtimi-dazol. Sm. 139° (B. 31, 902).

 - 3) Dehydrocinchonin. Sm. 202—203°. HBr (B. 19, 2856). III, 839.
 4) Oxycinchen. Sm. 100—110°. (2 HCl, PtCl₄) (B. 23, 2670). III, 837.
 5) Verbindung (aus Anilin, Brenztraubensäure u. Isobuttersäurealdehyd). Sm. 222° (A. 242, 275). IV, 358.
 - 6) Verbindung (aus 4-Amido-1-Methylbenzol u. Brenztraubensäure). Sm. 238° (B. 17, 998). — II, 501. C 71,3 — H 6,2 — O 5,0 — N 17,5 — M. G. 320.
- $\mathbf{C}_{19}\mathbf{H}_{20}\mathbf{ON}_{4}$ 1) Verbindung (aus 2,6-Dimethyl-1,4-Pyron-3-Carbonsäure). Sm. 140—1420 (A. **257**, 294). — **II**, 1757.
- $\mathbf{C}_{19}\mathbf{H}_{20}\mathbf{O}_{2}\mathbf{N}_{2}$ C 74.0 - H 6.5 - O 10.4 - N 9.1 - M. G. 308.1) 1,4-Dibenzoyl-2-Methylhexahydro-1,4-Diazin $+ 2 H_2 O$. Sm. 146 bis 147° (wasserfrei) (J. pr. [2] 51, 476). — IV, 481.
 - 2) 4-Acetylamido-3-Methyl-6-Isopropyl-1-Phenylbenzoxazol. Sm. 207 bis 208° (G. 25 [2] 403).
 - 3) 4,5-Dimethyl-1,3-Diphenyl-4,5-Dihydropyrazol-5-Methylcarbon-
 - säure. Sm. 169-170° (G. 29 [1] 8). 4) Phenylamid d. cis-R.-Pentamethylen-1,3-Dicarbonsäure. Sm. 222 bis 224° (B. 31, 1957).
 - 5) β -[2,4,5-Trimethylphenyl]amidoäthylimid d. Benzol-1,2-Dicarbonsäure. Sm. 143° (B. 24, 2198). — II, 1800.
 - 6) γ-[4-Methylphenyl]methylamidopropylimid d. Benzol-1,2-Dicarbonsäure. Sm. 125° (B. 30, 2505).
- $C_{19}H_{20}O_{2}N_{4}$
 - C 67,8 H 6,0 O 9,5 N 16,7 M. G. 336. 1) Ketobisphenylhydrazid d. β -Acetylpropan- $\alpha\gamma$ -Dicarbonsäure. Sm. $222-223^{\circ}$ (A. 295, 121). — IV, 715.
 - 2) Anhydrodi [Phenylhydrazid] d. Hydrochelidonsäure. Sm. noch nicht bei 290° (A. 256, 330; 267, 96). — IV, 714.
- C 70.4 H 6.2 O 14.8 N 8.6 M. G. 324. $C_{19}H_{20}O_{8}N_{2}$ 1) Di[3-Acetylamido-4-Methylphenyl]keton. Sm. 196—197° (A. 271, 7). **— III**, 233.
 - 2) γ -Benzoat d. β -Benzoylamido- γ -Oximido- β -Methylbutan. Sm. 142
 - bis 143° (A. 262, 332). II, 1194. 3) s-Diphenyldiamid d. Hydrochelidonsäure. Sm. 186—187° (A. 267, 67). — II, 420.
- C 64.8 H 5.7 O 13.6 N 15.9 M. G. 352. $\mathbf{C}_{19}\mathbf{H}_{20}\mathbf{O}_{3}\mathbf{N}_{4}$ 1) Dinitrosocinchotoxin. Sm. 198—199° u. Zers. (B. 28, 1070). — III, 846.
- C 67,1 H 5,9 O 18,8 N 8,2 M. G. 340. $\mathbf{C}_{19}\mathbf{H}_{20}\mathbf{O}_4\mathbf{N}_2$ 1) Ornithursäure (Dibenzoylamidovaleriansäure?). Sm. 1820 (1840). Ca, Ba
 - (B. 10, 1925; 11, 406; 30, 2880; H. 26, 4). II, 2111. 2) αα-Di[Phenylacetylamido] propionsäure. Sm. 145° (B. 14, 1600). —

 - 3) α , 2-Lakton d. α -Oxy- γ -Phenylhydrazon- α -[3,4-Dioxyphenyl] butan-3,4-Dimethyläther-2-Carbonsäure. Sm. 159-160 (M. 14, 395). -II, 2008.
 - 4) Acetat d. 2-Acetylamido-1-[2-Oxybenzyl] acetylamidobenzol. Sm. 133° (B. **28**, 935). — **IV**, 556.

 $C_{19}H_{21}O_4N$

C₁₉H₂₀O₄N₂ 5) β -Phenylmonamid d. β -Phenylacetylamidopropan- $\alpha\beta$ -Dicarbonsäure + H₂O. Sm. 140—141 6 (A. 261, 148). — II, 439. C 53,8 — H 4,7 — O 15,1 — N 26,4 — M. G. 424.

1) Di[3-Nitrobenzylidenamido] pentamethylendiamin. Sm. 1340 (A. 288, 235). — III, *32*.

 $C 64,0 - H 5,6 - O 22,5 - N_17,9 - M. G. 356.$ $\mathbf{C}_{19}\mathbf{H}_{20}\mathbf{O}_{5}\mathbf{N}_{2}$

1) Nitrocodeïn. (2HCl, PtCl₄ + 4H₂O), H₂SO₄ (A. 77, 358). — III, 903. 2) Oxim d. Benzoylcotarnin. Sm. 165—166° (A. 254, 336). — III, 917. 3) Diäthylester d. s-Diphenylharnstoff-3,3'-Dicarbonsäure. Sm. 160,5°

(162°) (J. pr. [2] 4, 294; B. 11, 702). — II, 1260. 4) Di[4-Propionylamidophenylester] d. Kohlensäure. Sm. 180° (C. **1897** [1] **4**69).

C 59.4 - H 5.2 - O 20.8 - N 14.6 - M. G. 384. $C_{19}H_{20}O_5N_4$

1) Verbindung (aus 2-Nitrobenzaldehyd u. Acetessigsäureäthylester). Sm. 189°. HCl, (2HCl, PtCl₄) (B. **20**, 1341). — IV, 370.

2) isom. Verbindung (aus 2-Nitrobenzaldehyd u. Acetessigsäureäthylester).

Sm. 192° (B. **20**, 1343). — IV, 370. C 61,3 — H 5,4 — O 25,8 — N 7,5 — M. G. 372. $C_{19}H_{20}O_6N_2$

1) 3-Nitro-α-Oxybenzylhydrocotarnin. Sm. 170-171°. (2HCl, PtCl₄) (B. **31**, 2100).

2) Diäthylester d. 2,6-Dimethyl-4-[3-Nitrophenyl]pyridin-3,5-Dicarbonsäure. Sm. 65°. (2HCl,PtCl₄), Nitrat (B. 20, 1339). — IV, 386. C 58,7 — H 5,2 — O 28,9 — N 7,2 — M. G. 388.

1) Noryohimbinsäure (C. 1899 [1] 529).

 $\mathbf{C}_{19}\mathbf{H}_{20}\mathbf{O}_{7}\mathbf{N}_{2}$

2) Carbonat d. 4-Oxyphenylamidoameisensäure. Sm. 1840 (C. 1897

 $C^{47,9} - H^{4,2} - O^{30,2} - N^{17,6} - M.G.^{476}$ $C_{19}H_{20}O_{9}N_{6}$

1) Tetranitrohydrocinchonin (J. pr. [2] 8, 300). — III, 836. $C_{10}H_{20}N_2Br_2$ 1) Cinchenbromid. α -Modif. Sm. 115°; β -Modif. Sm. 133 – 134° (B. 19, 2858; **20**, 2512). — III, 837.

1) Jodathylat d. 6-Phenylamido-4-Methyl-2-Phenyl-1, 3-Diazin + H₂O. $\mathbf{C}_{19}\mathbf{H}_{20}\mathbf{N}_{8}\mathbf{J}$

Sm. 215° u. Zers. (Am. 20, 487). — IV, 1168. C 77,3 — H 7,1 — O 10,8 — N 4,7 — M. G. 295. $\mathbf{C}_{19}\mathbf{H}_{21}\mathbf{O}_{2}\mathbf{N}$

1) Benzoat d. 3-Dimethylamido-2-Oxy-1, 2, 3, 4-Tetrahydronaphtalin. Fl. HCl (A. 288, 120).

2) Aldehyd d. β -[2,4-Dimethylphenyl]benzoylamidobuttersäure. Sm. 157° (B. 29, 1469).

3) $\beta \gamma$ -Diphenyl-norm. Propylimid d. Essigsäure. Sm. 85° (B. 23, 2863). - II, 637.

C 70,6 - H 6,5 - O 9,9 - N 13,0 - M. G. 323. $C_{19}H_{21}O_{2}N_{8}$

1) Nitrosocinchotoxin. Sm. 98° (B. 28, 1069). — III, 846.

1) Mtroschienotoxin. Sin. 98° (B. 28, 1009). — III, 640. C 73,3 — H 6,7 — O 15,4 — N 4,5 — M. G. 311. 1) α -Oxyacanthin. Sm. 208—214° (202—204°) wasserfrei. HCl + 2H₂O, (2HCl, PtCl₄ + 5[6]H₂O), (HCl, AuCl₃ + 4H₂O), HBr + 2H₂O, HJ + 2H₂O, HNO₃, H₂SO₄ + 2(4 u. 6)H₂O (J. 1861, 545; B. 19, 3190; 28 [2] 614; $C_{19}H_{21}O_{8}N$

C. 1895 [1] 924). — III, 803.

U. 1895 [1] 924). — III, 803.
2) β-Oxyacanthin (B. 19, 3192). — III, 803.
3) Protocuridin. Sm. 274—276°. (2 HCl, PtCl₄) (C. 1897 [2] 1079).
4) Thebaïn. Sm. 193°. Salze meist bek. (A. 86, 184; 153, 61; 176, 196; B. 13, 1074; 27, 2961; 28, 941; 30, 1374; J. 1866, 823; 1867, 525; A. Spl. 8, 264; Soc. 29, 652). — III, 909.
5) Thebenin, siehe C₁₈H₁₉O₃N. — III, 910.
6) Methyläther d. Thebenin (Methebenin). HCl, HJ (B. 32, 179).
7) Asthylostor d. «Phenylemido-« Oxyaca-Phenyl-β-Buten-β-Carbon-

Aethylester d. α-Phenylamido-γ-Oxy-α-Phenyl-β-Buten-β-Carbon-säure. Sm. 103—104° (B. 30, 601; 31, 207, 602, 1967).

8) Aethylester d. α -Phenylamido- γ -Keto- α -Phenylbutan- β -Carbonsäure. Sm. 78° (B. 30, 601; 31, 207, 602, 1967).

9) Aethylester d. 1-Benzoyl-2,4,5-Trimethylphenyl-?-Amidoameisensäure. Sm. 105° (B. 17, 2675). — III, 236. C 69,7 — H 6,4 — O 19,6 — N 4,3 — M. G. 327.

Tubocurarin. (2HCl,PtCl₄) (C. 1895 [2] 1086).
 Acetylmorphin. α-Modif. + 2H₂O Sm. 187°; β-Modif. amorph. HCl + 3H₂O, (2HCl,PtCl₄) (Soc. 27, 1038; 28, 315). — III, 899.
 Oxybenzylhydrocotarnin. Sm. 240° u. Zers. (B. 29, 2045). — III, 909.

- $C_{19}H_{21}O_4N$ 4) Diacetat d. 5-Aethyl-2-[αβ-Dioxy-β-Phenyläthyl]pyridin. Sd. 315 bis 320° u. Zers. (B. 22, 1059). IV, 398.
 - Dibenzoat d. γ-Dimethylamido-αβ-Dioxypropan. Fl. Pikrat (B. 15, 1154). II, 1141.
 - 6) Diäthylester d. 2,6-Dimethyl-4-Phenylpyridin-3,5-Dicarbonsäure. Sm. 66–67° (B. **16**, 1608). — IV, 386. C 66,5 — H 6,1 — O 23,3 — N 4,1 — M. G. 343.
- $C_{19}H_{21}O_5N$
 - 1) Trimethylcolchicinsäure $+2 \,\mathrm{H}_2\mathrm{O}$. Sm. 159°. $+2 \,\mathrm{CH}_4\mathrm{O}$, $\mathrm{HCl}+1^{\circ}/_4\mathrm{H}_0\mathrm{O}$. $(2HCl, PtCl_4 + 2H_2O)$ (M. 9, 10, 875). — III, 874.
 - 2) Methylester d. Morphinearbonsäure. Sm. 116°. H.SO. (B. 25 [2] 202). — III, 900.
 - 3) Diäthylester d. 2,6-Dimethyl-4-[3-Oxyphenyl]pyridin-3,5-Dicarbonsäure. Sm. 174° (G. 17, 465). IV, 387.
 4) Diäthylester d. 4-Keto-2,6-Dimethyl-1-Phenyl-1,4-Dihydropyridin-
 - 3,5-Dicarbonsäure. Sm. 170-171°. (2HCl, PtCl₄) (B. 19, 25). II. 2005.
- $C_{19}H_{91}O_{5}C1$ 1) Diathylester d. 1-Keto-5-Methyl-3-[4-Chlorphenyl]-1, 2, 3, 4-Tetrahydrobenzol-2,4-Dicarbonsäure. Sm. 100-101° (A. 303, 255).
- C 63.5 H 5.8 O 26.7 N 3.9 M. G. 359. $C_{19}H_{21}O_6N$
- 1) Helicinmonanilid $+ H_2O$ (A. 154, 31). III, 69. 2) Diäthylester d. 6-Oxy-2-Keto-1-Phenyl-1,2-Dihydropyridinäthyl-
- äther-3,5-Dicarbonsäure. Sm. 115° (A. 285, 119). C 56,0 H 5,2 O 35,4 N 3,4 M. G. 407. 1) Benzylnitroarbutin + H₂O. Sm. 142-143° u. Zers. (A. 221, 370). $C_{19}H_{21}O_{9}N$ III, 572.
- C 49,0 H 4,6 O 42,2 N 4,1 M. G. 455. $C_{19}H_{21}O_{12}N$
- C₁₉H₂₁O₁₂N C 49,0 H 4,6 O 42,2 N 4,1 M. G. 455. 1) Corydalinsäure + 3H₂O. Sm. 175—180° u. Zers. (wasserfrei). K₂, Ba₂, Pb₂, Ag₂, Ag₄ (Soc. 65, 58; 67, 21). III, 876. C₁₉H₂₁N₂Cl 1) Cinchoninchlorid. Sm. 72° (B. 13, 287; 14, 103, 1854; 17, 1985; 18, 2379; 25, 1545; J. 1881, 937). III, 836. 2) Cinchonidinchlorid. Sm. 108—109° (B. 17, 1986). III, 852. C₁₉H₂₁N₂Br 1) Hydrobromcinchen. Sm. 105—116° (B. 20, 2522). III, 817. C₁₉H₂₁N₃Cl₄ 1) Verbindung (aus α -Oxytri[4-Amidophenyl]methan) (Bl. [3] 9, 690). —
- II, 1087. $\mathbf{C}_{19}\mathbf{H}_{21}\mathbf{N}_{3}\mathbf{Br}_{4}$ 1) Verbindung (aus α -Oxytri[4-Amidophenyl]methan) (Bl. [3] 9, 699). —
- II, 1087. Sm. 85° (B.
- 1) α -Phenylmethyldithiomonobenzyl-c-Methylketuret. $C_{19}H_{21}N_3S_2$ **28**, 1108). 2) 4,4'-Biphenylenamid d. Amylimidodi[thioameisensäure]. Sm. 148°
- (*b*. **27**, 1559). IV, *965*. C 77,5 H 7,5 O 5,4 N 9,5 M. G. 294. C19H22ON2
 - 1) Camphyloxyphenylpyrimidin. Sm. 140° (Pinner, Imidoather 291). IV, 1018.
 - 2) 3-Keto 2-Methyl-1, 4-Di[4-Methylphenyl]hexahydro 1, 4-Diazin. Sm. 117—118° (B. 25, 2937). — II, 507.
 - 3) Cinchonin. Sm. 255,4°. Salze meist bek. Lit. bedeutend. III, 828.
 - 4) β -Cinchonin. (2HCl, PtCl₄), 2HJ, 3HJ, H₂SO₄ + 2H₂O (M. 13, 680; B. 28, 1426). — III, 848.
 - 5) γ-Cinchonin. Sm. 235-236°. (2 HCl, PtCl₄), H₂SO₄ (M. 13, 688). -III, 848.
 - 6) δ -Cinchonin. Sm. 150° (144°). HCl + 1 $\frac{1}{2}$ H₂O (C. r. 118, 29; M. 19, 467, 472).
 - 7) s-Cinchonin. Sm. 151,5—152°. HCl (M. 19, 467, 473).
 - α-Isocinchonin. Sm. 126°. HCl + 3(2)H₂O, (2 HCl, PtCl₄ + 2 H₂O), 2 HJ, Rhodanat (A. 276, 91; B. 20, 2521; 28, 1426; M. 13, 676; 19, 466, 472). **- III**, 846.
 - 9) β-Isocinchonin. Sm. 125°. Salze meist bek. (A. 216, 213; 260, 216; 276, 97; J. 1888, 2286; Bl. 49, 747; M. 13, 687; B. 28, 1421; 31, 2360). **- III**, 846.

 - 10) Allocinchonin. Sm. 214—216°. (2HCl,PtCl₄), 2HJ+2H₂O, H₂SO₄ (B. 26, 2005; 31, 2360; M. 14, 371). III, 847.

 11) Apocinchonin. Sm. 228°. HCl+2H₂O, (2HCl,PtCl₄+2H₂O), HClO₃, HClO₄+H₂O, HBr+H₂O, HJ, H₂SO₄+3H₂O, Oxalat+2H₂O (A. 205, 330; 276, 115; B. 16, 384; R. 1, 175). III, 844.

C₁₉H₂₂ON₂ 12) Apoisceinchonin. Sm. 216°. (2HCl, PtCl₄+2H₂O), 2HJ, H₂SO₄+2H₂O (A. 276, 99; B. 31, 2360; M. 19, 467, 475). — III, 847. 13) Isoapocinchonin. Sm. 232—234°. (2HCl, PtCl₄), H₂SO₄+2H₂O (A.

276, 116). — III, 847.

14) Diapocinchonin. (2HCl, PtCl₄ + 2H₂O), Oxalat (A. 205, 333; 276, 118). - III, 845.

— III, 845.

15) Homocinchonin. Sm. 251°. HCl + 2H₂O, 2HCl, (2HCl, PtCl₄ + 2H₂O), H₂SO₄ + 2H₂O (A. 243, 149; 276, 103). — III, 848.

16) Pseudocinchonin. Sm. 252°. HCl + H₂O, 2HCl, (2HCl, PtCl₄ + 2H₂O), 2HJ, H₂SO₄ + 3H₂O (A. 276, 106; M. 19, 481). — III, 847.

17) Tautocinchonin. Sm. 252,5°. 2HJ, H₂SO₄ + 2H₂O (M. 19, 463, 468).

18) Apochinamin. Sm. 114°. HCl + ½ H₂O, (2HCl, PtCl₄ + 2H₂O), HNO₃, H₂SO₄ + 2H₂O, 0xalat + H₂O, Tartrat + xH₂O (A. 207, 294). — III, 857.

19) Cinchonibin. Sm. bei 259°. (2HCl, PtCl₄ + 1½ H₂O), Rhodanat, Oxalat, Succinat, Tartrat (Bl. 49, 747; J. 1888, 2287; A. 260, 222). — III, 848.

20) Cinchonicin (Cinchotoxin). Sm. 58—59° (49—50°). (2HCl, ZnCl₂ + 2H₂O), (2HCl, ZhCl₂ + 2H₂O), (2HCl, CdCl₂ + 2H₂O), (2HCl, PtCl₄ + H₄O).

(2 HCl, CdCl₂ + 2^{1} /₂ H₂O), (2 HCl, PtCl₄ + H₂O), (3 HCl, 2 PtCl₄ + 4 H₂O), HJ, Oxalat + 4 H₃O, Ditartrat (J. 1853, 423, 473; Soc. 25, 102; A. 147, 242; 166, 277; 178, 253; 201, 333; B. 28, 1071; Bl. [3] 13, 1005).

21) Apocinchonicin. (2HCl, PtCl₄ + 2H₂O), Oxalat (A. 205, 331). — III, 845.

22) Cinchonidin. Sm. 207,20 (202,40). Salze meist bek. Lit. bedeutend. — III, 848.

23) β-Cinchonidin. Sm. 244°. (2HCl, PtCl₄), 3HJ, Oxalat, Ditartrat, Pikrat (M. 13, 655). — III, 853.

24) γ-Cinchonidin. Sm. 238°. III, 853. (2HCl, PtCl₄), Ditartrat (M. 13, 659). —

25) Isocinchonidin. Sm. 235° (A. 243, 149). — III, 853.

26) Apocinchonidin. Sm. 225° u. Zers. (2HCl, PtCl₄ + 2H₂O), Tartrat (A. **205**, 327). — III, 853.

27) Homocinchonidin. Sm. 207,6°. Salze meist bek. (A. 205, 203; 207, 310; 243, 148; 258, 140; B. 14, 46, 1890; M. 2, 345; Fr. 35, 134). III, 854.

28) Cinchonifin. Sm. 273,6°. HCl + 2H₂O, Br + H₂O, HJ + H₂O, HNO₃ + H₂O, H₂SO₄ + 2H₂O, Succinat, Oxalat + H₂O, Tartrat + 1¹/₂H₂O (Bl. 49, 747; B. 27 [2] 256). — III, 848.

29) Cinchonilin. Sm. 130,4°. HCl+3H₂O, (2HCl, PtCl₄+H₂O), 2(HCl, AuCl₈) + H₂O, HBr + 3H₂O, HJ + H₂O, 2HJ, Rhodanat + H₂O (Bl. 49, 747; J. 1888, 2287). — III, 848.

30) Cinchotoxin (siehe Cinchonicin). Sm. 58-59° (B. 28, 1064). - III, 846.

31) Nitril d. 6-Keto-2, 2, 4-Trimethyl-1-[1, 2, 3, 4-Tetrahydro-2-Naphtyl] 1,2,3,6-Tetrahydropyridin-5-Carbonsäure. Sm. 210-2110 (C. 1895) [2] 973). C 73,6 — H 7,1 — O 10,3 — N 9,0 — M. G. 310.

 $(C_{19}H_{92}O_{9}N_{9})$

1) αβ-Di[Acetylphenylamido] propan. Sm. 146—147° (B. 25, 3272). — II, 368.

2) Di [5-Acetylamido-2-Methylphenyl] methan. Sm. 270° (B. 27, 3315). **— IV**, 984.

3) Di[4-Acetylamido-3-Methylphenyl]methan. Sm. 198° u. Zers. (B. 27, 1811). — IV, 984.

4) $\alpha s - \text{Di}[\text{Benzoylamido}]$ pentan. Sm. 129,5° (H. 13, 567; 16, 196). —

5) $\beta \delta$ -Di[Benzoylamido]pentan. Sm. 189° (B. 31, 550).

6) isom. $\beta \delta$ -Di[Benzoylamido] pentan. Sm. 189—190° (B. 31, 551). 7) d- $\alpha \delta$ -Di[Benzoylamido]- β -Methylbutan. Sm. 151—152° [Bl. [3] 17, 807).

8) $\alpha \eta$ -Dioximido- $\alpha \eta$ -Diphenylheptan. Sm. 175—176° (Soc. 55, 347). —

III, 301. 9) Phenylhydrazon d. 3-Methyläther-4-Acetylmethyläther d. 3,4-Dioxy-1-Allylbenzol (Ph. d. Acetonyleugenol). Sm. 93° (B. 27, 2465). — IV, 768.

10) Phenylhydrazon d. 3-Methyläther-4-Acetylmethyläther d. 3,4-Dioxy-1-Propenylbenzol (Ph. d. Acetonylisoeugenol). Sm. 145° (B. 27, 2466). — IV, 768.

11) p-Furfurtoluidin. HCl, HNO₃ (A. 156, 203). — III, 723.

- C₁₉H₂₂O₂N₂ 12) Apochinin + 2H₂O. Sm. 210° u. Zers. (2HCl,PtCl₄), 2HJ + H₂O, Oxalat (A. 205, 323; 230, 65; B. 28, 1972; M. 16, 34). III, 818.

 13) Apoconchinin + 2H₂O. Sm. 137° (wasserfrei). HCl, (2HCl,PtCl₄ + 3H₂O (A. 205, 326). III, 826.

 14) Cuprein + 2|H₂O. Sm. 198°. Salze meist bek. (A. 230, 57; Bl. [3] 7, 305; R. 8, 147). III, 821.

 - 15) α -Oxycinchonin. Sm. 252° u. Zers. HCl + H₂O, (2HCl, PtCl₄ + $\frac{1}{2}$ H₂O), $(HCl, AuCl_3 + H_2O), HBr + H_2O, HJ + H_2O, Oxalat (Bl. 49, 748; J. 1889)$ 2019). **— III**, *840.*
 - 16) β -Oxycinchonin. Sm. 273°. HCl + H₂O, 2HCl + 3H₂O, (2HCl, CdCl₂ + 2H₂O), (2HCl, PtCl₄), HBr + H₂O, 2HBr, HJ, HNO₃, H₂SO₄ + 4H₂O, Oxalat + H₂O, Succinat + 3H₂O, Tartrat + H₂O (Bl. 49, 748; C. 1895 [1] 436; B. 28 [2] 61). III, 840.
 - 17) isom. Oxycinchonin. (2HCl, PtCl₄), H₂SO₄ (A. 108, 347; 123, 381). III, 840.
 - 18) isom. P-Oxycinchonin. Sm. 205° (J. 1876, 822). III, 835.
 - 19) Methylester d. 4,5-Camphyl-1-Phenylpyrazol-3-Carbonsäure. Sm. 80,5— $81,5^{\circ}$ (Am. **20**, 337).
 - 20) Nitril d. β -Valeroxyl- α -[2-Cyanphenyl]- α -Hexen- α -Carbonsäure.
 - Sm. $119-120^{\circ}$. $+\text{C}_2\text{H}_6\text{O}$ (Sm. $153-154^{\circ}$) (B. 30, 895). 21) Phenylamid d. Pentan- α s-Dicarbonsäure. Sm. 155° (A. 295, 179).
 - 22) Phenylamid d. β -Methylbutan- $\alpha\delta$ -Dicarbonsäure. Sm. $199-200^{\circ}$ Bl. [3] 15, 228).
 - 23) Verbindung (aus Furfurol u. Methylanilin). HCl (Sm. 94°) (A. 239, 354). III, 723.
 - 24) Base (aus Dihydrojodapoconchinin). Sm. 157°. (2HCl, PtCl₄) (M. 12, 675). **- III**, 826.
- C 62,3 H 6,0 O 8,7 N 23,0 M. G. 366. $\mathbf{C}_{19}\mathbf{H}_{22}\mathbf{O}_{2}\mathbf{N}_{6}$
 - 1) Di[2-Oxybenzylidenamido]-R-Pentamethylentetramin. (A. 288, 234). — III, 72.
- 1) Diäthyläther d. Di[P-Oxy-P-Methylphenyl]thioketon. Sm. 117 bis 118° (B. 28, 2872). III, 232.
 2) Dipropyläther d. 4,4'-Dioxydiphenylthioketon. Sm. 105—106° (B. $C_{19}H_{29}O_2S$
 - **28**, 2871). III, 211.
- C 69.9 H 6.7 O 14.7 N 8.6 M. G. 326. $C_{19}H_{22}O_3N_2$
 - 1) Dioxycinchonidin. $(2HCl, PtCl_4)$, H_2SO_4 , $H_2SO_4 + 2H_2O$ (A. 172, 104). - III, 852.
 - d. 6-[4-Acetylamidophenyl]acetylamido-3-Oxy-1-2) Aethyläther Methylbenzol. Sm. 153° (A. 287, 158).
 - 3) Aethyläther d. 2-Acetylamido-5-[4-Oxyphenyl]acetylamido-1-Methylbenzol. Sm. 180—181° (A. 287, 166).
 - 4) Isoamylester d. Diphenylallophansäure. Sm. 58° (B. 4, 248). II, 382. 5) α-Benzyl-β-Phenylhydrazid d. Bernsteinsäuremonoäthylester. Sm.
- 79° (B. **26**, 678). **IV**, 812. C 66,7 H 6,4 O 18,7 **N** 8,2 M. G. 342. $\mathbf{C}_{19}\mathbf{H}_{22}\mathbf{O}_{4}\mathbf{N}_{2}$
 - α α-Di[P-Nitrophenyl]heptan. Fl. (Bl. 47, 49). II, 242.
 Chitenin + 4 H₂O. Sm. 286° u. Zers. (wasserfrei). (2 HCl, PtCl₄ + 3 H₂O), 2 HBr + 1(1¹/₂)H₂O, 2 H₂SO₄ + 15 H₂O, Ag (A. 199, 352; Z. 1869, 594; M. 14, 598). III, 819.
 Chitenidin + 2 H₂O. Sm. 246° u. Zers. (2 HCl, PtCl₄ + 3 H₂O), H₂SO₄

 - +3H₂O (B. 15, 1659). III, 826. 4) Diäthylester d. Di[Phenylamido]methan-αα-Dicarbonsäure. Sm.
 - $117-118^{\circ}$ (Am. 19, 695). 5) Diäthylester d. 2,6-Dimethyl-4-[3-Amidophenyl]pyridin-3,5-Dicarbonsäure. Sm. 109-110°. $(2HCl, PtCl_4 + H_2O)$ (B. 20, 1340). -
 - II, 387. 6) 4-Methylphenylamid d. Mesoxaläthyläthersäure (Am. 16, 382).
 - 7) Di[4-Aethoxylphenylamid] d. Methandicarbonsäure. Sm. 233 bis 234° (226°) (G. **25** [2] 540; B. **31**, 3257).
 - 8) Verbindung (aus s-Diphenylharnstoff u. Acetessigsäureäthylester). Fl.
- (A. 233, 11). II, 379. C 59,1 H 5,7 O 20,7 N 14,5 M. G. 386. C19H22O5N4 1) Dinitrocinchonamin. Sm. 118°. $(2 \text{HCl}, \text{PtCl}_4 + 3 \text{H}_2 \text{O})$ (A. 225, 227; A. ch. [6] 19, 119). — III, 929.

C₁₉H₂₂O₅N₄ 2) Diäthylester d. s-Diphenylcarbaziddicarbonsäure. Sm. 158-159° (B. 32, 15). C 61,0'— H 5,9 — O 25,6 — N 7,5 — M. G. 374. 1) Helicinphenylhydrazon. Sm. 187° (B. 18, 1659). $C_{19}H_{22}O_6N_2$ 2) Diäthylester d. 2,6-Dimethyl-4-[2-Nitrophenyl]-1,4-Dihydropyridin-3,5-Dicarbonsäure. Sm. 119-1200 (B. 20, 1341). - IV, 370. 3) Diäthylester d. 2,6-Dimethyl-4-[3-Nitrophenyl]-1,4-Dihydropyridin-3,5-Dicarbonsäure. Sm. 161⁶ (B. 20, 1338). — IV, 371. 4) Diäthylester d. 2,6-Dimethyl-4-[4-Nitrophenyl]-1,4-Dihydropyridin-3,5-Dicarbonsäure. Sm. 118—122° (B. 20, 1340). — IV, 371. C 54,5 — H 5,3 — O 26,8 — N 13,4 — M. G. 418. $C_{19}H_{22}O_7N_4$ 1) Verbindung (aus Harnstoff u. 2-Nitrobenzol-1-Carbonsäurealdehyd). Sm. 170° (M. 10, 305). — III, 33. 1) Di[?-Trimethylphenyl]keton-?-Disulfonsäure (Dipseudocumylketondi- $C_{10}H_{22}O_7S_2$ sulfonsäure). Ba (J. pr. [2] 47, 50). — III, 239. C 81,1 — H 8,2 — O 5,7 — N 5,0 — M. G. 281. C19 H23 ON 1) α-Oximido-αγ-Di[2,5-Dimethylphenyl]propan. Sm. 82—84° (A. ch. [7] 2, 206). — III, 239. C 76,8 — H 7,7 — O 10,8 — N 4,6 — M. G. 297. $C_{19}H_{23}O_{2}N$ α-Naphtolconicinurethan.
 β-Naphtolconicinurethan.
) 2-Methylphenylamid d. Oxyessig-4-Isobutylphenyläthersäure. Sm. 91° (Am. 19, 75). 4) 4-Methylphenylamid d. Oxyessig-4-Isobutylphenyläthersäure. Sm. 122° (Am. 19, 76).
C 72,9 — H 7,3 — O 15,3 — N 4,5 — M. G. 313.
1) α-Methylmorphimethin (Methocodeïn). Sm. 118,5°. HCl + 2H₂O, (2HCl, PtCl₄ + 2H₂O) (A. eh. [5] 27, 276; A. 222, 218; B. 22, 185, 1113; 27, 1145; 30, 355). — III, 903. C19H23O3N 2) β-Methylmorphimethin (Methocodeïn). Fl. HCl, Tartrat (B. 22, 1133; **27**, 1145). — III, 904. 3) Dihydrothebaïn. Sm. 1540 (B. 32, 192). 4) Isodihydrothebaïn. Sm. 138°. HJ (B. 32, 195). 5) Aethyläther d. Morphin + H₂O (Codäthylin). Sm. 83°. HCl + H₂O (A. ch. [5] 27, 278; C. 1899 [1] 430, 705). — III, 908. 6) Aethylpiperin (3,4-Methylenäther d. ε-Keto-ε-Piperidyl-α-[3,4-Dioxyphenyl]-δ-Aethyl-αγ-Pendadiën). Sm. 118-119° (B. 28, 1196). — IV, 17. 7) Dipropyläther d. α-Oximido-4,4'-Dioxydiphenylmethan. Sm. 113° (B. 28, 2871). — III, 199. 8) Aethylester d. 3-Benzoyl-1,2,4,6-Tetramethyl-1,4-Dihydropyridin-5-Carbonsäure. Sm. 97° (B. 24, 1669). — IV, 90. C 69,3 — H 7,0 — O 19,4 — N 4,2 — M. G. 329. 1) d-Cinnamyleocaïn. Sm. 68°. HCl, (2HCl, PtCl₄), (HCl, AuCl₃), HBr, HNO₃ (B. 24, 7). — III, 869. 2) 1-Cinnamyleocaïn. Sm. 121°. HCl + 2H₂O, (2HCl, PtCl₄), (HCl, AuCl₃) $C_{19}H_{23}O_4N$ (B. 21, 3374; 22, 132, 2661; A. 271, 184). — III, 869. 3) Allocinnamyleoeaïn. Fl. (2HCl, PtCl₄) (B. 27, 2046). — III, 869. 4) γ -Isatropyleoeaïn + $\frac{1}{2}$ H₂O (Cocamin; α -Truxillin) (B. 22, 665, 682; A. 271, 187). — III, 869. δ-Isatropylcocaïn (Isococamin; β-Truxillin). Zers. oberh. 120°. (2HCl, PtCl₄), (HCl, AuCl₈) (B. 21, 2342, 3196; 22, 681; A. 271, 191). III, 869. 6) ε-Isatropylcocaïn (γ-Truxillin). Sm. bei 63° (B. 22, 130). — III, 869.
7) Diäthylester d. 2,5-Dimethyl-1-[4-Methylphenyl]pyrrol-2,4-Dicarbonsäure. Sm. 67° (B. 18, 304). - IV, 92. 8) Diäthylester d. 2,6-Dimethyl-4-Phenyl-1,4-Dihydropyridin-3,5-Dicarbonsäure. Sm. 157° (B. 16, 1607; 31, 742; M. 17, 349). — C 63.9 - H 6.4 - O 17.9 - N 11.8 - M. G. 357. $C_{19}H_{23}O_4N_3$ 1) Isoamyldi]4-Nitrobenzyl]amin. Sm. 57° (B. 30, 67). C 66,1 — H 6,7 — O 23,2 — N 4,0 — M. G. 345. $C_{19}H_{28}O_5N$ 1) Laurotetanin. Sm. 134°. $HCl + 6H_2O$, $HBr + 2H_2O$, $HJ + 2H_2O$, $H_2SO_4 + 5H_2O$ (C. 1899 [1] 122).

2) Acetylscopolamin. (HCl, AuCl₃). — III, 796.

- 3) Diäthylester d. 1-Oximido-5-Methyl-3-Phenyl-1, 2, 3, 4-Tetrahydro- $C_{19}H_{23}O_5N$ benzol-2,4-Dicarbonsäure. Sm. 1730 (A. 281, 78). — II, 1971.
- 1) Diäthylester d. $\beta\zeta$ -Diketo- δ -[4-Chlorphenyl]heptan- $\gamma\varepsilon$ -Dicarbon- $C_{19}H_{23}O_6C1$ säure. Sm. 150-151° (A. 303, 253).
- - 1) α-Phenylmonamid d. Propen-ααγγ-Tetracarbonsäure-αγγ-Triäthylester. Fl. (A. 285, 140). C 58,0 — H 5,8 — O 32,6 — N 3,6 — M. G. 393.
- C19H28O8N
 - 1) Diäthylester d. $\beta\zeta$ -Diketo- δ -[2-Nitrophenyl]heptan- $\gamma\varepsilon$ -Dicarbonsäure. Sm. 163-164° (A. 303, 231).
 - 2) Diäthylester d. $\beta\zeta$ -Diketo- δ -[3-Nitrophenyl]heptan- $\gamma\varepsilon$ -Dicarbonsäure. Sm. 146° (A. 303, 232).
 - 3) Diäthylester d. βζ-Diketo-δ-[4-Nitrophenyl]heptan-γε-Dicarbonsäure. Sm. 170-171° (A. 303, 236).
 1) Cinchotinchlorid. Sm. 85-87° (B. 27, 2291). III, 858. C 76.9 H 8,1 0 5,4 N 9,5 M. G. 296.
- C19H23N2C1
- $\mathbf{C}_{19}^{\mathsf{N}}\mathbf{H}_{24}^{\mathsf{N}}\mathbf{ON}_{2}$
 - 1) s-Di[4-Propylphenyl]harnstoff. Sm. 205° (B. 17, 1224). II, 549.
 - 2) s-Di[2,4,5-Trimethylphenyl]harnstoff. Sm. 274° (subl. bei 280°) (B. **21**, 528; **25**, 1089; *Bl.* [3] **17**, 732). — **II**, 552.
 - 3) s-Di[2,4,6-Trimethylphenyl]harnstoff. Sm. oberh. 300° (B. 15, 1017). **— II**, 554.
 - 4) s-Di[?-Trimethylphenyl]harnstoff. Sm. oberh. 290° (B. 18, 2233). II, 556.
 - 5) α -Isobutyl- $\beta\beta$ -Dibenzylharnstoff. Sm. 108-109° (B. 25, 1821). —
 - 6) α -Isobutyl- β -Benzyl- β -[4-Methylphenyl]harnstoff. Sm. 41° (B. 25, 1824). — II, 526.
 - 7) α -Isobutyl- $\beta\beta$ -[4-Methylphenyl]harnstoff. Sm. 118—119° (B. 25, 1822). - II, 495.

 - 11, 493.
 Cinchonamin. Sm. 185°. Salze meist bek. (A. 225, 218; A. ch. [6] 19, 23, 100; G. 22 [2] 637; B. 16, 62; Bl. [3] 19, 39). III, 928.
 Cinchotin. Sm. 277,3° (268°). Salze meist bek. (A. Spl. 7, 249; A. 166, 256; 197, 362; 260, 220; 300, 42, 357; B. 14, 436, 1266; 15, 519; 27, 2290; 28, 1076; M. 16, 68; 18, 414). III, 858.
 Dihydroeinchonin. Sm. 265°. (2HCl, PtCl₄ + 2H₂O) (J. pr. [2] 8, 294; B. 11, 314; 15, 855; M. 16, 326). III, 836.
 isom. Hydroeinchonin. Sm. 256°. (2HCl, PtCl₄ + 2H₂O) (B. 15, 855).

 - III. 858.
 - 12) Hydrocinchonidin (Cinchamidin). Sm. 229—230°. Salze meist bek. (B. 14, 1270, 1683, 1893; 15, 520; A. 214, 1). III, 857.
 - 13) amorphes Hydrocinchonidin. Sm. unter 100°. (2HCl, PtCl₄ + 2H₂O),
 - Oxalat (A. 214, 13). III, 858. 14) Pereirin. Sm. 124° u. Zers. (2HCl, PtCl₄ + 4H₂O) (A. 202, 147). —
- C19H24ON4 C 70.4 - H 7.4 - O 4.9 - N 17.3 - M. G. 3241) Benzaldehydphenylhydrazin. Sm. 154° (Bl. [3] 15, 845). — IV, 748.
 - 2) 4'-Diäthylamido-5-Acetylamido-2-Methylazobenzol. Sm. 159° (A. **234**, 359). — IV, *1384*. C 73,1 — H 7,7 — O 10,2 — N 9,0 — M. G. 312.
- $C_{19}H_{24}O_{2}N_{2}$ 1) Diäthyläther d. 1,3-Di[4-Oxyphenyl]tetrahydroimidazol. Sm. 2140 (B. 31, 3256).

 - 38, 62). III, 859.
 - 6) **Hydrocupre**in $+ 2H_2O$. Sm. $168 170^{\circ}$. $2HCl + H_2O$, $(2HCl, PtCl_4)$, $2 \text{HJ}, \text{H}_2 \text{SO}_4, \text{Tartrat} + 2 \text{H}_2 \text{O}$ (A. 241, 280; M. 12, 431; 16, 73).

 $C_{10}H_{24}O_2N_2$ 7) Geissospermin + H₂O. Sm. bei 160°. (2 HCl, PtCl₄) (A. 202, 143). -

8) Nichin + 2 H₂O. Sm. bei 102° (130—132°; 146° wasserfrei). 2 HCl, (2 HCl, PtCl₄ + 3 H₂O), HJ, 2 HJ, H₂SO₄ + 3¹/₂ H₂O, H₂SO₄ + 10 H₂O, Bioxalat (*M.* 14, 431, 556). — III, 820.

9) Isonichin. Sm. 208—209°. (2 HCl, PtCl₄) (*M.* 14, 441). — III, 821.

10) Methylester d. Di[4-Dimethylamidophenyl]essigsäure. Sm. 68° (C.

C19H24O2N4

1895 [1] 201). C 67,0 — H 7,1 — O 9,4 — N 16,5 — M. G. 340. 1) Orcin + 2Molec. Phenylhydrazin. Sm. 61—62° (B. 24 [2] 904). — IV, 654.

2) Aethylester d. γ -Phenylhydrazon- β -Phenylhydrazidovaleriansäure. Sm. 205° u. Zers. (B. 21, 2494). — IV, 741. C 69,5 — H 7,3 — O 14,6 — N 8,5 — M. G. 328. 1) Methylester d. Phenylhydrazoncampheroxalsäure. Sm. 204—205°

 $C_{19}H_{24}O_{3}N_{2}$

(Am. 20, 336).

2) Aethylester d. Phenylazocamphocarbonsäure. Sm. 65,50 (B. 25 [2] 726). — IV, 1468. C 66,3 — H 7,0 — O 18,6 — N 8,1 — M. G. 344.

 $C_{19}H_{24}O_4N_2$

1) Diathylester d. 2,5-Dimethyl-1-[m-Amidotolyl]pyrazol-3,4-Dicarbonsäure. Sm. 134° (A. 236, 311). — IV, 549. 2) Diäthylester d. 1-Methylphenylamido-2,5-Dimethylpyrazol-3,4-Di-

C 61,3 — H 6,5 — O 17,2 — N 15,0 — M. G. 372.

 $C_{19}H_{24}O_4N_4$

1) Di[Phenylhydrazon] d. Rhamnose. Sm. 200° u. Zers. (B. 23, 3105). **– IV**, 792.

2) $\operatorname{Di}[\operatorname{Phenylhydrazid}]$ d. $\beta\delta$ -Dioxypentan- $\beta\delta$ -Dicarbonsäure. Sm.

 $\mathbf{C}_{19}\mathbf{H}_{24}\mathbf{O}_{4}\mathbf{N}_{6}$

2) Diff neighbory drawing d. ρθ-Dioxypentan-βθ-Dicarbonsaure.
 3) isom. Di [Phenylhydrazid] d. βδ-Dioxypentan-βδ-Dicarbonsaure.
 Sm. 186° (B. 25, 3246). — IV, 722.
 C 57,0 — H 6,0 — O 16,0 — N 21,0 — M. G. 400.
 1) Verbindung (aus Aceton, Benzaldehyd u. Harnstoff). Sm. 186—187° (G. 23 [1] 404). — III, 38.
 A rephinocohomorulmorkoutol. Sm. 1440 (B. 20, 552)

1) Arabinosebenzylmerkaptal. Sm. 144° (B. 29, 552). C 63,3 — H 6,7 — O 22,2 — N 7,8 — M. G. 360. $\mathbf{C}_{19}\mathbf{H}_{24}\mathbf{O}_{4}\mathbf{S}_{2}$ $C_{19}H_{24}O_5N_2$

1) m-Acetylamido-d-Cocaïn. Sm. 44—45°. HCl (B. 27, 1882). — III, 868. C 58,8 — H 6,2 — O 20,6 — N 14,4 — M. G. 388.

 $C_{19}H_{24}O_5N_4$

1) Di[Phenylhydrazon] d. α-Galaheptose. Sm. 218° (224° cor.) u. Zers. (A. 288, 146). — IV, 794. 2) Di[Phenylhydrazon] d. Glykoheptose. Sm. 195° u. Zers. (A. 270,

77, 88). — IV, 792.

3) Di[Phenylhydrazon] d. d-Mannoheptose. Sm. 2000 u. Zers. (B. 23, 2231). — IV, 793.

4) Di[Phenylhydrazon] d. l-Mannoheptose. Sm. bei 2030 u. Zers. (A. 272, 187). **— IV**, 793.

5) Di[Phenylhydrazon] d. i-Mannoheptose. Sm. bei 210° u. Zers. (A. **272**, 188). — IV, 793.

6) Di[Phenylhydrazon] d. Volemit. Sm. 196° u. Zers. (B. 28, 1974). —

IV, 794. C 54,8 — H 5,8 — O 19,2 — N 20,2 — M. G. 416. C19H24O5N6

1) Dianisotriureid (A. 151, 199). — III, 86. C 58,2 — H 6,1 — O 28,6 — N 7,1 — M. G. 392. $C_{19}H_{24}O_7N_2$

1) Verbindung (aus Kakothelin). (2HCl, PtCl₄ + H₂O), Ag (B. 20, 456). **— III**, 948.

C 54,3 - H 5,7 - O 26,7 - N 13,3 - M. G. 420. $C_{19}H_{24}O_{7}N_{4}$

1) Phenylhydrazid d. α-Pentaoxypimelinsäurelakton. Sm. 200° u. Zers.

(A. 270, 91). — IV, 732. 2) Phenylhydrazid d. isom. Pentaoxypimelinsäure. Sm. 225° u. Zers. (A. 272, 197). — IV, 732. C 55,9 — H 5,9 — O 31,4 — N 6,8 — M. G. 408.

 $C_{19}H_{24}O_8N_2$

1) Diäthylester d. ζ -Oximido- β -Keto- δ -[3-Nitrophenyl]heptan- γ ε -Di-

carbonsäure. Sm. 201° (A. 303, 233).
2) Diäthylester d. ζ-Oximido-β-Keto-δ-[4-Nitrophenyl]heptan-γε-Dicarbonsäure. Sm. 208° u. Zers. (A. 303, 237).

- 1) s-Di[4-Propylphenyl]thioharnstoff. Sm. 138° (B. 17, 1222). II, 549. 2) $\alpha\beta$ -Dipropyl- $\alpha\beta$ -Diphenylthioharnstoff. Sm. 103,5° (B. 21, 103). C,9H,4N,S 3) s-Di[2,4,6-Trimethylphenyl]thioharnstoff. Sm. 196° (B. 15, 1013). - II, 555. 4) s-Di[P-Trimethylphenyl]thioharnstoff. Sm. 1460 (B. 18, 2233). II, 556. 5) s-Di[2,4-Dimethylbenzyl]thioharnstoff. Sm. 176-1770 (B. 22, 123). **- II**, *553*. 6) s-Di[3,5-Dimethylbenzyl]thioharnstoff. Sm. 165° (B. 25, 3014). II, 555. 7) s-?-Aethylphenyl-4-Isobutylphenylthioharnstoff. Sm. 140° (B. 16, 2023). — **II**, 558. 8) Di[Hexahydrochinolyl]thioharnstoff. Sm. 129° (B. 27, 1479).—IV, 139. 1) Methylsenfölauramin. Sm. 203—203,5° (J. pr. [2] 50, 442. — IV, 1175. C 73,3 — H 8,0 — O 5,1 — N 13,5 — M. G. 311. $C_{19}H_{24}N_4S$ $\mathbf{C}_{19}\mathbf{H}_{25}\mathbf{ON}_{3}$ 1) β -Isopropylphenylamido - α -2,4,5-Trimethylphenylharnstoff. Sm. 155°. — IV, 674. 2) β -[2,4,5-Trimethylphenyl]amido- α -2,4,5-Trimethylharnstoff. Sm. 240° . — IV, 813. C 76.2 — H 8.4 — O 10.7 — N 4.7 — M. G. 299. $C_{19}H_{25}O_{2}N$ 1) Protocurarin (C. 1897 [2] 1080). C 69,7 - H 7,6 - O 9,8 - N 12,8 - M. G. 327. $C_{19}H_{25}O_{2}N_{8}$ 1) Nitrosotetrahydrocinchonin. HNO₂ (Sm. 200° u. Zers.) (B. 28, 1639). **- III**, 836. Nitrosotetrahydrocinehonidin. HNO₂ (B. 29, 802). — III, 853. C 61,4 — H 6,7 — O 12,9 — N 18,9 — M. G. 371.
 Verbindung (aus d. Acetylcyanessigsäureäthylester u. Phenylhydrazin). Sm. 86° (C. 1895 [2] 83). $C_{19}H_{25}O_3N_5$ $C_{19}H_{25}O_3Br$ 1) Brompodocarpinäthyläthersäure. Sm. 158°. $+C_9H_6O$ (A. 170, 237). **– II**, 1685. 1) Di[2,4,5-Trimethylphenylester] d. Methylphosphinsäure. Sm. 79 C19H25O3P bis 90° (?) (B. 31, 1053). C 68,9 — H 7,6 — O 19,3 — N 4,2 — M. G. 331. C19H25O4N 1) Corytuberin. Zers. bei 200°. HCl, (2HCl, PtCl₄), H₂SO₄ (Soc. 63, 485). **– III**, 877. 2) Propylester d. Benzoylecgonin. Sm. 78 — 79,5° (Am. 10, 147). — III, 867. 3) Propylester d. d-Benzoylecgonin. HCl + H₂O (B. 23, 987). — III, 867. C 60,8 — H 6,7 — O 21,3 — N 11,2 — M. G. 375. $C_{19}H_{25}O_5N_3$ 1) Jaborinsäure. Ag, Ag + AgNO₃, + PtCl₄, + 2 AuCl₃, (2HCl,PtCl₄) (Bl. 46, 479; 48, 225). — III, 925. C 58,3 — H 6,4 — O 24,6 — N 10,7 — M. G. 391. $C_{19}H_{25}O_6N_3$ 1) Phenylhydrazid d. Phenylamidogalaktosecarbonsäure. Sm. 203° (B. 27, 1290). — IV, 726.
 2) Phenylhydrazid d. Phenylamidoglykosecarbonsäure. Sm. 210° (B. 210° (B. 2000). 27, 1290). — IV, 726. C₁₉H₂₅N₂Br 1) 4-Bromphenylhydrazon d. α -Jonon. Sm. 142-143° (B. 28, 1755; 31, 852, 877; J. pr. [2] 57, 494). — IV, 770. 2) 4-Bromphenylhydrazon d. β -Jonon. Sm. 115-116° (B. 31, 872). 3) 4-Bromphenylhydrazon d. Pseudojonon. Sm. 102-104° (B. 31, 846). 4) 4-Bromphenylhydrazon d. Iron. Sm. 168-170° (B. 28, 1757). IV, 770. 5) Verbindung (aus α-Jonon-4-Bromphenylhydrazon). Sm. 165° (B. 28, 1756). — IV, 770. 1) α -Jod- $\alpha\alpha$ -Di[Phenylamido]heptan (A. ch. [6] 16, 172). — II, 445. $C_{19}H_{25}N_2J$
- 2) Jodnethylat d. 1,4-Dibenzylhexahydro-1,4-Diazin (J. d. Dibenzylpiperazin). Sm. 217° (C. 1898 [1] 381, 727). 3) Jodmethylat d. Diäthylendi [4-Methylphenyl] diamin (A. 173, 141). — **II**, 487. С 76,5 — **H** 8,7 — О 5,4 — **N** 9,3 — **M**. G. 298.
- $\mathbf{C}_{19}\mathbf{H}_{26}\mathbf{ON}_{2}$ 1) Tetrahydrocinchonin. Fl. (B. 28, 1425, 1638). — III, 836. 2) Tetrahydrocinchonidin. Fl. (B. 29, 802). — III, 853. 3) Curarin (siehe auch $C_{18}H_{35}N$) (\tilde{C} . 1897 [2] 1078).

 $C_{19}H_{26}O_2Cl_2$ 1) Dichlorabietinsäure. Sm. 1240 (J. 1861, 391). — II, 1436. C 48.5 - H 5.5 - O 34.0 - N 11.9 - M. G. 470.C19 H26 O10 N4

1) Verbindung (aus Glykoseamidoguanidin) + H₂O (B. **27**, 973). C 48,1 - H 5,5 - O 40,5 - N 5,9 - M. G. 474. $\mathbf{C}_{19}\mathbf{H}_{26}\mathbf{O}_{12}\mathbf{N}_{2}$

1) Maltose - 2, 3 - Diamidobenzol - 1 - Carbonsäure. Ba (B. 20, 2212). — II, 1274.

2) Verbindung (aus Glykuronsäure u. 3,4-Diamido-1-Methylbenzol). K (Zers. bei 130°) (H. 13, 278). — IV, 616.

 γ-Phenylpropylamidodithioameisensaures γ-Phenylpropylamin. Sm. 90° (B. 27, 2311).
 s-Di[4-Aethylamido-3-Methylphenyl]thioharnstoff. Sm. 163° (A. 286, $C_{19}H_{26}N_2S_2$

 $C_{19}H_{26}N_4S$ 165). — IV, 609.

1) Bromabietinsäure. Sm. 134° (B. 12, 1443). — II, 1436. C 71,9 — H 8,5 — O 15,1 — N 4,4 — M. G. 317. $\mathbf{C}_{19}\mathbf{H}_{27}\mathbf{O}_{2}\mathbf{Br}$

 $C_{19}H_{27}O_{3}N$

 Aethylatropin. (2 HCl, PtCl₄), HJ (A. 138, 239).
 C 68,5 — H 8,1 — O 19,2 — N 4,2 — M. G. 333. $C_{19}H_{27}O_4N$

1) Piperidinguajakol (Guajaperol). Śm. 79,8° (C. 1898 [1] 857; 1898 [2]

836; Soc. 73, 141, 145).

2) Methylester d. 4 - Benzoxyl -1, 2, 2, 6, 6 - Pentamethylhexahydropyridin-4-Carbonsäure. HCl (C. 1896 [1] 1131).

3) Diäthylester d. α-[1-Piperidyl]-α-Phenyläthan-ββ-Dicarbonsäure. Sm. 58—59°. HCl (B. 29, 814). — IV, 21.
 C 65,3 — H 7,7 — O 22,9 — N 4,0 — M. G. 349.

 $C_{19}H_{97}O_5N$

1) Aethylester d. Sebacinsäuremonophenylamid-3-Carbonsäure. 146°. Ba + $2H_2O$ (G. 15, 551). — II, 1266.

1) Jodnethylat d. $\alpha\beta$ -Di[4-Dimethylamidophenyl]äthan (B. 20, 912). $\mathbf{C}_{19}\mathbf{H}_{27}\mathbf{N}_{9}\mathbf{J}$ **– IV**, 978.

2) Jodmethylat d. $\alpha\beta$ -Di[Methyl-4-Methylphenylamido]äthan. Zers. bei 100° (A. **224**, 342). — II, 487.

C₁₀H₂₈N₂Cl₂ 1) Dichlormethylat d. Di[4-Dimethylamidophenyl]methan (B. 12, 1170). **IV**, 975.

 $C_{19}H_{28}N_2J_2$ 1) Dijodmethylat d. Di[4-Dimethylamidophenyl]methan. Sm. 214° u. Zers. (B. 12, 1170). — IV, 974.

 Verbindung (aus Schwefelkohlenstoff u. Trimethylenphenylendiamin).
 Zers. bei 105° (116°) (G. 19, 692; B. 23, 1171).
 C 68,1 — H 8,6 — O 19,1 — N 4,2 — M. G. 335. $C_{19}H_{28}N_4S_2$

C19H29O4N

1) Diäthylester d. 2,6-Dimethyl-4-Hexylpyridin-3,5-Dicarbonsäure.

Fl. (2HCl, PtCl₄) (A. 246, 39). — IV, 171.

1) Phenylthioharnstoff d. Base C₁₂H₂₄N₂ (aus Nitroso-α-Pipekolin). Sm. $\mathbf{C}_{19}\mathbf{H}_{29}\mathbf{N}_{3}\mathbf{S}$ 116° (B. 31, 2278).

 $\mathbf{C}_{19}\mathbf{H}_{30}\mathbf{O}_{10}\mathbf{N}_{2}$ C 51,1 - H 6,7 - O 35,9 - N 6,3 - M. G. 446.

1) Glykose-3, 4-Diamido-1-Methylbenzol. Sm. 160° u. Zers. (B. 20, 495). **– IV**, 621.

 $C_{19}H_{30}O_{10}N_5$ 1) Lanugininsäure. Ba, Pb (J. 1871, 857; B. 22, 1120). — II, 2110. $C_{19}H_{31}O_4N$ C 67,6 — H 9,2 — O 19,0 — N 4,1 — M. G. 337.

1) Diäthylester d. Hexyldihydrolutidindicarbonsäure. Sm. 54° (A. 246, 38). — IV, 96. C 64,5 — H 8,8 — O 22,7 — N 4,0 — M. G. 353.

 $C_{19}H_{31}O_5N$

1) Diäthylester d. 1-Oximido-3-Hexyl-5-Methyl-1, 2, 3, 4-Tetrahydrobenzol-2,4-Dicarbonsäure. Sm. 116-118° (A. 288, 342).

1) Diamyläther d. α -Phenylsulfon- $\beta\gamma$ -Dimerkaptopropan. Fl. (J. pr. $\mathbf{C}_{19}\mathbf{H}_{32}\mathbf{O}_{2}\mathbf{S}_{3}$

[2] **56**, 453). $\beta \gamma$ -Diamylsulfon- α -Phenylsulfonpropan. Sm. 120° (*J. pr.* [2] **56**, 454). C19 H32 O6 S3 1) Di[Jodmethylat] d. 2-Diäthylamidomethyl-1-Piperidylmethylbenzol. $\mathbf{C}_{19}\mathbf{H}_{34}\mathbf{N}_{2}\mathbf{J}_{2}$

 $\mathbf{C}_{19}\mathbf{H}_{35}\mathbf{O}_{2}\mathbf{N}$

C19 H36 ON2

1) Di Jodinethylat J. 2-Diathylath Sm. 216° (B. 31, 428).

C 73,8 — H 11,3 — O 10,4 — N 4,5 — M. G. 309.

1) α-Cyanstearinsäure. Sm. 83,5° (B. 24, 2778). — I, 1221.

C 74,0 — H 11,7 — O 5,2 — N 9,1 — M. G. 308.

1) s-Dicamphelylharnstoff. Sd. 220—221° (G. 22 [1] 220). — I, 1301.

C 64,8 — H 10,2 — O 9,1 — N 15,9 — M. G. 352. C19 H36 O2 N4

1) β -Nitro- $\alpha \gamma$ -Dipiperidyl- β -Piperidylmethylpropan. Sm. 86—87° (Bl. [3] 15, 1226).

 $C_{10}H_{36}O_2Cl_2$ 1) Methylester d. Dichlorstearinsäure (B. 23, 2531). — I, 476. $\mathbf{C}_{10}^{10}\mathbf{H}_{80}^{80}\mathbf{N}_{2}^{2}\mathbf{S}^{2}$ 1) s-Dicamphelylthioharnstoff. Sm. $108-109^{\circ}$ (G. **23** [2] 507).

- C19H97O9N C 69,7 — H 11,3 — O 14,7 — N 4,3 — M. G. 327.
- 1) Monamid d. Heptadekan-αα-Dicarbonsäure (B. 24, 2780). I, 1388. 1) Camphelylaminsalz d. Camphelylamidodithioameisensäure. Sm. 95 $\mathbf{C}_{19}\mathbf{H}_{38}\mathbf{N}_{2}\mathbf{S}_{2}$
- bis 96° (*G*. **23** [2] 504). C 76,8 H 13,1 O 5,4 N 4,7 M. G. 297.
- $\mathbf{C}_{19}\mathbf{H}_{89}\mathbf{ON}$ 1) δ-Oximidononadekan. Sm. 28° (*Bl.* [3] 15, 766).
- $\mathbf{C}_{19}\mathbf{H}_{16}\mathbf{Cl}_{8}\mathbf{P}_{8}$ 1) Formylnonäthyltriphosphoniumchlorid. 6 + 3 PtCl₄ (J. 1859, 377; **1861**, 488). — **I**, *1507*.
- $\mathbf{C}_{19}\mathbf{H}_{46}\mathbf{J}_{3}\mathbf{P}_{3}$ 1) Formylnonäthyltriphosphoniumjodid (J. 1859, 377). — I, 1507.

C₁₉-Gruppe mit vier Elementen.

- $\mathbf{C}_{19}\mathbf{H}_{8}\mathbf{O}_{6}\mathbf{Br_{4}S}$ 1) Tetrabromsulfonfluorescein (Bl. [3] 17, 823)
- $\mathbf{C}_{19}^{\mathsf{H}}\mathbf{H}_{10}^{\mathsf{O}}\mathbf{NBr}_{3}$ 1) ?-Tribrom-9-Benzoylcarbazol. Sm. 228-230° (G. 25 [2] 397). IV, 393.
- C₁₉H₁₀O₄N₃Br 1) Diäthylester d. ?-Brom-?-Dinitro-?-Phenylamidophenylmethan-
- dicarbonsăure. Sm. 127° (Am. 12, 299). II, 1842. C₁₉H₁₀O₆Br₂S 1) Dibromsulfonfluorescein + H₂O (Am. 9, 377; 17, 548). III, 200. C₁₉H₁₁ONBr₂ 1) P-Dibrom-9-Benzoylcarbazol. Sm. 215—216° (G. 25 [2] 395). IV, 393.
- $C_{19}H_{11}O_3N_2Cl$ 1) 3-Chlor-6-Nitro-9-Benzoylcarbazol. Sm. 257—258° (G. 26 [1] 289). **- IV**, 393.
- $C_{19}H_{11}O_{3}N_{9}Br$ 1) 9-Benzoyl-?-Bromnitrocarbazol. Sm. 267—268° (G. 22 [2] 573). IV, 393.
- 1) 9-Benzoyl-?-Bromcarbazol. Sm. 124—125° (G. 22 [2] 570). $C_{19}H_{12}ONBr$ IV, 392. $\mathbf{C}_{19}\mathbf{H}_{12}\mathbf{O}_5\mathbf{Br}_2\mathbf{S}$ 1) Dibromphenolsulfonphtalein (Am. 20, 264).
- $C_{19}H_{12}O_8N_3Cl$ 1) 2,4,6-Trinitro-1-Chlorbenzol + Fluoren. Sm. 69-70° (B. 8, 378).
- 1) Di[?-Chlorphenyl]amid d. Benzolcarbonsäure. Sm. 1530 (B. 14, $\mathbf{C}_{19}\mathbf{H}_{13}\mathbf{ONCl}_{2}$ 2369; **15**, 1285). — **II**, 1164.
- C₁₉H₁₉ONBr. 1) Di[?-Bromphenyl]amid d. Benzolcarbonsäure. Sm. 142° (B. 15, 830). - II, 1164.
- 1) Benzoylthiodiphenylamin. Sm. 170,5° u. Zers. (B. 18, 1844). - $\mathbf{C}_{19}\mathbf{H}_{13}\mathbf{ONS}$ II, 1179.
- $\mathbf{C}_{19}\mathbf{H}_{13}\mathbf{ON}_{6}\mathbf{Cl}_{3}$ 1) Diazo-4-Rosanilinchlorid. $+3\,\mathrm{AuCl}_{3}$ (A. 194, 268). IV, 1552. $C_{19}H_{13}O_{2}NBr_{2}$ 1) Di[4-Bromphenyläther] d. $\alpha\alpha$ -Dioxy- α -Phenylimidomethan. Sm.
- $10\tilde{6}^{0}$ (B. 28, 978). 1) Phenylester d. Thiodiphenylamidoameisensäure. Sm. 164^{0} (B. 24, $C_{19}H_{18}O_{2}NS$
- 2908). II, 806. $C_{19}H_{13}O_2N_2Cl$ 1) 1 [oder 4]-Chlor-2-Oxybenzylphenazon. Sm. 234° (A. 290, 306). - IV, 1004.
 - 2) Acetylmethylchlornaphteurhodon. Sm. oberh. 220° (Soc. 63, 1386). **— IV**, 1063.
 - 3) Benzoat d. 2-Chlor-4'-Oxyazobenzol. Sm. 131° (B. 26, 2977). IV, 1408.
 - 4) Benzoat d. 3-Chlor-4'-Oxyazobenzol. Sm. 118º (B. 26, 2977). -IV, 1409.
 - 5) Benzoat d. 4-Chlor-4'-Oxyazobenzol. Sm. 1540 (B. 26, 2978). IV, 1409.
- $C_{19}H_{18}O_2N_2Br$ 1) Benzoat d. 2-Brom-4'-Oxyazobenzol. Sm. 122—123° (B. 31, 2115). **– IV**, 1409.
 - 2) Benzoat d. 3-Brom-4'-Oxyazobenzol. Sm. 1220 (B. 28, 803). -IV, 1409.
 - 3) Benzoat d. 4-Brom-4'-Oxyazobenzol. Sm. 166° (B. 31, 2116). —
- IV, 1410. $C_{10}H_{18}O_8N_2Br$ 1) 4'-Brom-3-Nitro-4-Phenylamidodiphenylketon. Sm. 180° (B. 24, 3773). — III, 183.
- $\mathbf{C}_{19}\mathbf{H}_{13}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{Cl}$ 1) β -Chlor- $\alpha\gamma$ -Di[1,2-Phtalylamido]propan (β -Chlortrimethylendiphtal
 - imid). Sm. 208—209° (B. 25, 3056). II, 1807.
 2) Verbindung (aus Chlordioxybenzochinon u. Benzoyl-o-Phenylendiamin). Sm. 237° (B. 28, 357). IV, 565.

1) Resorcinsacchareïn. Sm. 265-267º (Bl. [3] 17, 695). $C_{19}H_{13}O_5NS$

1) 5-Phenylakridin-?-Sulfonsäure. Na₂ (A. 224, 32). — IV, 468. C19H13O6NS2

1) Helicinleucindisulfit (A. 210, 126). — III, 68. $C_{19}H_{13}O_{12}NS$

1) α -Phenyl- β -Thiodiphenylharnstoff. Sm. 168-169 (B. 24, 2910). $\mathbf{C}_{19}\mathbf{H}_{14}\mathbf{ON}_{2}\mathbf{S}$ - II, 806.

1) Phenylamid d. 4'-Chlorazobenzol-3-Carbonsäure. Sm. 1980 (A. C19H14ON2Cl 263, 232). — IV, 1461.
1) Phenyläther-4-Bromphenyläther d. αα-Dioxy-α-Phenylimido-

C10 H14 O2 NBr methan. Sm. 83° (B. 28, 981).

 Verbindung (aus 2-Cyanbenzol-1-Sulfonsäurechlorid u. Anilin). Sm. 187
 bis 189° (189,5°) (B. 26, 2292; Am. 18, 810). — II, 1297. $C_{19}H_{14}O_{2}N_{2}S$

bis 189° ($189,5^{\circ}$) (B. **26**, 2292; Am. 18, 810). — II, 1297. $\mathbf{C}_{19}\mathbf{H}_{14}\mathbf{O}_{3}\mathbf{N}_{5}\mathbf{C}\mathbf{1}$ 1) $\mathbf{2} - [\mathbf{4} - \mathbf{O}\mathbf{x}\mathbf{y}\mathbf{ch}]\mathbf{orphenylaf}]$ d. $\mathbf{4} - [\mathbf{4} - \mathbf{N}\mathbf{i}\mathbf{trophenyl}]$ -I-Phenyl-1, 2, 3, 5-Tetrazol. Zers. bei $208 - 209^{\circ}$ (B. 31, 477). — IV, 1232. $\mathbf{C}_{19}\mathbf{H}_{14}\mathbf{O}_{3}\mathbf{N}_{5}\mathbf{Br}$ 1) α -Phenyl- β -[3-Bromphenyl]azo- β -[3-Nitrophenyl]harnstoff. Sm. 128° (B. 21, 2576). — IV, 1566. 2) α -Phenyl- β -[4-Bromphenyl]azo- β -[3-Nitrophenyl]harnstoff. Sm. 134° (B. 21, 2575). — IV, 1566. 3) α -Phenyl- β -[4-Bromphenyl]azo- β -[4-Nitrophenyl]harnstoff. Sm. 129° (B. 21, 2574). — IV, 1566. $\mathbf{C}_{19}\mathbf{H}_{14}\mathbf{O}_{4}\mathbf{NP}$ 1) Phenylimid d. Phenylphosphorsäure-2-Carbonsäurephenylester. Sm. 152° (B. 31, 2178).

Sm. 152° (B. 31, 2178).

1) 3-Amidophenolsulfonphtalein (Am. 20, 268). C19H14O4N2S 2) 4-Amidophenolsulfonphtalein (Am. 20, 269).

1) Monobenzoat d. 2,5-Dioxyazobenzol-4'-Sulfonsäure. Ba (B. 26, C19H14O8N9S

1912). — IV, 1447. 1) P-Trinitrodiphenylbenzylphosphinoxyd. Sm. 206 ° (B. 21, 1507). C19 H14 O7 N9 P - IV, 1662.

1) 4-Chlor-4'-[2-Oxybenzyliden]amidodiphenylamin. Sm. 170° (A. $C_{19}H_{15}ON_{2}Cl$ 303, 315).

C₁₉H₁₅ON₂Br 1) 6-Brom-2-[2-Oxyphenyl]-1-Phenyl-2, 3-Dihydrobenzimidazol. Sm. 155° (A. 303, 325). C19H15ON4Cl

1) 2-Chlor-2-[4-Oxyphenyl]-1,4-Diphenyl-2, 2-Dihydro-1, 2,3,5-Tetrazol. Sm. 243—244° u. Zers. (B. 29, 1852). — IV, 1268. 2) α -Phenyl- β -Phenylazo - β -[4-Chlorphenyl] harnstoff. Sm. 126—127°

(B. 30, 1408). — IV, 1561.

 $\begin{array}{llll} \textbf{C}_{19}\textbf{H}_{15}\textbf{ON}_4\textbf{Br} & \textbf{1}) & \alpha\textbf{-Phenyl}\textbf{-}\beta\textbf{-Phenylazo}\textbf{-}\beta\textbf{-[4-Bromphenyl]harnstoff.} & \text{Sm. 131}^{\circ} & (B. \\ & 2\textbf{1}, 2569; \textbf{30}, 1405). & -\textbf{IV}, 1562. \\ \textbf{C}_{19}\textbf{H}_{15}\textbf{ON}_4\textbf{J} & \textbf{1}) & \alpha\textbf{-Phenyl}\textbf{-}\beta\textbf{-Phenylazo}\textbf{-}\beta\textbf{-[4-Jodphenyl]harnstoff.} & \text{Sm. 132}^{\circ} & (B. \\ \end{array}$

30, 1409).

1) 3, 3-Diphenyl-2, 3-Dihydro-1, 2-Benzsulfonazol (Diphenylbenzyl- $C_{19}H_{15}O_{2}NS$ sultam). Sm. 210°. K (B. 29, 2296). C₁₀H₁₅O₂N₂Br 1) Acetat d. 4-Oxy-1-[2-Brom-4-Methylphenyl]azonaphtalin. Sm. 155°

(B. 31, 1784). — IV, 1436. C19H15O9NS

1) α-Oximido-4-Phenylsulfondiphenylmethan. Sm. 201° (Am. 20, 314). 2) Phenylamid d. Diphenylketon-2-Sulfonsäure. Sm. 143-145° (Am. 17, 359). — III, *192*.

3) Phenylamid d. Diphenylsulfon-4-Carbonsäure. Sm. 202-2030 (Am. 20, 309). 4) Benzoylphenylamid d. Benzolsulfonsäure. Sm. 114-1150 (Am.

19, 763). $C_{10}H_{15}O_3N_4Cl~1)~7$ -Chlormethylat d. 9-Nitro-5-Acetylamido- $\alpha\beta$ -Naphtophenazin

(B. 31, 3093). C₁₉H₁₅O₆ClS₈ 1) α-Chlortriphenylsulfonmethan. Sm. 260° (B. 25, 350). — II, 784.

 $C_{19}H_{15}O_6BrS_3$ 1) α -Bromtriphenylsulfonmethan. Sm. 255° u. Zers. (B. 25, 351). — II, 784.

 $\mathbf{C}_{10}\mathbf{H}_{15}\mathbf{O}_{7}\mathbf{N}\mathbf{Br}_{2}\ 1)\ \mathbf{Phenylamid}\ d.\ \mathbf{2,6-Dibrom-3,4,5-Triacetoxylbenzol-1-Carbon-3}$

säure (Bl. [3] 11, 325). — II, 1924. C₁₉H₁₅O₁₀NBr₂1) Oxim d. Dibromeichenrindengerbsäure (A. 240, 336). — III, 588. $\mathbf{C}_{19}\mathbf{H}_{16}\mathbf{ON}_{2}\mathbf{S}$ 1) Verbindung (aus 4-Thionylamido-1-Methylbenzol) (A. 274, 228). -II, 489.

 $\mathbf{C}_{19}\mathbf{H}_{16}\mathbf{ON}_{3}\mathbf{Cl}$ 1) 7-Chlormethylat d. 10-Acetylamido- $\alpha\beta$ -Naphtophenazin. 2+PtCl₄ (B. 31, 3097).

 $C_{19}H_{16}O_2N_2S$ 1) α -Phenylsulfonimido - α -Phenylamido - α -Phenylmethan. Sm. 138 bis 139° (A. 214, 214; B. 11, 754). — IV, 847.

- C10H10O2NOS 1) β -Benzyliden- $\alpha \alpha$ -Diphenylhydrazin- β 3-Sulfonsäure. Na (B. 24, 792). **- IV**, 754.
 - 2) s-Di[Phenylamid] d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm. 196° (Am. 17, 316, 339; 18, 809; B. 31, 1658).
 3) uns-Di[Phenylamid] d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm.
 - 270° u. Zers. (270–280° u. Zers.). $+ C_2H_6O$ (Am. 17, 317, 341; 18, 809: B. 31, 1658).
 - 4) Di[Phenylamid] d. Benzol-1-Carbonsäure-3-Sulfonsäure (A. 102) 258). — II, 1300.
 - 5) Di[Phenylamid] d. Phenylsulfon-2-Amidobenzol-1-Carbonsäure. Sm. 144—144,5° (J. pr. [2] 44, 428). — II, 1253.
- 6) Verbindung (aus 2,3-Bichinolyl) (B. 18, 333). IV, 1067.
 1) 6-Amido-2,3-Diphenyl-2,3-Dihydro-1,2,4-Benztriazin-2²-Sulfon- $C_{19}H_{16}O_3N_4S$
 - säure (B. 30, 2600). IV, 1287. 2) 6-Amido-2,3-Diphenyl-2,3-Dihydro-1,2,4-Benztriazin-2³-Sulfon-
 - säure (B. 30, 2600). IV, 1287. 3) 6-Amido-2, 3-Diphenyl-2, 3-Dihydro-1, 2, 4-Benztriazin-2⁴-Sulfonsäure (B. 30, 2599). — IV, 1287.
- C19H16O4N2S 1) Phenyl-2-Nitrobenzylamid d. Benzolsulfonsäure. Sm. 1430 (J. pr. [2] **51**, 263).
- C₁₉H₁₆O₄N₂S₂ 1) 1,3-Di[Phenylsulfon]-2,3-Dihydrobenzimidazol (Dibenzolsulfonmethylen-o-Phenylendiamin). Sm. 147—148° (A. 287, 224). IV, 561.
- 1) 4-Oxy-3-Phenylhydrazonmethylazobenzol-4'-Sulfonsäure. $\mathbf{C}_{19}\mathbf{H}_{16}\mathbf{O}_{4}\mathbf{N}_{4}\mathbf{S}$
- (A. 251, 178). IV, 1476. 1) s-Thioharnstoff d. 2-Keto-5-Methyl-3-[4-Amidophenyl]-2,3-Di- $\mathbf{C}_{19}\mathbf{H}_{16}\mathbf{O}_{4}\mathbf{N}_{6}\mathbf{S}$ hydro-1, 3, 4-Oxdiazol. Sm. 2080 (B. 26, 1319). — IV, 1127.
- 1) 3,6-Dibrom-4-Oxy-2,5-Dimethylbenzyl-2-Naphtylamin. Sm. 181 C₁₉H₁₇ONBr₉ bis 182º (B. 29, 1120).
- $C_{19}H_{17}ON_3Cl_2$ 1) 2,2'-Dichlor-4,4',42-Triamidotriphenyl-Oxymethan (B. 19, 1989). - II, 1087.
- $\mathbf{C}_{19}\mathbf{H}_{17}\mathbf{O}_{2}\mathbf{NS}$ 1) Phenylbenzylamid d. Benzolsulfonsäure. Sm. 1190 (A. 273, 14). · II, 531.
- 1) Phenylazotetrahydro-α-Naphtochinolinsulfonsäure (B. 24, 2478). $C_{19}H_{17}O_3N_3S$ **- IV**, 1487.
- $C_{19}H_{17}O_3N_6S$
- Furfuramidallylsenföl. Sm. 118° (B. 10, 1191). III, 724.
 Benzylimid d. Benzolsulfonsäure. Sm. 136° (C. 1897 [2] 848). $C_{19}H_{17}O_4NS_2$
- 1) α -Phenylsulfon- γ -[2-Naphtyl]sulfon- β -Oximidopropan. Sm. 1670 C₁₉H₁₇O₅NS₂ (J. pr. [2] 55, 412).
- 1) Verbindung (aus 2,5,6-Trioxyphenylen-1,3-Disulfid u. o-Toluidin) (Bl. C19H17O6NS4 [3] **15**, 418).
- 1) 2-Oxy-1-[3-Nitro-2,4,5-Trimethylphenylazo]naphtalin-16-Sulfon- $C_{19}H_{17}O_6N_3S$ säure + 2H₂O. Ca (B. **20**, 2067). — IV, 1438. 1) Bromapocinchen. Sm. 186—188° (B. **20**, 2678). — III, 838.
- $\mathbf{C}_{19}\mathbf{H}_{18}\mathbf{ONBr}$
- $C_{19}H_{18}ON_2Cl_8$ 1) Hexachlorhydrocinchonin + $\frac{1}{2}H_2O$ (J. pr. [2] 8, 302). III, 836. 1) Jodmethylat d. Diphenylphenoxylphosphin. Sm. 134—136° u. Zers. C₁₉H₁₈OJP
- (B. 18, 2116). IV, 1657. 1) Jodmethylat d. 2-Methylchinolin-3-Carbonsäurebenzylester. Sm. $\mathbf{C}_{19}\mathbf{H}_{18}\mathbf{O}_{2}\mathbf{N}\mathbf{J}$
- $\mathbf{C}_{19}\mathbf{H}_{18}\mathbf{O}_{2}\mathbf{NP}$
- 172° u. Zers. (A. 282, 125). IV, 353.
 Phenylmonamid d. 4-Methylphenylphosphinsäuremonophenylester. Sm. 59°; Sd. 283°₄₈ (A. 293, 268). IV, 1669.
 α-[2-Naphtyl]sulfon-β-Phenylhydrazonpropan. Sm. 147° (J. pr. [2] $C_{19}H_{18}O_{2}N_{2}S$
- 55, 401). IV, 768. 2) Phenyl-2-Amidobenzylamid d. Benzolsulfonsäure. Sm. 139—140°
- (J. pr. [2] 51, 263). IV, 627.1) 2-Methylphenylamid d. Phosphorsäurediphenylester. Sm. 1760 C19H18O8NP (B. 27, 2578).
 - 2) 4-Methylphenylamid d. Phosphorsäurediphenylester. Sm. 1340 (B. **27**, 2576).
- 1) Benzoldisazo-2,4-Toluylendiamin-4'-Sulfonsäure (B. 16, 2036). $C_{19}H_{18}O_{8}N_{6}S$
- 1) Jodmethylat d. Phosphorigsäuretriphenylester. Sm. 70-75° (B. C19H18O3JP 31, 1049).

C₁₉H₁₈O₄NBr 1) Verbindung (aus Hydroberberindibromid). Sm. 153-154°. +AgNO₃.

 $C_{19}H_{18}O_4N_2S_2$ 1) 3,4-Di[Phenylsulfonamido]-1-Methylbenzol. Sm. 178—179° (A. 265, 190). — IV, 617.

2) Di[Phenylamid] d. 1-Methylbenzol-2,4-Disulfonsäure. Sm. 1870 (Soc. 73, 754).

3) Di[Phenylamid] d. 1-Methylbenzol-2,5-Disulfonsäure. Sm. 1780 (Soc. 73, 744, 758).

4) Di[Phenylamid] d. 1-Methylbenzol-2,6-Disulfonsäure. Sm. 162° (Soc. 73, 772).

 Di[Phenylamid] d. 1-Methylbenzol-3,4-Disulfonsäure. Sm. 190° (Soc. 73, 746, 752).

6) Di[Phenylamid] d. 1-Methylbenzol-3,5-Disulfonsäure. Sm. 153° (Soc. 73, 749).

C₁₉H₁₈O₇N₄S 1) Benzaldehyd-2-Nitrophenylthionaminsaures-2-Nitro-1-Amidobenzol. Sm. 88° (A. 274, 226). — III, 7.

Benzaldehyd - 3 - Nitrophenylthionaminsaures -3 - Nitro - 1 - Amidobenzol. Sm. 90—91° (A. 274, 224). — III, 7.

3) Benzaldehyd-4-Nitrophenylthionaminsaures-4-Nitro-1-Amidobenzol. Sm. 95-96° (A. 274, 225). — III, 7.

C₁₉H₁₉ON₂P 1) Di[Phenylamid] d. 2-Methylphenylphosphinsäure. Sm. 234° (A. 293, 295). — IV, 1668. 2) Di[Phenylamid] d. 4-Methylphenylphosphinsäure. Sm. 209° (A.

293, 267). — IV, 1669.

C₁₉H₁₉O₂N₂P 1) Monophenylhydrazid d. 4-Methylphenylphosphinsäuremonophenylester. Sm. 173—174° (A. 293, 263). — IV, 1669.

C₁₉H₁₉O₃NS 1) Verbindung (aus d. Benzyloxamid d. Benzolsulfonsäure u. Benzol). Sm. 92—93° (B. **29**, 1566).

 $C_{19}H_{20}ON_2Cl_2$ 1) Dichloreinehonin. Sm. 220—230°. 2 HCl, (2 HCl, PtCl₄ + H₂O), 2 HBr (J. 1847/48, 618; B. 12, 423; 25, 1543). — III, 835.

C₁₉H₂₀ON₂Br₂ 1) Dibromeinchonidin. 2HBr (A. 172, 103). — III, 852. 2) Dehydrocinchonindibromid. Sm. 172—173°. HBr (B. 25, 1544). — III, 839.

C₁₉H₂₀ON₂S 1) 5-Aethyläther d. 2-Merkapto-5-Oxy-3-Phenyl-6,7,8,9-Tetrahydro-a-Naphtimidazol. Sm. 269—270° (B. 31, 903).

C₁₉H₂₀ON₃P 1) Di[Phenylamid]-2-Methylphenylamid d. Phosphorsäure. Sm. 175° (B. 27, 2579).
2) Di[Phenylamid]-4-Methylphenylamid d. Phosphorsäure. Sm. 168°

(B. 27, 2577). C₁₉H₂₀O₃NBr 1) Bromthebaïn (B. 17, 528). — III, 910.

 $C_{19}H_{20}O_8NBr_5$ 1) Bromthebaïntetrabromid (B. 17, 528). — III, 910.

C₁₉H₂₀O₃NJ 1) Jodmethylat d. Difuraltropinon. Sm. 281° u. Zers. (B. 30, 2716).

C₁₉H₂₀O₃N₂S 1) Sulfocinchen. Zers, bei 280° (B. **31**, 2361). 2) Cinchensulfonsäure (B. **31**, 2363).

3) Verbindung (aus Benzaldehyd u. Anilinsulfit). Sm. 24° (B. 24, 749). — III, 6.

 $C_{10}H_{20}O_4NBr$ 1) Brompropylat d. Papaverolin. Sm. 140° (J. pr. [2] 56, 344).

C₁₉H₂₁ON₂Br 1) Bromeinehonin (J. 1847/48, 619; 1876, 822). — III, 835. 2) Hydrobromoxycinchen. Sm. 180—190°. 2HBr (B. 23, 2669). — III 837

3) Hydrobromdehydrocinchonin. Sm. bei 235° u. Zers. HBr (B. 20, 2524). — III, 839.

C₁₉H₂₁ON₄P 1) Di[Phenylhydrazid] d. 4-Methylphenylphosphinsäure. Sm. 171^o (4. 293, 269). — IV, 1669.

C₁₀H₂₁O₂NBr₄ 1) Methyldi[3,6-Dibrom-4-Oxy-2,5-Dimethylbenzyl]amin. Sm. 168 bis 169° (173°). HBr (B. 29, 1113).

C₁₉H₂₁O₂N₂Cl 1) Verbindung (aus d. 2-Methylphenylamid d. α -Chlor- α -Oxybuttersäure). Sm. 105—107° (B. **21**, 305). — II, 466.

 $C_{19}H_{21}O_3N_3S$ 1) 6-Phenylazo-1, 2, 3, 4, 7, 8, 9, 10-Oktohydro- α -Naphtochinolin-6-Sulfonsäure (B.~24,~2490). — IV, 1485. $C_{19}H_{21}O_4NS$ 1) Diäthylester d. 4-Thiocarbonyl-2, 6-Dimethyl-1-Phenyl-1, 4-Dimethyl-1-Phenyl-1, 4-Dimethyl-1-

C₁₉H₂₁O₄NS 1) Diäthylester d. 4-Thiocarbonyl-2, 6-Dimethyl-1-Phenyl-1, 4-Dihydropyridin-3, 5-Dicarbonsäure. Sm. 245-246° (B. 20, 2112). — II, 2006.

- $C_{19}H_{22}ON_2Br_2$ 1) Cinchonindibromid + H_2O . Zers. bei 110°. 2HCl, HBr (J. 1849, 376; **1876**, 822; B. **17**, 1995; **19**, 2854; **20**, 2515). $\stackrel{\checkmark}{-}$ III, 831.
- 1) Valerylimidophenylbenzylamidomerkaptomethan. Sm. 125-126° $\mathbf{C}_{19}\mathbf{H}_{22}\mathbf{ON}_{2}\mathbf{S}$ (Soc. 67, 1043).
 - 2) α -Acetyl- $\alpha\beta$ -Di[β -Phenyläthyl]thioharnstoff. Sm. 73° (B. 19, 1824). - II, 539.
- 1) Isoamylester d. Diphenyldithioallophansäure. Sm. 87° (J. pr. [2] $\mathbf{C}_{19}\mathbf{H}_{22}\mathbf{ON}_{2}\mathbf{S}_{2}$
- 32, 258). II, 398. 1) Propyläther d. Verb. C₁₈H₁₈ON₃Cl (B. 31, 1414). C19 H22 ON C1
- 1) Isoamylester d. Thiodiphenylallophansäure. Sm. 70° (B. 4, 248). C19H22O2N2S **— II**, 382.
- C₁₉H₂₂O₃NBr 1) Brommethylmorphimethin. 2 Modif. Sm. 132° u. 182–184°. (2 HCl, $PtCl_4 + 4H_2O$) (A. **297**, 213).
- 1) Jodmethylat d. Curin. Sm. 252—2530 (C. 1895 [2] 1086). $C_{19}H_{22}O_3NJ$
- 2) Jodmethylat d. Morphothebaïn. Sm. 221-222° (B. 32, 191).
 1) Cinchonidinsulfonsäure. Sm. 225°. (2 HCl, PtCl₄ + 3 H₂O) (A. 267, C19H22O4N2S 142). — III, 853.
 - 2) Isocinchonidinsulfonsäure. (HCl, AuCl₃) (A. 267, 140). III, 853.
 - 3) Isocinchoninsulfonsäure. $(2 \text{HCl}, \text{AuCl}_3 + 2 \text{H}_2 \text{O}) (A. 267, 141)$. III, 835.
- 1) Diäthylester d. 1-Oximido-5-Methyl-3-[4-Chlorphenyl]-1, 2, 3, 4- $\mathbf{C}_{19}\mathbf{H}_{22}\mathbf{O}_5\mathbf{NCl}$ Tetrahydrobenzol-2, 4-Dicarbonsäure. Sm. 187—188° (A. 303, 254).
- $\mathbf{C}_{19}\mathbf{H}_{22}\mathbf{N}_{2}\mathbf{ClBr}$ 1) Hydrobromeinchoninchlorid + 2H₂O (B. 25, 1546). III, 836.
- 1) Hydrojodcinchoninchlorid (B. 31, 2358). $\mathbf{C}_{19}\mathbf{H}_{22}\mathbf{N}_{2}\mathbf{ClJ}$ 2) Hydrojodcinchonidinchlorid (B. 31, 2359).
- C₁₉H₂₃ONBr₂ 1) Verbindung (aus Diäthylanilin u. Dibrompseudocumenolbromid). Sm. 89—90° (B. **29**, 1124).
- 1) Hydrochloreinchonin. Sm. 212-213°. Salze meist bek. (A. 205, $\mathbf{C}_{19}\mathbf{H}_{23}\mathbf{ON}_{2}\mathbf{Cl}$ 348; 276, 109, 112; J. pr. [2] 8, 280; M. 16, 328; B. 20, 2519; R. 1, 108). — III, 831.
 - 2) Hydrochlor-α-Isocinchonin. Sm. 172°. (2HCl, PtCl₄ + 3H₉O) (A. **276**, 96). — III, 846.
 - 3) Hydrochlorapoisocinchonin. Sm. 203°. HCl + H₂O, 2 HCl, (2 HCl, $PtCl_4 + 2H_2O$, $2HJ + H_2O$, $H_2SO_4 + 3H_2O$ (A. 276, 101). III, 847.
 - 4) Hydrochlorapoeinchonidin. Sm. 200°. 2HCl, (2HCl, PtCl₄+2H₂O), H₂SO₄ (A. 205, 346; J. pr. [2] 8, 283). III, 853.
- C₁₉H₂₃ON₂Br 1) Hydrobromeinchonin. 2 HBr (A. 201, 324; B. 20, 2520). — III, 832.
- 1) Hydrojodcinchonin. Sm. 158-160°. 2 HCl, (2 HCl, PtCl₄), 2 HNO₈ $\mathbf{C}_{19}\mathbf{H}_{23}\mathbf{ON}_{2}\mathbf{J}$ (M. 12, 662; 13, 432). - III, 832.
- $C_{19}H_{23}O_2N_2Cl$ 1) Hydrochlorapochinin. Sm. 160°. 2HCl + 3H₂O₂ (2HCl, PtCl₄ + $2 \text{ H}_{2}\text{ O}$) (J. pr. [2] 8, 285; A. 205, 341). — III, 819.
- 2) Hydrochlorapoconchinin $+ 2 \, \text{H}_2\text{O}$. Sm. 164° (wasserfrei). 2 HCl, $(2 \, \text{HCl}, \, \text{PtCl}_4 + 4 \, \text{H}_2\text{O})$ (A. 205, 343). III, 826. C₁₉H₂₃O₂N₂Br 1) Hydrobromapochinin. Sm. $209-210^{\circ}$. (2 HCl, PtCl₄), HBr $+ \, \text{H}_2\text{O}$ (M. 6, 751). — III, 819.
- 1) Hydrojodapochinin. (2 HCl, PtCl₄ + H₂O), 2 HJ (M. 12, 330). - $\mathbf{C}_{19}\mathbf{H}_{23}\mathbf{O}_{2}\mathbf{N}_{3}\mathbf{J}$ III, 819.
- 1) Codeinmethylenjodid. Sm. 214-216° (C. 1899 [1] 118). $\mathbf{C}_{19}\mathbf{H}_{28}\mathbf{O_{8}NJ_{2}}$
- 1) Diäthylphenyl-3,6-Dibrom-4-Oxy-2,5-Dimethylbenzylammonium-C₁₉H₂₄ONBr₃ bromid. Sm. 245-246° (u. 256-257°) (B. 29, 1123).
 - Bromäthylat d. Verb. C₁₇H₁₉ONBr₂ (aus Dibrompseudocumenol-bromid). Sm. 189—192° u. Zers. (B. 29, 1125).
- 1) Jodmethylat d. ?-Dimethylamido-2,4,5-Trimethyldiphenylketon C₁₉H₈₄ONJ
- + xH₂O. Sm. 187° u. Zers. (wasserfrei) (B. 17, 2675). III, 236. 1) Dihydrojodcinchonin. Sm. 187—190° u. Zers. HJ, HNO₃, H₂SO₄ C₁₉H₂₄ON₂J₂
- (M. 12, 583; 13, 431, 676; 15, 447). III, 832.
 1) Dihydrojodapochinin. HJ (M. 12, 684). III, 819. $\mathbf{C}_{19}\mathbf{H}_{24}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{J}_{2}$
 - 2) Dihydrojodapoconchinin. Sm. bei 220°. HCl, HJ, HNO3 (M. 12, 669). — III, 826.
- 1) Chlormethylat d. Codein $+ H_2O$. $2 + PtCl_4 + 3H_2O$ (A. 222, 215). $\mathbf{C}_{19}\mathbf{H}_{24}\mathbf{O}_{3}\mathbf{NC1}$ — III, 903.
- C19H24O8NJ 1) Jodmethylat d. Bebeerin (J. d. Bebirin). Sm. 268-270° (B. 29, 2057). — III, 798.

2) Jodmethylat d. Codeïn + 2H₂O. Zers. bei 270° (C. r. 92, 1140; M. 10, 733; A. ch. [5] 27, 276; A. 222, 215; B. 27, 1149; 30, 355). $\mathbf{C}_{19}\mathbf{H}_{24}\mathbf{O}_{3}\mathbf{N}\mathbf{J}$ - III, 903.

3) Jodäthylat d. Morphin + 1/2 H2O (A. 88, 340; C. r. 92, 1140). -

III, 898.

1) Cinchotinsulfonsäure + $_{2}$ O. Sm. 245 – 246° u. Zers. (224°). HCl + $_{2}$ O, (2HCl, $_{2}$ Cl, + $_{3}$ Cl, + $_{4}$ Cl, + $_{2}$ O, $_{4}$ Cl, + $_{2}$ Cl, + $_{3}$ Cl, + $_{4}$ Cl, + $_{3}$ Cl, + $_{4}$ Cl, + $_{4}$ Cl, + $_{5}$ Cl, + $_{4}$ Cl, + $_{5}$ Cl, + $_{$ $\mathbf{C}_{19}\mathbf{H}_{94}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{S}$

1) Hydrojodnichin + xH₂O. Sm. bei 60°. 2HJ (M. 14, 440). — III, 820. $\mathbf{C}_{19}\mathbf{H}_{25}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{J}$ 1) Jodmethylat d. 4,4'-Di[Dimethylamido] diphenylketon. Sm. 105°

 $\mathbf{C}_{19}\mathbf{H}_{26}\mathbf{ON}_{2}\mathbf{J}_{2}$ (B. **22**, 1878). — III, 186.

1) Chloräthylat d. 1-Scopolamin. + AuCl₃ (B. 27 [2] 883). — III, 796. 1) Jodäthylat d. 1-Scopolamin. Sm. 185—186° (B. 27 [2] 883). — C₁₉H₂₆O₄NCl $\mathbf{C}_{19}\mathbf{H}_{26}\mathbf{O}_{4}\mathbf{N}\mathbf{J}$ III, 796.

 $\mathbf{C}_{19}\mathbf{H}_{27}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{C}\mathbf{I}$

 Hydrochlorapotetrahydrochinin (M. 16, 635). — III, 816.
 4-Methylphenyldi [1-Piperidyl]phosphin + 2 Molec. Schwefelkohlenstoff. Sm. 139° (B. 31, 1046). — IV, 1682. $\mathbf{C}_{19}\mathbf{H}_{27}\mathbf{N}_{2}\mathbf{S}_{4}\mathbf{P}$

1) Jodmethylat d. N-Methyl-Tetramethyldiamidothiodiphenylamin $C_{19}H_{27}N_3J_2S$ (A. 230, 114, 151). — II, 808.

1) Jodmethylat d. α-Oxy-?-Tetramethyldiamidodiphenylmethan. Sm. $\mathbf{C}_{19}\mathbf{H}_{28}\mathbf{ON}_{2}\mathbf{J}_{2}$ 195° (B. **22**, 1882). — **II**, 1079.

 Diäthylester d. αβ-Di[Hexahydrophenyl]thioharnstoff-2,2'-Dicarbonsäure. Sm. 133° (A. 295, 206). $\mathbf{C}_{19}\mathbf{H}_{32}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{S}$

1) Aethyl-4-Methylphenyldi[1-Piperidyl]phosphoniumjodid. Sm.1910 $\mathbf{C}_{19}\mathbf{H}_{32}\mathbf{N}_{2}\mathbf{JP}$ (B. 31, 1046). — IV, 1682.

1) Isobutyl-1-Tripiperidylphosphoniumjodid. Sm. 1720 (B. 28, 2210). $\mathbf{C}_{19}\mathbf{H}_{39}\mathbf{N}_{3}\mathbf{JP}$ **— IV**, 11.

C₁₀-Gruppe mit fünf Elementen.

C₁₀H₀ONCl₂Br₂ 1) ?-Dichlor-?-Dibrom-l-Benzoylcarbazol. Sm. 267—268° (G. 25 [2] 363). - IV, 393.

2) ?-Dichlor-?-Dibrom-1-Benzoylcarbazol. Sm. 238—240° (G. 25 [2] 363). — IV, *393*.

1) 3-Chlor-6-Brom-9-Benzoylcarbazol. Sm. 2020 (G. 25 [2] 360). — C, H, ONCIBr IV, 393.

 $\mathbf{C}_{19}\mathbf{H}_{12}\mathbf{O}_{5}\mathbf{NBrS}$ 1) Bromresorcinsaccharein (Bl. [3] 17, 696). 1) Jodresorcinsacchareïn (Bl. [3] 17, 696). $\mathbf{C}_{19}\mathbf{H}_{12}\mathbf{O}_{5}\mathbf{NJS}$

1) Phenylamid d. 4-Chlorbenzol-1-Carbonsäure-3-Sulfonsäure. $\mathbf{C}_{19}\mathbf{H}_{15}\mathbf{O}_{3}\mathbf{N}_{2}\mathbf{ClS}$

Sm. 219—220° (Am. 16, 543). — II, 1303.

1) Benzolsulfonat d. 2-Brom-4'-Oxy-4-Methylazobenzol. Sm. 115° $\mathbf{C}_{19}\mathbf{H}_{15}\mathbf{O}_{8}\mathbf{N}_{8}\mathbf{BrS}$ (B. 31, 1783). — IV, 1414.

1) Jodmethylat d. Phosphorigsäuretri-4-Chlorphenylester, Sm. 71° $\mathbf{C}_{19}\mathbf{H}_{15}\mathbf{O}_{3}\mathbf{Cl}_{3}\mathbf{JP}$ (B. 31, 1053).

C₁₉H₁₆O₃N₂J₄S 1) Benzaldehyd-2,4-Dijodphenylaminsaures 2,4-Dijod-l-Amidobenzol. Sm. 78° (A. 274, 224). — III, 7.
C₁₉H₁₇O₄N₂ClS₂ 1) Di[Phenylamid] d. 2-Chlor-l-Methylbenzol-3,5-Disulfonsäure. Sm. 183° (Soc. 73, 751).
2) Di[Phenylamid] d. 2-Chlor-l-Methylbenzol-4,5-Disulfonsäure. Sm. 183° (Soc. 73, 747).

3) Di[Phenylamid] d. 2-Chlor-1-Methylbenzol-4, 6-Disulfonsäure. Sm. 180° (Soc. 73, 776).

4) Di[Phenylamid] d. 4-Chlor-1-Methylbenzol-2, 5-Disulfonsäure. Sm. 245° (Soc. 73, 744).
5) Di[Phenylamid] d. 4-Chlor-1-Methylbenzol-2, 6-Disulfonsäure.

Sm. 188° (Soc. 73, 771).

6) Di[Phenylamid] d. 4-Chlor-1-Methylbenzol-3,5-Disulfonsäure. Sm. 184° (Soc. 73, 743). C₁₉H₁₇O₄N₂BrS₂ 1) Di[Phenylamid] d. 2-Brom-1-Methylbenzol-3,5-Disulfonsäure.

Sm. 194° (Soc. 73, 750).

 $\textbf{C}_{19}\textbf{H}_{18}\textbf{O}_{3}\textbf{N}_{2}\textbf{Cl}_{2}\textbf{S} \hspace{0.2cm} \textbf{1)} \hspace{0.2cm} \textbf{Benzaldehyd-3-Chlorphenylthionaminsaures} \hspace{0.2cm} \textbf{3-Chlor-1-Amido-1} \\$ benzol. Sm. 108° (A. 274, 218). — III, 7

- C₁₉H₁₈O₂N₂Br₂S 1) Benzaldehyd-2-Bromphenylthionaminsaures 2-Brom-1-Amidobenzol. Sm. 93° (A. **274**, 221). — III, 7.
 - 2) Benzaldehyd-3-Bromphenylthionaminsaures 3-Brom-1-Amidobenzol. Sm. 101—102° (A. 274, 220). — III, 7.
 - 3) Benzaldehyd-4-Bromphenylthionaminsaures 4-Brom-1-Amido-
- benzol. Sm. 122° (A. 274, 220). III, 7.

 1) Benzaldehyd 4 Jodphenylthionaminsaures 4-Jod-1-Amido- $C_{19}H_{18}O_8N_9J_9S$ benzol. Sm. 121-1220 (A. 274, 223). - III, 7.
- $\mathbf{C}_{19}\mathbf{H}_{23}\mathbf{O}_{2}\mathbf{NClJ}$
- C₁₉H₂₈O₃NClBr
- 1) Jodmethylat d. Chlorocodid (A. 297, 215).
 1) Chlormethylat d. Bromcodeïn + 2½, 420 (A. 297, 218).
 1) Codeïnmethylenchlorojodid. Sm. 235 238° u. Zers. (C. 1899) C₁₉H₂₈O₃NClJ [1] 118).
- 1) Jodmethylat d. Bromcodeïn. Sm. 242—244° (A. 297, 212).
 1) Hydrochloreinchoninsulfonsäure. Sm. 227°. HCl + 3 H₂O, (2 HCl, $\mathbf{C}_{19}\mathbf{H}_{23}\mathbf{O}_{3}\mathbf{NBrJ}$ C19 H28 O4 N, ClS $PtCl_4 + 2H_2O$, (HCl, AuCl₃), $HJ + 2\frac{1}{2}H_2O$, $H_2SO_4 + 8H_2O$ (A. 276, 112). — III, 835.

C₂₀-Gruppe mit einem Element.

- C 94,5 H 5,5 M. G. 254. $C_{20}H_{14}$
 - 1) 1,1'-Binaphtyl. Sm. 154°. Pikrat (A. 144, 78; B. 10, 1272, 1603; 15, 2170; 17, 3020; Soc. 35, 225). II, 294.
 2) 1,2'-Binaphtyl. Sm. 79—80° (76°) (J. 1877, 392; Soc. 35, 227; B. 23, 3199). II, 295.
 - 3199). II, 295.

 3) 2,2'-Binaphtyl. Sm. 187° (183,5°); Sd. 452°₇₅₃ (B. 10, 1272, 1603; 12, 2131; 20, 662; 23, 3200; J. 1870, 568; Soc. 35, 229; 40, 5; 47, 104; 65, 879; 67, 653; A. 284, 74). II, 295.

 4) Phenylanthracen. Sm. 152—153°; Sd. 417° (A. 202, 61; 209, 276; Am. 13, 554; A. ch. [6] 1, 495). II, 294.

 C 93,8 H 6,2 M. G. 256.

 1) Benzylfluoren. Sm. 102° (M. 2, 443). II, 294.

 2) 9-[P-Methylphenyl]fluoren. Sm. 128° (B. 11, 203). II, 294.

 3) Phenyldihydroanthracen. Sm. 120° (A. 202, 63). II, 294.

 4) Kohlenwasserstoff (aus Benzaldehyd u. Benzol). Sm. oberh. 360° (A. 242, 331). II 287
- C20 H16

 $\mathbf{C}_{20}\mathbf{H}_{22}$

- **242**, 331). II, 287.
- C 93,0 H 7,0 M. G. 258. $C_{20}H_{18}$ 1) $\alpha \alpha \beta$ -Triphenyläthan. Sm. 53,5—54,5°; Sd. 396—400° (B. 15, 1128; A.
 - **296**, 247). II, 289. 2) 2-Methyltriphenylmethan. Sm. 59-59,5°; Sd. 353-354,7°₇₇₄ (A. 194, 282; A. ch. [6] 2, 342). — II, 288.
 3) 3-Methyltriphenylmethan. Sm. 62°; Sd. oberh. 360° (B. 16, 2368). —

 - 4) 4-Methyltriphenylmethan. Sm. 71°; Sd. oberh. 360° (A. 194, 263; B.
 - 7, 1209; Bl. [3] 17, 978). II, 289. 5) α -Dibenzylbenzol. Sm. 86° (B. 6, 120, 221; 9, 31; 27, 3237). — II, 289. 6) β -Dibenzylbenzol. Sm. 78° (B. 6, 121, 222; 9, 31; 27, 3237). — II, 289.
 - C 91,6 H 8,4 M. G. 262. 1) Hexamethylanthracen. Sm. 220°. Pikrat (Sm. 203°) (A. ch. [6] 11, 272).
 - II, 278. C 90.9 - H 9.1 - M. G. 264.
- C20H24 1) 9,9-Dipropyl-9,10-Dihydroanthracen. Sm. 46-470 (B. 22, 1070).
 - 2) 2,6-Diisopropyl-9,10-Dihydroanthracen. Sm. 90°; Sd. oberh. 360° (G. 14, 280). - II, 255.
 - 3) 1,2-Dimethyl-4,5-Diphenylhexahydrobenzol. Sm. 97°; Sd. 270° (B. 29, 2123).
 - 4) $\alpha\beta$ -Di[?-Trimethylphenyl] äthen. Sm. 161°. Pikrat (J. pr. [2] 47, 51).
 - 5) polym. 4-Allyl-1-Methylbenzol. Sd. 350° (G. 14, 283, 505). II, 171. 6) polym. 4-Allyl-1-Methylbenzol (G. 14, 283, 505). — II, 171.
- C 90.2 H 9.8 M. G. 26.6. C20 H26
- 1) $\alpha\beta$ -Di[4-Isopropylphenyl]äthan. Sd. über 360° (A. 121, 251). II, 242.

C20H28

2) αα-Di[1,2,4-Trimethylphenyl]äthan (J. pr. [2] 47, 51). — II, 242.

- C 89,6 H 10,4 M. G. 268. $C_{20}H_{28}$ 1) Diterebenthylen. Sd. 345-350° (Bl. 50, 420; 51, 119). — II, 220. C 88,9 — H 11,1 — M. G. 270. $C_{20}H_{30}$ 1) Diterebenthyl. Sd. 343-346°. 2 + HCl (Soc. 54, 161; Bl. 50, 420). — II, 176. 2) Pinakonen. Sm. 55—56° (A. 292, 17; B. 27, 2350). C 88,2 — H 11,8 — M. G. 272.

 1) Bisabolen. Sd. 259—260° (C. 1897 [2] 428).

 2) Camphotereben. Sd. 260—280° (A. 197, 332). — III, 539. $C_{20}H_{32}$ 3) Colophen. Sd. 318-320° (A. 37, 192; 71, 350; A. ch. [5] 6, 40; B. 12, 1755). — III, *539*. 4) Copaïvabalsamöl. Sd. 252—256° (A. 7, 157; **34**, 321; **148**, 152; **242**, 191; M. **2**, 510). — III, 539. 5) Dicinen. Sd. 328—333° (B. 17, 1973). — III, 540. 5) Dicinen. Sd. 328—333° (B. 17, 1973). — 111, 540.
 6) Diterpilen. Sd. 210—212°₄₀ (A. ch. [6] 15, 174, 191). — III, 541.
 7) Metaterebenten. Sd. oberh. 360° (A. ch. [3] 39, 19). — III, 540.
 8) Nephrin + H₂O. Sm. 168° (wasserfei) (J. pr. [2] 57, 443).
 9) Paracajeputen. Sd. 310—316° (J. 1860, 482). — III, 541.
 10) Petrolen. Sd. 280° (A. 23, 265).
 11) Pinakonan. Sm. 98° (B. 27, 2350; A. 292, 21).
 12) Diterpen (aus Colophonium). Sd. 305—310° (A. ch. [6] 1, 240). — III, 537.
 C 87,6 — H 12,4 — M. G. 274. $C_{20}H_{34}$ C 87,6 — H 12,4 — M. G. 274.

 1) Colophenhydrür. Sd. 320—330° (B. 19, 2174). — II, 39.
 2) Dicamphenhydrür. Sm. 94°; Sd. 321—323,6° (B. 13, 793). — II, 39.
 3) Dicamphenhydrür. Sd. 321° (A. ch. [5] 19, 150; B. 13, 793). — II, 39.
 4) Hydrodicamphen. Sm. 75°; Sd. 326—327° (Bl. [3] 19, 318).
 C 87,0 — H 13,0 — M. G. 276.
 1) Dimenthen. Sd. 320° (Bl. 31, 530). — II, 19.
 2) Kohlenwasserstoff (aus Harzöl). Sd. 330—335° (Bl. 31, 119). — I, 140.
 3) Kohlenwasserstoff (aus Menthol). Sd. 190—191°₂₀ (C. 1898 [1] 105).
 C 86,3 — H 13,7 — M. G. 278.
 1) Eikosylen. Sd. 314—315° (B. 12, 69). — I, 137.
 C 85,7 — H 14,3 — M. G. 280.
 1) Tetraamylen. Sd. 390—400° (J. 1861, 660). — I 125 $C_{20}H_{86}$ $C_{20}H_{38}$ $\mathbf{C}_{20}\mathbf{H}_{40}$ 1) Tetraamylen. Sd. 390-400° (J. 1861, 660). - I, 125. $C_{20}H_{42}$ C 85,1 — H 14,9 — M. G. 282. 1) norm. Eikosan. Sm. 36,7°; Sd. 205°₁₅ (B. 15, 1718; 19, 2220; 21, 2261; 29, 1323). — I, ·107.
 2) Bryonan. Sm. 69°; Sd. 400° (B. 25 [2] 287).
 3) Kohlenwasserstoff (aus Braunkohlenparaffin) (B. 12, 73). C₂₀-Gruppe mit zwei Elementen. $\begin{matrix}\mathbf{C}_{20}\mathbf{H}_{7}\mathbf{C}\mathbf{l}_{9}\\\mathbf{C}_{20}\mathbf{H}_{7}\mathbf{B}\mathbf{r}_{7}\end{matrix}$ 1) Enneachlordinaphtalin. Sm. 156-1580 (A. 160, 73). - II, 189. 1) Heptabrom-2,2'-Binaphtyl (J. 1874, 446). — II, 295. $\mathbf{C}_{20}\mathbf{H}_8\mathbf{O}_6$ C 69.8 - H 2.3 - O 27.9 - M. G. 344.1) Coerulein (B. 4, 455, 555, 665; A. 209, 258, 271; Bl. [3] 11, 1136). — II, 2088. 2) Dianhydrobisdiketodihydroinden-4,4'-Dicarbonsäure. Ag₂ (B. 31,
- $\mathbf{C}_{20}\mathbf{H}_{8}\mathbf{Br_{6}}$ $\mathbf{C}_{20}\mathbf{H}_{10}\mathbf{O}_{4}$

2088).

 $\mathbf{C}_{20}\mathbf{H}_{8}\mathbf{Cl}_{6}$

- 2088).

 1) Hexachlor-1, I'-Binaphtyl (A. 144, 82). II, 295.

 1) Hexabrom-1, I'-Binaphtyl (A. 144, 81). II, 295.

 C 76,4 H 3,2 O 20,4 M. G. 314.

 1) o-Dixanthon. Sm. 317° (B. 26, 75). III, 306.

 2) m-Dixanthon. Sm. 256° (B. 25, 1655). III, 306.

 3) α-Dinaphtyldichinon (B. 15, 1812). III, 376.

 4) 2, 2'-Bi[1, 4-Naphtochinon]. Sm. 216—217° u. Zers. (Zers. bei 270°) (Soc. 57, 632, 808; 67, 661; B. 30, 2663; 32, 546). III, 463.

 5) 1, I'-Binaphtyl-3, 4, 3', 4'-Dichinon. Sm. noch nicht bei 300° (A. 194, 206; B. 19, 2483; Soc. 67, 663). II, 396.

 C 72,7 H 3,0 O 24,3 M. G. 330.

 1) α-Oxydixanthon. Sm. 258° (B. 24, 3981; 25, 1655). III, 306.
- $\mathbf{C}_{20}\mathbf{H}_{10}\mathbf{O}_{5}$

2) β -Oxydixanthon. Sm. 326° (B. 25, 1656). — III, 306. $\mathbf{C}_{20}\mathbf{H}_{10}\mathbf{O}_{5}$ 3) **4,4'-Di[1,2-Naphtochinon]oxyd.** Sm. 245° (B. **30**, 2199). C 69.3 - H 2.9 - O 27.7 - M. G. 346. $C_{20}H_{10}O_6$ 2,2'-Bi[3-Oxy-1,4-Naphtochinon]. Sm. 215° (Soc. 67, 662). — III, 463. C 66,3 — H 2,8 — O 30,9 — M. G. 362.
 Gallein (B. 4, 457; 14, 1326; A. 209, 249, 261). — II, 2087.
 Anhydrobisdiketodihydroinden-4,4'-Dicarbonsäure (B. 31, 2088). $C_{20}H_{10}O_7$ 2) Affiyotostatic duliy drollicin-4, 4-Dicarbolisative (B. 31, 2008).
1) Tetrachlor-2, 2'-Binaphtyl (J. 1874, 446). — II, 295.
C 89,5 — H 4,5 — O 6,0 — M. G. 268.
1) α-Binaphtylenoxyd. Sm. 182—182,5° (184°). Pikrat (A. 209, 134; B. 13, 1724; 14, 196; 15, 1122; J. r. 14, 130). — II, 1005.
2) 2,6-[β] Binaphtylenoxyd. Sm. 161° (158°). Pikrat (B. 13, 1724; 14, 140). $\mathbf{C}_{20}\mathbf{H}_{10}\mathbf{Cl}_{4}$ $C_{20}H_{12}O$ 200; **15**, 1122; A. **209**, 136, 146; J. r. **14**, 132; Soc. **59**, 1096). -II, 1005. 3) isom. Binaphtylenoxyd. Sm. 157°. Pikrat (B. 15, 2171). — II, 1006. C 84,5 — H 4,2 — O 11,3 — M. G. 284. $\mathbf{C}_{20}\mathbf{H}_{12}\mathbf{O}_2$ 1) 2-[2-Naphtyl]-1,4-Naphtochinon. Sm. 177° (Soc. 67, 657). — III, 463. C 80,0 - H 4,0 - O 16,0 - M. G. 300. $C_{20}H_{12}O_{8}$ Anhydrophenolphtaleïn (Fluoran). Sm. 180° (173—175°). + ½ C2H6O (A. 212, 349; B. 24, 1417; 25, 1386, 3589; 28, 430). — II, 1983.
 3-Oxy-2-[2-Naphtyl]-1,4-Naphtochinon. Sm. 187° u. Zers. (Soc. 67, 3) Benzoat d. 1-Oxy-9-Ketofluoren. Sm. 128-129° (B. 31, 3034).
C 75,9 - H 3,8 - O 20,2 - M. G. 316.
Binaphtyldichinhydron (A. 194, 205). - III, 396.
3) 3,4-Methylenäther d. 2-[3,4-Dioxyphenyl]-1,4-α-Naphtopyron. Sm. $C_{20}H_{12}O_4$ 253—254° (B. **31**, 708). 3) 3,4-Methylenäther d. 2-Keto-1-[3,4-Dioxybenzyliden]-α-Naphtofuran (B. 30, 1469). 4) Benzoat d. 1-Oxyxanthon. Sm. 206,5° (B. 27, 1996). — III, 201.
5) Benzoat d. 2-Oxyxanthon. Sm. 151° (B. 27, 1996). — III, 201.
6) Benzoat d. 3-Oxyxanthon. Sm. 147° (B. 27, 1996). — III, 201.
7) Benzoat d. 4-Oxyxanthon. Sm. 172° (B. 27, 1996). — III, 201.
8) Säure (aus 2-Oxynaphtalin). Sm. 281°. Ba + 7H₂O, Ag (M. 10, 116). II, 1914. 9) Verbindung (aus Diphenacylfumarsäure) (A. 299, 60).
 10) Verbindung (aus d. Lakton d. γ-Oxy-γ-Phenylcrotonsäure) (A. 299, 56).
 C 72,3 - H 3,6 - O 24,1 - M. G. 332. $C_{20}H_{12}O_5$ 1) Fluoresceïn (Dioxyfluoran). Zers. oberh. 290°. Ca + 4H₂O, Ba + 9H₂O (A. 183, 2; 212, 351; 215, 83; 238, 360; B. 11, 1342; 21, 3377; 24, 1413; 28, 312, 428; 29, 2623). — II, 2060. 2) Hydrochinonphtalein (2,7-Dioxyfluoran). Sm. 226—227° (B. 6, 507; 11, 714; 28, 2959; 31, 1743). — II, 2065. C 68,9 — H 3,4 — O 27,6 — M. G. 348. 1) Cörulin (B. 14, 1326; A. 209, 274). — II, 2088. 2) Diresorcinphtalein + 3½,420. Zers. bei 245° (B. 13, 1654; M. 5, 182). C20 H12 O6 **— II**, 2067. 3) Anhydrid d. Resorcinoxalein (B. 14, 2565). — II, 937. C 65.9 - H 3.3 - O 30.8 - M. G. 364.C20H12O7 Hydrogallein (A. 209, 266). — II, 2093.
 Phloroglucinphtalein. Zers. bei 240° (B. 13, 1652). — II, 2093. 3) 1,9-Laktond.1-Oxy-2,3-Diacetoxyl-10-Keto-9,10-Dihydroanthracen-9-Methenylcarbonsäure (Diacetat d. o-Dioxyanthracumarin). Sm. 260° (B. **20**, 3143). — II, 2028. C 63,2 — H 3,1 — O 33,7 — M. G. 380. $\mathbf{C}_{20}\mathbf{H}_{12}\mathbf{O}_{8}$ 1) Pyrogallinphtaleïnsäure (B. 4, 457, 663; A. 209, 261). — II, 2087. $C_{58,2} - H_{2,9} - O_{38,8} - M.G.$ 412. $\mathbf{C}_{20}\mathbf{H}_{12}\mathbf{O}_{10}$ Use, 2 — H 2,9 — U 58,8 — M. G. 412. 1) Verbindung (aus d. Purpurogallin $C_{20}H_{16}O_{9}$) (J. 1882, 682). — III, 346. C 85,7 — H 4,3 — N 10,0 — M. G. 280. 1) Dinaphtazin. Sm. 283—284° (Gm. 7, 24; B. 3, 291; 10, 573, 772; 19, 2795; 23, 1329; 26, 183; 29, 2089; Soc. 51, 100; A. 253, 28; 255, 147; 272, 351). — IV, 1083. 2) s- $\alpha\beta$ -Dinaphtazin. Sm. 242—243° (B. 23, 1333; 26, 184; 29, 2089, 2091; A. 272, 333). — IV, 1084. $\mathbf{C}_{20}\mathbf{H}_{12}\mathbf{N}_{2}$

 $\mathbf{C}_{20}\mathbf{H}_{12}\mathbf{N}_{2}$

3) $\alpha\beta$ - $\beta\beta$ -Dinaphtazin. Sm. 240° (B. 29, 2087). — IV, 1085.

4) 2, 3-Biphenylen-1, 4-Benzdiazin (Phenanthrophenazin). Sm. 217°. HCl (A. 237, 340; 292, 264). — IV, 1085. 5) Chinakridin. Sm. 2210 (B. 29, 81). — IV, 1086.

6) Chrysopiazin. Sm. 128—129° (Soc. 63, 1290). — IV, 1087.
7) Base (aus Oxychinakridon). Sm. 213° (B. 29, 81). — IV, 1087.
1) Dibrom-1,1'-Binaphtyl. Sm. 215° (A. 144, 80). — II, 295.

 $\mathbf{C}_{20}\mathbf{H}_{12}\mathbf{Br}_{2}$ $\mathbf{C}_{20}\mathbf{H}_{12}\mathbf{Br}_{6}$

1) $\alpha\beta\beta$ -Tribrom- $\alpha\alpha\beta$ -Tri[P-Bromphenyl]äthan. Sm. 245° (A. 296, 247). 1) Dinaphtylenthiophen. Sm. 147° (B. 27, 3001). C 89,8 — H 4,9 — N 5,2 — M. G. 267.

 $\mathbf{C}_{20}\mathbf{H}_{12}\mathbf{S}$ $\mathbf{C}_{20}\mathbf{H}_{13}\mathbf{N}$

1) $\beta\beta$ -Dinaphtylenamin (β -Dinaphtylearbazol). Sm. 159° (cor.). Pikrat (B. 15, 2174). — IV, 472.

2) isom. $\beta\beta$ -Dinaphtylcarbazol. Sm. 169—170°. Pikrat (B. 19, 2242). — IV, 473.

3) isom. Dinaphtylcarbazol. Sm. 216°. Pikrat (B. 18, 3259). — IV, 473.

4) 2,3-Diphenylenindol. Sm. 188-1890 (Soc. 71, 1124). C 81,4 - H 4,4 - N 14,2 - M. G. 295

C20 H13 N3

1) 2-[2-Naphtyl]- $\beta\beta$ -Naphtriazol. Sm. 186° (B. 28, 2202). — IV, 1170. 2) α -Amido- $\alpha\beta$ -Naphtazin. Sm. bei 325° (B. 29, 2089). — IV, 1215. 3) Amidophenanthrophenazin. Sm. 279° (B. 21, 2306). — IV, 1214. C 88,9 — H 5,2 — O 5,9 — M. G. 270.

 $C_{20}H_{14}O$

1) 10-Oxy-9-Phenylanthracen (Phenylanthranol). Sm. 141-1440 u. Zers. (A. 202, 54). — II, 1094.

2) 1,1'-Dinaphtyläther. Sm. 109—110°. Pikrat (B. 14, 195). — II, 857. 3) 2,2'-Dinaphtyläther. Sm. 105°; Sd. über 360°. Pikrat. Sm. 122 bis

122,5° (A. 209, 149; B. 13, 1850; 14, 199; 15, 306; Soc. 40, 5). — II, 877.

4) Verbindung (aus $\alpha \zeta$ -Diketo- $\alpha \beta \delta \zeta$ oder $\alpha \gamma \delta \zeta$ -Tetraphenyl- $\beta \delta$ -Hexadiën). Sm. 92—94° (A. **302**, 214). C 83,9 — H 4,9 — O 11,2 — M. G. 286.

C20H14O2

C20H14O8

 1) 1,4-Dioxy-2-[2-Naphtyl]naphtalin. Sm. 169—170° (Soc. 67, 658).
 2) α-Dioxybinaphtyl. Sm. 300° (J. r. 6, 183). — Π, 1004.
 3) 2,2'-Dioxy-1,1'-Binaphtyl. Sm. 217°. Pikrat (J. r. 6, 187; B. 14, 2345; 15, 2166; 21, 3562; 23, 3368; Bl. [3] 19, 610). — II, 1004. 4) isom. P-Dioxybinaphtyl. Sm. 1956 (B. 15, 807). — II. 1005.

5) 9-Oxy-10-Oxyphenylanthracen (A. 202, 58; 209, 277; B. 13, 1617). **- II**, 1112.

6) 10-Oxy-9-Keto-10-Phenyl-9,10-Dihydroanthracen (Phenyloxanthra-

nol). Sm. 208° (A. 202, 58; 209, 277; B. 13, 1617). — III, 260.
7) Benzyläther d. 1-Oxy-9-Ketofluoren. Sm. 93—94° (B. 31, 3034).
8) 1,2-Dibenzoylbenzol. Sm. 145—146° (B. 9, 32, 309). — III, 305.
9) 1,3-Dibenzoylbenzol (Isophtalophenon). Sm. 99,5—100° (B. 13, 320). - III. 304.

10) 1,4-Dibenzoylbenzol (Terephtalophenon). Sm. 159-160° (B. 9, 31, 309;

19, 147, 1847). — III, 305.
11) Lakton d. α-Oxytriphenylmethan-2-Carbonsäure (Phtalophenon; Diphenylphtalid). Sm. 115°; Sd. 419—428° u. Zers. (B. 14, 1866; 17, 387; A. 202, 50; 290, 234; A. ch. [6] 1, 523). — II, 1722.

12) Lakton d. α-Oxy-α'-Phenyl-α²-Biphenylmethan-α', 2-Carbonsäure (L. d. Phenylbenzhydryl-o-Benzoësäure). Sm. 204-206° (J. pr. [2] 41,

149). — II, 1722.

13) Benzoat d. Cyklophenylenbenzylidenoxyd. Sm. 150—190° (M. 16, 279). C 79.5 - H 4.6 - O 15.9 - M. G. 302.

1) 2-[1-Naphtyl]äther d. 1,2,4-Trioxynaphtalin. Sm. 240-245° (B. 30, 2566)

2) 4-[1-Naphtyl]äther d. 1,2,4-Trioxynaphtalin. Zers. bei 220° (B. 30,

3) 9,9-Dioxy-10-Oxyphenylanthracen (A. 202, 91). — II, 1116.

4) 10-Oxy-9-Keto-10-[?-Oxyphenyl]-9,10-Dihydroanthracen (Oxyphenyloxanthranol). Sm. 194° u. Zers. (B. 13, 1618). — III, 260.

5) 2-[4-Phenylbenzoyl] benzol-1-Carbonsäure. Sm. 225° (220°). Ca, Ni, Pb, Cu, Ag (*J. pr.* [2] 41, 147; *A.* 257, 96). — II, 1726. 6) Hydrofluoransäure (Anhydro-?-Dioxytriphenylmethan-2-Carbonsäure). Sm. 226—228° (214—217°). Ag (A. 212, 350; B. 25, 1388; 28, 431). II, 1911.

- C20H14O3
- 7) α,2-Lakton d. α-Oxy-P-Oxytriphenylmethan-2-Carbonsäure (Monoxydiphenylphtalid). Sm. 61—66° u. 155° (B. 13, 1613). — II, 1910.

 8) Benzoat d. 2-Oxydiphenylketon. Fl. (M. 17, 107). — III, 193.

 9) Benzoat d. 4-Oxydiphenylketon. Sm. 112,5° (A. 210, 251; B. 6, 1245;
- 14, 1841). III, 194.
- 10) Verbindung (aus Phenanthroxylenacetessigsäureäthylester). Zers. bei 2850 (Soc. 59, 14). — II, 1908. 11) Verbindung (aus β -Benzoylpropionsäure). Sm. 191—192° (A. 299, 61).
- 12) Verbindung (aus β-Phtalylpropionsäure). Sm. 235—237° (B. 11, 1680). **- II**, 1875.

C 75,4 - H 4,4 - O 20,1 - M. G. 318.C20 H14 O4

- 1) P-Dibenzoyl-1,3-Dioxybenzol. Sm. 149° (A. 210, 259). III, 305. 2) P-Dibenzoyl-1,4-Dioxybenzol. Sm. 207° (A. 210, 264). III, 305.
- 3) 3,4-Methylenäther d. γ -Keto- γ -[1-Oxy-2-Naphtyl]- α -[3,4-Dioxy-phenyl]propen. Sm. 154—155° (B. 31, 707).
- 4) 2,2'-Bi-1,3-Diketo-2-Methyl-2,3-Dihydroinden. Sm. 203-205° (B. 31, 1163).

5) Naphtochinhydron (A. 167, 359). — II, 982.

- 6) Binaphtyldihydrochinon (Binaphtyldichinol). Sm. 176-178° (A. 194, 207; B. 17, 3024; 19, 2492). — III, 397. 7) Isobinaphtyldichinon. Sm. 250—260° u. Zers. (Soc. 47, 104). — III, 397.
- 8) Diacetat d. Dioxypyren. Sm. 166-167° (M. 4, 322). II, 1003. 9) Dibenzoat d. 1,2-Dioxybenzol. Sm. 840 (880) (A. 107, 247; 210, 261;

301, 104). — II, 1149.

10) Dibenzoat d. 1,3-Dioxybenzol. Sm. 117°. + AlCl₃ (A. 138, 78; 210, 256; 301, 104; B. 11, 2269; 26 [2] 492; J. pr. [2] 26, 64, [2] 36, 10; G. 15, 261). — II, 1149.

11) Dibenzoat d. 1,4-Dioxybenzol. Sm. 199° (A. 210, 263; B. 12, 661).

- II, 1150. 12) Säure (aus Naphtalin). Pb, Pb₃, Ag₂ (A. 144, 86). II, 1912. 13) Säure (aus 2-Oxynaphtalin). Sm. 223-224°. Ba + 2H₂O (M. 10, 120). - II, 1912.
- 14) α , 2'-Lakton d. α -Oxy- α -[2,4-Dioxyphenyl]- $\alpha\alpha$ -Diphenylmethan-2'-Carbonsäure (Benzolresorcinphtaleïn). Sm. 175—176°. + CHCl_s. Sm. 113—114° (B. 14, 1860). — II, 1986.
- 15) α,2-Lakton d. α-Oxy-ααα[P-Dioxytriphenyl]methan-2-Carbonsäure (Phenolphtaleïn). Sm. 100° (amorph); 253—255° (krystal.) (A. 202, 68; B. 16, 319; 29, 131; G. 25 [2] 142). — II, 1982.

 16) Isophenolphtaleïn. Sm. 69-70° (B. 28, 108, 431).

 17) Phenolphtalideïn. Sm. 212° (A. 202, 100). — III, 260.

 18) Corallinphtaleïn (B. II, 1427; A. 194, 140). — II, 1121.

- 19) Acetylderivat d. Säure C₁₈H₁₄O₄ (aus Dehydrobenzoylessigsäure). Sm. 145—150° (Soc. 47, 290). II, 1906.
- 20) Phenylester d. 6-Oxy-3-Benzoylbenzol-I-Carbonsäure. Sm. 840 (A.
- **290**, 168). 21) Diphenylester d. Benzol-1, 2-Dicarbonsäure. Sm. 70° (B. 7, 705; 13,
- 419; **28**, 108, 431). **II**, 1794. 22) Diphenylester d. Benzol-1,3-Dicarbonsäure. Sm. 120° (B. 7, 708).
- **II**, 1826.
- 23) Diphenylester d. Benzol-1,4-Dicarbonsäure. Sm. 1910 (B. 7, 707; A. **121**, 89). — II, 1832. C 71,8 — H 4,2 — O 23,9 — M. G. 334.

C₂₀H₁₄O₅

- 1) Di[3,4-Dioxy-1-Naphtyl]äther. Sm. 138° (B. 30, 2201).
- 2) Methyläther d. 2-Oxy-2'-Methyl-2,2'-Bi-1,3-Diketo-2,3-Dihydro-
- inden. Sm. 214—216° (B. 31, 1174).
 3) Fluorescin. Sm. 125—127° (A. 183, 26; M. 13, 423). II, 2037.
 4) Hydrochinonphtalin. Sm. 202—203°. + C₆H₆ (B. 11, 716). II, 2038.
 5) Benzoylpyrogallolphtalein. Sm. 189—190°. + 1 Molec. Essigsäure (B. 14, 1864). — II, 2037.
- 6) 2-[2-Acetoxylnaphtoyl]benzol-1-Carbonsäure. Sm. 170° (B. 16, 302). **– II**, 1909.
- 7) Aurinearbonsäure. Ca₃ (B. 25, 948). II, 2037.
- 8) Diphenylester d. 2-Oxybenzol-1, 3-Dicarbonsäure. Sm. 99°. Na (J. pr. [2] 44, 10). — II, 1936.

120

 $\mathbf{C}_{20}\mathbf{H}_{14}\mathbf{O}_{5}$ $C_{20}H_{14}O_6$

C20H14O9

C20 H14 N4

9) Dibenzoat d. 1,2,3-Trioxybenzol. Sm. 108° (A. 301, 106).

C 68,6 — H 4,0 — O 27,4 — M. G. 350.

1) Dimethyläther d. 2,2'-Bi-2-Oxy-1,3-Diketo-2,3-Dihydroinden. Sm. 175—180° (B. **31**, 1169).

2) Acetat d. Calycin. Sm. 178º (J. pr. [2] 58, 540).

3) Diresorcinphtalin. Sm. 1380 u. Zers. (B. 13, 1655; M. 5, 186). — II, 2038.

4) Brenzkatechinphtaleïn (B. 22, 2196). — II, 2065.
5) Allofluoresceïn (B. 28, 109; 31, 512, 1302).

6) Diacetat d. 1,3-Diketo-2-[3,4-Dioxybenzyliden]-2,3-Dihydroinden. Sm. 186° (B. 30, 1185).

7) 1, 3-Phenylenester d. 2-Oxybenzol-1-Carbonsäure. Sm. 111° (B. 26, 79). — II, *1493*.

8) 1,4-Phenylenester d. 2-Oxybenzol-1-Carbonsäure. Sm. 148° (B. 26, 81). — II, *1493*.

C = 65.6 - H = 3.8 - O = 30.6 - M. G. = 366. $C_{20}H_{14}O_{7}$

1) Hydrat d. 4,4'-Di[1,2-Naphtochinon]oxyd (B. 30, 2200).

2) Gallin (A. 209, 268). — II, 2086. 3) Phloroglucinphtalin (B. 13, 1653). — II, 2086. 4) Resorcinoxaleïn (B. 10, 1305; 14, 2563). — II, 937. C 62,8 — H 3,7 — O 33,5 — M. G. 382.

 $C_{20}H_{14}O_{8}$

1) 3,4-Methylenäther-7,8-Diacetat d. 7,8-Dioxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron (B. 29, 2435).

2) Triacetat d. 1,2,3-Trioxy-9,10-Anthrachinon. Sm. 181-1820 (B. 10, 40; Soc. 63, 1170). — III, 433.

3) Triacetat d. 1,2,4-Trioxy-9,10-Anthrachinon. Sm. 192-1930 (198

bis 200°) (A. 183, 192; B. 10, 553). — III, 434.

4) Triacetat d. 1,2,5[P]-Trioxy-9,10-Anthrachinon. Sm. 205° (192 bis 193°) (B. 12, 1289; A. 183, 192; 280, 17). — III, 435.

5) Triacetat d. 1,2,6-Trioxy-9,10-Anthrachinon. Sm. 195—196° (B.

10, 1822). — III, 435. 6) Triacetat d. 1,2,7-Trioxyanthrachinon. Sm. 220° (J. 1873, 452; A.

280, 15). — II, 436. 7) Säure (aus 1-Oxynaphtalin). Sm. 246°. Ba (B. 21, 1614). — II, 2087.

C 60,3 - H 3,5 - O 36,2 - M. G. 398.

1) Psoromsäure (Parellsäure). Sm. 263—264°. Ag (G. 12, 431; A. 284, 129; 288, 59; 295, 226). — II, 2093, 2112.
2) Benzoat d. Sordidin. Sm. 222—223° (G. 24 [2] 330). — II, 2059.
3) Verbindung (aus d. Glykosid C₃₂H₃₄O₁₉). Sm. 250—255° (J. 1876, 852).

- III, 576.

C 45.6 - H 2.7 - O 51.7 - M. G. 526. $C_{20}H_{14}O_{17}$

1) Anhydrid d. Prehnomalsäure. Sm. 210° (B. 4, 275).

C 85,1 — H 5,0 — N 9,9 — M. G. 282. 1) P-Diimido-1,1'-Binaphtyl. 2 HCl (B. 19, 2551). — IV, 1073. $\mathbf{C}_{20}\mathbf{H}_{14}\mathbf{N}_{2}$

2) 1,1'-Azonaphtalin. Sm. 190° (B. 18, 298, 3252; 30, 81). — IV, 1389. 3) 1,2'-Azonaphtalin. Sm. 136° (B. 20, 612). — IV, 1389. 4) 2,2'-Azonaphtalin. Sm. 204° (B. 30, 82). — IV, 1389. 5) α -[2-Chinolyl]- β -[6-Chinolyl]äthen. Sm. 146—147° (B. 22, 287). — IV, 177° (B. 22, 287).

IV, 1078. 6) α-[2-Chinolyl]-β-[7-Chinolyl]äthen. Fl. (B. 23, 3650). — IV, 1078. 7) 2,4-Diphenyl-1,3-Benzdiazin. Sm. 119-120°. (2 HCl, PtCl₄), Pikrat

(B. 25, 3091). - IV, 1079.8) 2,3-Diphenyl-1,4-Benzdiazin (Diphenylchinoxalin). Sm. 124° (126°).

HCl (B. 24, 720; 27, 2181; J. pr. [2] 57, 546). — IV, 1079.
9) Dihydrophenanthophenazin. HCl (A. 292, 264). — IV, 1080.
10) Dihydrochrysopiazin. Sm. 132—133° (Soc. 63, 1289). — IV, 1080.

C 77,4 — H 4,5 — N 18,1 — M. G. 310.

1) Verbindung (aus 2,2' Azobenzol-1-Diazochlorid). Sm. 202—204° (B. 20, 2901). - IV, 1542.

2) Verbindung (aus Aposafranin u. αβ-Diamidoäthan) (B. 30, 2492). — IV, 1279.

3) Azinverbindung (aus 1,2,4,5-Tetraamidobenzol u. Penanthrenchinon) (B. **20**, 338). — **IV**, *1244*.

 $\mathbf{C}_{20}\mathbf{H}_{14}\mathbf{C}\mathbf{l}_{4}$ 1) 1,4-Di[$\alpha \alpha$ -Dichlorbenzyl] benzol. Sm. 91—92° (B. 9, 311). — III, 305. $C_{20}H_{14}S$

- 1,1'-Dinaphtylsulfid. Sm. 110°; Sd. 290°₁₅ (197—198°₀) (B. 7, 407; 22, 823; 23, 3046; 28, 2330; 29, 1327; J. pr. [2] 41, 217). II, 867.
 2) 1,2'-Dinaphtylsulfid. Sm. 60—61°; Sd. 290—291°₁₅ (B. 23, 2368; 28,
- 2330). II, 887.
- 3) 2,2'-Dinaphtylsulfid. Sm. 151°; Sd. 295—296°₁₅ (201—202°₀) (B. 22, 825; 26, 2816; 28, 2330; 29, 1327). — II, 887.

 $C_{20}H_{14}S_{2}$

- 1) 1,1'-Dinaphtyldisulfid. Sm. 91° (85°) (A. 132, 94; J. pr. [2] 47, 97). **— II**, 868.
- 2) 2,2'-Dinaphtyldisulfid. Sm. 139° (132°) (Z. 1869, 711; B. 8, 463; 21, 1100; J. pr. [2] 47, 98; [2] 49, 387; [2] 58, 181, 189). II, 888.
 1) 1-Arsenonaphtalin. Sm. 221° (B. 14, 913; 15, 1954). IV, 1693.

 $\mathbf{C}_{20}\mathbf{H}_{14}\mathbf{As}_{2}$ $\mathbf{C}_{20}\mathbf{H}_{14}\mathbf{H}\mathbf{g}$

- 1) Quecksilberdi[1-Naphtyl]. Sm. 243° (A. 147, 166; 154, 188; B. 12, 564; **27**, 249; **31**, 1530). — **IV**, 1712. 2) Quecksilberdi[**2-Naphtyl**]. Sm. 238° (B. **27**, 251; Soc. **65**, 878). —

IV, 1712.

 $C_{20}H_{14}Se$ $C_{20}H_{15}N$

- 1) **2,2'-Dinaphtylselenid.** Sm. 138,5°; Sd. 298°₁₂ (B. **27**, 1767). C 89,2 - H 5,6 - N 5,2 - M. G. 269.
- 1) 1,1'-Dinaphtylamin. Sm. 113° (111°); Sd. 310-315°₁₅. Pikrat (Bl. 18,
- 1) 1,1'-Dinaphtylamin. Sm. 113' (111'); Sd. 510-515'₁₅. Pikrat (Bl. 18, 68; B. 11, 639; 15, 615; 16, 14, 17). II, 600.
 2) 1,2'-Dinaphtylamin. Sm. 110-111'. Pikrat (B. 16, 17). II, 604.
 3) 2,2'-Dinaphtylamin. Sm. 170,5°; Sd. 471°. HCl, Pikrat (A. 211, 43; 279, 108; B. 13, 1300; 14, 1791, 2343; 15, 611; 16, 10; 18, 1586; 19, 2016; 20, 2619; 23, 1541; C. 1896 [1] 997). II, 603.
 4) 1,2-Diphenylindol. Sd. oberh. 360° (A. 239, 223). IV, 413.
 5) 2,3-Diphenylindol. Sm. 123-124°; Sd. 290-296°₁₀. Pikrat, + Aceton (A. 236, 136). M. 14, 282, 15, 402; B. 26, 1341; Soc. 65, 892). —

(A. 236, 136; M. 14, 282; 15, 402; B. 26, 1341; Soc. 65, 892). —

iv, 469. 6) 3-Methyl-5-Phenylakridin. Sm. 135—136°. HJ, H₂SÖ₃, Pikrat (A. 239, 60). — IV, 469.

7) Nitril d. Triphenylmethan-α-Carbonsäure. Sm. 127,5° (A. 194, 260; J. 1881, 518; Bl. [3] 9, 374). — II, 1481. 8) polym. Nitril d. Triphenylmethan-α-Carbonsäure. Sm. 210° (A. 194,

262). — II, 1481.

9) Nitril d. Triphenylmethan-2-Carbonsäure. Sm. 89°; Sd. 270—285°, 20—85 (B. **24**, 2572). — II, 1481.

10) Nitril d. Triphenylmethan-4-Carbonsäure. Sm. 99° (B. 26, 3089). **– II**, 1482.

C20 H15 N3

 $C_{20}H_{15}N_5$

- C 80.8 H 5.0 N 14.1 M. G. 297.1) 1-[1-Naphtyl]amidodiazonaphtalin (α-Diazoamidonaphtalin) (Z. 1866,
- 137). IV, *1574*. 2) 2-[2-Naphtyl]amidodiazonaphtalin. Sm. 156° (B. 19, 1282; Soc. 51,
- 191). IV, 1574. 3) 4-Amido-1-[1-Naphtylazo]naphtalin. Sm. 173—175°. HCl, 2HCl, H₂SO₄ (Z. 1866, 138, 331, 568; A. 129, 108; B. 7, 1291; 17, 477; 18, 297; 22, 590; 28, 2198; Soc. 51, 190). — IV, 1390. 4) α-Amido-β-Azonaphtalin. Sm. 152° (B. 20, 612). — IV, 1390. 5) β-Amido-β-Azonaphtalin. HCl, H₂SO₄ (B. 20, 2900; 28, 2202; Soc.

- 59, 698). IV, 1390. 6) isom. Amido-β-Azonaphtalin. Sm. 149° (B. 18, 2422). IV, 1391.
- 7) 1,3,5-Triphenyl-1,2,4-Triazol. Sm. 104°; Sd. oberh. 360°. HCl (J. pr. [2] **54**, 152). — **IV**, 1187.
- 8) 1,3,4-Triphenyl-1,2,5-Triazol. Sm. 122° (B. 21, 2806; 25, 2599). IV, 785.
- 9) **6-A**mido-2, **3-Diphenyl-1**, **4-Benzdiazin.** Sm. 175°. HCl (A. 292, 254). **– IV**, *1213*.
- 10) 5-Phenylhydrazonmethylakridin. H_2SO_4 (B. 20, 1549). IV, 422. C 73,9 — H 4,6 — N 21,5 — M. G. 325.
 - 1) ?-Phenylazo-?-[2-Naphtyl]azopyrrol. Sm. 151° (B. 19, 2256). IV, 1483.
- 2) Phenylhydrazon d. 3-Benzoyl-1,2,4-Benztriazin. Sm. 185° (B. 26,

2789). — IV, 1166. 1) β-Chlor-ααβ-Triphenyläthen. Sm. 117° (C. 1897 [2] 662). $\mathbf{C}_{20}\mathbf{H}_{15}\mathbf{Cl}$ $\mathbf{C}_{20}\mathbf{H}_{15}\mathbf{Br}$

1) β -Brom- $\alpha \alpha \beta$ -Triphenyläthen. Sm. 115° (C. 1897 [2] 662). 120*

C20H16O

C 88.2 - H 5.9 - O 5.9 - M. G. 272.

1) β -Oxy- $\alpha\alpha\beta$ -Triphenyläthen. Sm. 136°; Sd. 270—280°₄₀. Na (*Bl.* [3] 13, 858; [3] 15, 22; *B.* 26, 1957; 29, 2080; 32, 654; *A.* 275, 88; 296, 242; *C.* 1897 [2] 660). — II, 1094; III, 258. 2) $\alpha\alpha\beta$ -Triphenyläthanoxyd. Sm. 105° (*C.* 1897 [2] 662).

3) α-Keto-β-Phenyl-α-Biphenyläthan (Biphenylbenzylketon). Sm. 150°; Sd. oberh. 360° (B. 21, 1339). — III, 258; 4) 4-Benzoyldiphenylmethan. Sm. 157° (Bl. [3] 15, 948).

5) Benzylacenaphtylketon. Sm. 114° (B. 21, 1342). — III, 258.

6) Aldehyd d. Triphenylmethan-4-Carbonsäure. Sd. 190-195% + NaHSO₃ (B. 19, 2028). — III, 64. 7) Verbindung (aus Zimmtaldehyd) (A. 34, 160). — III, 58.

C 83,3 - H 5,5 - O 11,1 - M. G. 288.C. H16O2

1) α-Oxy-β-Keto-ααβ-Triphenyläthan. Sm. 84° (Bl. [3] 13, 860; C. 1897 [2] 661; B. **32**, 655). — III, 258.

 2) β-Keto-αβ-Diphenyl-α-[4-Oxyphenyl]äthan (p-Desylphenol). Sm. 133°;
 309-314°₄₅ (Soc. 57, 965). — III, 258.
 3) Triphenylessigsäure (Triphenylmethan-α-Carbonsäure). Sm. 264° u. Zers. (255—258° u. Zers.). Ag (A. 194, 261; Bl. [3] 1, 778; J. 1881, 853; J. pr. [2] 32, 624; B. 26, 2225; 28, 2782). — II, 1481.
4) Triphenylmethan-2-Carbonsäure. Sm. 162°. Ag (A. 202, 52; 234, 242; B. 14, 1866; 24, 2573; Bl. [3] 17, 979). — II, 1481.

5) Triphenylmethan-4-Carbonsäure. Sm 1610 (B. 26, 3079). — II, 1482.

6) 1-[P-Phenylbenzyl]benzol-2-Carbonsäure. Sm. 184—185°. Ag (J. pr. [2] 41, 150). — II, 1482. 7) Benzoat d. α-Oxydiphenylmethan. Sm. 87,5-89° (A. 133, 20). -

II, 1144. 8) Benzoat d. 4-Oxydiphenylmethan. Sm. 86° (G. 3, 254; J. 1873, 440).

- II, 1149. C 78.9 - H 5.2 - O 15.8 - M. G. 304.C20H16O8

- 1) 9,?-Dioxy-10-Oxyphenyl-9,10-Dihydroanthracen (A. 202, 98). II, 1116.
- 2) Methylaurin + H_2O . 2 + H_2SO_4 (A. 194, 133; 202, 201; M. 3, 485;
- 16, 362). II, 1121. 3) Rosolsäure (A. 179, 184; 196, 91; B. 10, 1201; J. pr. [1] 100, 49). —

4) Isorosolsäure (A. 243, 162). — II, 1028.

- 5) α -Oxytriphenylmethan-3-Carbonsäure. Sm. 160—162° (B. 16, 2369). **— II**, 1723.
- 6) α -Oxytriphenylmethan-4-Carbonsäure. Sm. 200°. Ba + 7H₂O (B. 7. 1210; **19**, 2029; **26**, 3081). — **II**, 1723.
- 7) 2'-Oxytriphenylmethan-4²-Carbonsäure. Sm. 210⁶ (B. 13, 1616). II, 1724.

8) Lakton d. α -Aethoxyl- α -Phenyl- α -[2-Oxy-1-Naphtyl]essigsäure. Sm. 145° (B. 31, 2824).

 Aethylester d. γ-[9-Keto-9,10-Dihydro-10-Phenanthrylen] propen-γ-Carbonsäure (α-Phenanthroxylenerotonsäure). Sm. 124° (B. 16, 278; Soc. 59, 8). — II, 1721. C 75.0 — H 5.0 — O 20.0 — M. G. 320.

C20H16O4

1) Phenolcorallin (B. 11, 1427; A. 194, 140). — II, 1121.

 2) Farbstoff (aus Corallin) + H₂O (M. 16, 378, 394).
 3) Resorcinphenylaceteïn. Sm. 266-268° (J. pr. [2] 48, 397). — II, 1123. 4) Aethylderivat d. 3-Benzoyl-4-Keto-6-Phenyl-3,4-Dihydro-1,2-

Pyron. Sm. 159° (Soc. 47, 283). — II, 1909. 5) Acetat d. 5-Oxy-1, 3-Diketo-2-Methyl-2, 4-Diphenyl-2, 3-Dihydro-R-

- Penten. Sm. 111-112° (A. 284, 268). III, 321. 6) Diacetat d. 1,3-Dioxy - 2 - Phénylnaphtalin. Sm. $136 - 137,5^{\circ}$ (A. 296, 17).
- 7) Diacetat d. 1,4-Dioxy-?-Phenylnaphtalin. Sm. 151,5—152,5° (A. 226, 31). — III, 460.
- 8) ?-Dioxytriphenylmethan-2-Carbonsäure. Sm. 225° (A. 202, 80). —
- 9) ?-Dioxytriphenylmethan-?-Carbonsäure. Sm. 1840 (B. 14, 1862). II, 1911.

- C20 H16 O4 10) Dimethylester d. 1-Phenylnaphtalin-2,3-Dicarbonsäure. Sm. 118 bis 120° (Am. 20, 95). 11) Aethylester d. 2-[2-Oxynaphtoxyl]benzol-1-Carbonsäure. Sm. 206°
 - (B. 16, 302). II, 1909.
 - 12) Aethylester d. 4,6-Diphenyl-1,2-Pyron-5-Carbonsäure. Sm. 120 bis 121º (Soc. 75, 253).
 - 13) Aethylester d. 9-Ketophenanthren 10-[Acetylmethylencarbonsäure] (Ae. d. Phenanthroxylenacetessigsäure). Sm. 184,5—185,5° u. Zers. (Soc.
 - 43, 28; 59, 14). II, 1908.

 14) Aethylester d. Isophenanthroxylenacetessigsäure. Sm. 177° (Soc. 59, 3). II, 1908.
 - 15) Diphenylester d. 1,2-Dihydrobenzol-3,6-Dicarbonsäure. Sm. 175°
 (A. 258, 26). II, 1759.
 - 16) Diphenylester d. cis. trans-1,4-Dihydrobenzol-1,4-Dicarbonsäure. Sm. 146° (A. **258**, 17). — II, 1761.
 - 17) Diphenylester d. 1,4-Dihydrobenzol-2,5-Dicarbonsäure. Sm. 1910 (A. **258**, 31). — II, 1760. C 71,4 — H 4,8 — O 23,8 — M. G. 336.
 - 1) 3,4-Methylenäther-2-Acetat d. γ -Keto- ε -[2-Oxyphenyl]- α -[3,4-Dioxyphenyl]- α δ -Pentadiën. Sm. 144—145° (B. 31, 729).
 - 2) Anhydrid d. $\alpha\beta\beta$ -Tri[1,3-Dioxyphenyl] äthan (A. 243, 171). II, 1045.
 - 3) α -[?-Trioxyphenyl]- $\alpha\alpha$ -Diphenylmethan-2'-Carbonsäure (B. 14, 1865). - II, 1986.
 - 4) α -Oxy- α -[2,4-Dioxyphenyl]- α α -Diphenylmethan-2¹-Carbonsäure (B) **14**, 1860). — II, 1986.
 - 5) $\alpha \gamma$ -Lakton d. $\alpha \delta$ -Dioxy- $\alpha \delta$ -Diphenylbutan- $\beta \gamma$ -Dicarbonsäure- β -Monäthylester. Sm. 64-68° (A. 293, 85).

 - (a) Dimethylester d. Pulvinsäure. Sm. 141° (138—139°). Piperidinverbindung (B. 13, 1634; A. 282, 40). II, 2030.

 (b) Monäthylester d. Pulvinsäure. Sm. 127—128° (125—127°) (B. 13, 1633; A. 219, 14; 282, 14; 284, 116, 123). II, 2030.

 (c) Verbindung (aus Corallin) + 2½ H₂O (M. 16, 393). C (68,1 H 4,5 O 27,3 M. G. 352.

 - 1) Gallol (B. 4, 556; A. 209, 264). II, 1124.

 $C_{20}H_{16}O_5$

C20H16O6

- 2) Pterocarpin. Sm. 152° (Bl. 23, 97; 48, 88; A. ch. [6] 17, 124). III, 672.
- 3) 2,5-Dimethyläther-3,6-Diphenyläther d. 2,3,5,6-Tetraoxy-1,4-Benzochinon. Sm. 171° (Am. 17, 650). III, 355.
- 4) Diacetat d. $\alpha\beta$ -Dioxy- $\gamma\delta$ -Diketo- $\alpha\delta$ -Diphenyl- α -Buten. Sm. 158° (isom. Form. Sm. 124—125°) (B. 27, 719). III, 317. 5) Diacetat d. 3,5-Dioxy-1,7-Dimethyl-9,10-Anthrachinon. Sm. 236
- bis 237° (A. 240, 277). III, 457.
- 6) Diacetat d. Dimethylanthraflavinsäure. Sm. 2230 (A. 240, 278). III, 457.
- 7) Diacetat d. Dimethylbenzdioxyanthrachinon. Sm. 1880 (A. 240,

- 278). III, 457.
 8) Triacetat d. 1,2,9-Trioxyanthracen. Sm. 188° (B. 14, 1263). II, 1115.
 9) Triacetat d. Verb. C₁₄H₁₀O₃. Sm. 165° (B. 21, 446). III, 430.
 10) αδ-Dibenzoyl-β-Buten-βγ-Dicarbonsäure (Diphenacylfumarsäure?). Zers. bei 130°. Ag₂ (A. 299, 58).
 11) Dehydroanisoylessigsäure (C. 1897 [2] 616).
- 12) Dimethylester d. Oxypulvinsäure. Sm. 117° (*J. pr.* [2] 57, 314).
 13) Monoäthylester d. Oxypulvinsäure. Sm. 139° (*J. pr.* [2] 57, 315).
 14) Verbindung (aus ααβ-Tri[1,2-Dioxyphenyl] äthan) (*A.* 243, 183).
- II, 1045. 15) Verbindung (aus $\alpha\alpha\beta$ -Tri[1,3-Dioxyphenyl]äthan) (A. 243, 177).
- II, 1045.
- 16) Verbindung (aus $\alpha\alpha\beta$ -Tri[1,4-Dioxyphenyl]äthan) (A. 243, 187). II, 1046. C20H16O7 C 65.2 - H 4.3 - O 30.4 - M. G. 368.
 - 1) Hydrochinonphtaleïnsäure (B. 6, 507). II, 2065.
 - 2) Anhydrid d. Diphenylessigweinsäure. Sm. 117,5° (A. ch. [7] 3, 484). **- II**, 1310.

- 3) Diacetylphyscion. Sm. 1830 (A. 284, 182). III, 641. C20 H16 O7
 - 4) Diacetat d. ?-Trioxy-?-Methyl-9,10-Anthrachinonmonomethyläther. Sm. 148° (Soc. 65, 862). — III, 455.
 - 5) Diacetat d. Emodinmonomethyläther. Sm. 185-186° (Soc. 65, 932). - III, 454.
- C 62.5 H 4.2 O 33.3 M. G. 384. $C_{20}H_{18}O_{8}$
 - 1) Lakton d. 2'-Oxy-2,4,4'-Triacetoxyldiphenylessigsäure. Sm. 152° (160,5°) (Soc. 69, 1267; 71, 1087).
 - 2) α , 2- β , 2'-Dilakton d. $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[5, 6-Dimethoxylphenyl]äthen-2,2'-Dicarbonsäure (Tetramethoxylphtalyl). Sm. noch nicht bei 300°

 - (M. 12, 53). II, 2099.

 3) Diacetat d. Maleinfluorescein. Sm. 157° (B. 18, 2865). II, 2050.

 4) Diacetat d. Kämpferid. Sm. 188—189° (B. 14, 2388). III, 632.

 5) Verbindung (aus 1,3-Dioxybenzol). Sm. 210° (Am. 9, 136). II, 919.

 6) Verbindung (aus Scoparin) + 1¹/₂ H₂O. Sm. 297° (M. 15, 351). —
 - III. 648.
- C 60,0 H 4,0 O 36,0 M. G. 400.C20H16O9
 - 1) Purpurogallin (siehe C₁₈H₁₄O₆). Na₄, Ba₃ (J. **1882**, 682). III, 346. 2) Triacetylphlobaphen (A. **202**, 277). III, 588.

 - 3) Rheumsäure (Z. 1868, 308). III, 591.
 C 55,6 H 3,7 O 40,7 M. G. 432.
- C20 H16 O11
- 1) Acetylderivat d. Dipyrogallolessigsäure + H₂O (C. 1895 [1] 530). C 51.7 - H 3.4 - O 44.8 - M. G. 464. $\mathbf{C}_{20}\mathbf{H}_{16}\mathbf{O}_{13}$
- 1) Granatgerbsäure (A. 143, 285). III, 590.
- $C_{20}H_{16}N_2$ C 84,5 - H 5,6 - N 9,9 - M. G. 284.
 - 1) 1,2-Di[Benzylidenamido]benzol. Sm. 106° (B. 29, 1499). IV, 563. 2) 1,4-Di[Benzylidenamido]benzol. Sm. 138-140° (B. 11, 599).
 - IV, 596.
 - 3) 4-Amido-1-[1-Naphtyl]amidonaphtalin (A. 243, 303). IV, 922.
 - 4) P-Diamido-1, 1-Binaphtyl. 2 HCl (B. 19, 2551). IV, 1073.
 - 5) ?-Diamidobinaphtyl (α-Naphtidin). Sm. 198°. 2 HCl, (2 HCl, PtCl₄),
 - H_2SO_4 (B. 18, 3254). IV, 1073. 6) P-Diamido-P-Binaphtyl (Dinaphtylin). Sm. 273°. (2HCl, PtCl₄) (B. 18, 3257). — IV, 1073.
 7) s-Di[l-Naphtyl]hydrazin. Sm. 275° (B. 18, 3253). — IV, 1503.
 8) s-Di[2-Naphtyl]hydrazin. Sm. 162—164° (B. 30, 82). — IV, 1504.

 - 9) α -Benzyliden- β -Diphenylmethylenhydrazin. Sm. 75° (J. pr. [2] 44, 204). — III, 187.
 - 10) 2-Phenyl-1-Benzylbenzimidazol (Phenylbenzaldehydin). Sm. 133 bis 134°. HCl, $(2 \text{ HCl}, \text{ PtCl}_4)$, HNO_3 , H_2SO_4 (B. 11, 1653; 29, 1499). –
 - 11) 2,2'-Dimethyl-3,3'-Bichinolyl + H_2O . Sm. $104-105^{\circ}$ (144° wasserfrei).
 - (2 HCl, PtCl₄) (B. **25**, 1757). **IV**, 1073. 12) 8,8'-Dimethyl-5,5'-Bichinolyl. Sm. 188°; Sd. 250°. 2 HCl, (2 HCl,
 - PtCl₄ + 2 H₂O). IV, 1074. 13) 2, 2'-Dimethyl-6, 6'-Bichinolyl (Dichinaldin). Sm. 206—207°; Sd.
 - oberh. 360°. (2 HCl, PtCl₄ + 2 H₂O), 2 HNO₃, $\dot{H}_2Cr_2O_7$ (A. 242, 326). IV, 1073.
 - 14) αβ-Di[6-Chinolyl]äthan. Sm. 124°.
 2 HCl, AuCl₈) (B. 23, 1115). IV, 1074. $2 \text{HCl} + 4 \text{H}_2 \text{O}$, $(2 \text{HCl}, \text{PtCl}_4)$,
 - 15) α -[2-Chinolyl]- β -[6-Chinolyl]äthan. Sm. 106,5° (B. 22, 289). IV, 1074.
 - 16) 2,3-Diphenyl-1,2-Dihydro-1,4-Benzdiazin(Diphenyldihydrochinoxalin). Sm. 146° (148-149°) (HCl, SnCl₂) (B. 24, 720; 27, 2181). — IV, 1074.
 - 17) 1-Phenylamido-3-Methyl- β -Naphtochinolin. Sm. 168° (B. 25, 2708). **– IV**, 1016.
 - 18) 2-Phenylamido-5-Methylakridin. Sm. 215-216° (B. 24, 2044). -IV, 1015.
 - 19) Tetrahydrochinakridin. Sm. 272° (B. 29, 83). IV, 1075.
 - 20) Tetrahydrophenanthrochinoxalin. Sm. 202—204° (A. 295, 221). IV, 482.
 - 21) Nitril d. α -Phenylamido- $\alpha\alpha$ -Diphenylessigsäure. Sm. 146,5° (B. 25, 2056). — II, 1465.

 $\mathbf{C}_{20}\mathbf{H}_{16}\mathbf{N}_{4}$

- C 76,9 H 5,1 N 17,9 M. G. 312. 1) 1,8-Diamidoazonaphtalin. HCl (B. 13, 717). IV, 1391. 2) 8,8'-Dimethyl-5,5'-Azochinolin. Sm. 260° (B. 23, 3677). IV, 1486. 3) 5,7-Diamido-2,3-Diphenyl-1,4-Benzdiazin. Sm. 260° (B. 30, 541).
- IV, 1243. 4) 6,7-Diamido-2,3-Diphenyl-1,4-Benzdiazin. Sm. 245° (B. 22, 446). — IV, 1244.
- 5) Phenylosazon d. Phenylglyoxal. Sm. 152° (A. 243, 247; J. pr. [2] **49**, 406).
- 6) Triphenyldicarbimid. Sm. $70-74^{\circ}$. HCl, $(2 \text{HCl}, \text{PtCl}_4 + 2 \text{H}_2 \text{O})$, $\text{H}_2 \text{SO}_4 + 2 \text{H}_2 \text{O}$ (B. 23, 1670). II, 352.

 $\mathbf{C}_{20}\mathbf{H}_{17}\mathbf{N}$ C 88,6 - H 6,3 - N 5,1 - M. G. 271.

1) α-[4-Methylphenyl]imidodiphenylmethan. Sd. oberh. 360° (A. 187, 214). — III, 188.

2) α-Benzylimidodiphenylmethan. Sm. 64° (B. 30, 3007).

3) α-Benzylidenamidodiphenylmethan (Benzylidenbenzhydrylamin). Sm. 98-99° (B. **26**, 2169). — III, 31.

4) 10-Methyl-5-Phenyl-5,10-Dihydroakridin. Sm. 104° (B. 16, 1815). **— IV**, 465. C 80,3 - H 5,7 - N 14,0 - M. G. 299.

 $C_{20}H_{17}N_{3}$

- 1) 4-Benzylidenamido-l-Phenylhydrazonmethylbenzol. Sm. 140° (J. pr. [2] **56**, 105). — **IV**, 753.
- 2) α -Amido- α -Cinnamylidenhydrazon- α -[2-Naphtyl]methan (Cinnamylen- β -Naphtenylhydrazidin). Sm. 170°. Pikrat (A. 298, 37; B. 30, 1880). **– IV**, 1168.

3) o-Azodibenzylanilin. Sm. 226° (B. 25, 3578). — IV, 1385.

- 4) 5[oder 6]-Amido-2-Phenyl-1-Benzylbenzimidazol (Amidobenzaldehydin). Sm. 121°. 2HCl (B. 29, 1502). IV, 1181.
 5) 5-Amido-2-Phenyl-1-[2-Methylphenyl]benzimidazol. Sm. 145° (Bl.
- [3] **17**, 870). **IV**, 1180.

6) 5-Amido-2-Phenyl-1-[4-Methylphenyl] benzimidazol. Sm. 1930 (Bl.

- [3] 17, 870). IV, 1180. 7) 2-[4-Amidophenyl]-1-[4-Methylphenyl] benzimidazol. Sm. 187—188°. $+\frac{1}{2}C_2H_6O$, $+HCl+\frac{1}{2}H_2O$, $+H_2SO_4+H_2O$ (Bl. [3] 19, 28; A. ch. [7] 14, 426). — IV, 1181.
- 8) 5-Phenylamido-2-Methyl-1-Phenylbenzimidazol. Sm. 162-164°.
- + C₂H₆O, HCl, (2 HCl, PtCl₄) (B. 25, 2720). IV, 1150. 9) 6-Phenylamido-2-Methyl-1-Phenylbenzimidazol. Sm. 115° (A. 286, 180). — IV, 1150.
- 10) 1-Phenylhydrazido-3-Methyl-β-Naphtochinolin. Sm. 189° (B. 25, 2708). — IV, 1185.

 $\mathbf{C}_{20}\mathbf{H}_{17}\mathbf{Cl}$ $C_{20}H_{18}O$

1) β -Chlor- $\alpha \alpha \beta$ -Triphenyläthan. Sm. 84° (A. ch. [6] 12, 272). — II, 289. C 87,6 — H 6,6 — O 5,8 — M. G. 274.

1) β -Oxy- $\alpha \alpha \beta$ -Triphenyläthan. Sm. 87° (C. 1897 [2] 661).

- 2) α-Oxy-P-Methyltriphenylmethan. Sm. 150° (A. 194, 283). II, 1089.
 3) Methyläther d. α-Oxytriphenylmethan. Sm. 82° (A. ch. [6] 1, 503).
- II, 1083. 4) 2-Keto-1,3-Dibenzylidenhexahydrobenzol. Sm. 1180 (B. 29, 1840,
- 5) 3-Keto-P-Dibenzyliden-I-Methyl-R-Pentamethylen. Sm. 149-151° (B. **29**, 1601). C 82.8 - H 6.2 - O 11.0 - M. G. 290.

C₂₀H₁₈O₂

- 1) ?-Di[α -Oxybenzyl]benzol. Sm. 171° (B. 9, 310). II, 1103. 2) $\alpha\beta$ -Dioxy- $\alpha\alpha\beta$ -Triphenyläthan. Sm. 164° (C. 1897 [2] 662). 3) β -Oxy- $\alpha\beta$ -Diphenyl- α -[4-Oxyphenyl]äthan. Sm. 161—162° (Soc. 57, 970). II, 1112.
- 4) Dibenzyläther d. 1,2-Dioxybenzol. Sm. 61° (A. 221, 378). II, 1050.
- 5) Dibenzyläther d. 1,3-Dioxybenzol. Sm. 76° (A. 221, 376). II, 1050. 6) Dibenzyläther d. 1,4-Dioxybenzol. Sm. 128° (130°) (Bl. [3] 1, 347;
- A. **221**, 370). II, 940, 1050. 7) Säure (aus Polyporsäure). Sm. 156°. Ag₂ (A. 195, 368). — II, 1907. C 78,4 — H 5,9 — O 15,7 — M. G. 306.

C,0H18O3 1) Methylleukaurin (A. 202, 210). — II, 1121.

C20 H18 O5

 $C_{20}H_{18}O_6$

- C20 H18 O8 2) ααβ-Tri[?-Oxyphenyl]äthan. Erweicht bei 140° (A. 243, 153). — II. 1028.
 - 3) Di[?-Oxyphenyl]-[?-Oxy-?-Methylphenyl]methan (A. 179, 198). II, 1028.
 - 4) Phenolphtalol (Dioxdiphenyl-Oxymethylphenylmethan). Sm. 190° (A. **202**, 87). — II, 1115.
 - 5) Triphenyläther d. ααα-Trioxyäthan (Orthoessigsäuretriphenyläther).
 Sm. 98-98,5° (B. 24, 3678). II, 655.

6) Dibenzoylmesityloxyd? Sm. 2130 (A. 278, 138).

- 7) Dehydrodiacetonphenanthrenchinon. Sm. 179-181° (B. 17, 2827). - III, 448.
- 8) $\alpha\gamma$ -Lakton d. α -Oxy- $\alpha\eta$ -Diphenyl- γ -Heptan- $\delta\eta$ -Oxyd- γ -Carbonsäure (Diphenyldibutolakton). Sm. 83—84° (A. 288, 193). C 74.5 - H 5.6 - O 19.9 - M. G. 322.
- $C_{20}H_{18}O_4$ 1) 3, 4-Methylenäther -2-Aethyläther d. γ -Keto - ε -[2-Oxyphenyl]- α -[3, 4-Dioxyphenyl]- α δ -Pentadiën. Sm. 90° (B. 31, 730).

2) $\beta \varepsilon$ -Diketo- $\gamma \delta$ -Dibenzoylhexan. Sm. 173 – 175 ° (B. 18, 2133). -

- 3) $\alpha \beta \gamma \delta$ -Tetraketo- $\alpha \delta$ -Di[2,4-Dimethylphenyl]butan. Sm. 180° (B. 25, 3475). III, 325.
- 4) α-Aethoxyl-α-Phenyl-α-[2-Oxy-l-Naphtyl]essigsäure. Ba (B. 31,
- 5) Dimethylester d. Polyporsäure. Sm. 1870 (A. 187, 193). II, 1907. 6) Aethylester d. 1,3-Diketo-5-Methyl-2-Phenyl-2,3-Dihydroinden-
- 2-Methylcarbonsäure. Sm. 95-96° (B. 29, 2378).

- 2-Methylcarbonsäure. Sm. 95—96° (B. 29, 2378).
 7) Aethylcarbonsäure. Sm. 116—118° (B. 28, 1391). II, 1906.
 8) Diphenylester d. cis-1, 2, 3, 4-Tetrahydrobenzol-1, 4-Dicarbonsäure. Sm. 107° (A. 258, 39). II, 1733.
 9) Diphenylester d. 1, 2, 3, 4-Tetrahydrobenzol-2, 5-Dicarbonsäure. Sm. 145° (A. 258, 32). II, 1833.
 10) Verbindung (aus Aethyloxanthranol). Sm. 84° (A. 212, 92). III, 244.
 11) Leukoverbindung d. Farbstoffes C₂₀H₁₆O₄ (aus Corallin) (M. 16, 379). C 71,0 H 5,3 0 23,7 M. G. 338.
 11) Tetramethyläther d. Dahydrobrasilin. Sm. 136—139° (M. 16, 914).
 - 1) Tetramethyläther d. Dehydrobrasilin. Sm. 136-139° (M. 16, 914). - III, 655.
 - 2) Säure (aus d. Verbindung $C_{22}H_{20}O_4$). Sm. 2030 u. Zers. $Ag_2 + H_2O$ (Soc. 59, 20). — II, 1981. 3) Anhydrid d. β-Benzoylpropionsäure. Fl. (Bl. [3] 19, 390).

- 4) Aethylester d. α -Benzoyl- β -Acetoxyl- β -Phenylakrylsäure. Fl. (A. 282, 184). — II, 1896.
- 5) Aethylester d. β -Keto- $\alpha\alpha$ -Dibenzoylpropan- α -Carbonsäure (Ac. d. Dibenzoylacetessigsäure). Fl. (A. 258, 273; 266, 100; 282, 184). — II, 1981.
- 6) Aethylester d. 4[oder 5]-Benzoxyl-1,6[oder 1,3]Dimethylbenzfuran-2-Carbonsäure. Sm. 94-95° (A. 283, 256). - III, 732.
- 7) α -Acetat- β -Aethyläther d. $\alpha\beta$ -Dioxy- $\gamma\delta$ -Diketo- $\alpha\delta$ -Diphenyl- α -Buten. Sm. 121—122° (B. 25, 3472; 27, 713). — III, 317.
- Sm. 121—122° (B. 25, 34/2; 27, 713). III, 317.

 8) β-Acetat-α-Aethyläther d. αβ-Dioxy-γδ-Diketo-αδ-Diphenyl-α-Buten. Sm. 114—115° (B. 27, 718). III, 317.

 9) Verbindung (aus Cubebin). Sm. 78° (M. 8, 469). II, 1114. C 67,8 H 5,1 O 27,1 M. G. 354.

 1) ααβ-Tri[1,2-Dioxyphenyl]äthan (A. 243, 181). II, 1044.

 2) ααβ-Tri[1,3-Dioxyphenyl]äthan (A. 243, 173). II, 1045.

 3) ααβ-Tri[1,4-Dioxyphenyl]äthan (A. 243, 185). II, 1045.

 4) Tetramethyläther d. Dehydrohämatoxylin. Sm. 202—206° (M. 16, 910). III. 664.

- - 910). III, 664.
- 5) Tri [3-Oxyphenyläther] d. ααα-Trioxyäthan. Sm. 155—159° u. Zers.
 (B. 24, 3684). II, 917.
- 6) $\alpha^{3,4}$ -Methylenäther- γ^4 -Aethyläther- γ^2 -Acetat d. γ -Keto- γ -[2, 4-Dioxyphenyl]- α -[3, 4-Dioxyphenyl]propen. Sm. $100-101^{\circ}$ (B. 31, 704).
- 7) Hydromethylumbelliferon (oder $C_{10}H_{10}O_3$). Sm. 257—259° (Am. 5, 436). - II, 1780.
- 8) Opiaurin (B. 20, 873). II, 1942.

9) α , 2-Lakton d. α -Oxydiphenylmethan- α , 2, 2'-Tricarbonsäure- α , 2'-C20 H18 Oa Diäthylester. Sm. 108° (A. 242, 234). — II, 2055. 10) Diäthylester d. Diphtalylsäure. Sm. 154-155° (A. 242, 225; B. 31,

2650). — II, 2029.

C 64.9 - H 4.8 - O 30.3 - M.G. 370.C20H18O7

 $C_{20}H_{18}O_{8}$

 $C_{20}H_{18}O_{9}$

C20H18O10

1) Hydrastonsäure. Sm. 168—169° (B. 23 [2] 492; 26 [2] 1008). — II, 2055.

2) Dibenzoat d. Glykogen (J. r. 23, 379). - II, 1143.

3) Verbindung (aus Filixsäure) (B. 21, 2966). — II, 1967. C 62,2 - H 4,7 - O 33,1 - M. G. 386.

1) Ratanhiaroth (J. 1880, 1060). — III, 591.

- 2) Phloroglucinvanillein (Methyläther d. Oktooxytriphenylmethan) (M. 3, 641). — II, 1046.
- 3) Pyrogallolvanilleïn (Methyläther d. Oktooxytriphenylmethan) (M. 3, 639). **– II**, 1046.
- 4) Diacetyl-o-Dikresoldicarbonsäure. Zers. bei 1630 (B. 21, 1640). -II. 2023.
- 5) Methylester d. Succinyl-2-Oxybenzol-1-Carbonsäure (A. 89, 362). **- II**, 1497.
- 6) Dimethylester d. Dibenzoylweinsäure. Sm. 1320 (135,50) (B. 15, 2243; Bl. [3] 11, 473; Soc. 69, 1585). — II, 1155.
- 7) Tetramethylester d. 1-Phenylbenzol-2, 3, 5, 6-Tetracarbonsäure. Sm. 130—133° (Am. 20, 105).
- 8) Tetramethylester d. 1-Phenylbenzol-?-Tetracarbonsäure. Fl. (Am. 20, 109).

9) Tetracetat d. Sappanin (B. 5, 574). — II, 1038.

- 10) Tetracetat d. 1, 3, 1', 3'-Tetraoxybiphenyl. Sm. 157—159° (M. 5, 178; 11, 420). — II, 1036.
- 11) Verbindung (aus 1,3-Dioxybenzol) (Am. 9, 136). II, 919. C 59,7 — H 4,5 — O 35,8 — M. G. 402.

1) Dibenzoylglykuronsäure. Sm. 107° (H. 13, 275). — II, 1155.

- 2) α , 2-Lakton d. $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[5,6-Dimethoxylphenyl] äthen-2, 2'-Dicarbonsäure (Tetramethoxyldiphtallaktonsäure). Sm. 284-292° u. Zers. Cu (M. 14, 133). — II, 2099.
- 3) Anhydrid d. Opiansäure. Sm. 234° (A. Spl. 7, 65; M. 4, 262; B. 19, 2286). — II, 1941.
- 4) Monacetat d. Irigenin. Sm. 1690 (B. 26, 2014). III, 596. 5) Triacetat d. Baptigenin. Sm. 214-2150 (C. 1897 [2] 429, 430).

C 57,4 — H 4,3 — O 38,3 — M. G. 418.

1) Hemlockgerbsäure (B. 17, 1041). — III, 684. 2) $\alpha\beta$ -Diketo- $\alpha\beta$ -Di [5, 6-Dimethoxylphenyl] äthan-2, 2'-Dicarbonsäure (Tetramethoxyldiphtalylsäure). Sm. 270° u. Zers. Ba + 3 H₂O (M. 12, 68). - II, 2100.

C 83.9 — H 6.3 — N 9.8 — M. G. 286. $C_{20}H_{18}N_2$

- 1) 2-Benzylidenamido-l-Phenylamidomethylbenzol. Sm. 107-108° (B. 27, 3241). — IV, 637.
- 2) 4-Benzylidenamido-1-[4-Methylphenyl]amidobenzol. Sm. 1390 (A. **255**, 167). — IV, 596.
- 3) α-Phenylimido-α-Diphenylamidoäthan (Triphenyläthanamidin) (J. 1865, 415). **— II**, *34*7.
- 4) β-Phenylimido-β-Phenylamido-α-Phenyläthan. Sm. 107—108°. (2 HCl, $PtCl_4$) (B. 17, 1427). — IV, 850.

5) α -Benzylimido - α -Phenylamido - α -Phenylmethan. Sm. 100° (B. 23, 3337; 30, 1787; A. 273, 9). — IV, 843.

- 6) α -[4-Methylphenyl]imido- α -Phenylamido- α -Phenylmethan. Sm. 133°. HCl, HNO₃, Pikrat (B. 27, 1701; 28, 871; A. 286, 356). — IV, 844.
- 7) α-Phenylimido-α-[2-Methylphenyl]amido-α-Phenylmethan. Sm. 110° (A. 273, 10). — IV, 844. 8) α -Phenylimido- α -Phenylamido- α -[4-Methylphenyl]methan. Sm. 168°
- (B. 21, 2656). IV, 851. 9) α -Methylimido- α -Diphenylamido- α -Phenylmethan. Fl. HCl, (2HCl,
- PtCl₄), Nitrat (A. 192, 16). IV, 843.
- 10) β -Benzyliden α -Phenyl- α -Benzylhydrazin. Sm. 1110 (A. 252, 289). **– IV**, 812.

11) α-Diphenylhydrazon-α-Phenyläthan. Sm. 97-98° (A. 239, 222). C20 H18 N2

12) β -Phenylhydrazon- $\alpha\alpha$ -Diphenyläthan (A. 248, 102).

13) α -Phenylhydrazon- $\alpha\beta$ -Diphenyläthan. Sm. 116° (106°; 135°) (A. 236, 135; 305, 173; Am. 16, 111). — IV, 777.

14) α-Phenylhydrazon-4-Methyldiphenylmethan. Sm. 109° (B. 26, 26). **— IV**, 777.

15) α-Phenyl-α-Biphenylhydrazon[4]äthan(Acetophenonhydrazonbiphenyl). Sm. 148° (B. **27**, 3107). — IV, 970. 16) Dilepidin. Fl. HNO₃ (J. **1878**, 891). — IV, 1065.

17) 2,3-[Methylisopropylbiphenylen]-1,4-Diazin (Methylisopropylphenanthrapiazin). Sm. 110-111° (Soc. 63, 1288). - IV, 1064.

18) α-2,3-Diphenyl-1,2,3,4-Tetrahydro-1,4-Benzdiazin. Sm. 105-106°. HCl (B. 27, 2183). — IV, 1065.

- 19) β -2, 3-Diphenyl-1, 2, 3, 4-Tetrahydro-1, 4-Benzdiazin. Sm. 142, 5°. HCl (B. 27, 2184). — IV, 1065.
- 20) Tetrahydrophenanthrodihydrochinoxalin. Sm. 145,5° (A. 295, 219). - IV, 482.

 $C_{20}H_{18}N_4$

- 21) Verbindung (aus d. Verb. $C_{14}H_{12}N_2$). Sm. $114-115^{\circ}$ (Am. 21, 57). C 76.4 H 5.7 N 17.8 M. G. 314.
- 1) 1,4-Di[4-Amidobenzylidenamido]benzol. Sm. bei 190° (B. 31, 2254). 2) $\alpha \beta$ -Di[Phenylhydrazon]- α -Phenyläthan. Sm. 152° (148°) (B. 21, 2496;

22, 2558; A. 243, 247). — IV, 761.
3) Dibenzylglykosin. Sm. 145° (Soc. 51, 555). — II, 523. 4) III-2-Methylformazylbenzol. Sm. 154-155° (B. 31, 1756).

5) α-Phenylazo-α-[4-Methylphenyl]hydrazon-α-Phenylmethan. Sm. 1550

(B. 27, 1691). — IV, 1261. 6) α -[4-Methylphenyl]azo- α -Phenylhydrazon- α -Phenylmethan. Sm.

155,5° (B. 27, 1690). — IV, 1261. 7) Tetraamidoisobinaphtyl. Sm.164—167° u.Zers. (Soc. 47, 106). — IV, 1299. 8) 5,5'-Dimethyl-1,1'-Diphenyl-3,3'-Bipyrazol. Sm. 142° (A. 278, 295).

- IV, 1262.

9) 5-Amido-2-[4-Amidophenyl]-1-[4-Methylphenyl]benzimidazol. Sm. $252-253^{\circ}$. $H_2SO_4 + 4H_2O$ (Bl. [3] 19, 29). — IV, 1288.

10) ?-Diamido-2-Phenyl-1-[4-Methylphenyl] benzimidazol. Sm. 213° (Bl. [3] 17, 873). — IV, 1299.

11) α -Aethylphenosafranin. (2 HCl, PtCl₄), HNO₃ (B. 19, 151). — IV, 1283. 12) β -Aethylphenosafranin. (2 HCl, PtCl₄), HNO₃ (B. 19, 152). — IV, 1283. 13) Dimethylphenosafranin. HCl, (2 HCl, PtCl₄), HNO₃ (Bl. 48, 637). —

14) Dimethylsafranin. HCl (A. 263, 337). — IV, 1288.

15) Parasafranin. HCl, HJ, HNO₃ (Soc. 35, 728). — IV, 1299.
16) Nitril d. Tri[4-Amidophenyl]methan-α-Carbonsäure (Hydrocyanrosanilin). 3 HCl, + HgCl₂ (A. 194, 274; Z. 1866, 2; B. 28, 1698, 1706). - II, 1481. 17) isom. Hydrocyanrosanilin. + Hg(CN)₂, 2 + Hg(CN)₂ (B. 28, 1705). 18) Safraninfarbstoff. HCl (B. 28, 273). - IV, 1286.

19) Verbindung (aus Aposafranin u. αβ-Diamidoäthan) (B. 30, 2491). — IV, 1279. C 70,2 — H 5,3 — N 24,5 — M. G. 342.

 $\mathbf{C}_{20}\mathbf{H}_{18}\mathbf{N}_{6}$

1) α -Phenylazo- α -[4-Methylphenyl]azo- α -Phenylhydrazonmethan. Sm. 174—175° (B. 27, 1689). — IV, 1492.

2) αα-Diphenylazo-α-[4-Methylphenyl]hydrazonmethan. Sm. 173-174° (B. 27, 1689). — IV, 1493.

 $C_{20}H_{18}S_{3}$ 1) Triphenyläther d. ααα-Trimerkaptoäthan. Sm. 71° (B. 25, 353). —

2) Triphenyläther d. $\alpha \alpha \beta$ -Trimerkaptoäthan. Sd. über 300° u. Zers. (B. **27**, 3056). C 87,9 — H 6,9 — N 5,1 — M. G. 273.

 $C_{20}H_{19}N$

1) α -Methylamidotriphenylmethan. Sm. 73°. (2HCl, PtCl₄ + 6H₂O) (B. 17, 745). — II, 642.

2) Methylphenylamidodiphenylmethan (B. 15, 1581).

3) β -Amido- $\alpha \alpha \alpha$ -Triphenyläthan. Sm. 116°. HCl (B. 17, 700; A. 296, 254). — II, 643.

- 4) Phenyldibenzylamin. Sm. 67° (70°). HCl + H₂O, (2HCl, PtCl₄), Pikrat C20 H10 N (B. 20, 1611; 31, 2674; 32, 522). — II, 521. $\mathbf{C}_{20}\mathbf{H}_{19}\mathbf{N}_{3}$ C 79.7 - H 6.3 - N 13.9 - M. G. 301.
 - 1) Phenylimidodi[Phenylamido]äthan (Acetylentriphenyltriamin). Sm. 190°. (4HCl, 3HgCl₂), (2HCl, PtCl₄) (A. 178, 125; J. r. 6, 148). — H, 348. 2) 5-Amido-1-Phenylimido-4-[4-Methylphenyl]imido-2-Methyl-1,4-Dihydrobenzol. Sm. 2040 (B. 26, 2781). — III, 359.

3) α -Phenylhydrazon- α -[4-Amidophenyl]- α -[4-Methylphenyl]methan.

Sm. 163⁶ (A. **286**, 330). — IV, 777.

4) Diphenyl-2-Methylphenylguanidin. Sm. 112°. (2 HC!, PtCl₄), HNO₃ A. 286, 367).

5) Diphenyl-4-Methylphenylguanidin. Sm. 128-129°. HCl, (2HCl, $PtCl_4$) (B. 2, 459; 19, 2412; A. 286, 357). — II, 488.

6) α-Amidotetrahydroazonaphtalin. Sm. 135° (B. 22, 627). — IV, 1389. C 72,9 — H 5,8 — N 21,3 — M. G. 329.

1) Triphenylbiguanid. Sm. 137—138°. HCl, (2HCl, PtCl₄) (B. 23, 1672). **- II**, *353*.

2) 1-[4-Methylphenylazo - 4 - Methylphenyl]amidodiazobenzol. Zers. bei 76° (B. 28, 170). — IV, 1572.

3) 6-[2-Naphtyl]amidoazo-1,2,5-Trimethylbenzimidazol. Sm. 254 bis 257° u. Zers. (B. 31, 2518). — IV, 1582.
4) 7-[2-Naphtyl]amidoazo-1,2,5-Trimethylbenzimidazol. Sm. 258 bis

259° (B. 31, 2521). — IV, 1583.

1) Phenyldi [4 - Methylphenyl] phosphin. C20H19P Sm. 57° (B. 21, 1512). — IV, 1671. C 86,9 — H 7,2 — O 5,8 — M. G. 276. $C_{20}H_{20}O$

 $\mathbf{C}_{20}\mathbf{H}_{19}\mathbf{N}_{5}$

 $\mathbf{C}_{20}\mathbf{H}_{20}\mathbf{O}_{2}$

 $\mathbf{C}_{20}\mathbf{H}_{20}\mathbf{O}_{3}$

 $C_{20}H_{20}O_4$

1) Keton (aus $\beta\eta$ -Diketo- $\delta\varepsilon$ -Diphenyloktan). Sm. 87°; Sd. 330—335° (B. **29**, 386). — III, 253.

C 82.2 — H 6.8 — O 10.9 — M. G. 292. 1) α' -Phenyl- $\alpha^2\alpha'^3$ -Di[4-Methylphenyl]methan- α' 2-Carbonsäure. Sm. 172°. Ba $+ 2^{1}/_{2}$ H₂O (Bl. [3] 17, 972).

C 77,9 — H 6,4 — O 15,6 — M. G. 308. 1) Propyläther d. Thebenol (Prothebenol). Sm. 103-105° (B. 32, 187). C 74,1 — H 6,2 — O 19,7 — M. G. 324.

 Diisosafrol. Sm. 145° (G. 24 [2] 127). — II, 977.
 Diacetonphenanthrenchinon. Sm. 187° u. Zers. (B. 17, 2826). — III, 448.

3) β-Oxy-αγδ-Triketo-αδ-Di[2,4-Dimethylphenyl]butan (1,3,4-Xyloylformoïn). Sm. 155° (B. 25, 3475). — III, 320.

4) β-Oxy-αγδ-Triketo-αδ-Di[2,5-Dimethylphenyl]butan (1,4,2-Xyloylformoïn). Sm. 164—168° (B. 27, 662). — III, 321.

5) β -Oxy- $\alpha \gamma \delta$ -Triketo- $\alpha \delta$ -Di[3,4-Dimethylphenyl]butan (1,2,4-Xyloylformoïn). Sm. 146° (B. 27, 659). — III, 321. 6) Bisäthylbenzoylcarbinol. Sm. 190—192° (B. 28, 3032).

7) β -Aethyläther d. $\alpha\beta$ -Dioxy- $\gamma\delta$ -Diketo- $\alpha\delta$ -[4-Methylphenyl]- α -Buten.

Sm. 140—146° (B. 27, 716). — III, 320.
8) Diäthyläther d. αβ-Dioxy-γδ-Diketo-αδ-Diphenyl-α-Buten. Sm. 83 bis 84° (B. 27, 717). — III, 317.
9) Monoisoamyläther d. Chrysin. Sm. 125° (B. 10, 177). — III, 628.

10) o-Kresochinon. Sm. 64° (C. 1898 [1] 887). 11) p-Kresochinon. Sm. 62° (C. 1898 [1] 887).

12) Diphenyloxetoncarbonsäure. Sm. 145-1480 u. Zers. Ca, Ba, Ag (A. 288, 198).

13) γ-Polyphenylcrotonsäure. Sm. 179°. Ca, Ag (A. 227, 258; 228, 177; 256, 74). — II, 1425.

14) Dimethylester d. β -Cocasäure. Fl. (A. 271, 204). — II, 1404. 15) Dimethylester d. β -Isoatropasäure. Sm. 91° (B. 21, 2349). — II, 1404.

16) Dimethylester d. α-Truxillsäure. Sm. 174°; Sd. bei 300° (B. 22, 127). • II, 1901.

17) Dimethylester d. β -Truxillsäure. Sm. 76° (B. 21, 2348; 22, 2247; Ph. Ch. 10, 421). — II, 1902.

18) Dimethylester d. γ-Truxillsäure. Sm. 126° (B. 22, 127). — II, 1903.

19) Dimethylester d. δ-Truxillsäure. Sm. 77° (B. 22, 2250). — II, 1903.

20) Monäthylester d. γ-Truxillsäure. Sm. 171—172°. Ag (B. 22, 2243). $C_{20}H_{20}O_4$ **– II**, 1903.

21) Monäthylester d. α-Isoatropasäure. Sm. 186°. Ba (B. 28, 140). — II, 1403.

22) Aethylester d. α ε-Diketo-α ε-Diphenylpentan-γ-Carbonsäure. Sm. 640 (B. 26, 914). — II, 1900.

23) Monäthylester d. αα-Diphenyl-α-Buten-βγ-Dicarbonsäure. Sm. 143,5 bis 144,5° (B. 28, 3193).

24) Monoäthylester d. $\beta\delta$ -Diphenyl- α -Buten- $\alpha\gamma$ -Dicarbonsäure. Sm. 98° (Soc. 75, 250).

25) Diäthylester d. $\alpha\beta$ -Diphenyläthen- $\alpha\beta$ -Dicarbonsäure (D. d. Diphenylmaleïnsäure) (B. 13, 745). — II, 1897.

26) Diäthylester d. αβ-Diphenyläthen-2,2'-Dicarbonsäure. Sm. 79—80°

(A. 243, 258). — II, 1896. 27) Diäthylester d. Säure C₁₆H₁₂O₄. Fl. (B. 27, 212). — II, 1899. 28) Diphenylester d. trans-Hexahydrobenzol-1,4-Dicarbonsäure. Sm. 151° (A. **258**, 43). — II, 1834. C 70,6 — H 5,9 — O 23,5 — M. G. 340.

 $C_{20}H_{20}O_{5}$

1) $\beta\beta$ -Dioxy- $\alpha\gamma\delta$ -Triketo- $\alpha\delta$ -Di[2,5-Dimethylphenyl]butan (1,4,2-Dixylyltetraketon). Sm. $109-110^{\circ}$ (B. 27, 662). — III, 325.

2) $\beta\beta$ -Dioxy- $\alpha\gamma\delta$ -Triketo- $\alpha\delta$ -Di[3,4-Dimethylphenyl] butan (1,2,4-Dixylyltetraketon). Sm. 108° u. Zers. (B. 27, 660). — III, 325.

3) γ^2 -Acetat- α^4 -Methyläther- γ^4 -Aethyläther d. γ -Keto- γ -[2,4-Dioxyphenyl]-α-[4-Oxyphenyl]propen. Sm. 75° (B. 32, 323).

 $\mathbf{C}_{20}\mathbf{H}_{20}\mathbf{O}_{6}$

C 67,4 — H 5,6 — O 27,0 — M. G. 356. 1) Pseudocubebin. Sm. 122° (C. 1896 [2] 127).

2) Chinhydrondimethyläther (A. 200, 255; B. 12, 1501). — III, 344.

3) Guajakblau (C. 1897 [1] 168).

4) Bim. β -[2-Methoxylphenyl]akrylsäure (bimere β -Cumarmethyläthersäure). Sm. 260—262° (J. pr. [2] 51, 323). — II, 1629.

5) Methylester d. $1-\alpha\beta$ -Di|Phenacetoxyl|propionsäure. Sd. 266—270 $^{\circ}_{17}$ (Soc. 69, 111).

6) Propylester d. d-αβ-Dibenzoxylpropionsäure. Sd. 267—269°₁₁ (Soc. 69, 110).

C20 H20 O7

C 64,5 - H 5,3 - O 30,1 - M. G. 372.1) Guajakgelb. Sm. 115° (C. 1897 [1] 167).

2) Dibenzoat d. Dulcitan (Berthelot, Chim. org. synth. 2, 193). - II, 1142.

 Dibenzoat d. Mannitan (Berthelot, Chim. org. synth. 2, 193). — II, 1142.
 Verbindung (aus 5-Oxy-1,4-Naphtochinon) (B. 18, 474). — III, 380. C 61.8 - H 5.1 - O 33.0 - M. G. 388.

C20H20O8

1) Benzoylhelicin (A. 96, 379; 154, 24). — III, 68.

2) Triäthyläther d. 1,2,3,5,6,7-Hexaoxy-9,10-Anthrachinon. Sm. 1950 (B. 21, 1171; Ph. Ch. 18, 560). — III, 439.

Diacetat d. 3,4,2',4',6'-Pentaoxydiphenylketontrimethyläther. Sm. 126—127° (B. 25, 1131). — III, 208.
 α,2-Lakton d. α-Oxy-αβ-Di[5,6-Dimethoxylphenyl]äthan-2,2'-Dicar-

bonsäure (Tetramethoxyldihydrodiphtalyllaktonsäure). Sm. 186—187° (M. 14, 137). — II, 2091. C 59,4 — H 4,9 — O 35,6 — M. G. 404.

 $\mathbf{C}_{20}\mathbf{H}_{20}\mathbf{O}_{9}$

C20H20O10

1) Eichengerbsäure. Sm. 140° (M. 4, 523). — III, 588.

2) Ratanhiagerbsäure. Pb (J. 1854, 656; 1880, 1060; A. 143, 274). — III, 590.

3) Diacetat d. Barbaloïn (C. 1897 [2] 525). C 57,1 — H 4,8 — O 38,1 — M. G. 420.

1) Hydrat d. 4,4'-Di[1,2-Naphtochinon]oxyd (B. 30, 2200).

2) Scoparin + $5 \, \text{H}_2 \, \text{O}$. Sm. $202 - 219^{\circ} \, \text{u}$. Zers. Ba + $2 \, \text{H}_2 \, \text{O}$ (A. 78, 16; 138, 190; M. 14, 202; 15, 342). — III, 648. 3) isom. Scoparin (A. 78, 17). — III, 648. 4) Verbindung (Weintraubenfarbstoff) (Bl. [3] 7, 823).

C 55,0 — H 4,6 — O 40,4 — M. G. 436.

 $\mathbf{C}_{20}\mathbf{H}_{20}\mathbf{O}_{11}$

1) α -Oxy- $\alpha\alpha$ -Di[5,6-Dimethoxylphenyl]methan- α ,2,2'-Tricarbonsäure. Sm. 140°. Ba₂ + 5 H₂O (*M.* 12, 72). — II, 2102. 2) Verbindung (aus Pyrogallol) (*Bl.* [3] 19, 829).

 $C_{20}H_{20}O_{12}$

C 53,1 — H 4,4 — O 42,5 — M. G. 452.

1) Luteïnsäure. Sm. 273-274° (J. 1870, 873). - II, 2107. C 49.6 - H 4.1 - O 46.3 - M. G. 484.

 $\mathbf{C}_{20}\mathbf{H}_{20}\mathbf{O}_{14}$ $\mathbf{C}_{20}\mathbf{H}_{20}\mathbf{O}_{16}$

1) Pentacetyldipyrogallocarbonsäure (A. 245, 39). — II, 1918. C 46.5 - H 3.9 - O 49.6 - M. G. 516.

1) Verbindung (aus Pyrogallol) (*Bl.* [3] **19**, 829). C 83.3 - H 6.9 - N 9.7 - M. G. 288.

 $\mathbf{C}_{20}\mathbf{H}_{20}\mathbf{N}_{2}$

1) $\alpha\beta$ -Di[γ -Phenylallylidenamido]äthan. Sm. 109—110° (B. 20, 271). — III, 60.

2) 1,2-Di[Phenylamidomethyl]benzol. Sm. 114° (B. 17, 1825; 31, 1708 Anm.). - IV, 641.

3) 1,4-Di[2-Methylphenylamido]benzol. Sm. 135°; Sd. bei 420° (i.

H-Strom). 2HCl (*J. pr.* [2] 34, 65). — IV, 585. 4) 1,3-Di[4-Methylphenylamido] benzol. Sm. 138—139°. 2HCl (*J. pr.* [2] 33, 219; [2] 51, 333). — IV, 572.

5) 1,4-Di[4-Methylphenylamido] benzol. Sm. 182°. 2HCl (B. 16, 2810;

J. pr. [2] 33, 230). — IV, 586. 6) 4-Amido-1-Dibenzylamidobenzol (4-Amidophenyldibenzylamin). Sm. 89-90°. + Benzaldehyd (B. 20, 1614). - IV, 586.

7) 2-Benzylamido-1-Phenylamidomethylbenzol. Sm. 88°. 2HCl (B. 27,

3241). — IV, 627. 8) **2,5-Di**athyl-**3,6-D**iphenyl-**1,4-D**iazin. Sm. 140°. (2HCl,PtCl₄) (Bl. [3]

17, 76). — IV, 1045.
9) 1-Aethyl-3-[4-Methylphenyl]-2,3-Dihydro-α-Naphtimidazol. Sm. 175—178° (B. 27, 2778). — IV, 918.

10) **2,3-Diphenyl-5,6,7,8,9,10-Hexahydro-1,4-Benzdiazin.** Sm. 167 bis 169° (A. 295, 217). — IV, 482.

11) αα-Di[2-Methyl-1-Indolyl]äthan (Aethylidenmethylketol). Sm. 191 (A. **242**, 376). — IV, 1046.

12) 2,3-|?-Methylisopropylbiphenylen]-1,4-Dihydro-1,4-Diazin (1,4-Dihydromethylisopropylphenanthrapiazin). Sm. 77-79° (Soc. 63, 1288). -

13) Verbindung (aus Biacenaphtylidenon) (A. 290, 203).

C 76.0 - H 6.3 - N 17.7 - M. G. 316. $C_{20}H_{20}N_4$

1) P-Diamidotetrahydroazonaphtalin. Sm. 226° u. Zers. (B. 22, 959). — IV, 1401.

2) Verbindung (aus Succinazon). Sm. 184—185° u. Zers. (B. 23, 1784). — IV, 758. C 69,7 — H 5,8 — N 24,4 — M. G. 344.

C20 H20 N6

1) $\alpha\beta\gamma$ -Tri[Phenylhydrazon] propan. Sm. 166° (B. 24, 3258; 27, 221). 2) 5,5'-Diäthyl-1,1'-Diphenyl-3,3'-Bi-1,2,4-Triazol. Sm. 186,5-187°.

2HCl (B. 22, 3115). — IV, 1331. 3) 5,5'-Dimethyl-1,1'-Di[4-Methylphenyl]-3,3'-Bi-1,2,4-Triazol. Sm. 259—260° (B. 22, 3116). — IV, 1331.

4) Verbindung (aus Benzenyldiamidoaceton) (B. 25, 1566). — II, 1194.

C 79.2 - H 6.9 - N 13.9 - M. G. 303.1) 4¹, 4², 4³-Triamido-?-Methyltriphenylmethan (Leukanilin). Sm. 100°. $3HCl + H_2O$, $(6HCl, 3PtCl_4)$, $3HNO_3$ (J. 1862, 349; A. ch. [6] 2, 441). — IV, 1197.

2) Phenyldi [2-Amidobenzyl] amin. Sm. 187°. (6 HCl, SnCl₄) (B. 25, 3584). **— IV**, 628.

3) α -Phenyl- α -[2-Benzylamidobenzyl] hydrazin. Sm. 110° (B. 27, 3243). **— IV**, 1130.

 $\mathbf{C}_{20}\mathbf{H}_{21}\mathbf{N}_{5}$

C20H22O

 $C_{20}H_{21}N_3$

C 71.5 - H 6.6 - N 21.9 - M. G. 319.1) ?-Di[4-Methylphenylazo]-1-Aethylpyrrol. Sm. 180° (B. 19, 2254). — IV, 1483.

C 86.3 - H 7.9 - O 5.7 - M. G. 278.

1) Propyläther d. 10-Oxy-9-Propylanthracen. Sm. 72°. Pikrat (B. 22, 1070). — II, 902.

2) 10-Keto-9,9-Dipropyl-9,10-Dihydroanthracen. Sm. 1240 (B. 22, 1069).

3) Keton (aus Methyl-o-Xylylketon). Sm. 1130 (J. pr. [2] 41, 411). -III, 250.

C 81,6 — H 7,5 — O 10,9 — M. G. 294. 1) $\alpha \vartheta$ -Diketo- $\alpha \vartheta$ -Diphenyloktan. Sm. 83—85° (C. **1896** [2] 1091). 2) $\beta \eta$ -Diketo- $\delta \varepsilon$ -Diphenyloktan. Sm. 161°; Sd. 335—340° (B. **29**, 384, 2121). — III, 301. $C_{20}H_{22}O_{2}$ 3) $\alpha \delta$ -Diketo- $\alpha \delta$ -Di[2,4-Dimethylphenyl] butan. Sm. 129° (B. 20, 1375). **— III**, 301. 4) $\alpha \delta$ -Diketo- $\alpha \delta$ -Di[2,5-Dimethylphenyl] butan. Sm. 123° (B. 20, 1378). **— III**, 302. 5) $\alpha\beta$ -Diketo- $\alpha\beta$ -Di[4(?)-Isopropylphenyl]äthan. Sm. 84° (B. 14, 325, 610; A. 84, 103; 128, 300). — III, 301. 6) α-Dipropylcarbobenzonsäure. Sm. 139° (A. 184, 167). — II, 1477.
7) β-Dipropylcarbobenzonsäure. Sm. 90° (A. 184, 167). — II, 1477.
8) Aethylester d. Diäthylcarbobenzonsäure. Sd. 207—209°₁₁ (A. 184, 167). 166; **261**, 300). — II, 1476. C 77,4 — H 7,1 — O 15,5 — - M. G. 310. C20 H22 O3 1) Anhydrid d. 3,4-Dioxy-1-Allylbenzol-3-Methyläther (A. 131, 281). **— II**, 973. 2) Anhydrid d. 1-Isopropylbenzol-4-Carbonsäure. Fl. (A. 87, 77). — II, 1385. 3) Aethylester d. Dibenzylacetessigsäure. Sm. 57° (A. 268, 123). — II, 1717. 4) Eugenolester d. 1-Isopropylbenzol-4-Carbonsäure (A. 108, 323). — II, 1385.
C 73,6 - H 6,7 - O 19,6 - M. G. 326.
1) Chekenon. Sm. 204-205° (B. 21 [2] 481). - III, 627.
2) Diäthyläther d. αδ-Diketo-αδ-Di[4-Oxyphenyl] butan. Sm. 132° (R. 10, 220). - III, 298.
Diarkenonia Sm. Dienekenonia ven (Dibenyladiningsung). α Modification (Dibenyladiningsung). α Modification (Dibenyladiningsung). $C_{20}H_{22}O_4$ 3) $\alpha \zeta$ -Diphenylhexan- $\beta \varepsilon$ -Dicarbonsäure (Dibenzyladipinsäure). α -Modif. Sm. $211 - 213^{\circ}$. Ag₂. β -Modif. Sm. 152° . Ag₂ (Soc. **65**, 1021). -II, 1895. 4) Superoxyd d. 1-Isopropylbenzol-4-Carbonsäure (J. 1863, 317). — II, 1385. 5) Dimethylester d. Hydropolyporsäure (A. 195, 368). — II, 1907. 6) Diäthylester d. $\alpha\alpha$ -Diphenyläthan- $\beta\beta$ -Dicarbonsäure. Sm. 54° (Soc. **59**, 731). — **II**, 1892. 7) Diäthylester d. αβ-Diphenyläthan-αα-Dicarbonsäure. Sm. 140—141° (136°) (B. 14, 1804; 28, 2448; A. 259, 72). — II, 1891.
 8) Diäthylester d. isom. ?-αβ-Diphenyläthan-αα-Dicarbonsäure. Sm. 48 bis 49° ; Sd. 224°_{19} (B. **28**, 816). — II, 1890. 9) Diäthylester d. $\alpha\beta$ -Diphenyläthan- $\alpha\beta$ -Dicarbonsäure. Sm. 84—85° (B. 14, 1804; 28, 2449). — II, 1890. 10) Diäthylester d. αβ-Diphenyläthan-2,2'-Dicarbonsäure. Sm. 69-71° (A. **239**, 68). — **II**, 1889. 11) Acetat d. Ostruthin. Sm. 81° (A. 183, 330). — III, 639. C 70,2 — H 6,4 — O 23,4 — M. G. 342. $C_{20}H_{22}O_5$ 1) Mangostin. Sm. 190° (A. 93, 83). — III, 637. 2) Tetramethyläther d. Brasilin. Sm. 138—139,5° (66—69° amorph) (B. **27**, 524; *M*. **15**, 140). — **III**, 653. 3) Anhydrid d. 2-Oxy-l-Isopropylbenzol-4-Carbonsäure (B. 11, 1576). - II, 1582. 4) Diäthylester d. α-Oxy-αβ-Diphenyläthan-2,2'-Dicarbonsäure (D. d. Hydrodiphtalylsäure). Fl. (A. 243, 256). — II, 1974. 5) Diacetat d. Verb. $C_{16}H_{18}O_3$ (aus Anethol). Fl. (B. 13, 147). — II, 852. $C_{16}O_{10$ C20H22O6 1) $\beta\beta\gamma\gamma$ -Tetraoxy- $\alpha\delta$ -Diketo- $\alpha\delta$ -Di[2,4-Dimethylphenyl]butan (B. 25, 3475). — III, 325. 2) Dibenzylidendulcit. Sm. 215—220° (B. 27, 1534). — III, 9. 3) Dibenzylidensorbit. Sm. 162° (A. ch.]6] 22, 424). — III, 9. 4) Dimethyläther d. s-Di[2,5-Dioxy-1-Methyl]-?-Biphenyldiacetat. Sm. 123° (B. 23, 3249). — II, 956. 5) Tetramethyläther d. Hämatoxylin. Sm. 139-140° (M. 15, 143). -

> 6) Acetat d. Peruresinotannol (B. 27 [2] 312). 7) Dibenzoat d. Mannit. Sm. 132° (B. 21 [2] 737). — II, 1142.

III, 664.

- C20H22O6 8) kryst. Physodsäure. Sm. 190—192° u. Zers. Pb (B. 30, 1987; J. pr. [2] 57, 416). 9) amorphe Physodsäure (J. pr. [2] 57, 421). 10) Diäthylester d. 2-Oxybenzoläthylenäther-1-Carbonsäure. Sm. 96 bis 97° (J. pr. [2] 21, 128). — II, 1494.
- 11) Verbindung (aus d. Glykosid $C_{26}H_{32}O_{11}$). Sm. 70° (R. 5, 127). III, 600. C 64,2 H 5,9 O 29,9 M. G. 374. C20H22O7
 - 1) Coccelsäure. Sm. 178° (A. 284, 175; 300, 356; J. pr. [2] 58, 472). II. 2059.
 - 2) Diäthylester d. 1-Keto-5-Methyl-3-[3,4-Dioxyphenyl]-1,2,3,4-Tetrahydrobenzol-3,4-Methylenäther-2,4-Dicarbonsäure. Sm. 102° (A. **303**, 230). C 61,5 — H 5,6 — O 32,8 — M. G. 390.
- C20H22O8 1) Coccognin (Z. 1870, 681). — III, 628.

 $\mathbf{C}_{20}\mathbf{H}_{22}\mathbf{N}_{4}$

 $C_{20}H_{23}N_3$

- 2) Populin + 2H₂O (Benzoat d. Salicin). Sm. 180° (wasserfrei) (Berx. J. 11, 286; J. 1852, 179; A. 96, 375; 101, 372; 119, 92; 154, 5; B. 6, 890; 12, 1648). — III, 608.
- 3) Hexamethyläther d. $\alpha\beta$ -Diketo- $\alpha\beta$ -Di[3,4,5-Trioxyphenyl]äthan (Hexamethoxylbenzil). Sm. 1890 (A. 263, 253). — III, 296.
- 4) Diacetat d. α-Hexaoxybiphenyltetramethyläther. Sm. 217—225° (A. 169, 236). — II, 1041. 5) Dibenzoat d. Mannit. Sm. 178° (A. 301, 102).
- 6) isom. Dibenzoat d. Mannit. Sm. 132° (C. r. 107, 326).
 C 56,9 H 5,2 O 37,9 M. G. 422.
- $\mathbf{C}_{20}\mathbf{H}_{22}\mathbf{O}_{10}$ 1) Erythrin + H₂O (Zweifach orsellinsaurer Erythrit). Sm. 148° (wasserfrei). Pb, Pb₃, Pb₃ + 3H₂O, Pb₅ (A. 61, 64; 68, 72; 117, 304; 134, 255; 139, 29; 149, 290; J. pr. [2] 57, 257). — II, 1752. C 54,8 — H 5,0 — O 40,2 — M. G. 438.
- $\mathbf{C}_{20}\mathbf{H}_{22}\mathbf{O}_{11}$ $\mathbf{C}_{20}\mathbf{H}_{22}\mathbf{O}_{12}$
 - 1) Assamar (A. 85, 74; J. 1860, 506). I, 1107. C 52,9 H 4,8 O 42,3 M. G. 454. 1) Thujin (J. 1858, 513). III, 614. 2) Diathylester d. Tetracetoxylbenzol-1,4-Dicarbonsäure. Sm. 202° (B. **20**, 2798). — II, 2068. C 82,8 — H 7,6 — N 9,6 — M. G. 290.
- $\mathbf{C}_{20}\mathbf{H}_{22}\mathbf{N}_{2}$ 1) Diallylidendi [4-Methylphenyl] diamin. (2HCl, PtCl₄) (A. 140, 96). —
 - 2) 2,3,5,6-Tetramethyl-1,4-Dihydro-1,4-Diazin. Sm. 107—108; Sd. 281° (B. 20, 429). — IV, 530.
 - 3) 2-Phenyl-1-Benzylhexahydrobenzimidazol. Sm. 132,5° (B. 29, 965;
 - A. 295, 217). IV, 482. 4) Base (aus d. Chlorid $C_{20}H_{10}N_2Cl$). Sd. 260°. (2HCl, PtCl₄) (Bl. [3] 11, 1037). C 75,5 — H 6,9 — N 17,6 — M. G. 318.
 - 1) **4,4'-Bi**[1-Phenyl-3-Methyl-4,5-Dihydropyrazol]. Sd. bei 300°₁₀₀ (B. 28, 714).
 - 2) 5,5'-Bi[1-Phenyl-3-Methyl-4,5-Dihydropyrazol]. Sm. 275—278° (B. **26**, 102). — **IV**, 937.
 - 3) 3, 6-Di [4-Isopropylphenyl]-1, 2, 4, 5-Tetrazin. Sm. 156-157° (B. 30, 2011). - IV, 1295.
- 1) $\beta\beta$ -Dichlor- $\alpha\alpha$ -Di[1,2,4-Trimethylphenyl]äthen. Sm. 118° (J. pr. [2] C20H22Cl2 **47**, 48). — II, 255. C 86,6 — H 8,3 — N 5,0 — M. G. 277. $\mathbf{C}_{20}\mathbf{H}_{23}\mathbf{N}$
 - 1) P-Amyl-P-Hexyl-1,2,3,4-Tetrahydrochinolin. Sd. 270-310° (B. 17, 1720). — IV, 211.
 - 2) Nitril d. α-Phenyl-α-Benzyl-δ-Methylpentan-α-Carbonsäure. Sm. 74°; Sd. 330—350° (B. 22, 1236). — II, 1472. C 78,7 — H 7,5 — N 13,8 — M. G. 305. 1) 5-Amidooktohydroazonaphtalin. Sm. 141° (B. 23, 1134). — IV, 1389.
 - 2) 2,5-Di[4-Isopropylphenyl]-1,3,4-Triazol. Sm. 210° (B. 30, 2011). IV. 1189.
 - 3) 4-Phenylazo-3-Methyloktohydro-β-Naphtochinolin. Sm. 97,5-98° (B. 24, 2664). — IV, 1581.
 - 4) 5-Phenylazo-3-Methyl-1,2,3,4,7,8,9,10-Oktohydro- β -Naphtochinolin (B. **24**, 2666). — IV, 1485.

1) $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[1,2,4-Trimethylphenyl]äthan. Sm. 143° (J. pr. C20 H23 Cl3 [2] 47, 48). — II, 242. 1) $\alpha\beta$ -Dibrom - α -[1, 2, 4-Trimethylphenyl]- β -[P-Brom-1, 2, 4-Trimethyl-C20 H23 Br3 phenyl]äthan. Sm. bei 250° (J. pr. [2] 47, 53). — II, 243. C 85,7 — H 8,6 — O 5,7 — M. G. 280. $C_{20}H_{24}O$ 1) α-Keto-αβ-Diphenyloktan (Hexyldcsoxybenzoïn). Sm. 59°; Sd. 344 bis 346° (B. **22**, 347). — III, 239. 2) α -Keto- $\alpha\beta$ -Di[4-Isopropylphenyl]äthan. Sm. 58° (B. 14, 325). — C 81.0 - H 8.1 - O 10.8 - M. G. 296. $\mathbf{C}_{20}\mathbf{H}_{24}\mathbf{O}_{2}$ 1) β -Oxy- α -Keto- $\alpha\beta$ -Di[4-Isopropylphenyl]äthan (Cuminoïn). Sm. 101° (98°) (B. 14, 324, 609). — III, 239. 2) isom. Cuminoin. Sm. 138° (B. 10, 55). — III, 239. 3) α-Naphtolcampher. Fl. (Bl. [3] 4, 726). — III, 487. 4) Benzoat d. δ -[4-Oxyphenyl]heptan. Sm. 29,5-30° (J. r. 23, 542). -II, 1148. C 76,9 — H 7,7 — O 15,4' — M. G. 312. $C_{20}H_{24}O_{3}$ α-Oxy-αα-Di[4-Isopropylphenyl]essigsäure (Cuminilsäure). Sm. 119 1) \(\alpha \text{-0xy} - \alpha \alpha \text{-151} \) \(\alpha \text{-150} \) \(\text{P1} \) \(\alpha \text{-150} \) \(\text{P1} \) \(\ $C_{20}H_{24}O_4$ 5) Bithymochinon. Sm. 200-2010 (B. 10, 2177; 18, 3195; 27, 958). III, 365. 6) Guajakharzsäure (oder $C_{20}H_{26}O_4$). Sm. 86° (C. 1897 [1] 167; M. 18, 719). 7) Verbindung (aus Tiglinaldehyd, Guajakol u. Kreosol) (C. 1897 [1] 168). C 69,8 — H 7,0 — O 23,2 — M. G. 344. $C_{20}H_{24}O_5$ Physol. Sm. 145° (*J. pr.* [2] **57**, 415).
 Guajakonsäure. Sm. 74—76° (*C.* **1897** [1] 167).
 C 66,7 — H 6,7 — O 26,6 — M. G. 360. $C_{20}H_{24}O_6$ 1) Tetraäthyläther d. Tetraoxybiphenylchinon + HNO₃ (B. 11, 801; M. **2**, 216). — **II**, 1042. 2) Dimethylester d. Dicampherylsäure. Sm. 226—227° (Soc. 75, 182).
 3) Dimethylester d. Säure C₁₈H₂₀O₆ (B. 27 [2] 594). 4) Diäthylester d. 1-Keto-5-Methyl-3-[2-Methoxylphenyl]-1,2,3,4-Tetrahydrobenzol-2, 4-Dicarbonsäure. Sm. 1130 (A. 303, 252) 5) Diäthylester d. 1-Keto-5-Methyl-3-[4-Methoxylphenyl]-1,2,3,4-Tetrahydrobenzol-2,4-Dicarbonsäure. Sm. 103° (A. 303, 248). Tetrahydrobenzol-2, 4-Dicarbonsäure. C 63,8 — H 6,4 — O 29,8 — M. G. 376. $C_{20}H_{24}O_7$ 1) Hexamethyläther d. Hexaoxydesoxybenzoin. Sm. 161-1620 (A. 263, 255). — III, 227. C 61,2 - H 6,1 - O 32,7 - M. G. 392. $C_{20}H_{24}O_{8}$ 1) Diäthylester d. $\beta\zeta$ -Diketo- δ -[3,4-Dioxyphenyl]heptan-3,4-Methylenäther- $\gamma \varepsilon$ -Dicarbonsäure. Sm. 146—147° (A. 303, 228). C 58,8 — H 5,9 — O 35,3 — M. G. 408. 1) Podophyllsäure. Sm. 158—160° (B. **15** [2] 378; **24** [2] 646). — III, 645. $C_{20}H_{24}O_{9}$ α-Oxy-α-Di[P-Trimethoxylphenyl]essigsäure (Hexamethoxylbenzilsäure). Sm. 175° u. Zers. (A. 263, 255). — II, 2090.
 C 56,6 — H 5,6 — O 37,7 — M. G. 424. $\mathbf{C}_{20}\mathbf{H}_{24}\mathbf{O}_{10}$ 1) Tetracetat d. Phenolylglykosid (Am. 5, 171). — II, 656. C 52,6 — H 5,3 — O 42,1 — M \dot{G} 456. $\mathbf{C}_{20}\mathbf{H}_{24}\mathbf{O}_{12}$ 1) Tetracetat d. Inulinanhydrid (A. 160, 86). — I, 1096. C 82,2 - H 8,2 - N 9,6 - M. G. 292.C20 H24 N2 1) Di [2,4,5-Trimethylbenzyliden]hydrazin. Sm. 181° (Bl. [3] 17, 370).
2) Di [2,4,6-Trimethylbenzyliden]hydrazin. Sm. 171° (Bl. [3] 17, 372).
3) Methyldesoxycinchonidin. Sm. 64—65°. (2 HCl, PtCl₄) (B. 31, 2355).
C 75,0 — H 7,5 — N 17,5 — M. G. 320. $C_{20}H_{24}N_4$ 1) Diallyldi [4-Methylphenyl]tetrazon. Sm. 104° (B. 26, 2180). — IV, 1309. $\mathbf{C}_{20}\mathbf{H}_{24}\mathbf{Cl}_{2}$ 1) $\alpha\beta$ -Dichlor- $\alpha\beta$ -Di[4-Isopropylphenyl]äthan. Sm. 184—185° (B. 10, 54).

1) $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[1,2,4-Trimethylphenyl]äthan. Sm. 238—243° u.

- II, 242.

Zers. (J. pr. [2] 47, 52). — II, 242.

 $\mathbf{C}_{20}\mathbf{H}_{24}\mathbf{Br}_{2}$

- $\mathbf{C}_{20}\mathbf{H}_{24}\mathbf{Br}_{4}$ 1) Tetrabromditerebenthylen (Bl. 50, 420; 51, 119). — II, 220.
- $\mathbf{C}_{20}\mathbf{H}_{24}\mathbf{Br}_{6}$ 1) Hexabromditerebenthyl (Soc. 54, 161). — II, 176.
- $\mathbf{C}_{20}\mathbf{H}_{25}\mathbf{O}_{36}$ 1) Eupatorin = $(C_{20}H_{25}O_{36})x$. Zers. bei 250°. HNO₃ (Am. 14, 224). — III. 631.
- $\mathbf{C}_{20}\mathbf{H}_{25}\mathbf{Br}$ 1) α -Brom- $\alpha\beta$ -Di[1,2,4-Trimethylphenyl]äthan. Sm. 177° (J. pr. [2] 47, 52). — II, 242. C 85,1 — H 9,2 — O 5,7 — M. G. 282. $C_{20}H_{26}O$
 - 1) 4-Isopropylbenzylideneampher. Sd. 62°; Sd. 230-237°, (B. 24 [2] 732). — III, *514*.
 - 2) Di[4-Isopropylbenzyl] äther (Cuminäther). Sd. bei 350° u. Zers. (G. 14, 500). — II, *1066*.
- $\mathbf{C}_{20}\mathbf{H}_{26}\mathbf{O}_{2}$
- C 80,5 H 8,7 O 10,7 M. G. 298. 1) $\delta \varepsilon$ -Dioxy- $\delta \varepsilon$ -Diphenyloktan. Sm. 64° (B. 6, 499). II, 1103. 2) $\beta \beta$ -Dii[?-Oxyphenyl] oktan. Sm. 83,5° (J. r. 23, 503). II, 996. 3) $\gamma \delta$ -Dioxy- $\gamma \delta$ -Diphenyl- $\beta \varepsilon$ -Dimethylhexan. Sm. 96° (J. pr. [2] 46, 481). II, 1103.
 - 4) $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di-[4-Isopropylphenyl]äthan (Hydrocumoïn). Sm. 135° (A. 137, 104; B. 8, 1152; 10, 54; 14, 324; 19, 256). - II, 1103.
 - 5) 2,2'-Dioxy-4,4'-Dipropyl-1,1'-Dimethyl-?-Biphenyl. Sm. 154° (J. r.
 - **14**, 141). **II**, 997.
 - 6) 3,3'-Dioxy-4,4'-Dipropyl-1,1'-Dimethyl-?-Biphenyl+H₂O. Sm. 165,5° (160°) (J. r. 14, 135; B. 23, 2761). II, 996.
 7) Dimethyläther d. 5,5'-Dioxy-1,2,4,1',2',4'-Hexamethyl-?-Biphenyl.
 - Sm. 126° (B. 17, 2983; 18, 2659). II, 996. 8) Diäthyläther d. 4,4′-Dioxy-3,3′-Diäthylbiphenyl. Sm. 120° (B. 17,
 - 475). II, 996. 9) Dipropyläther d. 4,4'-Dioxy-3,3'-Dimethylbiphenyl. Sm. 115° (B. **21**, 1068). — **II**, *993*.

 - 10) Diphenyläther d. $\alpha\eta$ -Dioxyoktan. Sd. $240-250^{\circ}_{20-25}$ (C. 1899 [1] 26). 11) Diphenyläther d. $\alpha\theta$ -Dioxyoktan. Sm. 83,5—84° (C. 1899 [1] 26).
- $C_{20}H_{26}O_3$

RICHTER, Lex. d. Kohlenstoffverb.

- C 76,4 H 8,3 O 15,3 M. G. 314.

 1) Toxigenon (B. 31, 2459, 2462).

 2) Acetat d. Cannabinol. Sm. 75° (C. 1898 [1] 850).

 C 72,7 H 7,9 O 19,4 M. G. 330.

 1) Tetraäthyläther d. 1,3,1',3'-Tetraoxybiphenyl. Sm. 110° (B. 20, $\mathbf{C}_{20}\mathbf{H}_{26}\mathbf{O}_4$ 1143). — II, *1036*.
 - 2) Guajakharzsäure (oder $C_{20}H_{24}O_4$). Sm. 75—80° (83—85°). Na₂ + 2H₂O, Na + H₂O, K₂ + 2H₂O, K + H₂O, Ba, Pb₂ (A. 112, 183; 119, 226; J. 1862, 466; M. 3, 822; 18, 719; 19, 102; C. 1897 [1] 167; B. 30, 378). **– II**, 1877.
 - 3) Aethyl-Geraniolester d. Benzol-1,2-Dicarbonsäure (Aethylester d. Rhodinolphtalsäure). Fl. (J. pr. [2] 56, 23).
- C 69,3 H 7,5 O 23,1 M.G. 346. $\mathbf{C}_{20}\mathbf{H}_{26}\mathbf{O}_{5}$ 1) Opiansäurepseudoester d. Geraniol (O. d. Rhodinol). Sm. 48,5° (B. **31**, 358).
- C 66,3 ~ - H 7.2 - O 26.5 - M. G. 362. $\mathbf{C}_{20}\mathbf{H}_{26}\mathbf{O}_{6}$ 1) Tetraäthyläther d. α-Hexaoxybiphenyl. Sm. 176° u. Zers. (B. 11, 802). - II, 1041.
- C 63.5 H 6.9 O 29.6 M. G. 378. $C_{20}H_{26}O_7$ 1) Laktonanhydrid d. trans-π-Oxycamphersäure. Sm. 205-206° (Soc. 69, 942).
 - 2) Anhydrid d. cis-π-Camphansäure. Sm. 164-165° (C. 1896 [2] 248; Soc. 69, 946).
 - 3) Anhydrid d. trans-π-Camphansäure (C. 1896 [2] 248; Soc. 69, 933).
 - 4) Diäthylester d. $\beta\zeta$ -Diketo- δ -[2-Methoxylphenyl]heptan- $\gamma\varepsilon$ -Dicarbonsäure. Sm. 125° (A. 303, 250).
 - 5) Diäthylester d. $\beta\zeta$ -Diketo- δ -[4-Methoxylphenyl]heptan- $\gamma\varepsilon$ -Dicarbonsäure. Sm. 173° (A. 303, 247).
 - 6) Triäthylester d. δ -Keto- β -Phenylpentan- $\alpha \alpha \gamma$ -Tricarbonsäure (Tr. d. Malonsäurebenzylidenacetessigsäure). Sm. 148° (B. 27, 2339). — II, 2048. C 56,3 - H 6,1 - O 37,6 - M G. 426.

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 $\mathbf{C}_{20}\mathbf{H}_{26}\mathbf{O}_{10}$ 1) Tetraäthylester d. 3,6-Dioxybenzoldimethyläther-1,2,4,5-Tetracarbonsäure. Sm. 95° (Am. 11, 12). — II, 2095.

C 46,0 - H 5,0 - O 49,0 - M. G. 522. $\mathbf{C}_{20}\mathbf{H}_{26}\mathbf{O}_{16}$ 1) Säure (aus Muskatnussöl) + 2H₂O (B. 6, 149). - III, 543. C 81,6 - H 8,8 - N 9,5 - M. G. 294. $\mathbf{C}_{20}\mathbf{H}_{26}\mathbf{N}_{2}$ 1) 2,2'-Dimethyl-5,5'-Diisopropylazobenzol (Azocymol). Sm. 86° (J. 1864, 532; J. r. 19, 118). — IV, 1389. 2) 1-Dibenzylamidomethylhexahydropyridin. Sm. 101-102° (Bl. [3] 13, 158). — IV, 21. 3) α -[2,4-Dimethylphenyl]imido- γ -[2,4-Dimethylphenyl]amidobutan. Sm. 147° (B. **29**, 1467). C 74,5 — H 8,1 — N 17,4 — M. G. 322. C20 H26 N4 1) $\beta \gamma$ -Di[Phenylhydrazon]oktan. Sm. 117,—118° (G. 28 [2] 265, 283; J. pr. [2] 58, 364, 402). 2) δ_{γ} -Di[Phenylhydrazon]oktan. Sm. 96—97° (G. 28 [2] 265; J. pr. [2] **58**, 364). 3) $\delta \varepsilon$ -Di[Phenylhydrazon]oktan. Sm. 138° (B. 31, 1219). 4) $\varepsilon \zeta$ -Di[Phenylhydrazon]- β -Methylheptan. Sm. 114° (115°) (B. 22, 2124; G. 28 [2] 266). — IV, 782. 5) $\beta \varepsilon$ -Di[Methylphenylhydrazon]hexan. Sm. 143—144° (G. 253, 23). — IV, 782. 6) bimeres-4-Amido-1-Isopropylbenzoleyanid (A. 66, 145). — II, 550. 7) Di[4-Isopropylbenzenyl]hydrazidin. Sm. 193° (B. 30, 2011). — IV. 1289. 8) 4-Dimethylamido-4'-[1-Piperidyl]methylazobenzol. Sm. 109° (A. 259, 44). — IV, 1386. 1) Di[2-Methyl-5-Isopropylphenyl]disulfid. Fl. (B. 6, 480). — II, 828. C20H26S2 1) Quecksilberdi [2-Methyl-5-Isopropylphenyl]. Sm. 1340 (B. 10, 1749; $\mathbf{C}_{20}\mathbf{H}_{26}\mathbf{H}\mathbf{g}$ 28, 592). — IV, 1712. C 85,4 — H 9,6 — N 5,0 — M. G. 281. $C_{20}H_{27}N$ 1) Di[4-Isobutylphenyl]amin. Sd. 305-315°. (2HCl, PtCl₄) (B. 20, 1256). — II, $5\overline{b}7$. 2) Di[2-Methyl-5-Isopropylphenyl]amin. Sd. 344—348°. HCl, (2HCl, PtČl₄) (B. 20, 1262). — II, 559. 3) Di[3-Methyl-6-Isopropylphenyl]amin. Sd. 340-345°. (2HCl, PtCl₄) (B. 20, 1260). — II, 560. 4) Di[4-Isopropylbenzyl]amin. Sm. 168°; Sd. 280—300°₁₀₀. HCl, (2HCl, PtCl₄) (A. Spl. 1, 143; A. 245, 309). — II, 560. C 84,5 — H 9,9 — O 5,6 — M. G. 284. $C_{20}H_{28}O$ 1) 4-Isopropylbenzylcampher. Sd. 225—230°₂₈ (B. 24 [2] 732). — III, 514. C 80,0 — H 9,3 — O 10,7 — M. G. 300.

1) Dicamphochinon. Sm. 128—130°; Sd. 320—325° (G. 23 [2] 316; 27, $\mathbf{C}_{20}\mathbf{H}_{28}\mathbf{O}_{2}$ [1] 182). — III, 501. 2) Dicamphanhexan-1,4-dion. Sm. 192-193°; Sd. 332-335° (G. 27 [1] 169, 203). $C_{20}H_{28}O_{8}$ C 76.0 - H 8.8 - O 15.2 - M. G. 316.1) Oxycopaïvasäure. Pb, Ag (A. 40, 111). — III, 554. Verbindung (aus Harzessenz) (B. 13, 1606). — III, 563.
 C 72,3 — H 8,4 — O 19,3 — M. G. 332.
 Absinthiin + ½H2O. Sm. 120—125° (J. 1861, 745). — III, 616.
 C 69,0 — H 8,0 — O 23,0 — M. G. 348.
 Elaterin. Sm. 200° (A. 2, 366; 43, 359; J. 1875, 829; Fr. 17, 500; 24, 156; Bl. [3] 17, 85). — III, 630. $C_{20}H_{28}O_4$ $\mathbf{C}_{20}\mathbf{H}_{28}\mathbf{O}_{5}$ 2) Diäthylester d. η -Keto- η -Phenyl- β -Methylheptan- $\varepsilon \varepsilon$ -Dicarbonsäure (D. d. β -Benzoyl- α -Isoamylisobernsteinsäure). Fl. (B. 23, 1500). - II, 1968. C 65,9 — H 7,7 — O 26,4 — M. G. 364. - H 7,7 - O 26,4 - M. G. 364. $\mathbf{C}_{20}\mathbf{H}_{28}\mathbf{O}_{6}$ C 55,9 = H 7,7 = O 20,4 = M. G. 504.
 Triäthylester d. α-Phenylpentan-ββγ-Tricarbonsäure. Sd. 336,1° (B. 22, 1818; 23, 654). = II, 2016.
 Triäthylester d. δ-Phenyl-β-Methylbutan-βγγ-Tricarbonsäure. Sd. 336,6° (B. 23, 655, 1943; 24, 1063; Ph. Ch. 10, 575). = II, 2016.
 C 50,4 = H 5,8 = O 43,7 = M. G. 476.
 Amyodoliyasinna Br. (4, 22, 11, 154, 227). II, 2108. $\mathbf{C}_{20}\mathbf{H}_{28}\mathbf{O}_{18}$ 1) Amygdalinsäure. Ba (A. 22, 11; 154, 337): — II, 2108. C 48,8 — H 5,7 — O 55,5 — M. G. 492. $\mathbf{C}_{20}\mathbf{H}_{28}\mathbf{O}_{14}$ 1) Tetraacetylarabin (Z. 1869, 265). — I, 1101. 2) Tetraacetylinulin (A. 160, 84). — I, 1096.

C 81,1 - H 9,4 - N 9,4 - M. G. 296. $\mathbf{C}_{20}\mathbf{H}_{28}\mathbf{N}_{2}$ 1) 4,4'-Di[Diäthylamido] biphenyl. Sm. 85°. (2 HCl, PtCl₄) (A. 115, 366; B. 14, 2166). — IV, 963. 2) Dicamphanhexanazin. Sm. 201—202°. HCl, (2HCl, PtCl₄), (HCl, AuCl₃), Pikrat, + HgCl₂ (G. 27 [1] 172). C 74,1 — H 8,6 — N 17,3 — M. G. 324.

1) 4,4'-Di[Diäthylamido]azobenzol. Sm. 170°. (2HCl, PtCl₄), 2 + 6J, (4HCN, Fe[CN]₂), Pikrat (M. 3, 710; 4, 285). — IV, 1362.

2) Diisobutyldiphenyltetrazon. Sm. 106—107° (A. 252, 284). — IV, 1308. $\mathbf{C}_{20}\mathbf{H}_{28}\mathbf{N}_{4}$ 3) Verbindung (Base aus Chlorhydrinimid). (2HCl, PtCl₄) (B. 8, 245). C 84,8 — H 10,2 — N 4,9 — M. G. 283. 1) 3-Amyl-2-Hexylchinolin. Sd. 355°. (2HCl, PtCl₄), Pikrat (B. 17, $\mathbf{C}_{20}\mathbf{H}_{29}\mathbf{N}$ 1719; **28**, 2820). — **IV**, 343. C 83,9 — H 10,5 — O 5,6 — M. G. 286. **Verbindung** (aus Sandelöl). Sd. 240° (Bl. 37, 303). — **III**, 549. $C_{20}H_{30}O$ Verbindung (aus Pinakonen). Sm. bei 70° (A. 292, 22).
 C 79,5 — H 9,9 — O 10,6 — M. G. 302. $C_{20}H_{30}O_{2}$ ββ-Dicampher (Dicamphoryl; Dicamphan-1,4-dion). Sm. 165—166°;
 Sd. oberh. 350° (G. 23 [2] 327; 27 [1] 159). — III, 501.
 d-α-Dicarvelon. Sm. 148—149° (A. 279, 380; 305, 225; B. 31, 1807). - III, 505. 3) 1-α-Dicarvelon. Sm. 148-149° (A. 279, 380; 305, 225). — III, 505. 4) i-α-Dicarvelon. Sm. 120-121° (A. 305, 226). 4) 1-α-Dicarveion. Sm. 120—121° (A. 305, 5) d-β-Dicarveion. Sm. 207° (A. 305, 229). 6) 1-β-Dicarveion. Sm. 207° (A. 305, 229). 7) i-β-Dicarveion. Sm. 168° (A. 305, 229). 8) d-γ-Dicarveion. Sm. 126° (A. 305, 230). 9) 1-γ-Dicarveion. Sm. 126° (A. 305, 230). 10) i-γ-Dicarveion. Sm. 112° (A. 305, 231). 11) Dieucarveion. Sm. 172° (A. 305, 236). 12) isom. Dieucarveion. Sm. 172° (A. 305, 236). 12) isom. Dieucarvelon. Sm. 128° (A. 305, 236). 13) Copaivasäure. Ca, Pb, Ag (A. 13, 177; 40, 310; J. 1867, 727; M. 2, 516). — II, *1437*. 14) Metacopaivasäure. Sm. 126—129° (M. 2, 516). — III, 559.

15) Dextropimarsäure. Sm. 210—211°. NH₄, Na + 5H₂O, K, Ca + H₃O, Ba + 9H₂O, Pb, Ag (A. 34, 272; 148, 143; J. 1859, 510; Bl. 21, 387; B. 11, 447; 17, 1885; 18, 2167, 3331; 19, 2167; 20, 3252; C. 1896 [1] 756). — II, 1437. 16) Lävopimarsäure. Sm. 140—150° (B. 20, 3248). — II, 1438. 16) Lävopimarsäure. Sm. 140—150° (B. 20, 3248). — II, 1438.
17) Sylvinsäure. Sm. 162° (129°; 145°) (A. 148, 147; 161, 115; J. 1847/48, 572; 1859, 508; 1861, 390; B. 17, 1885; 18, 2166). — II, 1438.
18) Säure (aus Terpentinöl) (J. 1854, 589). — III, 517.
19) Isosylvinsäure. Sm. 60,5—62,5° (B. 23, 1921). — II, 1438.
20) Verbindung (aus Bromcampher). Sm. 150° (G. 23 [1] 76).
21) Verbindung (aus α-π-Dibromcampher). Sm. 248° (G. 1896 [1] 1168). C 75,5 — H 9,4 — O 15,1 — M. G. 318.
1) Camphanoncamphersäure. Sm. 224—225°. Na, Ag (G. 27 [1] 183).
2) Säure (aus Colorbonium). Ca. Ra ± 2H O. Ch. Ag (J. x. 20, 477). — C20H20O2 2) Säure (aus Colophonium). Ca, Ba + 2H₂O, Cu, Ag (J. r. 20, 477). II, 1674. 3) Anhydrid d. Camphorensäure. Sm. 84-85° (C. 1896 [1] 306; Soc. 4) Anhydrid d. α-Dicamphandisäure. Sm. 143-144° (G. 27 [1] 193). 5) Anhydrid d. β -cis-Dicamphandisäure. Sm. 162° (G. 27 [1] 191). C 71.8 — H 9.0 — O 19.2 — M. G. 334.

1) Arnicin (J. 1859, 584; 1860, 544; 1861, 753). — III, 619.

2) Propheretin (Propheteïn) (J. 1859, 566). C20H30O4 3) Diacetat d. 1,3-Dioxy-?-Diisoamylbenzol. Sm. 890 (B. 25, 2653). — 4) Diacetat d. 1,4-Dioxy-?-Diisoamylbenzol. Sm. 116° (B. 25, 2650). — II, 972.

C 68,6 - H 8,6 - O 22,8 - M. G. 350.

1) Atractylin (J. 1873, 846). — II, 2109.

1) Säure (aus Onoketon). Sm. 75-80°. Ag (B. 29, 2990). C 65,6 - H 8,2 - O 26,2 - M. G. 366.

 $C_{20}H_{30}O_5$

C20 H30 O6

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C 60,2 — H 7,5 — O 32,2 — M. G. 398.

1) Eudesmin. Sm. 99° (C 1897 [1] 170).
C 55,8 — H 7,0 — O 37,2 — M. G. 430. $C_{20}H_{30}O_8$ C20 H30 O10 1) Ciliansäure. Sm. 242°. Ag₈ (B. 32, 686). 2) Tetraäthylester d. βζ-Diketo-δ-Methylheptan-αγεη-Tetracarbonsäure (T. d. Aethylidenbisacetondicarbonsäure). Sm. 1150 (A. 288, 356). 3) Pentaäthylester d. α-Penten-αβγγε-Pentacarbonsäure. Sd. 240 bis 250°₁₅ (B. 31, 50). Ba (Soc. 35, 22). — 4) Farbstoff (aus Lithospermum erythrorhizon). III, 667. C 52,0 — H 6,5 — O 41,5 — M. G. 462. 1) Gentiopikrin. Sm. 120—125° (J. 1862, 483). — III, 585. $\mathbf{C}_{20}\mathbf{H}_{30}\mathbf{O}_{12}$ 2) Hexaäthylester d. Aethanhexacarbonsäure. Sm. 101° (Am. 15, 527; 16, 574). C 48,6 - H 6,1 - O 45,3 - M. G. 494.C20 H30 O14 1) Tetraäthylester d. Succinylweinsäure. Fl. (A. Spl. 5, 281). — I, 797. C 47.1 - H 5.9 - O 47.0 - M. G. 510. $\mathbf{C}_{20}\mathbf{H}_{30}\mathbf{O}_{15}$ Tetracetat d. Milchzucker (Bl. 12, 209). — I, 1064.
 Tetracetat d. Rohrzucker (Bl. 12, 207). — I, 1069.
 C 80,5 — H 10,1 — N 9,4 — M. G. 298. $\mathbf{C}_{20}\mathbf{H}_{30}\mathbf{N}_{2}$ 1) 7-Amido-3-Amyl-2-Hexylchinolin. Sm. $68-69^{\circ}$. $(2 \text{HCl}, \text{PtCl}_4+4\text{H}_2\text{O})$, Pikrat (B. 24, 1738). — IV, 944. 2) Dicamphandihydropyridazin (Dicamphanazin). Sm. 155—156°. HCl, (HCl, AuCl₃), Pikrat (G. 27 [1] 164).

1) Diterebenthyldibromid (Soc. 54, 161). — II, 176.

2) Dibrompinakonan. Sm. 157° (B. 27, 2350; A. 292, 20). $\mathbf{C}_{20}\mathbf{H}_{30}\mathbf{Br}_{2}$ 1) Verbindung (aus Asphalt). — III, 565.
1) Chlorcampherpinakonan. Sm. 75° (B. 27, 2349; A. 292, 6).
2) Verbindung (aus Pinen). Sd. 180—185° (i. V.) (Soc. 55, 47). — III, 519. $C_{20}H_{30}S$ C20 H31 Cl 1) Bromcampherpinakonan. Sm. 103° (B. 27, 2349; A. 292, 8). $\mathbf{C}_{90}\mathbf{H}_{91}\mathbf{Br}$ C 83,3 — H 11,1 — O 5,6 — M. G. 288.

1) Cerin. Sm. 250° (J. 1884, 1461). — III, 627.

2) Fluavil. Sm. 42° (J. 1852, 644; 1859, 518). — III, 552.

3) Hämosterin. Sm. 37—42° (C. 1896 [1] 562).

4) Oxycampherpinakonan. Sm. 120° (B. 27, 2349; A. 292, 15). $C_{20}H_{32}O$ C 79,0 — H 10,5 — O 10,5 — M. G. 304. C20 H32 O2 1) Caryophyllin. subl. bei 280° (Berz. J. 22, 452; J. 1850, 510; B. 13, 800). — III, 626. Laktucerin. Sm. 210° (Hesse, N. Handwört. d. Ch. 4, 8; J. 1847/48, 824; A. 234, 243). — III, 634.
 Vitin. Sm. 250—255° u. Zers. NH₄, Ca, Pb, Cu, Ag (M. 14, 719). — III, 649. 4) Glykol d. Kohlenw. C₂₀H₃₀ (aus Campher). Sm. 150° (B. 27, 2350).
 5) Phenylester d. Myristinsäure. Sm. 36°; Sd. 230°₁₅ (B. 17, 1379). — II, 662. 6) Verbindung (aus Terpentinöl) (J. 1854, 589). C 71,4 — H 9,5 — O 19,1 — M. G. 336. C20 H32 O4 1) α -Dicamphandisäure. Ag, (G. **27** [1] 194). 2) β -cis-Dicamphandisäure. Sm. 178—180° (G. **27** [1] 191). 3) β -trans-Dicamphandisäure. Sm. 265—266°. K, Ag₂ (β . 27 [1] 188). 4) d-Monoborneolester d. Camphersäure. Sm. 176—177° (β . 23 [2] 284). **– III**, 471. 5) 1-Monoborneolester d. Camphersäure. Sm. 164—166° (B. 23 [2] 284). - III, 471. 6) Monogeraniolester d. Camphersäure (J. pr. [2] 53, 44). Acetat d. Ammoresitannol (B. 29 [2] 37). 8) Verbindung (aus Bisabolharz) (C. 1897 [2] 429). C 68,2 — H 9,2 — O 22,7 — M. G. 352 $\mathbf{C}_{20}\mathbf{H}_{32}\mathbf{O}_{5}$ Verbindung (aus Terpentinöl). Fl. (J. 1854, 589). — III, 517.
 C 65,2 — H 8,7 — Ö 26,1 — M. G. 368.
 α-Condurangin. Sm. 60-61° (G. 22 [1] 239). — III, 577.
 Caryophyllinsäure. Na₂, Ba + 1¹/₂ H₂O, Ag₂ (B. 6, 1053). — III, 626.
 C 62,5 — H 8,3 — O 29,2 — M. G. 384.
 Sangenin (G. 19, 29). $\mathbf{C}_{20}\mathbf{H}_{32}\mathbf{O}_{6}$ $C_{20}H_{32}O_{7}$ 1) Senegenin (G. 19, 32). — III, 610.

C 80,0 — H 10,7 — N 9,3 — M. G. 300. 1) Lepamin. Sd. 275°. 2 HCl, (2 HCl, PtCl₄) (J. 1863, 430). — IV, 314. $C_{20}H_{32}N_2$ C20 H32 S4 1) Thiuramsulfür d. Dekahydrochinolin, Sm. 80-81° (B. 23, 1152). IV, 56. 1V, 56.

1) Melanthin = $(C_{20}H_{33}O_7)_x$ (J. 1880, 1077). — III, 597. C 82,7 — H 11,7 — 0 5,5 — M. G. 290.

1) Cinchol + H₂O. Sm. 139° (wasserfrei) (A. 228, 294). — II, 1069.

2) Cupreol + H₂O. Sm. 140° (A. 228, 291). — II, 1068.

3) Quebrachol + xH_2O . Sm. 125° (A. 211, 272). — II, 1068.

4) d-Borneoläther. Sd. 285—290° (B. 11, 456). — III, 470.

5) i-Bornyläther. Sm. 90—91°; Sd. 322° (Bl. [3] 11, 902). — III, 473.

6) Geranioläther. Sd. 187—190° (A. 157, 238). — III, 477. $C_{20}H_{33}O_{7}$ C20H34O 6) Geramolather. St. 187–190 (A. 187, 288). — 111, 477.
7) d-Licarhodoläther. Sm. 145–150°₁₀ (Bl. [3] 17, 591).
8) l-Linaloloxyd. Sd. bei 320° (Bl. [3] 9, 806). — III, 478.
9) Verbindung (aus Citronellal). Sd. 185°₁₀ (C. 1897 [2] 305).
10) Verbindung (aus Onodaphne california). Sd. 167–168° (B. 13, 630). — III, 548. C 78,4 — H 11,1 — O 10,5 — M. G. 306. C20 H34 O2 1) Dibornyl. Sm. 164—166° (G. 23 [2] 329). — III, 501. 2) Dicampholyl. Sm. 90°; Sd. 330—335° u. Zers. (Bl. [3] 11, 616). 3) d-Campherpinakon. Sm. 157-158° (B. 22, 912; 27, 2348; A. 292, 1; G. 27 [1] 206). 4) 1-Campherpinakon (A. 292, 25). 5) Isobutyläther d. Benzoresinol. Sm. 210° (B. 26 [2] 679). — III, 554,
6) Verbindung (aus Chlorameisensäureäthylester). Sd. 249° u. Zers. (J. pr. [2] 6, 168). — I, 609. Verbindung (aus d. Keton $C_{10}H_{18}O$ aus Isolauronolsäure). Sm. 120° (C. 1897 [1] 814). C 74.5 - H 10.6 - O 14.9 - M. G. 322 $C_{20}H_{34}O_{3}$ 1) Asclepion. Sm. 104° (A. 69, 125). — III., 619.
2) Pyrolithofellinsäure (A. 44, 290). — I, 629.
3) Dichromatinsäure. Ba (H. 4, 194; 5, 75; A. 284, 92). — I, 629.
4) Divalerylendivaleriansäure. Sm. 125,5—128,5°; Sd. 295°. Na, Pb, Zn, Ag (Z. 1866, 462; B. 20, 2339). — I, 629.

5) Anhydrid d. Campholsäure. Sm. 56°; Sd. 209-210°₂₀ (Bl. [3] 11, 610).

6) Lakton d. Lithofellinsäure. Sd. 245-248°₁₆ (B. 28, 3047).

C 71,0 — H 10,0 — O 18,9 — M. G. 338. C20 H34 O4 1) Methylester d. Lichesterinsäure. Sm. 96-97° (C. 1898 [2] 964). 2) Monäthylester d. Camphothetischen Säure. Sd. 135-1400, (Soc. **63**, 504). C 64.9 - H 9.2 - O 25.9 - M. G. 370.C20 H34 O6 Norrangiformsäure + H₂O. Sm. 119° (wasserfrei). Ba₃ (J. pr. [2] 57, 279).
 C 62,2 - H 8,8 - O 29,0 - M. G. 386. $\mathbf{C}_{20}\mathbf{H}_{34}\mathbf{O}_{7}$ 1) Gratiolin (J. 1858, 518). — III, 592. C 59,7 — H 8,4 — O 31,8 — M. G. 402. $\mathbf{C}_{20}\mathbf{H}_{34}\mathbf{O}_{8}$ 1) Tetraäthylester d. Oktan-ααθθ-Tetracarbonsäure. Sd. 277-280% (Soc. 65, 600). 2) Tetraäthylester d. Oktan-γγζζ-Tetracarbonsäure. Sm. 93—94° (Soc. **65**, 1007). 3) Tetraäthylester d. β -Methylheptan- $\alpha\alpha\eta\eta$ -Tetracarbonsäure. Sd. 273 bis 276° 60 (Soc. 53, 201). — I, 862. 4) Diäthylester d. Dicaproylweinsäure. Fl. (Bl. [3] 11, 314).

5) Dipropylester d. norm. Divalerylweinsäure. Sd. 223°₁₂ (Bl. [3] **11**, 313). 6) Dipropylester d. Diisovalerylweinsäure. Fl. (Bl. [3] 11, 369). 7) norm. Dibutylester d. Dibutyrylweinsäure. Sd. 232-234° (B. 25 [2] 859; Bl. [3] 9, 683; [3] 11, 312). 8) Diisobutylester d. Dibutyrylweinsäure. Sd. 221-223 % (B. 25 [2] 859; Bl. [3] 11, 367). 9) Diisobutylester d. Diisobutyrylweinsäure. Fl. (Bl. [3] 11, 369). C 55,3 — H 7,8 — O 36,9 — M. G. 434. 1) Cyclamin. Sm. 236° (J. 1857, 518; 1887, 2305; A. 185, 214; Bl. 32, 417). — III, 579. $\mathbf{C}_{20}\mathbf{H}_{34}\mathbf{O}_{10}$

1) Geraniolsulfid. Fl. (A. 157, 238). — III, 477.

C₂₀H₃₄S

 $\mathbf{C}_{20}\mathbf{H}_{36}\mathbf{O}_{2}$

C 83,0 — H 12,1 — N 4,8 — M. G. 289. $C_{20}H_{35}N$ 1) Dibornylamin. Sm. 43—44°; Sd. 180—181°₁₂. HCl, (2HCl, PtCl₄), (HBr, Br₂), HNO₂ (A. 269, 354; B. 22, 1851). — IV, 56.
2) 2,6-Dimethyl-4-Tridekylpyridin. Sd. 215—217°₁₈. (2HCl, PtCl₄) (B.

22, 1758). — IV, 140. C 82,2 — H 12,3 — O 5,5 — M. G. 292. 1) Euphorbon. Sm. 67—68° (J. 1886, 1821). — III, 631. 2) Excretin. Sm. 95—96° (J. 1854, 713; A. 166, 213). — III, 631.

 $C_{20}H_{36}O$

C 77,9 — H 11,7 — O 10,4 — M. G. 308. 1) Gallocerin (B. 28 [2] 613).

Alkohol (aus Dicampholyl). Sm. 50° (Bl. [3] 11, 617).
 Nonadekin-α-Carbonsäure. Sm. 69°; Sd. 270°₁₅ (B. 27, 3404).
 Aethylester d. Leinölsäure. Sd. 270—275°₁₈₀ (J. pr. [2] 41, 534). —

C20 H36 O4

1, 536. C 70,5 — H 10,6 — O 18,8 — M. G. 340. 1) Lithofellinsäure. Sm. 204—205°. Na, Ba + 10 H₂O, Ag (A. 39, 242; 41, 150; 44, 289; 67, 53; J. 1863, 655; 1880, 831; J. Th. 1879, 241; B. 12, 1925; 28, 3045). — I, 695.

Acetylricinolsäure. Fl. (J. pr. [2] 39, 339). — I, 613.
 Diisovalerat d. εζ-Dioxy-ε-Deken. Sd. 270—280° u. Zers. (B. 12, 318; 24, 1275; 31, 1222; G. 25 [2] 57, 132). — I, 429.

 $C_{67.4} - H_{10.1} - O_{22.5} - M_{6.356}$ $\mathbf{C}_{20}\mathbf{H}_{36}\mathbf{O}_{5}$

1) θ-Keto-λ-Acetoxylheptadekan-α-Carbonsäure (Ketoacetoxylstearinsäure). Fl. (B. **27**, 3124).

C 59.4 - H 8.9 - O 31.7 - M. G. 404.C20 H36 O8

1) Convallamaretin (J. 1858, 519). — III, 578.

2) Triisoamylester d. $\alpha\beta$ -Dioxyäthan- $\alpha\alpha\beta$ -Tricarbonsäure (Tr. d. Desoxalsäure) (Z. 1865, 50). — I, 857.

1) Bisabolentetrahydrochlorid. Sm. 79,3° (C. 1897 [2] 428). C₂₀H₃₆Cl₄

2) Tetrahydrochlorid d. Copaïvabalsamöl. Sm. 77° (54°) (A. 7, 158; 34, 321). — III, 539. C 81,6 — H 12,9 — O 5,4 — M. G. 294.

 $C_{20}H_{38}O$

1) Verbindung (aus d. Säure $C_{10}H_{18}O_2$ aus Petroleum) (B. 24, 1813). — I, 523. C 77,4 — H 12,3 — O 10,3 — M. G. 310.

C20H38O2

1) Menthonpinakon. Sm. 94° (J. pr. [2] 55, 23).

2) μ-Nonadeken-α-Carbonsäure? Sm. 50°; Sd. 267°, Na, Ba, Ag (B. **27**, 3403).

3) Aethylester d. Oelsäure (A. 28, 256). — I, 526.
4) Aethylester d. Elaïdinsäure. Sd. über 370° u. Zers. (A. 28, 255). — I, 527. C 73,6 — H 11,6 — O 14,7 — M. G. 326.

 $\mathbf{C}_{20}\mathbf{H}_{38}\mathbf{O}_{3}$

1) Aethylester d. ι-Ketoheptadekan-α-Carbonsäure (Ae. d. Ketostearinsäure). Sm. 41° (B. 27, 174).

2) Aethylester d. β -Keto- γ -Heptyldekan- γ -Carbonsäure (Aethylester d. norm. Diheptylacetessigsäure). Sd. 331—333° (A. 200, 114). — I, 613.

3) Aethylester d. Ricinolsäure. Fl. (A. 64, 123). — I, 613.

4) Aethylester d. Pseudoricinolsäure (C. 1897 [1] 662).
5) Aethylester d. Ricinelaïdinsäure. Sm. 16° (A. 60, 324). — I, 613.
6) Bryoïdin. Sm. 135—136° (J. 1875, 860). — III, 557.
7) Verbindung (aus Isovaleraldehyd). Sd. 260—290° (B. 5, 481; 6, 982; **16**, 1038). — **1**, 950. C 70,2 - H 11,1 - O 18,7 - M. G. 342.

C20H38O4

1) Aethylester d. θ-Keto-λ-Oxyheptadekan-α-Carbonsäure (Ae. d. Keto-

oxystearinsäure). Sm. 54,5° (B. 27, 3124). 2) Aethylester d. Acetyljalapinolsäure. Sd. 224—225° (J. pr. [2] 57,

3) Diisoamylester d. Oktan-a 3-Dicarbonsäure (Diisoamylester d. Sebacinsäure). Sd. über 360° (J. 1876, 577). — I, 686.

4) Diacetat d. Cetenglykol. Sm. 55-56° (B. 23, 2353; A. 143, 270). -

5) Verbindung (aus Isobuttersäurealdehyd). Sd. 223-225° (Soc. 43, 95; M. 19, 374). — I, 947.

- $\mathbf{C}_{20}\mathbf{H}_{38}\mathbf{N}_{2}$
- C 78,4 H 12,4 N 9,1 M. G. 306. 1) Menthylhydrazonmenthon. Sm. 92-93°. HCl (J. pr. [2] 52, 424;
- J. r. 27, 544). IV, 486.

 1) Dichloreikosen (Eikosylenchlorid) (B. 12, 72). I, 137.

 1) Dibromeikosen (Eikosylenbromid) (B. 12, 73). I, 137.

 1) Eikosylenhydrochlorid. Sd. 225—230° (B. 12, 71). I, 137. $\mathbf{C}_{20}\mathbf{H}_{38}\mathbf{Cl}_{2}$ $\mathbf{C}_{20}^{\circ}\mathbf{H}_{38}^{\circ}\mathbf{Br}_{2}$
- C20H39Cl $\mathbf{C}_{20}\mathbf{H}_{40}\mathbf{O}$
 - C 81,1 H 13,5 O 5,4 M. G. 296.1) η-Ketoeikosan (Hexyltridekylketon). Sm. 210-211° (B. 15, 1717). -
- $C_{20}H_{40}O_{2}$
- η-Retoeikosan (Hexyltridekylketon). Sm. 210—211°₁₁ (B. 15, 1717). I, 1005.
 C 76,9 H 12,8 O 10,3 M. G. 312.
 Arachinsäure. Sm. 77° (73,5°). K, Ba, Sr, Cu, Ag (P. 90, 146; A. 89, 1; 97, 257; 101, 97; J. 1877, 729; 1884, 1193; Z. 1867, 256; B. 16, 1104; 26, 644; J. pr. [2] 48, 328, 487; M. 16, 877; 17, 528). I, 447.
 Säure (aus Onoketon). Sm. 73—74° (B. 29, 2990).
 Aethylester d. Stearinsäure. Sm. 32,9° (33,7°); Sd. 224° u. Zers. (A. 84, 302; 88, 292; 91, 154; J. 1858, 301; C. 1898 [2] 757). I, 445.
 Aethylester d. Neurostearinsäure (J. pr. [2] 25, 27). I, 447.
 Aethylester d. Dioktylessigsäure. Sd. 275—280°₁₀₀ (A. 204, 13). I. 447.

 - I, 447.
 - 6) Cetylester d. Buttersäure. Sm. 20°; Sd. 260—270°_{202.5} (A. 131, 285).
 - 7) Oktadekylester d. Essigsäure. Sm. 31°; Sd. 222-223°₁₅ (B. 16, 1722). • I, 411.
- C20 H40 O3 C 73,2 - H 12,2 - O 14,6 - M. G. 328.
 - 1) α-Oxyarachinsäure. Sm. 91-92°. Na, Ba (M. 17, 534).
- $C_{20}H_{40}O_4$
- Acthylester d. β-Oxyheptadekan-α-Carbonsäure (Ac. d. β-Oxystearinsäure). Sm. 44° (J. r. 18, 44). I, 579.
 C 69,8 H 11,6 O 18,6 M. G. 344.
 Dracoalban (C. 1896 [2] 713).
 Acthylester d. d-β-ι-Dioxyheptadekan-α-Carbonsäure. Sm. 128 bis 130° (Bt. [3] 13, 1054).
 Acthylester d. 1. 9 Dioxyheptadekan-α-Carbonsäure. Sm. 28 bis 130° (Bt. [3] 13, 1054).
 - 3) Aethylester d. l-θι-Dioxyheptadekan-α-Carbonsäure. Sm. 98—99° (Bl. [3] 13, 1054).
 - 4) Aethylester d. i-θι-Dioxyheptadekan-α-Carbonsäure (Ae. d. Dioxystearinsäure). Sm. 98,8-100° (104-106°) (J. pr. [2] 40, 244; Bl. [3] 13, 239). — I, *636*.
- $C_{20}H_{40}Cl_{2}$
- Dichloreikosan (B. 12, 71, 72). I, 137.
 Dichloreikosan (aus d. Kohlenw. C₂₀H₄₂) (B. 12, 73).
 C 80,5 H 14,1 O 5,4 M. G. 298. $C_{20}H_{42}O$
- 1) Medicagol. Sm. 80°; Sd. 395° (B. 25 [2] 286). I, 240. C 76,4 H 13,4 O 10,2 M. G. 314. $\mathbf{C}_{20}\mathbf{H}_{42}\mathbf{O}_{2}$
- Verbindung (aus Dammarharz). Sm. 62º (B. 22 [2] 345). III, 555.
 C 66,3 H 11,6 O 22,1 M. G. 362. $\mathbf{C}_{20}\mathbf{H}_{42}\mathbf{O}_{5}$
- 1) Verbindung (aus Isovaleraldehyd). Sm. 70° (B. 6, 983, 984). I, 950. C 46,0 H 8,0 O 46,0 M. G. 522.

 1) Panaquilon (A. 90, 231). III, 639. C 80,8 H 14,5 N 4,7 M. G. 297. $\mathbf{C}_{20}\mathbf{H}_{42}\mathbf{O}_{15}$
- $\mathbf{C}_{20}\mathbf{H}_{43}\mathbf{N}$ 1) α-Diäthylamidohexadekan (Cetyldiäthylamin). Sm. 6-8°; Sd. 355°.
- (2HCl, PtCl₄) (B. **22**, 814). I, 1138. C 32,1 H 5,9 O 62,0 M. G. 374. $\mathbf{C}_{20}\mathbf{H}_{44}\mathbf{O}_{29}$
- $\mathbf{C}_{20}\mathbf{H}_{44}\mathbf{Sb}_{2}$
- $C_{20}H_{44}Sn$
- Säure (aus Jute). Ba (Soc. 41, 92). I, 1080.
 Antimontetraisoamyl. Fl. (A. 97, 321). I, 1516.
 Zinntetraisoamyl. Fl. (A. 92, 394). I, 1529.
 Perchlordiisoamylester d. Hexadekachloroktan-αθ-Dicarbonsäure $\mathbf{C}_{20}\mathbf{O}_{4}\mathbf{Cl}_{38}$ (P. d. Perchlorsebacinsäure). Sm. 1790 (Soc. 52, 802). - I, 687.

C₂₀-Gruppe mit drei Elementen.

- C₂₀H₇O₅Br₅ 1) Pentabromhydrochinonphtalein. Sm. über 300° (B. 11, 715; 28, 2962). - II, 2066.

 $C_{20}H_7O_6Br_5$ 1) Pentabromresorcinoxaleïnanhydrid. Ba (B. 14, 2568). — II, 937. $\begin{array}{c} \textbf{C}_{20}\textbf{H}_7\textbf{O}_6\textbf{B}\textbf{F}_5 & \textbf{1}) \text{ Fential Foliates of kind and statement and the bit } \textbf{Bit } (B.~\textbf{Fit},~2505). \ \, = 11,~957. \\ \textbf{C}_{20}\textbf{H}_7\textbf{O}_6\textbf{B}\textbf{F}_9 & \textbf{1}) \text{ Bromderivat d. Verbindung } \textbf{C}_{20}\textbf{H}_{16}\textbf{O}_6 \text{ (aus } \alpha\alpha\beta\text{-Tri}[2,5\text{-Dioxyphenyl}]-3than) } (A.~\textbf{243},~188). \ \, = \textbf{II},~1046. \\ \textbf{C}_{20}\textbf{H}_7\textbf{O}_{18}\textbf{N}_5 & \textbf{C}~45,7 \ - \textbf{H}~1,3 \ - \textbf{O}~39,6 \ - \textbf{N}~13,3 \ - \textbf{M}.~\textbf{G}.~525. \end{array}$ 1) Pentanitrofluoran. Sm. noch nicht bei 335° (B. 31, 1744). 1) Oktobrom - 2, 2'-Dinaphtylamin. Sm. oberh. 300° (B. 20, 2621). - $\mathbf{C}_{20}\mathbf{H}_{7}\mathbf{NBr}_{8}$ II, 603. $C_{20}H_7N_2Br_5$ 1) Pentabromdinaphtazin. Sm. oberh. 320° (B. 10, 576). — IV, 1084. Tetrabrom-β-Binaphtylenoxyd (Soc. 59, 1100). — II, 1006.
 C 71,4 — H 2,4 — O 9,5 — N 16,7 — M. G. 336. C20H8OBr4 1) Nitril d. Triphendioxazindicarbonsäure (B. 30, 998). — IV, 1083. C₂₀H₈O₂Cl₁₀ 1) Verbindung (aus 1, 1, 3, 4-Tetrachlor-2-Keto-1, 2-Dihydronaphtalin u. $\mathbf{C}_{20}\mathbf{H}_8\mathbf{O}_2\mathbf{N}_4$ 1,1,3,3,4,4-Hexachlor-2-Keto-1,2,3,4-Tetrahydronaphtalin). Sm. 86-870 (B. 22, 1032). — III, 172. C₉₀H₈O₄Cl₆ 1) Di[2,4,6-Trichlorphenylester] d. Benzol-1,2-Dicarbonsäure. Sm. 193 bis 194° (B. 18, 1164). — II, 1794. $C_{20}H_8O_5Cl_4$ 1) Tetrachlorfluorescein (A. 238, 333, 360). — II, 2062. C₂₀H₈O₅Cl₁₀ 1) Anhydrid d. 2-Trichloracetylphenyldichloressigsäure. Sm. 224° (A. 300, 200). C₂₀H₈O₅Br₄ 1) Tetrabromfluoresceïn (Eosin). Salze meist bek. (A. 183, 38; 238, 360; J. 1878, 1185; B. 28, 312, 1576; 29, 2625). — II, 2063. C 64,5 — H 2,1 — O 25,8 — N 7,5 — M. G. 372. $\mathbf{C}_{20}\mathbf{H}_8\mathbf{O}_6\mathbf{N}_2$ 1) 1,6-Anhydrid d. 3,4-Dimethoxyl-6-Diazobenzol-1,2-Dicarbonsäure. Zers. bei 140—150° (B. 19, 2302). — IV, 1558.
1) Dibromgalleïn (A. 209, 265). — II, 2088. $\mathbf{C}_{20}\mathbf{H}_8\mathbf{O}_7\mathbf{Br}_2$ 1) Verbindung (aus Trioxyphenylendisulfid). Sm. 185° (Bl. [3] 15, 1048). C20H8O7S4 Verbindung (aus Phenol). Sm. 180° (B. 27 [2] 82).
 C 53,6 — H 1,8 — O 32,1 — N 12,5 — M. G. 448.
 Tetranitro-β-Binaphtylenoxyd. Sm. 250° u. Zers. (Soc. 59, 1100). — $\mathbf{C}_{20}\mathbf{H}_{8}\mathbf{O}_{8}\mathbf{J}_{8}$ $\mathbf{C}_{20}\mathbf{H}_8\mathbf{O}_9\mathbf{N}_4$ II, 1006. C 46,9 — H 1,6 — O 40,6 — N 10,9 — M. G. 512. $C_{20}H_8O_{13}N_4$ 1) Tetranitrofluorescein (A. 183, 33; B. 30, 334; M. 19, 150). — II, 2064. C 44,4 — H 1,5 — O 38,5 — N 15,6 — M. G. 540. $C_{20}H_8O_{13}N_6$ 1) ?-Hexanitro-2,2'-Dinaphtyläther. Zers. bei 270° (B. 26, 253). -II, 884. Tinitrosychinakridon. Zers. bei 270—280° (B. 29, 80). — IV, 1087. $C_{20}H_8O_{14}N_4$ $\mathbf{C}_{20}\mathbf{H}_{9}\mathbf{O}_{9}\mathbf{N}_{8}$ $\mathbf{C}_{90}\mathbf{H}_{9}\mathbf{O}_{9}\mathbf{N}_{5}$ C 44,5 - H 1,7 - O 35,6 - N 18,2 - M. G. 539. $C_{20}H_9O_{12}N_7$ 1) ?-Hexanitro-2, 2'-Dinaphtylamin. K, Ba (B. 20, 2624). — II, 604. C₂₀H₉Cl₄Br₃ 1) α -Tetrachlortribromdinaphtalin. Sm. 74—76° (A. 160, 69). — II, 193. 2) β -Tetrachlortribromdinaphtalin. Sm. 71—73° (A. 160, 71). — II, 193. Dichlor-α-Binaphtylenoxyd. Sm. 150—151° (A. 209, 136). — II, 1005.
 Dichlor-2, 6-[β]-Binaphtylenoxyd. Sm. 245° (A. 209, 140). — II, 1006.
 Dibrom-α-Binaphtylenoxyd. Sm. 287° (A. 209, 137). — II, 1005.
 Dibrom-2, 6-[β]Binaphtylenoxyd. Sm. 247° (B. 26, 853; A. 209, 140). $\mathbf{C}_{20}\mathbf{H}_{10}\mathbf{OCl}_{2}$ $\mathbf{C}_{20}\mathbf{H}_{10}\mathbf{OBr}_{2}$ - II, 1006. C₂₀H₁₀O₂Cl₂ 1) Verbindung (aus 2, 4 - Dichlor - 1 - Oxynaphtalin). subl. (B. 21, 891).

— II, 859. C₂₀H₁₀O₃Cl₂ 1) Chlorid d. Fluoresceïn. Sm. 252° (A. **183**, 18). — II, 2061.

 $C_{20}H_{10}O_3Br_2$ 1) Dibromfluoran. Sm. 255—258° (A. 212, 350). — II, 1984.

 $C_{20}H_{10}O_3Br_4$ 1) ?-Tetrabrom-9,?-Dioxy-10-Oxyphenylanthracen (A. 202, 93). — II, 1116. $C_{20}H_{10}O_4Cl_4$ 1) Dibenzoat d. 2,3,5,6-Tetrachlor-1,4-Dioxybenzol. Sm. 232° (A. 210,

156). — II, 1150. 2) Di[2,4-Dichlorphenylester] d. Benzol-1,2-Dicarbonsäure. Sm. 1080

(J. 1887, 1301). — II, 1794. C₂₀H₁₀O₄Br₄ 1) Tetrabromphenolphtaleïn. Sm. 220 — 230° u. Zers. (A. 202, 77). —

II, 1984.
2) Tetrabromphenolphtalidein. Sm. oberh. 280° (A. 202, 106). — III, 261.

 $\mathbf{C}_{20}\mathbf{H}_{10}\mathbf{O}_{4}\mathbf{J}_{4}$ 1) Tetrajodphenolphtalein. Zers. bei 220° (B. 28, 1606). — II, 1984.

- $C_{20}H_{10}O_5N_2$
- C 67,0 H 2,8 O 22,3 N 7,8 M. G. 358. 1) Dinitro- α -Binaphtylenoxyd. Sm. 270° (A. 209, 137). II, 1005. 2) Dinitro-2,6-[β]Binaphtylenoxyd. Sm. 221° (A. 209, 140). II, 1006.
- $C_{20}H_{10}O_5Cl_2$ 1) Dichlorfluorescein (A. 238, 357). II, 2062. $C_{20}H_{10}O_5Br_2$ 1) Dibromfluorescein. Sm. 260—270° (A. 183, 38). II, 2063.
- $C_{20}^{20}H_{10}O_6Cl_4$ 1) Tetrachlorfluoresceïnsäure (A. 238, 333). II, 2062. $C_{20}H_{10}O_6Br_4$ 1) Tetrabromfluoresceïnsäure (A. 183, 55). II, 2063.

- 1) Tetranitro-1, 1'-Binaphtyl (A. 144, 83). II, 295.
 - 1) Tetranitro-1, 1-maphtyl (M. 111, 80).
 2) Tetranitro-2, 2'-Binaphtyl. Sm. 150° u. Zers. (Soc. 47, 105). II, 296.
 C 56,9 H 2,4 O 34,1 N 6,6 M. G. 422.
- $\mathbf{C}_{20}\mathbf{H}_{10}\mathbf{O}_{9}\mathbf{N}_{2}$
- 1) Dinitrofluorescein (A. 183, 30; B. 30, 332; M. 19, 149). II, 2064. C 48,2 — H 2,0 — O 38,5 — N 11,2 — M. G. 498. 1) **Tetranitrophenolphtalein.** Sm. 244—245° (B. **27** [2] 593). — **II**, 1985. $\mathbf{C}_{20}\mathbf{H}_{10}\mathbf{O}_{12}\mathbf{N}_4$

- 1) Dinaphtoresorufin (Oxyketodinaphtoxazin). HCl (B. 28, 358). IV, 476.
 2) Nitro-β-Binaphtylenoxyd. Sm. 185° (Soc. 59, 1100). II, 1006.
 C₂₀H₁₁O₄Cl₃ 1) Dibenzoat d. Trichlor-1, 3-Dioxybenzol. Sm. 133° (J. pr [2] 17, 340).
- **II**, 1150.
 - 2) Dibenzoat d. Trichlor-1,4-Dioxybenzol. Sm. 174° (A. 210, 153). II, 1150.
- C₂₀H₁₁O₄Br 1) $\frac{3}{3}$,4-Methylenäther d. ?-Brom-2-Keto-1-[3,4-Dioxybenzyliden]- α -Naphtofuran (B. 30, 1470).
- $C_{20}H_{11}O_4Br_5$ 1) Pentabromresorcinphenylacetein (J. pr. [2] 48, 402). II, 1123. C 57,0 — H 2,6 — O 30,4 — N 10,0 — M. G. 421. $\mathbf{C}_{20}\mathbf{H}_{11}\mathbf{O}_{8}\mathbf{N}_{8}$
- 1) Dinitrofluoresceingelb. Na₂ (B. 30, 332). C 53,4 H 2,4 O 28,5 N 15,6 M. G. 449. $\mathbf{C}_{20}\mathbf{H}_{11}\mathbf{O}_{8}\mathbf{N}_{5}$
 - 1) ?-Tetranitro-2,2'-Dinaphtylamin. Sm. 285-286° (B. 17, 198; 20, 2624). — II, 603.
 - 2) 2,4-Diketo-1-[2,4,6-Trinitrophenyl]-3-Phenyl-1,2,3,4-Tetrahydro-
- 1,8-Benzdiazin. Sm. 237—238° (*J. pr.* [2] 49, 319). C 53,0 H 2,4 O 35,3 N 9,3 M. G. 506. $\mathbf{C}_{20}\overline{\mathbf{H}}_{11}\mathbf{O}_{10}\mathbf{N}_3$
- 1) Di[3-Nitrobenzoat] d. 4-Nitro-1,3-Dioxybenzol. Sm. 1230 (G. 15, 269). — II, 1150.
- - 1) α -Oxy-s- $\alpha\beta$ -Naphtazin. Sm. noch nicht bei 380° (B. 29, 2088). IV, 1084.
 - 2) Oxy-s- $\alpha\beta$ -Dinaphtazin (A. 272, 349). IV, 1084.
 - 3) Oxyphenanthrophenazin. Sm. oberh. 300° (B. 25, 497). IV, 1086.
- 1) P-Chlor-10-Oxy-9-[P-Chlorphenyl]anthracen. Sm. 1700 (A. 202, 95). $\mathbf{C}_{20}\mathbf{H}_{12}\mathbf{OCl}_{2}$ **— II**, 1094.
 - 2) 1,1'Dichlor-2,2'-Dinaphtyläther. Sm. 1280 (B. 26, 252). II, 878.
- 252). — II, 880.
- C 76.9 H 3.8 O 10.3 N 9.0 M. G. 312. $\mathbf{C}_{20}\mathbf{H}_{12}\mathbf{O}_{2}\mathbf{N}_{2}$
 - 1) 2,3-Difuranyl-1,4-Naphtisodiazin. Sm. 147° (B. 25, 2844). IV, 1087.
- $C_{20}H_{12}O_{2}Cl_{2}$ 1) Phenolphtalide inchlorid. Sm. 156° (A. 202, 109). III, 261. 2) Verbindung (aus Phenolphtaleïn). Sm. 155-1560 (A. 202, 76). -
- II, 1983. 1) Verbindung (aus Di[2-Oxy-?-Naphtyl]sulfid). Sm. 164° (B. 23, 3358). $C_{20}H_{12}O_{2}S$ - II, 986.

2) Verbindung (aus Di[2-Oxy-?-Naphtyl]sulfid). Sm. 155° (159-160°) (B. $C_{20}H_{12}O_{2}S$ **27**, 3000, 3448). C 73,2 — H 3,7 — O 14,6 — N 8,5 — M. G. 328.

 $\mathbf{C}_{20}\mathbf{H}_{12}\mathbf{O}_{3}\mathbf{N}_{2}$

1) Oxychinakridon. Zers. bei 410° (B. 29, 78). — IV, 1087. 2) 3-[2-Naphtyl]azo-2-Oxy-1,4-Naphtochinon. Zers. bei 247—248° (B. 30, 2130). — IV, 1481.

C₂₀H₁₂O₃Cl₂ 1) Anhydro-?-Dichlor-?-Dioxytriphenylmethan-2-Carbonsäure. Sm. 226—230° (A. 183, 21; 212, 352). — II, 1911.

Coo H10 Oo Bro 1) a, 2-Lakton d. P-Dibrom-a-Oxy-P-Oxytriphenylmethan-2-Carbon-

1) P-Dinitro-1, 1'-Binaphtyl. Sm. 280° (B. 19, 2550). — II, 295. C 64,5 — H 3,2 — O 17,2 — N 15,1 — M. G. 372.

 $C_{20}H_{12}O_4N_4$

1) Dioxybenzodiphenyldipyrazolon. Sm. 150° u. Zers. + 2NH₃, Phenylhydrazinsalz (B. 22, 1291). — IV, 732.

C₂₀H₁₂O₄Cl₂ 1) Dibenzoat d. Dichlor-1, 3-Dioxybenzol. Sm. 127° (J. pr. [2] 17, 335). **— II**, 1150.

2) Dibenzoat d. 2,3-Dichlor-1,4-Dioxybenzol. Sm. 173-174° (G. 24 [2] 379). — **II**, 1150.

3) Dibenzoat d. 2,5-Dichlor-1,4-Dioxybenzol. Sm. 185^o (A. 210, 150). - II, 1150.

4) Dibenzoat d. 2,6-Dichlor-1,4-Dioxybenzol. Sm. 105° (B. 16, 1447). **II**, 1150.

5) Di[2-Chlorphenylester] d. Benzol-1,2-Dicarbonsäure. Sm. 95° (J. 1887, 1301). — II, 1794. 6) Di [4-Chlorphenylester] d. Benzol-1,4-Dicarbonsäure. Sm. 111°

(J. 1887, 1301). — II, 1794.

 $C_{20}H_{12}O_4Br_2$ 1) $\alpha, 2'$ -Lakton d. α -Oxy- α -[?-Dibrom-2,4-Dioxyphenyl] - $\alpha\alpha$ -Diphenylmethan-2'-Carbonsäure (Dibrombenzolresorcinphtalein). Sm. 2190 (B. 14, 1861). — II, 1986.

C₂₀H₁₂O₄Br₄ 1) Tetrabromresorcinphenylacetein. Sm. 236° (J. pr. [2] 48, 400). — II, 1123.

2) ?-Tetrabrom-?-Dioxytriphenylmethan-2-Carbonsäure. Sm. 2050 (A. 202, 85). — II, 1911. C 66,7 — H 3,3 — O 22,2 — N 7,8 — M. G. 360. 1) P-Dinitro-2, 2'-Dinaphtyläther. Sm. 145° (B. 26, 253). — II, 884.

 $C_{20}H_{12}O_5N_2$

2) Dioxim d. 4,4'-Di[1,2-Naphtochinon]oxyd (B. 30, 2202).

1) Tetrajodphenolphtaleïnsäure (B. 28, 1606). — II, 1984. C 63,8 — H 3,2 — O 25,5 — N 7,4 — M. G. 376. $C_{20}H_{12}O_5J_4$ C20 H12 O6 N2

1) P-Dinitro-1, 3-Dibenzoylbenzol. α-Modif. Sm. 200°; β-Modif. Sm. 100° (B. 13, 322). — III, 304.

2) Lakton d. α -Oxy- α' -[?-Dinitrodiphenyl]- α^2 -Phenylmethan- α^2 2-Carbonsäure (Dinitrodiphenylphtalid). 2 isom. Formen (A. 202, 66). — II, 1722.

 $\mathbf{C}_{20}\mathbf{H}_{12}\mathbf{O}_{8}\mathbf{Cl}_{2}$ 1) Dichlorfluoresceïnsäure (A. 238, 357). — II, 2062. $\mathbf{C}_{20}\mathbf{H}_{12}\mathbf{O}_{8}\mathbf{N}_{2}$ C 58,8 — H 2,9 — O 31,4 — N 6,9 — M. G. 408.

1) Dinitrophenolphtaleïn. Sm. 196° (197°) (B. 27 [2] 593; G. 26 [1] 265). - II, 1985.

C20 H12 O8 N4 $C_{55,0} - H_{2,8} - O_{29,3} - N_{12,8} - M_{6}$. G. 436.

1) 1,4-Benzochinon-2,5[?]-Di[Nitrosamidobenzol-2-Carbonsäure](Bl.[3] 13, 749). — III, 343.

 $C_{20}H_{12}O_8Br_6$ 1) Tetracetat d. Hexabrom-1,3,1',3'-Tetraoxybiphenyl. Sm. 259° (M. 1, 356). — II, 1037.

1, 356). — II, 1037.

C₂₀H₁₂O₈S 1) Fluoresceinsulfonsäure. Ca₃ (B. 18, 1129). — II, 2065.
2) Fluoresceinsulfat. Sm. 140-150° (A. 183, 27). — II, 2062.
C₂₀H₁₂O₉Br₄ 1) Tetrabrompurpurogallin. Sm. 202-204° (J. 1882, 683). — III, 346.
C₂₀H₁₂O₁₀N₂ 1) Dinitrofluoresceinsäure (A. 183, 31). — II, 2064.
C₂₀H₁₂O₁₂N₄ C 48,0 — H 2,4 — O 38,4 — N 11,2 — M. G. 500.
1) Tetranitroresorcinphenylacetein (J. pr. [2] 48, 403). — II, 1123.
C₂₀H₁₂O₁₃S₄ 1) α -Binaphtylenoxydtetrasulfonsäure. Ba₂ + 2H₂O (A. 209, 138). — II, 1005.

- $\mathbf{C}_{90}\mathbf{H}_{19}\mathbf{O}_{13}\mathbf{S}_{4}$ 2) **2,6**-[β] **Binaphtylenoxydtetrasulfonsäure.** Ba₂ + 2 H₂O (Soc. **59**, 1098; A. 209, 141). — II, 1006.
- C₂₀H₁₂O₁₅S₃ 1) Resorcinoxaleïnanhydridtrisulfonsäure. Ba₅, Pb₄, Pb₅ (B. 14, 2569). - II, 937.
- $\mathbf{C}_{20}\mathbf{H}_{12}\mathbf{N}_{2}\mathbf{Br}_{8}$ 1) Verbindung (aus Oktobrom-p-Tetrolditolyl) (B. 14, 936). IV, 1035. $\mathbf{C}_{20}\mathbf{H}_{12}\mathbf{N}_{2}\mathbf{S}_{2}$ 1) Phtalylamidothiophenol. Sm. 112° (B. 13, 1233). II, 1809.
- $\mathbf{C}_{20}\mathbf{H}_{12}\mathbf{N}_{4}\mathbf{Cl}_{2}$ 1) Tetrazodichlorid (aus ?-Diamidobinaphtyl). + PtCl₄ (B. 18, 3256). -IV, 1073.
- $\begin{array}{l} {\bf C_{20}H_{12}N_7Cl_3} \ 1) \ \ {\bf Diazohydroeyan-4-Rosanilinehlorid} \ + 2\,{\bf H_2O} \ (A. \ 194, 275). \ {\bf IV}, 1552. \\ {\bf C_{20}H_{12}Cl_2S_2} \ 1) \ \ {\bf Di[5-Chlor-1-Naphtyl] disulfid.} \quad {\bf Sm.} \ \ 173-174^{\circ}. \ {\bf II}, \ 868. \\ 2) \ \ {\bf Di[8-Chlor-1-Naphtyl] disulfid.} \quad {\bf Sm.} \ \ 110^{\circ} \ (B. \ 23, \ 963). \ {\bf II}, \ 868. \\ \end{array}$
- 1) Di[4-Fluor-1-Naphtyl]disulfid. Sm. 1430. II, 868. C, H, F, S,
- $\mathbf{C}_{20}\mathbf{H}_{13}\mathbf{ON}$ C 84.8 - H 4.6 - O 5.6 - N 4.9 - M. G. 283.
- 1) Oxy-2-Dinaphtylamin. Sm. 301° (B. 19, 2244). II, 886. C20H13O2N
- C 80,3 H 4,3 O 10,7 N 4,7 M. G. 299. 1) P-Nitro-1,1'-Binaphtyl. Sm. 188° (B. 19, 2550). II, 295.
 - 2) 3-[3,4-Dioxyphenylmethylenäther]-β-Naphtochinolin (Piperonyl-β-

 - 2) 3-[3,4-Dioxyphenylmethylenather]-β-Naphtochinolin (Piperonyl-β-Naphtochinolin). Sm. 1789 (B. 27, 2030).
 3) Benzoat d. 9-Oximidofluoren. Sm. 1790 (A. 252, 36). III, 240.
 4) 2-Phenyl-α-Naphtochinolin-4-Carbonsäure. Sm. 3000 u. Zers. Na + 1/2 H₂0, Ca + 4 H₂0, Zn, Pb, Cu, Ag (A. 249, 110). IV, 471.
 5) 3-Phenyl-β-Naphtochinolin-1-Carbonsäure. Sm. 2960 u. Zers. Na + 5 H₂0, K + 5 H₂0, Ca + 6 H₂0, Zn + 2 H₂0, Cu + H₂0, Ag (A. 249, 129). IV, 471.
 6) 5-Phenyl-g-Rydin 3 Carbonsäure. Sp. 2520 Ph. A. (A. Control of the contr
 - 6) 5-Phenylakridin-3-Carbonsäure. Sm. 252-255°. Ba, Ag (A. 239, 62). — IV, 471.
 - 7) 5-Phenylakridin-52-Carbonsäure. Na, HCl (A. 224, 45). IV, 470.
 - 8) Lakton d. α -Oximido- α' -Phenyl- α^2 -Biphenylmethan- α' 2-Carbonsäure. Sm. 180° (A. 257, 99). — II, 1726.
- C 73.4 H 4.0 O 9.8 N 12.8 M. G. 327. $C_{20}H_{13}O_{2}N_{3}$
 - 1) 6-Nitro-2,3-Diphenyl-1,4-Benzdiazin. Sm. 1880 (A. 292, 254). IV, 1079.
- C 76,2 H 4,1 O 15,2 N 4,4 M. G. 315. $C_{20}H_{13}O_{8}N$
 - 1) 3-[1'Naphtyl]amido-2-Oxy-1,4-Diketo-1,4-Dihydronaphtalin. Sm. 174° (A. 286, 74). III, 385.
 - 2) 3-[2-Naphtyl]amido-2-Oxy-1,4-Diketo-1,4-Dihydronaphtalin. Sm. 178° (A. 286, 75). III, 385.
 - 3) 3-[2-Oxyphenyl]-β-Naphtochinolin-1-Carbonsäure. Sm. 226° (B. 27, 2029). — IV, 471.
 - 4) 3-Oxy-5-Phenylakridin-52-Carbonsäure. Sm. oberh. 2500 (B. 24, 2048). — IV, 471.
 - 5) Phenylamidoformiat d. 1-Oxy-9-Ketofluoren. Sm. 148-149° (B. 31,
- C 72,5 H 3,9 O 19,3 N 4,2 M. G. 331. $C_{20}H_{18}O_4N$
- 1) Imidohydrochinonphtalein. Sm. noch nicht bei 310° (B. 28, 2961).
 - 2) Lakton d. Acetyldiphenylketipinsäuremononitril. Sm. 141-1420 (A. 282, 57). — II, 2032.
 - 3) Acetat d. Anhydrodiketodihydroindenoxim. Zers. oberh. 180° (A. **277**, 370). — III, 276.
- C 66.9 H 3.6 O 17.8 N 11.7 M. G. 359.C₂₀H₁₃O₄N₃
 - 1) ?-Dinitro-2,2'-Dinaphtylamin. Sm. 224-225° (B. 17, 197; 20, 2623). **– II**, 603.
 - 2) 2-Carboxyphenylamid d. 5-Keto-5,10-Dihydro-α-Chinochinolin-3-Carbonsäure. Sm. 336°. Ba (B. 28, 125). IV, 1020.
- C20H13O4N5
- C 62,0 H 3,4 O 16,5 N 18,1 M. G. 387. 1) **Verbindung** (aus 4-Nitro-1-Amidonaphtalin) (A. 183, 234). IV, 1574.
- 1) Dibenzoat d. P-Chlor-1, 3-Dioxybenzol. Sm. 98° (J. pr. [2] 17, 327). $\mathbf{C}_{20}\mathbf{H}_{13}\mathbf{O}_{4}\mathbf{C}\mathbf{1}$ **- II**, 1150.
 - 2) Dibenzoat d. 2-Chlor-1,4-Dioxybenzol. Sm. 130° (A. 210, 142; B. 13, 1428). — II, 1150.
- C 64,0 H 3,5 O 21,3 N 11,2 M. G. 375. $C_{20}H_{13}O_5N_3$
 - 1) P-Dinitro-P-Acetylamidochrysen. Sm. 160° u. Zers. (B. 24, 952). II, 643.

- C 66.1 H 3.6 O 26.4 N 3.9 M. G. 363. $C_{20}H_{13}O_6N$
 - 1) 2,6-Diphenylpyridin-22,3,4-Tricarbonsäure. Sm. 2500 u. Zers. Ag (A. 249, 119). — IV, 459.

 2) Dibenzoat d. 4-Nitro-1, 3-Dioxybenzol. Sm. 1070 (1110) (B. 16, 872;
 - G. 15, 271). II, 1150.
 - 3) Dibenzoat d. 2-Nitro-1, 4-Dioxybenzol. Sm. 140-1420 (J. pr. [2] 48, 182). — II, 1150.
- C 61.4 H 3.3 O 24.5 N 10.7 M. G. 391. $C_{20}H_{13}O_6N_3$
 - 1) 3'-Nitro-4-Benzoxylazobenzol-3-Carbonsäure. Sm. oberh. 240° (A. 251, 189). — IV, 1469.
- C 59,0 H 3,2 O 27,5 N 10,3 M G 407. $C_{20}H_{13}O_7N_3$
- Phenanthrenpikrat. Sm. 144° (A. 166, 363; 167, 137, 180). II, 267.
 C 51,8 H 2,8 O 24,2 N 21,2 M. G. 463. $C_{20}H_{13}O_7N_7$
- 1) Trinitroderivat d. Verbindung C₂₀H₁₆ON₄. Sm. 363° (B. 26, 1186). **- IV**, 1225.
- 1) Verbindung (aus 2-Chlor-1-Ketoinden-3-Carbonsäure). Sm. 245° (A. 283, $\mathbf{C}_{20}\mathbf{H}_{13}\mathbf{O}_{8}\mathbf{C}\mathbf{I}$ 353).
- 1) α -Thio- β -Dinaphtylamin. Sm. 236°. Pikrat (B. 19, 2241; 21, 2811). $\mathbf{C}_{20}\mathbf{H}_{13}\mathbf{NS}$ **— II**, 869.
- 2) β -Thio- β -Dinaphtylamin. Sm. 280° (u. 307°) (*B*. **21**, 2811). II, 869. 1) 2-Imidodinaphtyldisulfid. Sm. 205° (*B*. **21**, 2808). II, 870.
- $\mathbf{C}_{20}\mathbf{H}_{13}\mathbf{NS}_{2}$ 2) isom. 2-Imidodinaphtyldisulfid. Sm. 220° (B. 21, 2808). — II, 870.
- 1) 2,2'-Azonaphtalin-1-Diazochlorid (B. 20, 2901). IV, 1542. $\mathbf{C}_{20}\mathbf{H}_{13}\mathbf{N}_4\mathrm{Cl}$ C 80,5 — H 4,7 — O 5,4 — N 9,4 — M. G. 298. 1) P-Nitroso-I,1'-Dinaphtylamin. Sm. 169° (A. 243, 301). — II, 600. $\mathbf{C}_{20}\mathbf{H}_{14}\mathbf{ON}_{2}$
 - 2) 1,1'-Dinaphtylnitrosamin. Sm. 260-262° u. Zers. (B. 11, 641). -
 - II, 600.
 - 3) 2,2'-Dinaphtylnitrosamin. Sm. 139-140° (B. 20, 2621). II, 603. 4) Phenylhydrazon d. Phenanthrenchinon. Sm. 165° (B. 16, 1564). -
 - IV, 795. 5) 1,1'-Azoxynaphtalin (J. 1864, 532). IV, 1341.
 - 6) 2-Oxy-1,1'-Azonaphtalin. Sm. 228-229° (B. 31, 1531; Soc. 65, 837). **- IV**, 1438.

 - 7) 4-Oxy-1,1'-Azonaphtalin (Soc. 37, 752). IV, 1438. 8) 2-Oxy-1,2'-Azonaphtalin. Sm. 176° (B. 19, 1282). IV, 1438.
 - 9) 6-Oxy-4-Phenyl-2-[2-Naphtyl]-1,3-Diazin. Sm. 265° (B. 25, 1427). - IV, 1080.
 - 10) 2-Phenyl-3-Phenylimido-1-Keto-1, 3-Dihydroisoindol. Sm. 152 bis 153° (B. 13, 420). — II, 1559.
 - 11) 6-Oxy-2,3-Diphenyl-1,4-Benzdiazin. Sm. 251° (B. 25, 495). IV, 1079.
 - 12) 2-Benzoylbenzol-1-Carbonsäurephenylhydrazon. Sm. 180—1820 (B. 18, 805). — IV, 698.
- C₂₀H₁₄OCl₂ 1) Hydrophenolphtalidinchlorid (?-Chlor-9-[?-Chlorphenyl]-10-Oxy-9,10-
- Dihydroanthracen). Sm. 56° (A. 202, 97). II, 1094.

 1) 1,1'-Dinaphtylsulfoxyd. Sm. 164,5° (162,5°) (B. 17, 2603; 23, 2367; J. pr. [2] 38, 142). II, 868, 871.

 C 76,4 H 4,5 O 10,2 N 8,9 M. G. 314. C20 H14 OS
- $\mathbf{C}_{20}\mathbf{H}_{14}\mathbf{O}_{2}\mathbf{N}_{2}$
 - 1) 4-Phtalylamido-1-Phenylamidobenzol. Sm. 270° (A. 255, 191). IV, 595.
 - 2) β-Phtalyl-αα-Diphenylhydrazin. Sm. 154—155° (J. pr. [2] 35, 271). **- IV**, 710.
 - 3) 1-[2-Naphtyl]azo-2,7-Dioxynaphtalin. Sm. 2020 (B. 23, 524). IV, 1450.
 - 4) 2-Benzoyl-3-Keto-1-Phenyl-2, 3-Dihydroindazol. Sm. 89° (B. 32,
 - 5) 2,4-Diketo-1,3-Diphenyl-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 234—235° (J. pr. [2] 49, 319).
 - 6) Acetat d. P-Oxy-2,3'-Bichinolyl. Sm. 156-1570 (M. 7, 316). -IV, 1068.
 - 7) 9-Phenylhydrazonfluoren-4-Carbonsäure. Sm. 205° (A. 247, 281). IV, 699.
 - 8) Phenylamidoimid d. Biphenyl-2,2'-Dicarbonsäure. Sm. 150° (A. 247, 274). — IV, 712.

- C 70.2 H 4.1 O 9.3 N 16.4 M. G. 342. $C_{20}H_{14}O_{2}N_{4}$ 1) 1,5-Di[Phenylamido] benzdioxazol. Sm. oberh. 270° u. Zers. Pikrat (B. 22, 3239). - II, 930.2) Dichinizinohydrobenzolblau (B. 17, 2056). — IV, 724. $C_{20}H_{14}O_2Cl_2$ 1) P-Dichlortriphenylmethan-2-Carbonsäure. Sm. 205—206° (A. 202,
- C20H14O2S
- 1) i-Dichotripholymetric 24. 84). II, 481. 1) Di[2-Oxy-?-Naphtyl] sulfid. Sm. 152°. Pb (B. 27, 3000). 2) Di[2-Oxy-?-Naphtyl] sulfid. Sm. 215° (211°). Na₂ + 6 H₂O, Pb (G. 17, 94; B. 21, 261, 3559; 23, 3356; 27, 2996, 2998). II, 985. 3) 1,1'-Dinaphtylsulfon. Sm. 187° (123°) (A. 28, 39; 100, 216; B. 9, 683; 23, 2368; J. pr. [2] 41, 218). II, 868. (B. 23, 2369). II, 887.
 - 4) 1,2'-Dinaphtylsulfon. Sm. 122,5—123° (B. 23, 2369). II, 887.
 5) 2,2'-Dinaphtylsulfon. Sm. 177°; Sd. 245°, (B. 9, 684; 23, 2366; 29, 1327; Bl. 25, 25). II, 887.
 1) Di[2-Oxy-?-Naphtyl]disulfid. Sm. 169° (166°). Pb (B. 21, 262; 23,
- $C_{20}H_{14}O_{2}S_{2}$ 3363; **27**, 2998). — II, 986.
- 2) 1,1'-Dinaphtyldisulfoxyd. Sm. 104—106° (J. pr. [2] 47, 97). II, 871. 3) 2,2'-Dinaphtyldisulfoxyd. Sm. 106—108° (J. pr. [2] 47, 97). II, 887. 1) Di[1-Oxy-?-Naphtyl]trisulfid. Zers. bei 190° (B. 23, 3368). II, 986. 1) Di[2-Oxy-?-Naphtyl]tetrasulfid. Sm. 141°. Pb (B. 27, 2997). $C_{20}H_{14}O_{2}S_{3}$ C20 H14 O2 S4
- - 4) Inneres Anhydrid d. 2-[3,4-Dimethoxylphenyl]- α oder β -Napht-
 - imidazol-2²-Carbonsäure. Śm. 191—192° (B. **25**, 1986). **IV**, 1066. 5) Nitril d. Acetyldiphenylketipinsäure. Sm. 208—209,5°. Na + 3H₂O, Ag (A. 282, 54). — II, 2032.
 - 6) Acetylphenylamidoimid d. Naphtalin-1,8-Dicarbonsäure. Sm. 230°
- (B. 28, 363). IV, 712. $\mathbf{C}_{20}\mathbf{H}_{14}\mathbf{O}_{3}\mathbf{Br}_{4}$ 1) ?-Tetrabrom- α -[Dioxydiphenyl]- α -[Oxy-?-Methylphenyl] methan (A. 179, 202). II, 1028.
- $C_{20}H_{14}O_3S$ 1) 2, 2'-Binaphtyl- α -Sulfonsäure (J. 1877, 391). — II, 296. 2) 2, 2'-Binaphtyl- β -Sulfonsäure. Ca + 2 H₂O, Ba + 2 H₂O (J. 1877, 391;
- Soc. 39, 551). II, 296. C 69,4 H 4,0 O 18,5 N 8,1 M. G. 346. $C_{20}H_{14}O_4N_2$ 1) ?-Nitro-2-[1,2-Phtalyl]methyl-6,8-Dimethylchinolin (Nitro-o-p-Di
 - - methylchinophtalon) (B. 28, 1512). IV, 459. 2) N-Diacetylindigo (B. 24, 4130). II, 1621. 3) Diacetat d. 5,6-Dioxy- $\alpha\beta$ -Naphtophenazin (D. d. $\alpha\beta$ -Oxynaphteurhodol).
- Sm. 208° (A. 286, 78). IV, 1058. C 64,2 H 3,7 O 17,1 N 15,0 M. G. 374. $C_{20}H_{14}O_4N_4$ 1) 1,2-Di[4-Nitrobenzyliden]amidobenzol. Sm. 222° (B. 27, 2191). —
 - IV, 563. 2) 5,9-Dinitro-2-Phenyl-1-[4-Methylphenyl]benzimidazol. Sm. 1920 (Bl. [3] 17, 872). - IV, 562.
 - 3) 5-Nitro-1-[4-Methylphenyl]-2-[3-Nitrophenyl]benzimidazol. Sm.
 - 213-215° (Bl. [3] 19, 519). IV, 1008. 4) 5-Nitro-1-[4-Methylphenyl]-2-[4-Nitrophenyl]benzimidazol. Sm. 250° (Bl. [3] 17, 1030). — IV, 1008.
 - 5) 1-[4-Nitrobenzyl]-2-[4-Nitrophenyl]benzimidazol. Sm. 212,5° (B. 27, 2192). — IV, 1006.
 - 6) P-Diphenylazobenzol-1,4-Dicarbonsäure. Sm. oberh. 250°. Ag. (B.
- **24**, 2694). **IV**, 1475. **C**₂₀**H**₁₄**O**₄**Cl**₂ 1) **Dibenzyläther d. 3,6-Dichlor-2,5-Dioxy-1,4-Benzochinon.** Sm. 142^o (Am. 18, 12). — III, 351. C 61,5 — H 3,6 — O 20,5 — N 14,4 — M. G. 390.
- $C_{20}H_{14}O_5N_4$ 1) β -[2,4-Dinitrophenylhydrazon]- α -Keto- $\alpha\beta$ -Diphenyläthan. Sm. 183
- bis 184° (G. 21 [1] 571). IV, 784. C 57,4 H 3,3 O 19,1 N 20,1 M. G. 418. 1) Dinitroderivat d. Verb. C₂₀H₁₆ON₄. Sm. 253° (B. 26, 1186). $\mathbf{C}_{20}\mathbf{H}_{14}\mathbf{O}_{5}\mathbf{N}_{6}$ IV, 1225.

C 63.5 - H 3.7 - O 25.4 - N 7.4 - M. G. 378. $C_{20}H_{14}O_6N_2$ 1) 1,4-Benzochinondi Amidobenzol-2-Carbonsäure]. $K_2 + 2H_2O(Bl. [3])$ 13, 746; [3] 15, 1025). — III, 343. 2) 1,4-Benzochinondi [Amidobenzol-3-Carbonsäure] (Bl. [3] 15, 1027).
3) 1,4-Benzochinondi [Amidobenzol-4-Carbonsäure] (Bl. [3] 15, 1027). 4) Base (aus Tarkonin). 4 + 3 HBr, H_2SO_4 (Soc. 32, 535). — III, 921. C 59,1 — II 3,4 — O 23,6 — N 13,8 — M. G. 406. C20H14O6N4 1) P-Dinitro-1, 4-Di [Formylphenylamido] benzol. Sm. 2150 (B. 25, 2722). **- IV**, 588. 2) Anthracen + 2,4,6-Trinitro-l-Amidobenzol. Sm. 165-170° (B. 8, 378). — II, *319*. 3) Di [2-Nitrophenylamid] d. Benzol-1, 2-Dicarbonsäure. Sm. 180-1840 (B. 28, 1120). — II, 1807. 4) Di[4-Nitrophenylamid] d. Benzol-1, 2-Dicarbonsäure. Sm. 232—234^q (B. 28, 1120). — II, 1808. 1) 4-Methylsulfonfluorescein + H_2O (Am. 17, 563). - III, 212. $C_{20}H_{14}O_6S$ 2) 2-[9-Sulfophenylbenzoyl] benzol-1-Carbonsäure. Ba $+ 2 H_2 O (J. pr. [2])$ **41**, 146). — II, 1726. 1) 2,2'-Binaphtyl-α-Disulfonsäure. Ba (Soc. 39, 553). — II, 296. $C_{20}H_{14}O_6S_2$ 2) 2, 2'-Binaphtyl-β-Disulfonsäure. Ba (Soc. 39, 553). — II, 296. 1) 1,1'-Dinaphtyldisulfid-?-Disulfonsäure. K₂ (J. pr. [2] 41, 219). $C_{20}H_{14}O_6S_4$ 2) 2,2'-Dinaphtyldisulfid-?-Disulfonsäure. K₂ (J. pr. [2] 41, 223). — II, 892. $C_{20}H_{14}O_7Br_2$ 1) Diacetat d. Dibrombrasileïn + $1^4/_2H_2O$ (B. 23, 1428). — III, 655. $C_{20}H_{14}O_7S_2$ 1) 2,2'-Dinaphtyläther-6,6'-Disulfonsäure. K_2 (B. 14, 1482). — II, 891. 2) 6-Sulfo-2-Naphtylester d. 2-Oxynaphtalin-6-Sulfonsäure. K (B. **14**, 1481). — **II**, 890. C₂₀H₁₄O₈Br₄ 1) Tetracetat d. ?-Tetrabrom-?-Tetraoxybiphenyl. Sm. 195° (M. 1, 353), - II, 1037. C₂₀H₁₄O₁₀Br₄1) Tetrabromhemlockgerbsäure (B. 17, 1041). — III, 684. $C_{20}H_{14}O_{12}S_4$ 1) 2,2'-Binaphtyltetrasulfonsäure. Pb₂ + 6H₂O (Soc. 39, 553). II, 296. 1) Jodmethylat d. meso-Phenylcarbazoakridin (G. 20, 409). — IV, 472, $\mathbf{C}_{20}\mathbf{H}_{14}\mathbf{NJ}$ 2) Jodmethylat d. Pyrenolin. Sm. 212° (M. 8, 447). — IV, 472. $C_{20}H_{14}N_2Br_2$ 1) $\alpha\beta$ -Dibrom- α -[2-Chinolyl]- β -[6-Chinolyl]äthan. Sm. noch nicht bei 300° (B. 22, 288). — IV, 1074. C 84,2 — H 5,3 — O 5,6 — N 4,9 — M. G. 285. $\mathbf{C}_{20}\mathbf{H}_{15}\mathbf{ON}$ 1) β -Phenylimido- α -Keto- α β -Diphenyläthan (Anilbenzil). Sm. 105° (M, 9, 687; J. pr. [2] 34, 24). — III, 284. 2) Acetylamidochrysen. Sm. 285° (B. 24, 951). — II, 643. 3) 9-Keto-10-Benzyl-9,10-Dihydrophenanthridin. Sm. 115° (112,5°) (B. **26**, 1967; A. **276**, 253). — IV, 408. 4) 3-[2-Methoxylphenyl]- β -Naphtochinolin. Sm. 184° (B. 27, 2029). C 76,7 - H 4,8 - O 5,1 - N 13,4 - M. G. 313. $C_{20}H_{15}ON_{3}$ 1) Carbonyltriphenylguanidin. Sm. 134°. $+ \text{ H}_2\text{O}$ (Sm. 141°) (B. 14, 2181). — II, *351*. 2) isom. Carbonyltriphenylguanidin. HCl, HNO₃ (J. pr. [2] 32, 23). II, 351. 3) 2-Phenylimido-3,5-Diphenyl-2,3-Dihydro-1,3,4-Oxdiazol. IICl (Sm. 106°) (B. 26, 2872). — IV, 675. 4) 6-Phenylformylamido-1-Phenylbenzimidazol. Sm. 1240 (A. 286, 179). **- IV**, 1147. 5) 5- oder 6-Benzoylamido-2-Phenylbenzimidazol + H₂O. Sm. 125 bis 214°(?). HCl (B. 14, 2653). — IV, 1180. 6) 2-Phenylimido-4-Keto-3-Phenyl-1, 2, 3, 4-Tetrahydro-1, 3-Benzdia-2-Prenylimido-4-Reto-3-Prenyl-1,2,3,4-Tetrahydro-1,5-Belladia zin. Sm. 163° (B. 30, 1093, 1682, 1687; Am. 21, 143). — IV, 1158. 7) 1-Nitroso-2,3-Diphenyl-1,2-Dihydro-1,4-Benzdiazin (Nitrosodiphenyl-dihydrochinoxalin). Sm. 138° (B. 27, 2182). — IV, 1074. 8) 8-Keto-7-Phenyl-5-[4-Methylphenyl]-7,8-Dihydro-1,6,7-Benztriazin. Sm. 247°. (2 HCl, PtCl₄) (M. 18, 456). — IV, 799. 9) N-Aethyltriphenazinoxazin. Sm. 229° (B. 31, 499). — IV, 1213. 10) Acetylaposafranin. HCl (B. 21, 1590; J. r. 29, 542). — IV, 1177. C₂₀H₁₅OCl 1) α-Chlor-β-Keto-ααβ-Triphenyläthan. Fl. (C. 1897 [2] 661).

- C20H15OBr 1) α -Brom- β -Keto- $\alpha \alpha \beta$ -Triphenyläthan. Sm. 97° (Bl. [3] 13, 861; C. 1897 [2] 661). — III, 258. C 79,7 — H 5,0 — O 10,6 — N 4,6 — M, G. 301.
- $\mathbf{C}_{20}\mathbf{H}_{15}\mathbf{O}_{2}\mathbf{N}$
 - 2-Benzoylamidodiphenylketon. Sm. 80,5° (B. 25, 3090). III, 182.
 2-Benzoylamidodiphenylketon. Sm. 152° (Soc. 41, 133; A. 210, 271;
 - B. **14**, 1438). **III**, *184*.
 - 3) 3-Benzoyl-1- $[\alpha$ -Oximidobenzyl]benzol. Sm. 2010 (B. 19, 146). III, 304.
 - 4) 4-Benzoyl-1-[α-Oximidobenzyl] benzol. Sm. 212—213° (B. 19, 147). - III, 305.
 - 5) 2-Keto-3,3-Diphenyl-5-[2-Pyrryl]furan (Anhydro-αα-Diphenylβ-Pyrroylpropionsäure). Sm. 184° (B. 23, 1355). — IV, 90.
 - 6) 2-[1,2-Phtalyl]methyl-6,8-Dimethylchinolin (o-p-Dimethylchinophtalon). Sm. 282° (B. 28, 1512). — IV, 459.
 - 7) 4-Diphenylmethylenamidobenzol-1-Carbonsäure. Sm. 240° (B. 24, 3522). — III, 188.
 - 8) 5-Phenyl-P-Dihydroakridin-52-Carbonsäure. Sm. 160—1650 u. Zers. (A. **224**, 49). — IV, 471.
 - 9) Phenylimid d. Benzolcarbonsäure. Sm. 161° (155°) u. 136° (J. 1856, 501; A. 178, 235; B. 6, 176; 26, 2852; Soc. 41, 133; Am. 19, 153). — II, 1171.
- $\mathbf{C}_{20}\mathbf{H}_{15}\mathbf{O}_{2}\mathbf{N}_{3}$ C 73.0 - H 4.5 - O 9.7 - N 12.8 - M. G. 329.
 - 1) 6-Phenylhydrazon-5-Oxy-3-Methyl-1-Phenylbenzoxazol. Sm. 169 bis 170°. HCl (M 19, 500). — IV, 1448.
 - 2) 1-[4-Methylphenyl]-2-[4-Nitrophenyl]benzimidazol. Sm. 1760 (Bl. [3] **17**, 1029). — **IV**, 1008.
 - 3) 5-Nitro-2-Phenyl-1-[2-Methylphenyl]benzimidazol. Sm. 172—173°
 - (Bl. [3] 17, 869). IV, 562. 4) 5-Nitro-2-Phenyl-1-[4-Methylphenyl]benzimidazol. Sm. 177-178° (Bl. [3] 17, 869). - IV, 562.
 - 5) Acetylsafraninon (Acetylamidobenzolindon). Sm. oberh. 280° (B. 30,
 - 400). IV, 1179. 6) Acetat d. 3-Oxy-5-Phenyl-1-[2-Naphtyl]-1,2,4-Triazol. Sm. 142 bis
- 143° (Soc. 73, 371). IV, 1158. 1) Di[1-Naphtyl]phosphinsäure. Sm. 202—204° (B. 11, 1502). — IV, 1681. $\mathbf{C}_{20}\mathbf{H}_{15}\mathbf{O}_{2}\mathbf{P}$ $C_{20}H_{15}O_{3}N$
 - C 75,7 H 4,7 O 15,1 N 4,4 M. G. 317.1) 2-Keto-3,3-Di[P-Oxyphenyl]-2,3-Dihydroindol (Phenolisatin). Sm. 220° (B. 18, 2641). — II, 1618.
 - 2) 1-Keto-2,3-Di[4-Oxyphenyl]-1,3-Dihydroisoindol. Sm. 252—256° (B. 26, 176; M. 17, 436; 20, 363). II, 1986.
 3) 1-Keto-3,3-Di[4-Oxyphenyl]-1,3-Dihydroisoindol (Imidophenolphta-

 - leïn). Sm. 2620 u. Zers. (G. 24 [1] 71). II, 1985. 4) 3-[2-Naphtylamido]-2-Oxy-1,4-Diketo-1,2,3,4-Tetrahydronaphtalin
 - (A. 286, 73). III, 382. 5) Benzoat d. 2-Benzoylamido-1-Oxybenzol. Sm. 182° (176°) (A. 210,
 - 387; B. 16, 1828). II, 1176. 6) Benzoat d. 3-Benzoylamido-1-Oxybenzol. Sm. 153° (Am. 15, 43). —
 - II, 1177.
 - 7) Benzoat d. 4-Benzoylamido-1-Oxybenzol. Sm. 231° (234°) (B. 9, 1529; 27, 3358; 29, 1484). — II, 1177.
 - 8) Benzoat d. Benzoylphenylhydroxylamin. Sm. 118-119° (J. pr. [2] **56**, 87).
 - 9) Diphenylmonamid d. Benzol-1, 2-Dicarbonsäure (Diphenylphtalamidsäure). Sm. 147—148°. Ag (A. 227, 190). — II, 1797.
 - 10) Verbindung (aus Phenolphtalidein). Sm. bei 260° (A. 202, 120). III, 261.
- C 69,6 H 4,3 O 13,9 N 12,2 M. G. 345.C20 H15 O3 N3
 - 1) α -Benzoyl- α -Phenyl- β -[2-Nitrobenzyliden]hydrazin. Sm. 166—167° (J. pr. [2] 53, 462). - IV, 752.
 - 2) α -Benzoyl- α -Phenyl- β -[3-Nitrobenzyliden]hydrazin. Sm. 197° (J. pr.
 - [2] 53, 457). IV, 752. 3) α -Benzoyl- α -Phenyl- β -[4-Nitrobenzyliden]hydrazin. Sm. 169° (J. pr. [2] **53**, 459). — IV, 752.

 $\mathbf{C}_{20}\mathbf{H}_{15}\mathbf{O}_{3}\mathbf{N}_{3}$ 4) β -[3-Nitrophenylhydrazon]- α -Keto- $\alpha\beta$ -Diphenyläthan. Sm. 158° (B. 22, 2814). — IV, 784.
5) Verbindung (aus 1,5-Diamidonaphtalin) (Z. 1865, 558). — IV, 1541.

C 64,3 — H 4,0 — O 12,9 — N 18,8 — M. G. 373. 1) Mononitroderivat d. Verb. $C_{20}H_{16}ON_4$. Sm. $197,5^\circ$; Sd. 272° u. Zers. $C_{20}H_{15}O_{3}N_{5}$ (B. 26, 1184). — IV, 1225. 1) Verbindung (aus Phenanthroxylenacetessigsäureäthylester). Sm. 145 bis

 $\mathbf{C}_{20}\mathbf{H}_{15}\mathbf{O}_{3}\mathbf{C}\mathbf{1}$ 146° (Soc. 59, 22). — II, 1908.

 $\mathbf{C}_{20}\mathbf{H}_{15}\mathbf{O}_{3}\mathbf{Br}$ 1) Aethyläther d. 2-Brom-?-Oxy-l,l'-Diketo-2,3-Dihydro-2,2'-Biinden. Sm. 173-174° u. Zers. (Soc. 71, 247).

 $\mathbf{C}_{20}\mathbf{H}_{15}\mathbf{O}_{3}\mathbf{Br}_{3}$ 1) $\mathbf{Tri}[\mathbf{4}\text{-Bromphenyläther}]$ d. $\alpha\alpha\alpha$ - $\mathbf{Trioxyäthan}$. Sm. 132—133° (B. 24, 3680). — II, 672. C 72,1 — H 4,5 — O 19,2 — N 4,2 — M. G. 333.

 $\mathbf{C}_{20}\mathbf{H}_{15}\mathbf{O}_{4}\mathbf{N}$

1) Sanguinarin + H_2O . Sm. 213°. $HCl + H_2O$, (2 HCl, $PtCl_4$), (HCl, $AuCl_3$), $HNO_3 + H_2O$ (Berx. J. 9, 221; J. 1855, 566; Z. 1870, 119; A. 43, 233; Soc. 56, 62). — III, 805.

2) Phenolphtaleïnoxim. Sm. 212° u. Zers. HCl (B. 26, 174). — II, 1985. 3) Phenylester d. 2-[Phenylamidoformyl] oxybenzol-1-Carbonsäure. Sm. 241° (B. 26, 1466). — II, 1496.

4) Acetat d. ?-Oxy-?-Phenyl-1,4-Naphtochinonacetylimid. Sm. 200 bis 201° (A. **226**, 39). — III, 460.

5) Phenyl-3-Oxyphenylmonamid d. Benzol-1, 2-Dicarbonsäure. Sm. 191—192°. Ag (B. **31**, 1331).

6) Phenyl-4-Oxyphenylmonamid d. Benzol-1,2-Dicarbonsäure. Sm. 191—192°. Cu + 4H₂O, Ag + 3¹/₂H₂O (B. 31, 1329). C 66,5 — H 4,1 — O 17,7 — N 11,6 — M. G. 361.

 $C_{20}H_{15}O_4N_3$ 1) ?-Nitro-1,3-Di[Benzoylamido]benzol. Sm. 222° (235-236°) (B. 14,

2653; A. 273, 351). — IV, 578.

2) $\alpha \beta$ -Dibenzoyl- α -[3-Nitrophenyl]hydrazin. Sm. 153° (B. 22, 2811). — IV, 670. C 61.6 - H 3.9 - O 16.4 - N 18.0 - M. G. 389.

 $C_{20}H_{15}O_4N_5$ 1) III-3-Nitroformazylbenzol-II-3-Carbonsäure. Sm. 1850 (B. 31, 1756). **– IV**, 1261.

1) 2,2'-Dinaphtylester d. Phosphorsäure. Sm. 1420 (147-1480) (B. 27, $\mathbf{C}_{20}\mathbf{H}_{15}\mathbf{O}_{4}\mathbf{P}$ 2865; **30**, 2377). — II, 877. C 63,7 — H 4,0 — O 21,2 — N 11,1 — M. G. 377.

 $C_{20}H_{15}O_5N_3$

1) ?-Nitro-2, 4-Di[Benzoylamido]-1-Oxybenzol. Sm. 167-1700 (A. 205, 70). — II, 1178. 2) ?-Nitro-2, 6-Di[Benzoylamido]-1-Oxybenzol. Sm. 201—202° (A. 205,

84). — II, 1178. 3) 4'-Benzoat-3'-Methyläther d. 3-Nitro-3', 4'-Dioxyazobenzol. Sm.

135—136° (Soc. **69**, 1333). — **IV**, 1441.

4) Dinitroderivat d. Phenyl[?-Methylphenyl]amid d. Benzolcarbonsäure (A. 132, 293). — II, 1165.

C₂₀H₁₅O₅Br 1) Diacetat d. 6-Brom-l-Keto-2-[3,4-Dioxybenzyliden]-2,3-Dihydroinden. Sm. 153° (B. 31, 724).

 $C_{20}H_{15}O_6N$ C 65.8 - H 4.1 - O 26.3 - N 3.8 - M. G. 365.1) Acetat d. 1-Diacetylamido-2-Oxy-9,10-Anthrachinon. Sm. 181° (B. **28**, 1423). — III, 420.

 $C_{20}H_{15}O_6Br$ 1) Brompterocarpin (A. ch. [6] 17, 127). — III, 672. $C_{20}H_{15}O_{7}N$ C 63,0 - H 3,9 - O 29,4 - N 3,7 - M, G. 381.

1) Verbindung (aus d. Methyläther d. 7-Amido-6-Oxy-1,2-Benzpyron) (G. **27** [2] 353).

C 60,5 - H 3,8 - O 32,2 - N 3,5 - M. G. 397. $C_{20}H_{15}O_8N$

1) Berilsäure. Sm. 198-200° u. Zers. Ag (Soc. 57, 1091). — III, 803. C 54,4 - H 3,4 - O 32,6 - N 9,5 - M. G. 441. $\mathbf{C}_{20}\mathbf{H}_{15}\mathbf{O}_{9}\mathbf{N}_{3}$ 1) Tri[2-Nitrophenyläther] d. ααα-Trioxyäthan. Sm. 167-168° (B. 24,

3680). — II, 680. 2) Verbindung (aus Azoopiansäure). Sm. noch nicht bei 280° (J. pr. [2]

55, 184).

C20 H15 NS 1) α -Rhodantriphenylmethan. Sm. 137° (B. 17, 700). — II, 1089. $C_{20}H_{15}N_3S$ 1) 1-Phenylamidophenylimidomethylbenzthiazol. Sm. 129°. (2HCl, 2 AuCl₃) (B. **20**, 2255). — II, 799.

- C20 H15 N2S 2) Verbindung (aus Anilidodiphenylthiobiazolin). Sm. oberh. 280° u. Zers.
- (B. 30, 853). IV, 686. 1) 2-Phenylimido-5-Phenylazo-3-Phenyl-2,3-Dihydro-1,3,4-Thio-C₂₀H₁₅N₅S
- diazol. Sm. $180-181^{\circ}$ (B. 26, 2874). IV, 687. $\mathbf{C_{20}H_{15}N_6Cl_3}$ 1) Diazoleukanilinchlorid. $+3\,\mathrm{AuCl_3} + \mathrm{H_2O}$ (A. 194, 281). IV, 1544. $\mathbf{C_{20}H_{16}ON_2}$ C 80,0 H 5,3 O 5,3 N 9,3 M. G. 300.
 - 1) α -Oximido- β -Phenylimido- $\alpha\beta$ -Diphenyläthan (Benziloximanil). Sm. 211 bis 212° (B. 25, 2597; 26, 794). — III, 290.
 - 2) α-Phenylimido-α-Benzoylamidophenylmethan (Phenylbenzoylbenzamidin). Sm. 143° (A. 296, 286; Am. 20, 573). — IV, 848.
 - 3) 4-Benzylidenhydrazidodiphenylketon. Sm. 188° (Soc. 55, 615). III, 186.
 - 4) α-Benzoyl-β-Diphenylmethylenhydrazin. Sm. 116,5° (J. pr. [2] 44, 197). — III, 187.
 - 5) α-Benzoyl-α-Phenyl-β-Benzylidenhydrazin. Sm. 1220 (1140) (B. 20, 1717; J. pr. [2] 53, 463). — IV, 750.
 - 6) Phenylhydrazon d. Acetyldiphenylenoxyd. Sm. 132-1330 u. Zers. (A. 264, 191). - IV, 777.
 - 7) β -Phenylhydrazon- α -Keto- $\alpha\beta$ -Diphenyläthan. Sm. 134° (128—129°)
 - (A. 236, 197; B. 26, 793). IV, 784. 8) β-Phenylazo-α-Keto-αβ-Diphenyläthan (Benzolazodesoxybenzoïn). Sm.
 - 159° (J. pr. [2] 55, 319). IV, 1479. 9) 3-Keto-2-[β-Phenyläthenyl]-1,2,3,4-Tetrahydro-1,4-Benzdiazin. Sm. 174° (B. 25, 955). — IV, 1075. C 73,2 — H 4,8 — O 4,8 — N 17,1 — M. G. 328.
- $C_{20}H_{16}ON_4$ 1) β -Phenylazo- β -Phenylhydrazon- α -Keto- α -Phenyläthan (Formazyl
 - phenylketon). Sm. 141-142°. Na, Ag (B. 26, 2787). IV, 1230. 2) 2,2'-Diamido-1,1'-Azoxynaphtalin. Sm. 121—122° (A. 255, 160). —
 - IV, 1341.
 3) 8,8'-Dimethyl-5,5'-Azoxychinolin. Sm. 201° (B. 23, 3679). IV, 1345.
 - 4) Verbindung (aus d. Verb. C₂₂H₁₈O₂N₄). Sm. 161°. Pikrat (B. 26, 1185). — IV, 1224. C 75,9 — H 5,1 — O 10,1 — N 8,9 — M. G. 316.
- $C_{20}H_{16}O_2N_2$
 - 1) $\alpha \delta$ -Di[2-Acetylamidophenyl]butadiin. Sm. 231° (B. 15, 61). IV, 1039. 2) ?-Diamido-1, 3-Dibenzoylbenzol. 2 Modif.; β-Modif. Zers. bei 70° (B. 13, 322). — III, 304.
 - 3) 1,2-Di[Benzoylamido]benzol. Sm. 301° (B. 23, 1878; A. 254, 254; **273**, 346). — **IV**, *562*.
 - 4) 1,3-Di[Benzoylamido]benzol. Sm. 240° (B. 14, 2652; A. 293, 385).
 - IV, 578.
 5) 1, 4 Di [Benzoylamido] benzol. Sm. oberh. 300° (A. 254, 254). IV, 594.
 - 6) 1,4-Di[Formylphenylamido] benzol. Sm. 1680 (B. 25, 2722). IV, 588.
 - 7) β -Phenylnitrosamido- α -Keto- $\alpha\beta$ -Diphenyläthan. Sm. 140° u. Zers. (J. pr. [2] 34, 7). - III, 220.
 - 8) 2-[4-Nitrobenzyliden] amidodiphenylmetham Sm. 105° (B. 27, 2787). - III, 31.
 - 9) 4,4'-Diamido-1,1'-Dioxy-2,2'-Binaphtyl. 2 HCl + 3 H₂O, (2 HCl, SnCl₄) (B. 30, 2662).
 - 10) $\hat{\mathbf{1}}$, 3-Di[α -Oximidobenzyl] benzol. Sm. 70—75° (B. 19, 1849). III, 304. 11) 1,4-Di[α -Oximidobenzyl] benzol. Sm. 235° (B. 19, 1847). — III, 305.
 - 12) αβ-Dibenzoyl-α-Phenylhydrazin. Sm. 177-178°. Na (A. 190, 128; B. 18, 1740; 20, 46, 1713). — IV, 669.
 - 13) Benzoat d. 4-Oxy-3-Methylazobenzol. Sm. 110-111 (B. 17, 364). **– IV**, 1420.
 - 14) Benzoat d. 6-Oxy-3-Methylazobenzol. Sm. 113° (B. 17, 353). IV, 1420.
 - 15) 6-Methyläther d. 6-Oxy-2-[2-Oxyphenyl]-1-Phenylbenzimidazol. Sm. 123° (B. 29, 2682).
 - 16) 2-Phtalyl-4-Methyl-5, 6-Dihydro-peri-Chinolinazol (B. 24, 2052). IV, 862.
 - 17) Aethyläther d. Safranol. Sm. 265° u. Zers. (A. 286, 212; B. 30, 401). - IV, 1003.
 - 18) 2,2'-Dioxy-4,4'-Dimethyl-6,6'-Bichinolyl. Sm. oberh. 300° (M. 19, 705). RICHTER, Lex. d. Kohlenstoffverb. 122

 $C_{20}H_{16}O_2N_2$ 19) Phenylamidoformiat d. α -Oximidodiphenylmethan. Sm. 176° (B. 22, 3108). — III, 189.

20) 1-Diphenylhydrazonmethylbenzol-2-Carbonsäure. Sm. 1870. Ca (B.

24, 2349). — **IV**, 696.

21) 3-Phenyl-α-Naphtimidazol-2-[Aethyl-β-Carbonsäure]. Sm. 180—181°. Ag, HCl, Pikrat (B. 27, 2774). — IV, 997. 22) Diimidophenylphtaleïn. Sm. 265 — 266° (A. 202, 112; G. 24 [1] 75).

– II, 1985.

23) Lakton d. α-Oxy-α'-[?-Diamidodiphenyl]-α²-Phenylmethan-α² 2-Carbonsäure (Diamidodiphenylphtalid). 2 isom. Formen. 1) Sm. 179—180°; 2) Sm. 205° (A. **202**, 66, 67). — II, 1722.

24) Lakton d. 1-[αβ-Diphenylhydrazido] oxymethylbenzol-2-Carbonsäure (Phtalidylhydrazobenzol). Sm. 202-203° u. Zers. (B. 24, 2350). -IV, 696.

25) Oximbenzoat d. Benzenylphenylamidoxim. Sm. 116° (B. 19, 1670). **– II**, 1208.

26) β -[1-Naphtyl]amidoäthylimid d. Benzol-1,2-Dicarbonsäure. Sm. 158° (B. 24, 2198). — II, 1800.

27) β -[2-Naphtyl]amidoäthylimid d. Benzol-1, 2-Dicarbonsäure. Sm. 141° (B. **24**, 2199). — **II**, 1800.

28) Di[Phenylamid] d. Benzol-1, 2-Dicarbonsäure. Sm. 231° u. Zers. (251 bis 252°) (B. 30, 1442; R. 15, 345 Anm.).

29) Di[Phenylamid] d. Benzol-1,3-Dicarbonsäure. Sm. 250° (C. 1895)

 $C_{20}H_{16}O_2N_4$

[2] 217). C 69,8 — H 4,6 — O 9,3 — N 16,3 — M. G. 344. 1) Dichinizinohydrobenzol. Zers. oberh. 300° (B. 17, 2055). — IV, 723.

2) Pyrazolblau (A. 238, 171; B. 25, 765). — IV, 1271. 3) Formazylbenzol - II - 3 - Carbonsäure. Sm. 202° (B. 31, 1755). — IV, 1261.

4) Acetat d. 4-Oxy-1, 3-Di[Diphenylazo] benzol. Sm. 116° (B. 17, 369;

25, 1334). — IV, 1416. 5) Diacetylderivat d. Base $C_{18}H_{12}N_4$ (aus d. Verb. $C_{16}H_8O_2N_4$). Sm. 176 bis 177° (A. 255, 353). — IV, 1171.

 $C_{20}H_{16}O_2Br_6$ 1) $\alpha\alpha\gamma\zeta\vartheta\vartheta$ -Hexabrom- $\beta\eta$ -Diketo- $\delta\varepsilon$ -Diphenyloktan. Sm. 190—191° (B. 29, 2126).

1) 3,4-Methylenäther-1,1-Diphenyläther d. 3,4-Dioxy-1-Dimerkapto- $C_{20}H_{16}O_2S_2$ methylbenzol. Sm. 48° (B. 18, 886). — III, 102.

2) $\alpha \alpha$ -Dimerkaptophenylessigdiphenyläthersäure. Sm. 143°. K $+1\frac{1}{2}H_2O$ (B. 18, 891; $\overline{19}$, 1789). — $\overline{\Pi}$, 1599. C 72,3 — H 4,8 — O 14,5 — N 8,4 — M. G. 332.

 $\mathbf{C}_{20}\mathbf{H}_{16}\mathbf{O}_{3}\mathbf{N}_{2}$

1) 2,4-Di[Benzoylamido]-1-Oxybenzol. Sm. 187—188° (A. 205, 68). —

2) 2, 6-Di[Benzoylamido]-1-Oxybenzol. Sm. 209-213° (A. 205, 82). -II, 1178.

3) Phenyl-2-Nitrobenzylamid d. Benzolcarbonsäure. Sm. 101° (B. 19, 1608). - II, 1166.

4) Phenyl-4-Nitrobenzylamid d. Benzolcarbonsäure. Sm. 194° (Soc. **53**, 780). — **II**, *1166*.

5) Benzoat d. α-Oxy-αβ-Diphenylharnstoff. Sm. 100° (J. pr. [2] 56, 85). 6) Monobenzoat d. 2', 5'-Dioxy-4-Methylazobenzol. Sm. 113—115,5° (B.

26, 1910). — IV, 1447. 7) Phenylamidoformiat d. Benzoylphenylhydroxylamin. Sm. 127° (J. pr.

[2] **56**, 86). 8) Monacetylderivat d. Verb. $C_{18}H_{14}O_2N_2$ (aus Diacetonitril u. Salicylaldehyd). Sm. 170° (J. pr. [2] 56, 140).

9) Phenylmonohydrazid d. Biphenyl-2,2'-Dicarbonsäure. Sm. 1740 (A. 247, 273). - IV, 712.

 $\mathbf{C}_{20}\mathbf{H}_{16}\mathbf{O}_{4}\mathbf{N}_{2}$

 $C_{69,0} - H_{4,6} - O_{18,4} - N_{8,0} - M.G.$ 348.

1) Di[3-Nitrobenzyl]benzol. Sm. 165° (B. 15, 2091). — II, 289. 2) Di[4-Nitrobenzyl]benzol. Sm. 146° (B. 16, 2716). — II, 289. 3) αα-Diacetylindigweiss. Sm. 226° (B. 21, 442). — II, 1623.

4) $\beta\beta$ -Diacetylindigweiss (B. 24, 4134). — II, 1623.

5) p-Dihomopiperylpyrazin. Sm. 155—156° (G. 25 [2] 212). — III, 144. 6) Cotoinazobenzol. Sm. 183—184° (Soc. 71, 1149). — IV, 1478.

C₂₀H₁₆O₄N₂ 7) 3-Acetat d. Phenylacetylhydrazon-3-Oxy-1-Keto-1,4-Dihydronaphtalin. Sm. 123° (A. 286, 87).

8) Diacetat d. 1-Phenylazo-2,4-Dioxynaphtalin. Sm. 122-1230 (B. 22, 3167). — IV, 1449.

9) Diacetat d. 1-Phenylazo-3,4-Dioxynaphtalin. Sm. 1530 (A. 286, 83). **- IV**, 1449.

10) 2-[3,4-Dimethoxylphenyl]- α oder β -Naphtimidazol-2 2 -Carbonsäure. Sm. 242 0 u. Zers. (B. 25, 1986). — IV, 1066.

11) 1,2-Phenylenester d. Phenylamidoameisensäure. Sm. 165° (B. 18, 2429). — II, 910.

12) 1,3-Phenylenester d. Phenylamidoameisensäure. Sm. 164° (B. 18, 2429). — II, 918.

13) 1,4-Phenylenester d. Phenylamidoameisensäure. Sm. 205-207° (B. 18, 2429). — II, 941.

14) Di[Phenylimid] d. h-Butan-αβγδ-Tetracarbonsäure. Sm. 210-230° (B. 28, 889).

15) Di[Phenylimid] d. n-Butan- $\alpha\beta\gamma\delta$ -Tetracarbonsäure. Sm. 194—197° (B. 28, 886).

16) Verbindung (aus Furfurin). Sm. 174° (B. 22, 2305). — III, 722.

 $C_{20}H_{16}O_4N_4$ C 63.8 - H 4.3 - O 17.0 - N 14.9 - M. G. 376.1) Monacetat d. 2,4-Diphenylazo-1,3,5-Trioxybenzol. Sm. 222-223°

u. Zers. (Soc. 71, 190). — IV, 1450. C 59,4 — H 4,0 — O 15,8 — N 20,8 — M. G. 404. $C_{20}H_{16}O_4N_6$ 1) Dimethylester d. 4,4'-Biphenylendi [Hydrazoncyanessigsäure]. Sm.

270° u. Zers. (Bl. [3] 19, 1034). — IV, 1276, 1457. C₂₀H₁₆O₄Cl₂ 1) 1,4-Dibenzyläther d. 3,6-Dichlor-1,2,4,5-Tetraoxybenzol. Sm. 122 bis 123° (Am. 18, 13).

C20 H16 O5 S 1) β -Keto- $\alpha\beta$ -Diphenyl- α -[4-Oxyphenyl]äthan-?-Sulfonsäure. Ca + 7H₂O (Soc. 57, 967). — III, 258.

2) α , 3-Lakton d. α -Oxy- $\alpha\alpha$ -Di[?-Oxyphenyl]- α -[4-Methylphenyl]methan-3-Sulfonsäure + 3H₂O (4-Methylphenolsulfonphtaleïn) (Am. 16, 514).

C 63,2 — H 4,2 — O 25,3 — N 7,3 — M. G. 380.

1) Nartinsäure. Zers. unterh. 200°. HCl, 2HCl, H₂SO₄, Ba (A. 212, 70; B. 14, 313). — III, 920.

2) 1,2-Lakton d. 6-Nitro-3,4-Dioxy-1-[2-Naphtyl]amidooxymethyl- $\mathbf{C}_{20}\mathbf{H}_{16}\mathbf{O}_{6}\mathbf{N}_{2}$

benzol-3,4-Dimethyläther-2-Carbonsäure (Nitroopiansäure-β-Naphtylamid). Sm. 232° u. Zers. (B. 29, 2033).

3) Diacetat d. Dioxydihydroindigotin (J. pr. [2] 58, 104).

C 58,8 — H 3,9 — O 23,5 — N 13,7 — M. G. 408. C20 H16 O6 N4 1) 2,5-Di[2-Nitro-4-Methylphenylamido]-1,4-Benzochinon. Zers. bei 140° (B. 23, 2795). — III, 340.

C 55,0 - H 3,7 - O 22,0 - N 19,3 - M. G. 436. $\mathbf{C}_{20}\mathbf{H}_{16}\mathbf{O}_{6}\mathbf{N}_{6}$ 1) Verbindung (aus γ -Benzoinphenylhydrazon). Sm. 137° u. Zers. +3Br (Am. 21, 50).

 $C_{20}H_{16}O_7N_2$ \dot{C} 60,6 - \dot{H} 4,0 - O 28,3 - N 7,1 - M. G. 396.

Co,01-16 Co,02 — II 4,0 — C 20,3 — N 7,1 — M. G. 590.

1) Verbindung (aus Essigsäureanhydrid u. Dibenzoylglyoximsuperoxyd). Sm. 149° (B. 21, 2839). — III, 298.

Co,0H16O₇Br₂ 1) Diacetat d. Dibrombrasilin. Sm. 249° (B. 27, 528). — III, 654.

Co,0H16O₈N₄ C 54,5 — H 3,6 — O 29,1 — N 12,7 — M. G. 440.

1) 2,3,2',3'-Diimid d. 4,5,4',5'-Tetraoxyazobenzoltetramethyläther2,3,2',3'-Tetracarbonsäure (Imid d. Azohemipinsäure). Sm. 250° u. Zers. (J. pr. [2] 55, 180). C 51,3 — H 3,4 — O 27,3 — N 18,0 — M. G. 468.

 $C_{20}H_{16}O_8N_6$ 1) 1,4-Di[?-Dinitro-4-Methylphenylamido] benzol. Sm. oberh. 300° (B. 25, 3007). — IV, 586.

 $\mathbf{C}_{20}\mathbf{H}_{16}\mathbf{O}_{8}\mathbf{Br}_{2}\ 1)\ \alpha, 2-\beta, 2'-\mathbf{Dilakton}\ \mathbf{d}.\ \alpha\beta-\mathbf{Dibrom}-\alpha\beta-\mathbf{Dioxy}-\alpha\beta-\mathbf{Di}[\mathbf{5},\mathbf{6}-\mathbf{Dimethoxyl-norm}]$ phenyl]äthan-2,2'-Dicarbonsäure(Tetramethoxydiphtalyldibromid). Sm. 260° u. Zers. (M. 14, 142). — II, 2096.

 $C_{20}H_{16}O_8S$ 1) Methyläther d. 4-Oxysulfofluorescein (Am. 20, 295). C 52,6 — H 3,5 — O 31,6 — N 12,3 — M. G. 456. $C_{20}H_{16}O_{9}N_{4}$

Verbindung + H₂O (aus 4-Hydrazidophenoxylessigsäure). Sm. 2420 (B. 30, 2104). — IV, 815.

C20H16O0S 1) 4-Methylsulfongallein (Am. 16, 526).

 $C_{20}H_{17}ON_3$

 $\mathbf{C}_{20}\mathbf{H}_{17}\mathbf{ON}_{5}$

 $C_{20}H_{17}O_{2}N$

C 50,8 — H 3,4 — O 33,9 — N 11,9 — M. G. 472. $\mathbf{C}_{20}\mathbf{H}_{16}\mathbf{O}_{10}\mathbf{N}_{4}$

1) Bis-Nitro-m-Opindolon. Sm. noch nicht bei 325° (B. 31, 934).

1) Tetracetat d. 1,3,1',3'-Tetraoxybiphenyl-?-Disulfon. Sm. 2560 (M. $C_{20}H_{16}O_{10}S$ **14**, 3). — **II**, 1037.

1) Chlorbenzylat d. \$\textit{\textit{9-Naphtochinolin}} + 2\text{H}_2\text{0}. Sm. 196\(^{\text{0}}\) (J. \$pr. [2] 57, 53).

1) Jodmethylat d. 5-Phenylakridin (A. 224, 20; B. 19, 426). — IV, 467.

1) s-Methylchrysylthioharnstoff. Sm. 231\(^{\text{0}}\) (B. 24, 957). — II, 643. $\mathbf{C}_{20}\mathbf{H}_{16}\mathbf{NCl}$ $\mathbf{C}_{20}\mathbf{H}_{16}\mathbf{N}\mathbf{J}$

 $\mathbf{C}_{20}\mathbf{H}_{16}\mathbf{N}_{2}\mathbf{S}$ 1) Di [2-Amido-1-Naphtyl] disulfid. HCl (B. 26, 2367). — II, 869. 2) Di [5-Amido-1-Naphtyl] disulfid. Sm. 192—193°. 2 HCl (B. 23, 1121). $\mathbf{C}_{20}\mathbf{H}_{16}\mathbf{N}_{2}\mathbf{S}_{2}$

- II, 869.

3) Di[1-Amido-2-Naphtyl]disulfid. Sm. 131-1320 (B. 20, 1900). -II, 888.

4) Di[5-Amido-2-Naphtyl] disulfid. Sm. 166°. 2HCl, 2HJ (B. 24, 332). · II, 889.

5) 2,2'-Di[4-Methylchinolyl]disulfid. Sm. 167° (B. 21, 627). — IV, 318.

1) 2-Phenylimido-5-Phenylamido-3-Phenyl-2, 3-Dihydro-1, 3, 4-Thio- $C_{20}H_{16}N_4S$ diazol. Sm. 154°. HCl (B. 26, 2873). - IV, 687.

1) 4,4'-Biphenylenphenylthiosemicarbazid. Sm. 220-230° u. Zers. (B. $C_{20}H_{16}N_4S_2$ **27**, 1560). — **IV**, 965. C 83,6 — H 5,9 — O 5,6 — N 4,9 — M. G. 287. $\mathbf{C}_{20}\mathbf{H}_{17}\mathbf{ON}$

1) α-[2-Oxybenzyliden]amidodiphenylmethan. Sm. 131° (B. 26, 2170).

2) 2-[4-Oxybenzyliden]amidodiphenylmethan. Sm. 110° (B. 27, 2787). 3) 2-Benzoylamidodiphenylmethan. Sm. 116° (B. 27, 2786). — II, 1169. 4) Benzyläther d. α-Oximidodiphenylmethan. Sm. 55-56° (M. 5, 205).

– III, 189.

5) β -Phenylamido- α -Keto- $\alpha\beta$ -Diphenyläthan (Anilbenzoïn; Desylanilid). Sm. 97-98°. HCl (J. pr. [2] 34, 2; M. 14, 280; B. 26, 1337). III, 220.

6) Methyloxydhydrat d. 5-Phenylakridin. Sm. 140°. Jodid (A. 224, 20; B. 19, 426; 25, 1747; J. pr. [2] 45, 197) — IV, 467.

7) Benzyloxydhydrat d. β -Naphtochinolin. Chlorid $+ 2 H_2 O$, Bichromat + 2H₂O (*J. pr.* [2] **57**, 53).

8) Phenylamid d. Diphenylessigsäure. Sm. 180° (*A.* **275**, 84). — II, 1464.

9) Diphenylamid d. Phenylessigsäure. Sm. 72° (B. 22, 324).

II, 1311. 10) Diphenylamid d. 1-Methylbenzol-4-Carbonsäure. Sm. 153-155°

(B. **20**, 2118). — **II**, 1341. 11) Phenylbenzylamid d. Benzolcarbonsäure. Sm. 104° (A. 138, 229).

— II, 1166. 12) Phenyl[?-Methylphenyl]amid d. Benzolcarbonsäure (A. 132, 293).

- II, 1165. C 76,2 - H 5,4 - O 5,1 - N 13,3 - M. G. 315.

1) α -Phenyl- β -[α -Benzoylamidobenzyliden]hydrazin. Sm. 105°. HCl (A. 296, 290, 293). — IV, 1137.

2) 4-[2-Oxybenzyliden]amido-1-Phenylhydrazonmethylbenzol. Sm. $173-174^{\circ}$ (J. pr. [2] **56**, 106). — **IV**, 759.

3) 4-Benzoylamido-1-Phenylhydrazonmethylbenzol. (J. pr. [2] 56, 104). — IV, 753.

4) α -Oximido- β -Phenylhydrazon- $\alpha\beta$ -Diphenyläthan. Sm. 173—1740 (B.

26, 792). — IV, 785. 5) 1-[4-Methylphenylbenzoylamido]diazobenzol. Sm. 124—125° (B. 28, 875). — IV, 1570.

6) 5-Aethylacetylamido- $\alpha\beta$ -Naphtophenazin (B. 23, 3805). — IV, 1204. 7) Phenylamid d. Phenylimidophenylamidoessigsäure. Sm. 134—135°

(A. 184, 281; B. 28, 62). — Π , 407. C 70,0 — H 4,9 — O 4,7 — N 20,4 — M. G. 343. 1) 4-Phenylazo-l-[4-Acetylamidophenylazo] benzol (Acetylamidodisazobenzol). Sm. 227° (B. **21**, 2144). — **IV**, 1371. C 79.2 — H 5.2 — O 10.6 — N 4.6 — M. G. 303.

1) α -Oxy-4-Benzoylamidodiphenylmethan. Sm. 145° (B. 30, 1138). 2) β -Oximido- α -Oxy- α α β -Triphenyläthan. Sm. 153,5° (Bl. [3] 13, 861). **- III**, 258.

3) Benzoylmethyl- β -Naphtomorpholin. Sm. 183,5° (B. 31, 760).

- $C_{90}H_{17}O_{9}N$ 4) α-Phenylamidodiphenylessigsäure. Sm. 168° u. Zers. (B. 22, 1213). - II, 1465.
 - 5) Lakton d. 1- $[\alpha$ -Oxy- β -(6, 8-Dimethyl-2-Chinolyl) äthyl] benzol-2-Carbonsäure (Monophtalidyl op-Dimethylchinaldin). Sm. 1160 (B. 29, 190). - IV, 451.
 - 6) 4-Methylphenylester d. Diphenylamidoameisensäure. Sm. 81° (B. 24, 2111). — II, 750.
 - 7) 1-Naphtylester d. 1,2,3,4-Tetrahydrochinolin-1-Carbonsäure. Sm. 73° (Bl. [3] **21**, 13).
 - 8) 2-Naphtylester d. 1,2,3,4-Tetrahydrochinolin-1-Carbonsäure. Sm. 118—119° (Bl. [3] **21**, 13).
 - 9) Benzoat d. α-Amido-2-Oxydiphenylmethan. Sm. 208° (M. 15, 664).
- Phenylamid d. 2-Oxydiphenylessigsäure. Sm. 143—146° (B. 31, 2815).
 C 72,5 H 5,1 O 9,7 N 12,7 M. G. 331. $C_{20}H_{17}O_{2}N_{3}$
 - 1) 2-[2-Nitrobenzylidenamido]-1-Phenylamidomethylbenzol. Sm. 132 bis 134° (B. 27, 3247). — IV, 638.
 - 2) 4-[4-Nitrobenzyliden]amido-l-[4-Methylphenyl]amidobenzol. Sm. 130° (A. 255, 168). — IV, 596.
 - 3) α -Phenylimido- α -[Methyl-3-Nitrophenyl]amido- α -Phenylmethan.
 - Sm. 97,5°. HJ (B. 30, 1787). IV, 843. 4) α - [3 - Nitrophenyl] imido - α - Methylphenylamido - α - Phenylmethan.
 - Sm. 107,5°. HJ (B. 30, 1786). IV, 843. 5) α -Phenylimido- α -[4-Methylphenyl]amido- α -[4-Nitrophenyl]methan.
 - Sm. 260° (B. 25, 1084). IV, 844.
 - 6) α -Benzoylamido $\alpha\beta$ -Diphenylharnstoff. Sm. 156 ° (B. 27, 1518). IV, 675.
 - 7) α-Triphenylbiuret. Sm. 147° (B. 4, 250; 21, 504). II, 383.
 8) β-Triphenylbiuret. Sm. 105° (B. 3, 651). II, 383.
 - 9) α -Phenylhydrazon- α -[4-Nitrophenyl]- α -[4-Methylphenyl|methan. Sm. 154° (A. 286, 329). — IV, 777.
 - 10) α -Phenyl- α -Benzyl- β -[3-Nitrobenzyliden]hydrazin. Sm. 140-141° (G. 27 [2] 238). IV, 812.
 - 11) Phenylamid d. αβ-Diphenylharnstoff-2-Carbonsäure. Sm. 218° (J. pr. 2] **32**, 292). — **11**, *1251*.
- $C_{66,9} H_{4,7} O_{8,9} N_{19,5} M.G.$ 359. $C_{20}H_{17}O_{2}N_{5}$
 - 1) $\alpha [4 Nitrophenyl]azo \alpha Methylphenylhydrazon \alpha Phenylmethan.$
- Sm. 201—202° (B. 29, 1387). IV, 1260.

 2) Rubazonsäure. Sm. 181° (A. 238, 192). IV, 1325.

 1) Triphenylphosphidoessigsäureanhydrid (Triphenylphosphorbetaïn). Sm. 124—126°. (2HCl, PtCl₄) (B. 27, 274). IV, 1661. C 75,2 H 5,3 O 15,0 N 4,4 M. G. 319. C,0H,7O,P
- $C_{90}H_{17}O_3N$ 1) $\alpha \alpha$ -Diphenyl- β -[2-Pyrroyl]propionsäure. Sm. 216°. Ag (B. 23, 1355).
 - 2) 1-Naphtylamid d. α-Benzoxylpropionsäure. Sm. 155° (A. 279, 97).
 - 3) 2-Naphtylamid d. α-Benzoxylpropionsäure. Sm. 177° (A. 279, 99). · II, 1154.
- C 69.2 H 4.9 O 13.8 N 12.1 M. G. 347.C20H17O3N3 1) α β -Diphenyl- α -[2-Nitrobenzyl]harnstoff. Sm. 124—125° (B. 24, 1158;
 - **27**, 39). **II**, 526. 2) αα-Diphenyl-β-[2-Nitro-4-Methylphenyl]harnstoff. Sm. 138—139,5°
 (B. 20, 2121). — II, 495.
 - 3) 4-Nitro-2-Benzoylamido-1-[2-Methylphenyl]amidobenzol. Sm. 164
 - bis 165° (Bl. [3] 17, 867). IV, 562. 4) 4-Nitro-2-Benzoylamido-1-[4-Methylphenyl]amidobenzol. Sm. 210
 - bis 211° (Bl. [3] 17, 866). IV, 562. 5) Acetat d. 3-Oxybenzolazo-1-Acetylamidonaphtalin. Sm. 226° (B. 27,
 - 2 596). 6) Gallocyaninanilid (B. 21, 1741; 25, 2995). — III, 677.
 C 64,0 — H 4,5 — O 12,8 — N 18,7 — M. G. 375.
- $\mathbf{C}_{20}\mathbf{H}_{17}\mathbf{O}_{3}\mathbf{N}_{5}$ 1) α-Phenyl-β-[4-Methylphenyl]azo-β-[3-Nitrophenyl]harnstoff. Sm. 96° (B. 21, 2574). - IV, 1572.
 - 2) α -Phenylhydrazon α [4 Methoxylphenyl] azo α [4 Nitrophenyl]-
- methan. Sm. 199° (B. 31, 475). IV, 1419. $\mathbf{C}_{20}\mathbf{H}_{17}\mathbf{O}_{3}\mathbf{Br}$ 1) Bromdiphenyldibutolakton. Sm. 109° (A. 288, 196).

C₂₀H₁₇O₃Br 2) isom. Bromdiphenyldibutolakton. Sm 150-151° (A. 288, 196). C 71,6 - H 5,1 - O 19,1 - N 4,2 - M. G. 335. $\mathbf{C}_{20}\mathbf{H}_{17}\mathbf{O}_{4}\mathbf{N}$

1) Berberin $+ 6H_2O$. Sm. 1450 (wasserfrei). Salze meist bek. Lit. bedeutend. - III, 798.

2) Opianylchinaldin + H₂O. Sm. 103° (174—175° wasserfrei). HCl, (2 HCl, PtCl₄ + 4 H₂O) (B. 27, 1978; 29, 188). — IV, 309.
3) Dibenzyläther d. 2-Nitro-1,4-Dioxybenzol. Sm. 83° (78°) (A. 221,

374; Bl. [3] 1, 348). — II, 1050.

4) Acetat d. 1-Diacetylamido-2-Oxyanthracen. Sm. 164° (B. 28, 1423).

5) Acetat d. Phenoldichroin (B. 21, 250). - III, 679.

6) 3,4-Dioxy-1-[2-Naphtyl]imidomethylbenzoldimethyläther-2-Carbonsäure. Sm. 195—200°. Na (B. 29, 181).

7) 1-Aethyl-2,5-Diphenylpyrrol-2,5-Dicarbonsäure. Sm. 220°. Ag

(B. 20, 1488). — IV, 452. 8) 1,2-Lakton d. 3,4-Dioxy-1-[1-Naphtylamido]oxymethylbenzoldimethyläther-2-Carbonsäure (Opiansäure -α-Naphtylamid). Sm. 212° u. Zers. (B. 29, 180).

9) 1,2-Lakton d. 3,4-Dioxy-1-[2-Naphtylamido]oxymethylbenzoldimethyläther - 2 - Carbonsäure (Opiansäure - β- Naphtylamid). Sm. 213° (207—207,5°) (B. 29, 181, 2031; M. 13, 114).

10) Methylester d. β-Cyan-αγ-Dibenzoylpropan-β-Carbonsäure. Sm. 1950 (B. 27 [2] 666).

11) Dimethylmonamid d. Pulvinsäure. Sm. 211°. Dimethylaminsalz (A. **282**, 31). — **II**, 2031.

C 66.1 - H 4.7 - O 17.6 - N 11.6 - M. G. 363. $\mathbf{C}_{20}\mathbf{H}_{17}\mathbf{O}_{4}\mathbf{N}_{3}$

1) Phenyldi[2-Nitrobenzyl]amin. Sm. 206° (B. 19, 1608). — II, 521.

 $C_{20}H_{17}O_5N$

1) Phenyldi 2-Nitrobenzyl amin. Sm. 169° (B. 30, 69).

2) Phenyldi 4-Nitrobenzyl amin. Sm. 169° (B. 30, 69).

C 68,4 — H 4,8 — O 22,8 — N 4,0 — M. G. 351.

1) Protopin (Macleyin) oder C₂₀H₁₉O₅N. Sm. 207°. HCl, (2 HCl, PtCl₄ + 4H₂O), (HCl, AuCl₃ + H₂O), HNO₃, H₂Cr₂O₇ (A. Spl. 8, 318; R. 3, 182; B. 23 [2] 698; M. 19, 183). — III, 806.

2) Oxyberberin. Sm. 198—200°. Acctat (Soc. 57, 1085). — III, 802.

3) Hydrastphtalimidin. Sm. 2260 (B. 23, 2914). — II, 2054.

4) Acetat d. Phenoloxychroin (B. 21, 251). — III, 679.

5) α-Aethylester - 2 -Benzylester d. β-Cyan-α-Keto-α-Phenyläthan-β, 2-Dicarbonsäure. Sm. 74° (A. ch. [7] 1, 496). — II, 1962.
 C 63,3 — H 4,5 — O 21,1 — N 11,1 — M. G. 379.

 $C_{20}H_{17}O_5N_3$

1) 2-Nitrobenzyläther d. 3-[2-Nitrobenzyl]amido-1-Oxybenzol. Sm. 1900

 $C_{20}H_{17}O_6N$

(B. 25, 3583). — II, 1058.
 C 65,4 — H 4,6 — O 26,2 — N 3,8 — M. G. 367.
 Dioxyberberin (Soc. 57, 1087). — III, 803.
 3-Aethylester d. 4,5-Diketo-1,2-Diphenyltetrahydropyrrol-18,3-Dicarbonsäure. Sm. 230° (B. 30, 604). — IV, 369.
 Aethylimid d. αβ-Dibenzoxyläthan-αβ-Dicarbonsäure. Sm. 159—160°

(B. 30, 3040). Verbindung (aus d. Jodmethylat d. Dioxymethylhydrastimid). Sm. 184 bis 185° (A. 271, 395).

 $C_{20}H_{17}O_7N$ C 62,7 - H 4,4 - O 29,2 - N 3,7 - M. G. 383.

1) Berberal. Sm. 148-150° (Soc. 55, 81; 57, 1062). -**- III**, 802.

2) Isoberberal. Sm. 185° (Soc. 57, 1081). — III, 802.
3) Pelagin (C. 1895 [2] 870; 1896 [1] 113).

4) Tetramethoxyldiphtalylimid. Zers. oberh. 200° (M. 14, 144). — II, 2100. C 58,4 — H 4,1 — O 27,2 — N 10,2 — M. G. 411.

 $\mathbf{C}_{20}\mathbf{H}_{17}\mathbf{O}_{7}\mathbf{N}_{3}$ 1) Verbindung (aus d. Methylenäther d. 3,4-Dioxyphenyl-Isonitrosodimethyl-

 $C_{20}H_{17}O_8N$

keton). Sm. 112° (G. 22 [2] 466). — II, 978. C 60,2 — H 4,3 — O 32,0 — N 3,5 — M. G. 399. 1) Anhydrid d. Berberilsäure. Sm. 236—237°. Cu + 2H₂O, Ag (Soc. **55**, 78; **57**, 1037). — III, 801.

C₂₀H₁₇N₂Cl 1) 2-Benzylidenamido-l-[4-Chlorphenylamido]methylbenzol. Sm. 115 bis 116° (J. pr. [2] 52, 383). — IV, 627.

2) 5-Chlorphenylat d. 2,8-Dimethyl-5,10-Naphtdiazin (Dimethylphenyl-

phenazoniumchlorid). + FeCl₃, 2 + PtCl₄ (B. 31, 975). - IV, 1016. C₂₀ $\mathbf{H}_{17}\mathbf{N}_2\mathbf{Br}$ 1) **2-Benzylidenamido-1-[4-Bromphenylamido]methylbenzol.** Sm. 122° (J. pr. [2] 52, 390). - IV, 637.

 $\mathbf{C}_{20}\mathbf{H}_{17}\mathbf{N}_{2}\mathbf{J}$ (1) Jodmethylat d. 4-Methyl-2, 6'-Bichinolyl (B. 19, 1037). — IV, 1072.

2) Jodäthylat d. **2,3**'-Bichinolyl (B. **17**, 2769). — **IV**, 1067. 3) Jodäthylat d. **2,7**'-Bichinolyl (B. **19**, 2472). — **IV**, 1069.

- $C_{20}H_{17}N_3S$ 1) α -Benzylidenamido- $\alpha\beta$ -Diphenylthioharnstoff. Sm. 182° (B. 27, 1514). **– IV**, 750.
 - 2) 5-Phenylamido 2, 3 Diphenyl 2, 3 Dihydro 1, 3, 4-Thiodiazol. Sm. $105-106^{\circ}$. HCl (B. 30, 852). — IV, 686.
- 1) 2-Chlor-1,4-Diphenyl-2-[4-Methylphenyl]-1,2-Dihydro-1,2,3,5-**Tetrazol.** Sm. 229°. $+ C_2 H_6 O (B. 27, 2930)$. — IV, 1268.
- $\mathbf{C}_{20}\mathbf{H}_{17}\mathbf{N}_{4}\mathbf{Br}$ 1) $\alpha\beta$ -Di[Phenylhydrazon] α [4 Bromphenyl] athan. Sm. 178—179°. IV, 761. C 79,5 — H 5,9 — O 5,3 — N 9,3 — M. G. 302.
- $\mathbf{C}_{20}\mathbf{H}_{18}\mathbf{ON}_{2}$
 - 1) 2-[2-Oxybenzylidenamido]-1-Phenylamidomethylbenzol. Sm. 1240
 - (B. 27, 3247). IV, 638. 2) 4-[2-Oxybenzyliden]amido-1-[4-Methylphenyl]amidobenzol. Sm. 142° (A. **255**, 167). — IV, 597.
 - 3) 2-Amido-1-Benzoylphenylamidomethylbenzol. Sm. 1190 (1150) (B.
 - 19, 1608; 23, 2193; 27, 3524). IV, 631.
 4) 2-Benzoylamido-1-Phenylamidomethylbenzol (o-Benzamidobenzyl-
 - anilin). Sm. 113—114° (B. 27, 3524). IV, 631. 5) 4-Acetylamidotriphenylamin. Sm. 197° (B. 23, 2538). IV, 585.
 - 6) $\alpha \alpha$ -Diphenyl- β -[4-Methylphenyl]harnstoff. Sm. 1306 (B. 9, 713). II, 495.
 - 7) 4-Nitrosophenyldibenzylamin. Sm. 91—92° (B. 20, 1616). II, 521.
 - 8) β -Hydrazon- α -Oxy- $\alpha \alpha \beta$ -Triphenyläthan. Sm. 167—168° (B. 32, 656). 9) α-Phenylhydrazon-β-Oxy-αβ-Diphenyläthan (Phenylhydrazon d. Benzoïn). Sm. 158-159⁶ (155⁶) (Am. 16, 113; 21, 47; A. 232, 229).
 - IV, 777. 10) isom. Benzoinphenylhydrazon (β -Modif.). Sm. 106° (Am. 16, 113; 21, 49). — IV, 777.
 - 11) isom. Benzoinphenylhydrazon (γ-Modif.). Sm. 162° (Am. 21, 45).
 - 12) Phenyläther d. α -Phenylhydrazon- β -Oxy- α -Phenyläthan. Sm. 85 bis 87° (B. **28**, 3031). — IV, 772.
 - 13) β -Benzoyl- α -Phenyl- α -Benzylhydrazin. Sm. 139—140° (G. 22 [2] 223). **- IV**, 812.
 - 14) α -Phenyl- α -Benzyl- β -[2-Oxybenzyliden]hydrazin. Sm. 117,5° (G. 27) [2] 239). — IV, 812.
 - 15) Methyläther d. α-Phenylhydrazon-4-Oxydiphenylmethan. Sm. 132°
 - (B. 24, 3526; 26, 21). IV, 776.
 16) Methyläther d. isom. α-Phenylhydrazon-4-Oxydiphenylmethan. Sm. 90° (B. 24, 3526; 26, 21). IV, 776.
 - 17) α-Benzyloxyamido α-Phenylimido α-Phenylmethan. Sm. 148°. Cu (B. 31, 243).
 - 18) O-Benzyläther d. Benzenylphenylamidoxim. Sm. 76-77° (B. 31,
 - 19) Benzyläther d. 4'-Oxy-4-Methylazobenzol. Sm. 128° (A. 287, 162). **- IV**, 1413.
 - 20) 5-Phenyloxydhydrat d. 2,8-Dimethyl-5,10-Naphtdiazin. Chlorid, Chlorid + FeCl₃, 2Chlorid + PtCl₄, Nitrat (B. 31, 975). IV, 1016.
 21) Phenylamid d. 1-Phenylamidomethylbenzol-4-Carbonsäure. Sm.
 - 183° (B. 28, 1144).
 - 22) Phenylhydrazid d. Diphenylessigsäure. Sm. 168° (A. 275, 85). IV, 671.
 - 23) $\beta\beta$ -Diphenylhydrazid d. Phenylessigsäure. Sm. 188° (B. 25, 1553). TV, 670. C 72,7 — H 5,4 — O 4,8 — N 17,0 — M. G. 330.
- $\mathbf{C}_{20}\mathbf{H}_{18}\mathbf{ON}_{4}$
 - 1) α -Phenyl- β -Phenylazo- β -[4-Methylphenyl]harnstoff. Sm. 126° (B. 21,
 - 2563). IV, 1570. 2) α-Phenyl-β-Phenylazo-β-Benzylharnstoff. Sm. 119° (B. 21, 1021). —
 - 3) 2,4-Di[2-Methylphenylazo]-1-Oxybenzol. Sm. 146° (116-117°) (B. **23**, 3257; **24**, 366). — **IV**, 1416.
 - 4) 2,4-Di[4-Methylphenylazo]-1-Oxybenzol. Sm. 170° (B. 25, 1334). IV, 1416.

5) Methyläther d. α -Phenylhydrazon- α -[4-Oxyphenyl]azo- α -Phenyl-C20 H18 ON4 methylather d. α-Friedythydraeour (1. 154° (B. 29, 1850). — IV, 1261.

Methylather d. α-Friedythydraeour (1. 154° (B. 29, 1850). — IV, 1261.

Methylather d. α-Friedythydraeour (1. 154° (B. 21, 1850). — IV, 1261.

6) 4-Methylphenylamidoformyldiazoamidobenzol.

2561). — IV. 1561. 7) 3-Methyl-2-[4-Acetylamidophenyl]-2,3-Dihydro-1,2,4-Naphtisotriazin. Sm. 161—162° (Soc. 59, 712). — IV, 1396. C 75,5 — H 5,7 — O 10,0 — N 8,8 — M. G. 318.

 $C_{20}H_{18}O_{2}N_{2}$

1) 4-Nitrophenyldibenzylamin. Sm. 130° (B. 20, 1613). — II, 521.

2) 3-Acetylamido-1-[Acetyl-2-Naphtyl]amidobenzol. Sm. 147—148° (B. 26, 979). — IV, 573.
3) P-Acetylamido-1-[P-Acetylamidophenyl]naphtalin. Sm. 285° (B. 26,

144). — IV, 1033. 4) 1,4-Diacetyl-2,3-Diphenyl-1,4-Dihydro-1,4-Diazin. Sm. 132—133°

(Soc. **63**, 1293). — III, 284.

5) 3,6-Di[Phenylamido]-2,5-Dimethyl-1,4-Benzochinon. Sm. 264° (A. 255, 171). — III, 364.

6) Methyläther d. P-Phenylamido-P-Oxy-2-Methyl-1,4-Benzochinonphenylimid. Sm. 131° (B. 16, 1561). — III, 361.

7) Aethyläther d. 5-Phenylamido-2-Oxy-1,4-Benzochinonphenylimid.

Sm. 134° (137°) (B. 18, 788; 21, 676). — III, 347. 8) 3-Phenylhydrazon-2,4-Diketooktohydrophenanthren. Sm. 156° (B. 31, 1902). — IV, 1480.

9) 6-Methyläther d. 6-Oxy-2-[2-Oxyphenyl]-1-Phenyl-2, 3-Dihydrobenzimidazol. Sm. 1320 (B. 29, 2682).

10) Diäthylamidophenonaphtoxazon. Sm. 205° (A. 289, 126). — IV, 1061.

11) Diäthylindigo (B. 16, 2202). — II, 1621.

12) Phenylharnstoff d. Methyl-β-Naphtomorpholin. Sm. 180° (B. 31, 760).

13) Aethylester d. 3-[β-Phenyläthenyl]-1-Phenylpyrazol-5-Carbonsäure.
 Sm. 120° (B. 31, 1309). — IV, 988.

14) $\alpha\beta$ -Diacetyl- α -Phenyl- β -[1-Naphtyl]hydrazin. Sm. 264° (B. 26, 144). **IV**, 1504.

15) Benzoat d. 6-Oxy-3-Methyl-s-Diphenylhydrazin. Sm. 151-152° (B. 24, 2305). — IV, 1506.

16) α -Benzoyl- α -Phenyl- β -[4-Oxy-3-Methylphenyl]hydrazin. Sm. 1420 (B. **25**, 1331). — **IV**, 1505. C 69,4 — H 5,2 — O 9,2 — N 16,2 — M. G. 346.

 $C_{20}H_{18}O_{2}N_{4}$

- 1) 2-Benzylnitrosamido-1-Phenylnitrosamidomethylbenzol. Sm. 1240
- (B. 27, 3243). IV, 628. 1,3-Di[4-Methylphenylnitrosamido]benzol. Zers. bci 150° (J. pr. [2] 33, 223). — IV, 573.

3) 1,4-Di[2-Methylphenylnitrosamido]benzol. Sm. 1400 (J. pr. [2] 34, 69). — IV, 585

4) 1,4-Di[4-Methylphenylnitrosamido] benzol. Sm. 152° u. Zers. (J. pr. [2] 33, 234). — IV, 586.

5) s-Diphenyl-1,3-Phenylendiharnstoff (B. 18, 1478). — IV, 575.

6) 3,5-Dioxy-1,2-Di[Phenylhydrazonmethyl]benzol. Sm. 230° u. Zers. (A. 248, 105; B. 24, 3652). — IV, 764.

7) ?-Di[2-Methylphenylazo]-1,3-Dioxybenzol. Sm. 194—195° (B. 15,

2825). — IV, 1445. 8) isom. ?-Di[2-Methylphenylazo]-1,3-Dioxybenzol (B. 15, 2825). — IV, 1445.

9) ?-Di[4-Methylphenylazo]-1,3-Dioxybenzol. Sm. 255-256° (B. 15,

2825). — IV, 1445. 10) isom. ?-Di[4-Methylphenylazo]-1,3-Dioxybenzol. Sm. 202—203°

isom. P-Di[4-Methylphenylazo]-1,5-Dica;
 15, 2825). — IV, 1445.
 4⁴-Aethyläther d. 2-Phenylazo-4-[4-Oxyphenyl]azo-1-Oxybenzol. Sm. 142° (B. 32, 125).
 3, 3'-Diketo-5, 5'-Dimethyl-2, 2'-Diphenyl-2, 3, 2', 3'-Tetrahydro-4,4'-Bipyrazol (B. 16, 2597; 17, 2044, 2059; 20, 2749; 22, 160; 29, 1658; Soc. 59, 339; A. 238, 168; J. pr. [2] 54, 185). — IV, 1262.
 Di[Phenylhydrazid] d. Benzol-1, 2-Dicarbonsäure. Sm. 191° (J. pr. [2] 35, 282). — IV, 711.

14) s-Di[Cinnamylidenhydrazid] d. Oxalsäure (J. pr. [2] 51, 196). — III, 62.

- C₂₀H₁₈O₂N₄ 15) Verbindung (aus Benzaldoxim u. Diazobenzolchlorid). Sm. 125° u. Zers, (B. 25, 1688). — IV, 754. C 71,8 — H 5,4 — O 14,4 — N 8,4 — M. G. 334.
- $C_{20}H_{18}O_3N_2$
 - 1) Phenylhydrazon d. Oreoselon. Sm. 194° (C. 1899 [1] 432).
 - 2) 2-Methylphenylamid-2-Methylphenylimid d. Akonitsäure. Sm. 2140 (Soc. 55, 239). — II, 468. C 66,3 — H 5,0 — O 13,2 — N 15,5 — M. G. 362.
- $C_{20}H_{18}O_3N_4$
 - 1) 3,5-Di[4-Methylphenylnitrosamido]-1-Oxybenzol. Zers. bei 230°
 - (G. 20 [1] 321). II, 724. 2) 2,4-Di[4-Methylphenylazo]-1,3,5-Trioxybenzol (B. 12, 227). IV, 1451.
 - 3) Phenylhydrazonoxydehydracetsäure. Sm. 105° u. Zers. (B. 25, 325).
 - IV, 716.
 4) Amid d. 3-[2-Methylphenyl]imido-5-[2-Methylphenyl]amido-2-Keto-6-Oxy-2,3-Dihydropyridin-4-Carbonsäure (B. 27, 3449). —
- IV, 1140. C 68,6 H 5,1 O 18,3 N 8,0 M. G. 350. $\mathbf{C}_{20}\mathbf{H}_{18}\mathbf{O}_{4}\mathbf{N}_{2}$
 - 1) 5,5'-Diketo-3,3'-Dimethyl-1,1'-Diphenyl-4,5,4',5'-Tetrahydro-4,4'-Bipyrazol (Am. 16, 584).
 - 2) Diacetat d. 1-Phenylhydrazido-3,4-Dioxynaphtalin. Sm. 178° (A. **286**, 84). — IV, 1449.
 - 3) α, 2-Lakton d. γ-Phenylhydrazon-α-Oxy-α-Phenyl-α-Buten-β, 2-Dicarbonsäure-β-Aethylester. Sm. 238-239° (A. 236, 189). IV, 725.
 4) Verbindung (aus Isosafrol). Sm. 180° (G. 22 [2] 483). II, 979.

 - 5) Verbindung (aus 1,4-Benzochinon u. 2-Amido-1-Oxybenzolmethyläther).
 Sm. 230° (A. 226, 69). III, 346.
 C 63,5 H 4,7 O 16,9 N 14,8 M. G. 378.
- $\mathbf{C}_{20}\mathbf{H}_{18}\mathbf{O}_{4}\mathbf{N}_{4}$ 1) 1,2-Di[2-Nitrophenylamidomethyl]benzol. Sm. 211—212° (B. 31, 630).
 - 2) 1,3-Di[2-Nitrobenzylamido] benzol. Sm. 134° (B. 25, 3583). IV, 573.
 - 3) Diacetyltolanharnstoff. Sm. 266° u. Zers. (G. 19, 564). III, 285.
 - 4) α -Phenyl- $\alpha\beta$ -Di[2-Nitrobenzyl]hydrazin. Sm. 128° (B. 25, 2899). IV, 412.
- C₂₀H₁₈O₄Br₂ 1) Monoisoamyläther d. Dibromchrysin (B. 10, 177). III, 628.
- Disulfid d. β-Merkapto-αγ-Diketo-α-Phenylbutan (Dithiobenzoylaceton). Sm. 117—118°. Na₂, Fe₂, Cu, +2 NH₃ (Bl. [3] 19, 835).
 Phenyläther d. αα-Diphenylsulfon-α-Merkaptoäthan. Sm. 194° (B. $C_{20}H_{18}O_4S_2$
- C20H18O4S3 **23**, 1416). — **II**, 784.
- C 65,6 H 4,9 O 21,9 N 7,6 M. G. 366. $\mathbf{C}_{20}\mathbf{H}_{18}\mathbf{O}_{5}\mathbf{N}_{2}$ 1) Anhydrid d. $\alpha\beta$ -Di[Phenylacetylamido] bernsteinsäure. Sm. 192°
- (B. **26**, 1772). II, 438.
- $\mathbf{C}_{20}\mathbf{H}_{13}\mathbf{O}_{5}\mathbf{Br}_{4}$ 1) Tetramethyläther d. Dibrombrasilindibromid. $+\mathbf{C}_{2}\mathbf{H}_{4}\mathbf{O}_{2}$ (B. 23, 1432). — III, *653*.
- 2) Dibromid (aus Brasilintetramethyläther) (B. 21, 3014). III, 653. l) α -[4-Methylphenyl]sulfon- γ -[2-Naphtyl]sulfon- β -Ketopropan. Sm.
- 185° u. Zers. (*J. pr.* [2] **55**, 409). C 62,8 H 4,7 O 25,1 N 7,3 M. G. 382. $\mathbf{C}_{20}\mathbf{H}_{18}\mathbf{O}_{6}\mathbf{N}_{2}$
 - 1) Cupronin. IICl, HBr (A. 212, 190). III, 921. 2) Diäthyläther d. 4,5-Di[4-Oxybenzoyl]-1,2,4,6-Dioxdiazol (D. d.
- 4-Dioxydiphenylendisacyl). Sm. 131° (R. 10, 220). III, 134. 3) Verbindung (aus Opiansäure) (R. 26, 536). II, 1941. $\mathbf{C}_{20}\mathbf{H}_{18}\mathbf{O}_{6}\mathbf{Br}_{2}$ 1) $\alpha^{3,4}$ -Methylenäther- γ^{4} -Aethyläther- γ^{2} -Acetat d. $\alpha\beta$ -Dibrom- γ -Keto- γ -[2,4-Dioxyphenyl]- α -[3,4-Dioxyphenyl]propan. Sm. 130° (R. 31, 7-[2]
 - 2) Dibrompseudocubebin. Sm. 1770 (C. 1896 [2] 127).
- α α α-Triphenyltrisulfonäthan.
 Sm. 182° (B. 25, 353). II, 784.
 α α β-Triphenyltrisulfonäthan.
 Sm. 85—86° (B. 24, 1835; 27, 3057). $\mathbf{C}_{20}\mathbf{H}_{18}\mathbf{O}_{6}\mathbf{S}_{3}$ - II, 785.
- C 60,3 H 4,5 O 28,1 N 7,0 M. G. 398. $\mathbf{C}_{20}\mathbf{H}_{18}\mathbf{O}_{7}\mathbf{N}_{2}$
 - 1) Diemyctylin (C. 1895 [1] 163).
 - 2) Diopianhydrazonsäureanhydrid. Sm. 225° (B. 26, 534). II, 1942. 3) Diacetat d. Gallocyaninmethyläther (B. 21, 1744). - III, 677.
 - 4) Amid d. Anhydroberberilsäure. Sm. 2030 (Soc. 57, 1046). III, 802.
- C 58,0 H 4,3 O 30,9 N 6,8 M. G. 414. $\mathbf{C}_{20}\mathbf{H}_{18}\mathbf{O}_{8}\mathbf{N}_{2}$ 1) Tetracetat d. P-Tetraoxyazobenzol. Sm. 240-2420 (C. 1897 [2] 588).

3) 2,2'-Dialdehyd d. 4,5,4',5'-Tetraoxyazobenzoltetramethyläther-2,3,2',3'-Tetracarbonsäure (Azoopiansäure). Sm. 174° u. Zers. Na₂ +

 $C_{20}H_{18}O_{10}N_2$ C 53,8 — H 4,0 — O 35,9 — N 6,3 — M, G. 446. 1) Dinitrocubebin (C. 1896 [2] 128). 2) Dinitropseudocubebin (C. 1896 [2] 127).

 $3 \, \mathrm{H}_2\mathrm{O}, \, \mathrm{K}_2 + 6 \, \mathrm{H}_2\mathrm{O}, \, \mathrm{Pb}, \, \mathrm{Cu} \, (\mathring{J}. \, pr. \, [2] \, \mathbf{55}, \, 173).$ $\mathbf{C}_{20}\mathbf{H}_{18}\mathbf{O}_{15}\mathbf{S}_2 \, 1)$ Tetracetylanhydrid d. 1,2,3-Trioxybenzol-P-Sulfonsäure (A. 178, 187). — II, 1016. $\begin{array}{c} \mathbf{C}_{20}\mathbf{H}_{18}\mathbf{N}_{2}\mathbf{Cl}_{2} \ 1) \ \mathbf{1}, \mathbf{2} \text{-} \mathbf{Di}[\mathbf{2} \text{-} \mathbf{Chlorphenylamidomethyl}] \mathbf{benzol}. \quad \mathbf{Sm.} \ 79^{0} \ (B. \ \mathbf{31}, \ 1157). \\ 2) \ \mathbf{Chinolin} \mathbf{\ddot{a}thylenchlorid}. \ 2 + \mathbf{PtCl}_{4} \ (B. \ \mathbf{16}, \ 879). \quad \mathbf{TV}, \ 252. \\ 3) \ \mathbf{Dichlormethylat} \ \mathbf{d}. \ \mathbf{2}, \mathbf{3}' \text{-} \mathbf{Bichinolyl} \ + \ \mathbf{6H}_{2}\mathbf{O}. \ \ + \mathbf{Cl}_{2}\mathbf{J}_{2} \ (B. \ \mathbf{18}, \ 597). \end{array}$ $- IV, 1067. \\ \mathbf{C}_{20}\mathbf{H}_{18}\mathbf{N}_{2}\mathbf{Br}_{2} \ 1) \ \mathbf{1}, \mathbf{2}\text{-Di}[\mathbf{2}\text{-Bromphenylamidomethyl}] \ \text{benzol.} \quad \text{Sm. } 132^{0} \ (B. \ \mathbf{31}, \ 1157).$ 2) Chinolinäthylenbromid + H₂O (B. 16, 879). — IV, 252.
 1) Dijodmethylat d. 6,6'-Bichinolyl. Sm. oberh. 290° (M. 5, 422; B. 17, $C_{20}H_{18}N_2J_2$ 1819, 2447). - IV, 1069. 1) α-Phenyl-β-Diphenylmethylthioharnstoff (s-Phenylbenzhydrylthioharn-C20 H18 N2 S stoff). Sm. 180,5° (B. 26, 2170). — II, 635. 2) $\alpha\beta$ -Diphenyl- α -Benzylthioharnstoff, Sm. 103°. Ag (B. 26 [2] 607). **– II**, 528. 3) Benzyläther d. Diphenylamidoimidomerkaptomethan. Sm. 125°. HCl (B. **26** [2] 607). — II, 396. d. \alpha - Phenylamido - \alpha - Phenylimidomerkaptomethan. 4) Benzyläther Fl. HCl, (HCl, Hg₂Cl₂) (Soc. 57, 297). — II, 1054. C₂₀H₁₈N₃Cl 1) 5-Chlorphenylat d. 3-Amido-2,8-Dimethyl-5,10-Naphtdiazin. 2+PtCl₄ (B. 31, 968, 976). — IV, 1185. 2) Dimethylaposafraninchlorid. 2 + PtCl₄ (B. 30, 2625). — IV, 1177. 1) α -Phenyl- β -[4-Phenylhydrazonmethylphenyl] thioharnstoff. CooHISNAS $220-221^{\circ}$ (J. pr. [2] **56**, 106). — IV, 753. 2) Triphenylguanylthioharnstoff (Triphenylthiodicyandiamin). Sm. 1500 (B. 12, 774). — II, 398. 3) Thiotetrapyridin. Sm. 155°. 2HCl, (HCl, HgCl₂), (2HCl, PtCl₄) (Bl. 34, 450). — IV, 859.

1) 1,2-Phenylendi[Phenylthioharnstoff]. Sm. 290° u. Zers. (A. 228, 200). C20 H18 N4 S2 **- IV**, 560. 2) 1,3-Phenylendi [Phenylthioharnstoff]. Sm. 160-161° (A. 228, 203). - IV, 576. 3) 1,4-Phenylendi [Phenylthioharnstoff] (4. 221, 28). — IV, 592. C 83,0 — H 6,6 — O 5,5 — N 4,8 — M. G. 289. C20H10ON 1) β -Phenylamido - α -Oxy- α β -Diphenyläthan (Hydrobenzoïnanilid). Sm. 119° (J. pr. [2] **34**, 13). — III, 220. 2) α -[1-Naphtyl]amidopropylphenylketon. Sm. 137—138° (Bl. [3] 17, 78). 3) α -[2-Naphtyl]amidopropylphenylketon. Sm. 151—152° (Bl. [3] 17, 78). 4) Benzyläther d. Diphenylmethylhydroxylamin. HCl (A. 278, 363). — II, 636. C 75,7 — H 6,0 — O 5,0 — N 13,3 — M. G. 317. $C_{20}H_{19}ON_3$ 1) αα-Diphenyl-β-[2-Amido-4-Methylphenyl]harnstoff. Sm. 135—137° (B. **20**, 2123). — **IV**, 614. 2) $\alpha\beta$ -Diphenyl- α -[2-Amidobenzyl]harnstoff. Sm. 177°. HCl, (2HCl, PtCl₄), Oxalat, Pikrat (B. 27, 40; J. pr. [2] 55, 240). — IV, 632. 3) β -Phenylbenzylamido- α -Phenylharnstoff. Sm. 163°. — IV, 674. 4) α-Phenyl-β-[2-Phenylamidomethylphenyl]harnstoff. Sm. 1020 (B. 27, 45). — IV, 633. 5) 4-Amidophenyläther d. α -Phenylhydrazon- β -Oxy- α -Phenyläthan. Sm. 128° (C. 1897 [1] 411).

6) 4-Cinnamylidenamido-3-Keto-1,5-Dimethyl-2-Phenyl-2,3-Dihydro-

7) Diäthylamidophenonaphtoxazin + xH₂O (Aethylnilblau). HCl (A. 289,

8) Dimethylaposafranin. 2 Chlorid + PtCl₄, Nitrat + ½ H₂O, Bichromat

1) 6-Dimethylamido-4-Oxy-1, 3-Di[Phenylazo] benzol. Sm. 136° (B. 31,

pyrazol. Sm. 160° (A. 293, 62). — IV, 1109.

(B. 30, 2624). — IV, 1177. C 69,6 — H 5,5 — O 4,6 — N 20,3 — M. G. 345.

115). — IV, *1209*.

490). — IV, 1417.

C20 H19 ON5

- 2) 4-[4-Dimethylamidophenyl]azo-1-[4-Oxyphenylazo]benzol (Soc. 45, C₂₀H₁₉ON₅ 111). — IV, 1416, C 64,3 — H 5,1 — O 4,3 — N 26,3 — M. G. 373.
- $\mathbf{C}_{20}\mathbf{H}_{19}\mathbf{ON}_{7}$
 - 1) Verbindung (aus Phenylhydrazoncyanaceton u. Phenylhydrazondiacetonitril). Sm. 165° (*J. pr.* [2] **52**, 94). — **IV**, *1477*. C 78,7 — H 6,2 — O 10,5 — N 4,6 — M. G. 305.
- $\mathbf{C}_{20}\mathbf{H}_{19}\mathbf{O}_{2}\mathbf{N}$
 - 1) Isopropyläther d. 4-[4-Methylphenyl]imido-2-Oxy-1-Keto-1,4-Dihydronaphtalin. Sm. 137—139° (B. 15, 1970). — III, 394.
 - 2) Aethylester d. 2-Methyl-1,5-Diphenylpyrrol-3-Carbonsäure.
- $\mathbf{C}_{20}\mathbf{H}_{19}\mathbf{O}_{2}\mathbf{N}_{3}$
- 100° (B. 18, 2595). IV, 357. C 72,1 H 5,7 O 9,6 N 12,6 M. G. 333. 1) Di[Phenylamid] d. 2,4-Dimethylpyrrol-3,5-Dicarbonsäure. 255° (A. 236, 331). — IV, 93. C 66,5 — H 5,3 — O 8,8 — N 19,4 — M. G. 361.
- $\mathbf{C}_{20}\mathbf{H}_{19}\mathbf{O}_{2}\mathbf{N}_{5}$
 - 1) 1-[4-Dimethylamidophenyl]azo-4-[2,4-Dioxyphenylazo]benzol (Soc. **45**, 110). — **IV**, 1444. C 74,8 — H 5,9 — O 14,9 — N 4,4 — M. G. 321.
- $C_{20}H_{19}O_3N$
 - 1) Cusparin (oder $C_{19}H_{17}O_3N$). Sm. 92° (89°). $HCl + 3H_2O$, (2HCl, $PtCl_4 + 6H_2O$), (HCl, $AuCl_3$), HBr, (HBr, Br), HJ, $H_2SO_4 + 7H_2O$ (G. 13, 363; B. 25 [2] 201; 29 [2] 35; G. 1895 [2] 826). III, 7.600 processor(50)
 - 2) Aethylapocinchensäure + H₂O. Sm. 124—126° (161—162° wasserfrei). Ag, (2HCl, P(Cl₄) (B. 18, 2384; 20, 2680). III, 839.

 3) 6-[4-Methylphenyl] amido 4-Keto 2-Phenyl-1, 2, 3, 4-Tetrahydro-

 - benzol-3-Carbonsaure. Sm. 190° u. Zers. (A. 294, 280).
 4) Cantharidin-1-Naphtylimid. Sm. 230—232° (G. 21 [1] 467). III, 623.
 - 5) Verbindung (Säure aus Rosanilin) (B. 5, 144). II, 1090.
- C 68.8 H 5.4 O 13.7 N 12.0 M. G. 349. $C_{20}H_{19}O_3N_3$
 - 1) Verbindung (aus αβγδ-Tetraketo-αδ-Diphenylbutan). Sm. 167° (B. 25, 3473). — III, *323*.
- C 71.2 H 5.6 O 19.0 N 4.2 M. G. 337. $\mathbf{C}_{20}\mathbf{H}_{19}\mathbf{O}_4\mathbf{N}$
 - 1) Aethylester d. 4,5-Diketo-2-Phenyl-l-[4-Methylphenyl]tetrahydropyrrol-3-Carbonsäure. Sm. 152—1530 (B. 30, 603). — IV, 369.
 - 2) β, 2'-Methylimid d. αβ-Diphenylpropan-β, 2, 2'-Tricarbonsäure-2-Methylester. Sm. 145° (B. 27, 2945). II, 2027.
 - 3) $\alpha\gamma$ -Phenylimid d. β -Phenylpropan- $\alpha\alpha\gamma$ -Tricarbonsäure- α -Aethylester. Sm. 166° (C. 1899 [1] 730).
- $C_{20}H_{19}O_4Br$ 1) Diphenylester d. 2 Bromhexahydrobenzol 1, 4 Dicarbonsäure.
- Sm. 127° (A. 258, 33). II, 1835. 1) Citronellalphosphorsäure. Sm. 203° (Am. 12, 555). III, 475. C 68,0 H 5,4 O 22,7 N 3,9 M. G. 353. C,0H19O4P
- $C_{20}H_{19}O_5N$ 1) Tetramethyläther d. 6,7-Dioxy-1-[3,4-Dioxybenzoyl]isochinolin
 - (Papaveraldin). Sm. 210°. HCl + 2¹/2 H₂O, (2 HCl, PtCl₄ + H₂O), HNO₃ + 2 H₂O, H₂SO₄, Pikrat (M. 6, 956; 7, 486). IV, 442.
 2) Hydrocotarninphtalid. Sm. 193°. (2 HCl, PtCl₄), HJ (B. 29, 186).
 - · III, 909. 3) Chelidonin + H₂O. Sm. 135°. HCl, (2 HCl, PtCl₄ + 2 H₂O), (HCl, AuCl₈), HNO₃, H₂SO₄ + 2 H₂O (A. 29, 123, 131; 35, 113; R. 3, 190; Bl. [3] 13, 446; Fr. 24, 165; M. 18, 387). — III, 805. 4) Protopin, siehe C₂₀H₁₇O₅N. — III, 806.
- $\mathbf{C}_{20}\mathbf{H}_{19}\mathbf{O}_{5}\mathbf{Br}_{8}$ 1) Tetramethyläther d. Brombrasileïndibromid. $+2\,\mathrm{C}_{2}\mathrm{H}_{4}\mathrm{O}_{2}$ (B. 23, 1432). — III, 653.
- C 60.4 H 4.8 O 24.2 N 10.6 M. G. 397. $\mathbf{C}_{20}\mathbf{H}_{19}\mathbf{O}_{6}\mathbf{N}_{3}$
 - 1) Diäthyläther d. 1-[2,4-Dinitro-3,6-Dioxyphenyl]amidonaphtalin Sm. 128° (B. 24, 3830). — II, 949.
- $\mathbf{C}_{20}\mathbf{H}_{19}\mathbf{O}_7\mathbf{N}$ C 62,3 - H 4,9 - O 29,1 - N 3,6 - M. G. 385.

 - Methylnornarkotin (A. Spl. 7, 62). III, 915.
 Oxim d. Hydrastonsäure. Na (B. 26 [2] 1008). II, 2056.
 4-Methylphenylamid d. 3,4,5-Triacetoxylbenzol-1-Carbonsäure (Bl. [3] 11, 83). — II, 1923.
 - 4) Verbindung (aus Berberilsäureanhydrid). Sm. 139—140° (Soc. 57, 1044).
- C 59.9 H 4.7 O 31.9 N 3.5 M. G. 401. $C_{20}H_{19}O_8N$
 - 1) Opiammon (A. 50, 6). II, 1941.

II, 1753.

 $\mathbf{C}_{20}\mathbf{H}_{19}\mathbf{O}_{12}\mathbf{Cl}_{4}$ 1) Verbindung (aus Katechin) (Soc. 41, 92). — III, 685. $\mathbf{C}_{20}\mathbf{H}_{19}\mathbf{N}_{2}\mathbf{Cl}$ 1) Base (aus Methylacetanilid). HCl, 2HCl (Bl. [3] 11, 1028). — IV, 1046. 1) Phenylamidothioformyl-4-Methyl-s-Diphenylhydrazin. Sm. 1520 $\mathbf{C}_{20}\mathbf{H}_{19}\mathbf{N}_{3}\mathbf{S}$ (A. 303, 371). — IV, 1502.

2) β-Phenylbenzylamido-α-Phenylthioharnstoff. Sm. 150° (A. 252, 289).

C₂₀H₂₀ON₂

- IV, 680. C 78,9 - H 6,6 - O 5,3 - N 9,2 - M. G. 304.

1) 3,5-Di[4-Methylphenylamido]-1-Oxybenzol. Sm. 120-121° (2 HCl, PtCl₄) (G. 20, 321). — II, 724.

2) Methyläther d. ?-Diamido-4-Oxytriphenylmethan (G. 15, 57). —

3) 1-Aethylacetylamido-2-Phenylamidonaphtalin. Sm. 197—198° (B.

26, 190). — IV, 918. 4) Aethyläther d. α-Phenylhydrazon-α-[1-Oxy-2-Naphtyl]äthan. Sm.

117° (B. 28, 1947). — IV, 775.
5) Dehydrochinen (B. 20, 2517). — III, 817.
6) Chinolinmethyloxyd. Sm. unterh. 50° (B. 15, 195). — IV, 250.
7) isom. Chinolinmethyloxyd. Sm. 72—75°. (HCl, AuCl₃) (B. 18, 595).
C 72,3 — H 6,0 — O 4,8 — N 16,9 — M. G. 332.

 $\mathbf{C}_{20}\mathbf{H}_{20}\mathbf{ON}_{4}$ Acetylamidodiphenylindulin. Sm. 160° (A. 286, 199).
 C 75,0 — H 6,2 — O 10,0 — N 8,7 — M. G. 320. $\mathbf{C}_{20}\mathbf{H}_{20}\mathbf{O}_{2}\mathbf{N}_{2}$

1) Diäthyläther d. 4-Oxy-1-[4-Oxyphenyl]azonaphtalin. Sm. 122—1230 (B. 27, 2358). - IV, 1440.

2) 24-Aethyläther d. 6-Oxy-4-Methyl-2-[4-Oxyphenyl]-5-Benzyl-1,3-Diazin. Sm. 242° (B. 23, 2955). — IV, 1041.
3) Dimethyloxydhydrat d. 6,6'-Bichinolyl. Jodid, Sulfat + 2H₂O (B.

17, 2447). — IV, 1069. 4) Hydrooxylepidin. Sm. 280° (B. 19, 3300). — IV, 317. 5) Benzoyldihydroharmalin. Sm. 158—159° (B. 30, 2485).

6) Verbindung (Base aus Rosanilin). Sm. 176° (B. 5, 144). — II, 1090. C 68,9 — H 5,7 — O 9,2 — N 16,1 — M. G. 348. $\mathbf{C}_{20}\mathbf{H}_{20}\mathbf{O}_{2}\mathbf{N}_{4}$

1) Phenylhydrazin + $\alpha\beta$ -Dioximido- $\alpha\beta$ -Diphenyläthan. Sm. 149–150°

(B. 21, 183). — IV, 785. 2) 1,4-Diacetyl-3,6-Dibenzyl-1,4-Dihydro-1,2,4,5-Tetrazin. Sm. 93° (B. 30, 1889; A. 298, 23). — IV, 1290.

3) Di[Phenylhydrazid] d. Isodehydracetsäure. Sm. 125° (A. ch. [6] 24,

107). — IV, 715. C 71,4 — H 5,9 - $\mathbf{C}_{20}\mathbf{H}_{20}\mathbf{O}_{3}\mathbf{N}_{2}$ - O 14,3 - N 8,3 - M. G. 336.

1) 1-Acetyl-3-[4-Methylphenyl]acetylamido-2-Keto-5-Methyl-2,3-Dihydroindol. Sm. 147° (B. 18, 193). — II, 1653.

2) $\alpha \delta$ -Di[Phenylimido]- γ -Ketopentan- α -Carbonsäure. Sm. 146° (Bl. [3] 13, 479).

 $C_{20}H_{20}O_3N_4$ C 65,9 - H 5,5 - O 13,2 - N 15,4 - M. G. 364.

α - Phenylhydrazon - β - Phenylhydrazido - α - [2,3,4 - Trioxyphenyl]- äthan. Sm. 214-215⁶ (B. 27, 1973; J. r. 25, 123). — IV, 772, 800.
 2-Dimethylalloxanylamidodi [4-Methylphenyl]amin. Sm. 217-218⁶

u. Zers. (B. **26**, 544). — IV, 616. C 68,2 — H 5,7 — O 18,2 — N 7,9 — M. G. 352.

 $\mathbf{C}_{20}\mathbf{H}_{20}\mathbf{O}_4\mathbf{N}_2$

1) 4,4'-Di[β -Ketobutyrylamido]biphenyl. Sm. 233—235°. Na₂ (M. 19, 694).

2) 4,4'-Di[Diacetylamido] biphenyl. Sm. 214—215° (176°) (Soc. 65, 56; B. 31, 663).

3) Diacetat d. $\alpha\beta$ -Dioximido- $\alpha\beta$ -Di[4-Methylphenyl]äthan. Sm. 133 bis 134° (B. 22, 382). — III, 299.

4) Diacetat d. isom. $\alpha\beta$ -Dioximido- $\alpha\beta$ -Di[4-Methylphenyl] äthan. Sm. 144° (B. 22, 382). — III, 299.

5) Dipropionat d. $\alpha\beta$ -Dioximido- $\alpha\beta$ -Diphenyläthan (D. d. α -Benzyldioxim). Sm. 103-104° (B. 21, 801). - III, 294.

- $C_{20}H_{20}O_4N_2$ 6) Dipropionat d. isom. $\alpha\beta$ -Dioximido- $\alpha\beta$ -Diphenyläthan (D. d. β -Benzildioxim). Sm. 121° (B. 21, 802). — III, 294.
 - 7) Dipropionat d. isom. αβ-Dioximido-αβ-Diphenyläthan (D. d. γ-Benzildioxim). Sm. 86—87° (B. 22, 714). III, 294.
 8) Diäthylester d. s-Diphenylazimethylendicarbonsäure. Sm. 135°
 - (J. pr. [2] 44, 567). II, 1598.
 - 9) 4-Methylphenylimid-4-Methylphenylamid d. Citronensäure. Sm. 2050 (B. 19, 2352). — II, 503.
- C 63.2 H 5.2 O 16.8 N 14.7 M. G. 380. $\mathbf{C}_{20}\mathbf{H}_{20}\mathbf{O}_{4}\mathbf{N}_{4}$
 - 1) Diäthylester d. 2,3-Diphenyl-2,3-Dihydro-1,2,3,4-Tetrazin-5,6-Dicarbonsäure. Sm. 143° u. Zers. (B. 28, 66). — IV, 728.
 - 2) Phenylhydrazid d. R-Tetramethylen-1, 3-Di[Oxymethylencarbonsäure]. Sm. 225-227° (B. 29, 2277). - IV, 724.
- C 58.8 H 4.9 O 15.7 N 20.6 M. G. 408.C20 H20 O4 N6
 - 1) 2, 3, 7, 8 Tetra [Acetylamido] 5, 10 Naphtdiazin (B. 22, 449). -IV, 1244.
- $\mathbf{C}_{20}\mathbf{H}_{20}\mathbf{O}_{4}\mathbf{S}_{2}$ 1) Dimethylester d. $\alpha\beta$ -Dimerkapto- $\alpha\beta$ -Diphenyläthendimethyläther-2,2'-Dicarbonsäure? Sm. 160-161° (B. 31, 2651).
- C 65,2 H 5,4 O 21,7 N 7,6 M. G. 368. 1) $1^3,1^4,6,7$ -Tetramethyläther d. 6,7-Dioxy-1- $[\alpha$ -Oximido-3,4-Dioxy- $C_{20}H_{20}O_5N_2$ benzyl]isochinolin (Papaveraldoxim). Labile Form, Sm. 235°; stabile
 - Form, Sm. 254°. HCl, HCl + 2H₂O, HCl + 3(4)H₂O, HCl + 10H₂O, 2 HCl + 12 H₂O (M. 7, 489; 16, 828). IV, 442.

 2) Tetramethyläther d. 6,7-Dioxy-1-[3,4-Dioxybenzoylamido]isochinolin. Sm. bei 170°. HCl (M. 16, 844). — IV, 442.
- C 56,6 H 4,7 O 18,9 N 19,8 M. G. 424. $C_{20}H_{20}O_5N_6$ 1) Anhydro-β-Oximido-α-Phenylhydrazonbuttersäure. Sm. 185° (B. **30**, 1163). — **IV**, 690.
- $C_{20}H_{20}O_5Br_2$ 1) γ^2 -Acetat- α^4 -Methyläther- γ^4 -Aethyläther d. $\alpha\beta$ -Dibrom- γ -Keto- γ -[2,4-Dioxyphenyl]- α -[4-Oxyphenyl] propan. Sm. 130-131° (B. 32, 323).
 - 2) Tetramethyläther d. Dibrombrasilin. Sm. 215° (B. 23, 1431). —
- C 62.5 H 5.2 O 25.0 N 7.3 M. G. 384. $\mathbf{C}_{20}\mathbf{H}_{20}\mathbf{O}_{6}\mathbf{N}_{2}$
 - 1) Tetramethoxyldihydrodiphtalyldiimid. Sm. 249° u. Zers. (B. 26, 538).
 - 2) $\alpha\beta$ -Diacetat-4,4'-Dimethyläther d. $\alpha\beta$ -Dioximido- $\alpha\beta$ -Di[4-Oxy-
 - phenyl]äthan. Sm. 139° (B. 22, 379). III, 296. 3) $\alpha\beta$ -Diacetat-4,4'-Dimethyläther d. isom. $\alpha\beta$ -Dioximido- $\alpha\beta$ -Di[4-Oxyphenyl]äthan. Sm. 130° (B. 22, 379). — III, 296.
 - 4) Nitropapaverin + H_2O . Sm. 163°. $HCl + 1^{1}/_{2}H_2O$, (2 HCl, $PtCl_4$), HJ, $HNO_3 + H_2O$, $H_2SO_4 + 8H_2O$, Dioxalat + $2H_2O$ (A. 94, 237; A. Spl. 8, 292). — IV, 440.
 - 5) αβ-Di[Phenylacetylamido] bernsteinsäure. Sm. 172-173° u. Zers. Na_2 , Ca, Ag_2 (B. 26, 1772). — II, 438.
 - 6) Dimethylester d. Bis-2-Aldehydophenoxyessigsäurehydrazon. Sm. 159—160° (B. 31, 2810).
 - 7) Diäthylester d. Bis-2-Aldehydophenylkohlensäurehydrazon. Sm.
 - 109—110° (B. 31, 2808). 8) Diäthylester d. 1,3-Phtalyldi[cyanmethylessigsäure]. Sm. 188° (Bl. [3] **11**, 1098). — **II**, *2019*.
 - 9) Dinitro-α-Dipropylcarbobenzonsäure. Sm. 176° (A. 184, 171). II, *1477.*
 - 10) Diphenylamid d. Diacetylweinsäure. Sm. 214-2150 (2270) (B. 24, 2960; A. 279, 138). — II, 422.
 - 11) Di[Phenylamid] d. n-Butan- $\alpha\beta\gamma\delta$ -Tetracarbonsäure Sm. 187° (B.
 - 28, 885). 12) Di[Phenylamid] d. h-Butan- $\alpha\beta\gamma\delta$ -Tetracarbonsäure. Sm. 167° (B.
 - 13) Diacetat d. 3,3'-Di[Acetylamido]-4,4'-Dioxybiphenyl. Sm. 225° (B. **21**, 3332). — **II**, 989.
 - C₂₀H₂₀O₈Br₂ 1) Diacetat d. Dibromhexaoxybiphenyltetramethyläther. Sm. 178° (B. 9, 930). — II, 1042.

 $\mathbf{C}_{20}\mathbf{H}_{21}\mathbf{ON}_{3}$

 $\mathbf{C}_{20}\mathbf{H}_{21}\mathbf{ON}_{5}$

 $\mathbf{C}_{20}\mathbf{H}_{21}\mathbf{O}_{2}\mathbf{N}$

 $C_{20}H_{21}O_{2}N_{3}$

C 60,0 - H 5,0 - O 28,0 - N 7,0 - M. G. 400. $\mathbf{C}_{20}\mathbf{H}_{20}\mathbf{O}_7\mathbf{N}_2$ 1) Oxycannabin. Sm. 175-176° (Z. 1870, 86; J. 1871, 786; C. 1898 [1] 849). — III, 639.

2) Aethylester d. β-Keto-αα-Di[2-Nitrobenzyl]propan-α-Carbonsäure. Sm. 103° (B. 29, 637).

C 57,7 — H 4,8 — O 30,8 — N 6,7 — M. G. 416. $C_{20}H_{20}O_8N_2$

1) Di[3,4-Dimethoxylbenzyliden]hydrazin-αα'-Dicarbonsäure + H₂0.

 $\begin{array}{c} \text{Sm. } 184^{\circ} \, (Bl. \, [3] \, 17, \, 946). \\ \text{C}_{20} \text{H}_{20} \text{O}_8 \text{Cl}_2 \quad 1) & \text{Diacetat d. Dichlorhexaoxybiphenyltetramethyläther.} \quad \text{Sm. } 172^{\circ} \, (B. \\ \textbf{9}, \, 929). \quad - \text{II}, \, 1042. \\ \text{C}_{20} \text{H}_{20} \text{O}_9 \text{N}_2 & \text{C} \, 55,6 \, - \text{II} \, 4,6 \, - \, \text{O} \, 33,3 \, - \, \text{N} \, 6,5 \, - \, \text{M. G. } 432. \\ \end{array}$

 $\mathbf{C}_{20}\mathbf{H}_{20}\mathbf{O}_{9}\mathbf{N}_{2}$

1) Azoopiansäure. Sm. 245° u. Zers. Ag. (B. 20, 879). — IV, 1475. 1) Jodmethylat d. 3,5-Dibenzylpyridin (A. 280, 45).

 $\mathbf{C}_{20}\mathbf{H}_{20}\mathbf{NJ}$

1) 4-Dimethylamidotriphenylphosphin. Sm. 1520 (B. 21, 1502; A. 260, $\mathbf{C}_{20}\mathbf{H}_{20}\mathbf{NP}$ 27). — IV, 1659.

1) 7-Chloräthylat d. 9-Dimethylamido- $\alpha\beta$ -Naphtophenazin. 2 + PtCl₄ $\mathbf{C}_{20}\mathbf{H}_{20}\mathbf{N}_{3}\mathbf{C}\mathbf{1}$ (C. 1898 [2] 920). — IV, 1201.

1) Verbindung (aus 2,5-Di-2,4-[Dimethylphenylamido]-1,3,4-Thiodiazol). Sm. $\mathbf{C}_{20}\mathbf{H}_{20}\mathbf{N}_{6}\mathbf{S}$ 103° (B. **23**, 370). — **IV**, 1237. 1) Dithiocarbonyltri-1, 3-Diamidobenzol (B. 17, 2657). — IV, 576.

 $\mathbf{C}_{20}\mathbf{H}_{20}\mathbf{N}_6\mathbf{S}_2$ 1) Aethyltriphenylphosphoniumjodid. Sm. 164-165° (A. 229, 311). $\mathbf{C}_{20}\mathbf{H}_{20}\mathbf{JP}$ IV, 1661. C 82,5 — H 7,2 — O 5,5 — N 4,8 — M. G. 291.

C,0H,1ON

1) 6-Aethylphenylamido-4-Keto-2-Phenyl-1, 2, 3, 4-Tetrahydrobenzol. Sm. 135° (A. **294**, 306).

2) Benzoylderivat d. 2-Methylen-1,3-Dimethyl-3-Aethyl-2,3-Dihydroindol. Sm. 119-120° (G. 28 [2] 380).

3) Benzoylderivat d. 2-Methylen-3,3-Dimethyl-1-Aethyl-2,3-Dihydroindol. Sm. 140° (G. 29 [1] 87).

4) 1-Benzoyl-?-Diathyl-1, 2-Dihydrochinolin. Sm. 74-750 (B. 29, 2479), **- IV**, 230.

5) 3- oder 2-Benzoyl-1,2,4,4- oder 1,3,4,4-Tetramethyl-1,4-Dihydrochinolin. Sm. 102° (G. 28 [1] 192).

6) Methyläther d. Apocinchen. Fl. $HCl + \frac{1}{2}H_2O$ (B. 18, 2380). III, 838.

7) Base (aus d. Verb. $C_{18}H_{15}N$). HCl, $(2 \text{ HCl}, \text{PtCl}_4)$ (A. 100, 65). — II, 342. C 75,2 — H 6,6 — O 5,0 — N 13,2 — M. G. 319.

1) 4,4¹,4²-Triamido-α-Oxy-3²-Methyltriphenylmethan (Rosanilin). Salze meist bek. Lit. bedeutend. — II, 1089. 2) 4-Oxy-3-Phenylhydrazon-2,5,6,8-Tetramethylchinolin (B. 21, 1976).

— IV, 373. C 69,1 — H 6,0 — O 4,6 — N 20,2 — M. G. 347. 1) Di[Phenylhydrazon]tropinon. Śm. 130° u. Zers. + CHCl₈, HCl, Acetat (B. 30, 2708). — IV, 798. C 78,2 — H 6,8 — O 10,4 — N 4,6 — M. G. 307.

1) 6-[4-Aethoxylphenyl|amido-4-Keto-2-Phenyl-1,2,3,4-Tetrahydro-

benzol. Sm. 207º (A. 294, 307). 2) Diäthyläther d. 2,5-Di[4-Oxyphenyl]pyrrol. Sm. 210° (R. 10, 220).

– IV, 439. 3) 3-Hexyl- β -Naphtochinolin-1-Carbonsäure. Sm. 291° (B. 27, 2022).

— IV, 423. C 71,6 — H 6,3 — O 9,6 — N 12,5 — M. G. 335. 1) 1,4-Diacetyl-3,5-Di[4-Methylphenyl]4,5-Dihydro-1,2,4-Triazol. Sm.

117° (B. 27, 3290; A. 298, 19). 2) Acetylderivat d. Verb. C₁₈H₁₉ON₃. Sm. 173° (B. 21, 1596). — IV, 1284. $\mathbf{C}_{20}\mathbf{H}_{21}\mathbf{O}_{2}\mathbf{P}$ 1) β -Oxyäthyltriphenylphosphoniumhydrat. Salze, siehe diese (B. 27, 276). $\mathbf{C}_{20}\mathbf{H}_{21}\mathbf{O_3N}$

1) \$\text{p-Oxyathyltriphenylphosphoniumhydrat. Saize, siehe diese (B. 21, 210).}\$\$\$ C 74,3 - H 6,5 - O 14,9 - N 4,3 - M. G. 323.}\$\$\$ 1) \$\text{Galipein.}\$\$ Sm. 115,5°. \$\text{HCl} + 4\text{H}_2\text{O}, (2\text{HCl, PtCl}_4), (HCl, AuCl}_3), \$\text{H}_2\text{SO}_4\$\$\$ + 7\text{H}_2\text{O} (G. 13, 363; \$B. 25 [2] 200). - III, 778.\$\$\$\$ C 68,4 - H 6,0 - O 13,7 - N 11,9 - M. G. 351.}\$\$\$ 1) \$\text{Codeineyanid}\$\$ (A. 77, 371). - III, 903.\$\$\$ C 70,8 - H 6,2 - O 18,9 - N 4,1 - M. G. 339.}\$\$\$ 1) \$\text{Canadin.}\$\$ Sm. 132,5°. \$\text{HCl}, (2\text{HCl, PtCl}_4), (HCl, AuCl}_3), \$\text{HNO}_3, \$\text{H}_2\text{SO}_4\$\$\$ (B. 27 [2] 312; \$J. 1873, 819; 1875, 784). - III, \$804.\$\$\$\$\$\$}\$\$

 $\mathbf{C}_{20}\mathbf{H}_{21}\mathbf{O}_{3}\mathbf{N}_{3}$

 $\mathbf{C}_{20}\mathbf{H}_{21}\mathbf{O}_4\mathbf{N}$

- 2) Hydroberberin. Sm. 167°. HCl, (2HCl, PtCl₄), (HBr, Br₄), HJ, HNO₃, $\mathbf{C}_{20}\mathbf{H}_{21}\mathbf{O}_{4}\mathbf{N}$
 - H₂SO₄+xH₂O, +Br₂ (A. Spl. 2, 191; J. 1889, 1970). III, 800.
 3) Tetramethyläther d. 6,7-Dioxy-1-[3,4-Dioxybenzyl]isochinolin (Papaverin). Sm. 147°. Salze meist bek. Lit. bedeutend. IV, 439.
 - 4) Phenylamidofilixsäure. Sm. 140° (B. 21, 2965). II, 1968.
 - 5) 1,2-Lakton d. 3,4-Dioxy-1-[2-Methyl-1,2,3,4-Tetrahydro-1-Chinolyl]oxymethylbenzol-3,4-Dimethyläther-2-Carbonsäure (Opiansäuretetrahydrochinaldid). Sm. 180° (B. 29, 182). — IV, 204.
 - 6) Diäthylester d. α -Phenylimido α -Phenyläthan $\beta\beta$ -Dicarbonsäure. Sm. 75° (B. 18, 2624). — II, 1850.
- C₂₀H₂₁O₅Br 1) Tetramethyläther d. Brombrasilin. Sm. 180-181^o (B. 21, 3014). III, 653.
- C 62,0 H 5,4 O 28,9 N 3,6 M. G. 387. $C_{20}H_{21}O_7N$
 - 1) Dibenzoylglykosamin. Sm. 168° u. Zers. (H. 14, 363). II, 1194.
- $\mathbf{C}_{20}\mathbf{H}_{21}\mathbf{O}_{10}\mathbf{N}$ C 55,2 - H 4,8 - O 36,8 - N 3,2 - M. G. 435.
 - Verbindung (aus Hemipinsäure u. ω-Amidoäthylpiperonylcarbonsäure).
 Sm. 155—160° u. Zers. (Soc. 57, 1062). II, 1994.
- $C_{20}H_{21}N_2Cl$ 1) α -Phenyl- $\alpha\alpha$ -Dibenzylhydrazoniumchlorid. Sm. 153—154° (A. 252, 291). — IV, 811. C 78,4 — H 7,2 — O 5,2 — N 9,1 — M. G. 306.
- $\mathbf{C}_{20}\mathbf{H}_{22}\mathbf{ON}_{2}$
 - 1) Chinen. Sm. $81-82^{\circ}$. $(2 HCl, ZnCl_2 + 2 H_2 O)$ (B. 17, 1989; 18, 1223). **- III**, 817.
 - 2) Verbindung (aus Anilin, Brenztraubensäure u. Isovaleraldehyd). Sm. 160° (A. 242, 280). — IV, 359. C 74,5 — H 6,8 — O 9,9 — N 8,7 — M. G. 322.
- $\mathbf{C}_{20}\mathbf{H}_{22}\mathbf{O}_{2}\mathbf{N}_{2}$
 - 1) 1,2-Di[Benzoylamido]hexahydrobenzol. Sm. noch nicht bei 280° (A. **295**, 215).
 - 2) Diäthyläther d. 3-[4-Oxyphenyl]amido-4-Amido-1-Oxynaphtalin.
 - Sm. 103° (B. 27, 2361).
 3) 2,5-Diketo-1,4-Di[2,5-Dimethylphenyl]hexahydro-1,4-Diazin. Sm.
 - 203° (J. pr. [2] 40, 436). II, 547. 4) 3,6-Diketo-2,5-Diäthyl-1,4-Diphenylhexahydro-1,4-Diazin. Sm. 268°
 - (B. 23, 2014, 2022; 25, 2316, 2924). II, 434. 5) isom. 3,6-Diketo-2,5-Diäthyl-1,4-Diphenylhexahydro-1,4-Diazin.
 - Sm. 145° (B. 23, 2023; 25, 2317). II, 434. 6) isom. 3,6-Diketo-2,5-Diäthyl-1,4-Diphenylhexahydro-1,4-Diazin.
 - Sm. 163° (B. 23, 2015). II, 434.
 - 7) 3,6-Diketo-2,5-Dimethyl-1,4-Di[2-Methylphenyl]hexahydro-1,4-Diazin. Sm. 183-184° (B. 25, 2920). II, 472.
 8) isom. 3,6-Diketo-2,5-Dimethyl-1,4-Di[2-Methylphenyl]hexahydro-1,4-Diazin. Sm. 155-162° (B. 25, 2921). II, 472.
 - 9) 3,6-Diketo-2,5-Dimethyl-1,4-Di[4-Methylphenyl]hexahydro-1,4-Diazin. Sm. 248° (B. 25, 2307, 2921). II, 508.
 - 10) isom. 3,6-Diketo-2,5-Dimethyl-1,4-Di[4-Methylphenyl]hexahydro-1,4-Diazin. Sm. 191—195° (191—202°) (B. 25, 2307, 2921). — II, 508.
 - 11) α -1,4-Dibenzoyl-2,5-Dimethylhexahydro-1,4-Diazin. Sm. 224—225° (B. 30, 226; J. pr. [2] 47, 505). - IV, 483.
 - 12) β -1,4-Dibenzoyl-2,5-Dimethylhexahydro-1,4-Diazin + H₂O. Sm. 147
 - bis 148° (wasserfrei) (*J. pr.* [2] **55**, 60). **IV**, 483.

 13) Diacetylderivat d. 3-Methyl-2-[3-Amidophenyl]-1,2,3,4-Tetrahydrochinolin. Sm, 178° (*B.* **19**, 535). **IV**, 996.
 - 14) Aethylester d. β-[α-Benzylidenamidobenzyl]amidopropen-α-Carbon-säure. Sm. 129° (M. 17, 347).
 - 15) 1-Allylamid-2-[2,4,5-Trimethylphenyl]amid d. Benzol-1,2-Dicar-
 - bonsäure. Sm. 179° u. Zers. (B. 17, 1808). II, 1808. 16) 4'-Amido-4-Biphenylimid d. $\beta\gamma$ -Dimethylbutan- $\bar{\beta}\gamma$ -Dicarbonsäure.
- $\mathbf{C}_{20}\mathbf{H}_{22}\mathbf{O}_{2}\mathbf{N}_{4}$
- Sm. 196° (A. 292, 177). IV, 965. C 68,6 H 6,3 O 9,1 N 16,0 M. G. 350. 1) p-Diacetylditolenylhydrazidin. Sm. 185° (B. 27, 3282). IV, 1289. 2) Di[α-Phenyläthylidenhydrazid] d. Aethan-αβ-Dicarbonsäure. Sm.
- 1) Isoamylfurfurin. (2HCl, PtCl₄), HJ (J. 1855, 560). III, 722.

C₂₀H₂₂O₃N₂ 2) Verbindung (aus Benzil u. Propionsäurenitril). Sm. 207° (B. 16, 2652; Soc. 57, 708). — III, 295.

 $C_{20}H_{22}O_4N_2$

C 67.8 - H 6.2 - O 18.1 - N 7.9 - M. G. 354.1) ?-Dinitro-2, 6-Diisopropyl-9, 10-Dihydroanthracen (G. 14, 282). —

2) Diäthyläther d. 2,5-Diketo-1,4-Di[4-Oxyphenyl] hexahydro-1,4-Diazin. Sm. 265° (B. 22, 1789). — II, 721.

3) Tetramethyläther d. 6,7-Dioxy-1- $[\alpha$ -Amido-3,4-Dioxybenzyl]isochinolin (Papaveraldylamin). Sm. 80—85°. HCl (M, 16, 846). — IV, 443.

4) Acetylcinchotenin. 2HCl (M. 15, 797). — III, 841.
5) Di[Benzoylamido]capronsäure (Lysursäure). Sm. 144—145°. Na + H₂O, Ba + 1¹/₂H₂O, Sr, Ag + ¹/₂H₂O (B. 28, 3190; H. 25, 528). **– III**, 893.

6) 2,2'-Diisopropylazobenzol-5,5'-Dicarbonsäure. Sm. 280° u. Zers. $\dot{\text{Na}}_2 + \text{H}_2 \text{O}$, $\dot{\text{K}}_2 + \text{H}_2 \text{O}$, $\dot{\text{Ba}} + 2 \text{H}_2 \text{O}$, $\dot{\text{Ag}}_2$ (J. r. 16, 162; 21, 489). - IV, 1466.

7) β -Aethylester d. γ -Phenylhydrazon- α -Phenylbutan- α^2 , β -Dicarbonsäure. Sm. 235° u. Zers. (A. 236, 193). — IV, 718.

8) Diäthylester d. β -Phenylhydrazon- α -Phenyläthan- $\alpha\beta$ -Dicarbon-

säure. Sm. 69-70 (A. 246, 341). — IV, 718.
Di[2-Methylphenylester] d. Hexahydro-1,4-Diazin-1,4-Dicarbonsäure. Sm. 135 (Bl. [3] 19, 766).

10) Di[3-Methylphenylester] d. Hexahydro-1,4-Diazin-1,4-Dicarbonsäure. Sm. 138° (Bl. [3] 19, 766).

11) Di[4-Methylphenylester] d. Hexahydro-1,4-Diazin-1,4-Dicarbonsäure. Sm. 238° (Bl. [3] 19, 766)

12) polym. 2-Methylphenylamid d. Acetylameisensäure. Sm. 177° (A. **270**, 317; **279**, 84).

13) polym. 4-Methylphenylamid d. Acetylameisensäure. Sm. 2070 (A.

279, 90). 14) Di [4-Aethoxylphenylamid] d. Fumarsäure. Sm. 214° (G. 28 [2] 195).

15) Verbindung (aus d. Verb. C₁₆H₁₂O₂N₂Cl₂). Sm. 90,5° (B. 19, 2341). II, 347.

 $\mathbf{C}_{20}\mathbf{H}_{22}\mathbf{O}_4\mathbf{N}_4$

C 62.8 - H 5.7 - O 16.8 - N 14.7 - M. G. 382.

1) 4,4'-Di[Isopropylidenhydrazido]biphenyl-3,3'-Dicarbonsäure. Sm. $265-267^{\circ}$ (\tilde{B} . 31, 2581).

2) Diäthylester der Di[Phenylhydrazon] äthan - α β - Dicarbonsäure. α -Modif. Sm. 120—121°; β -Modif. Sm. 136—137° u. Zers.; γ -Modif. Sm. 173—175° u. Zers. (A. **261**, 130; B. **28**, 65). — IV, 728.

3) Diphenylamidoformiat d. $\beta\gamma$ -Dioximidopentan. Sm. 164—170° u. Zers. (B. 22, 3108). — II, 446.

4) Di[β -Acetyl- α -Phenylhydrazid] d. Bernsteinsäure. Sm. 219° (B. 26, 2496). — IV, 704.

 $\mathbf{C}_{00}\mathbf{H}_{00}\mathbf{O}_4\mathbf{Br}_4$ 1) Tetrabromguajakharzsäure (A. 119, 275). — II, 1878. $\mathbf{C}_{20}\mathbf{H}_{22}\mathbf{O}_{5}\mathbf{N}_{2}$

C 64.9 - H 5.9 - O 21.6 - N 7.6 - M. G. 370.

1) Di[4-Methylphenylamid] d. Citronensäure. Sm. 161° (B. 19, 2353). **- II**, 503.

isom. Di[4-Methylphenylamid] d. Citronensäure. Sm. 189°. Ag
 22, 987; Soc. 63, 699). — II, 503.

C 60.3 - H 5.5 - O 20.1 - N 14.1 - M. G. 398. $C_{20}H_{22}O_5N_4$

1) Anhydrid d. Succinphenylhydrazinsäure. Sm. 137° (B. 25, 2750). **- IV**, 703.

 $\mathbf{C}_{20}\mathbf{H}_{22}\mathbf{O}_{6}\mathbf{N}_{2}$ C 62,2 - H 5,7 - O 24,8 - N 7,2 - M. G. 386.

1) 2,2'-Di[α -Oxyisopropyl]azobenzol-5,5'-Dicarbonsäure. Na₂+10H₂0

(B. 15, 2550). — ÎV, 1471. 2) Diäthylester d. 2,2'-Azophenoxylessigsäure. Sm. 110—111° (J. pr. 2] **29**, 171). — IV, 1405.

3) Di[2-Methoxylphenylester] d. Hexahydro-1,4-Diazin-1,4-Dicarbonsäure (Guajakolpiperazindiurethan). Sm. 181° (Bl. [3] 19, 187).

C 58,0 — H 5,3 — O 23,2 — N 13,5 — M. G. 414. 1) Dinitrochinin + H_2O (Soc. 39, 470). — III, 815. C20H22O6N4

2) 3,5,3',5'-Tetra[Acetylamido]-4,4'-Dioxybiphenyl. Sm. 280° (B. 21, 3532). — II, 989.

- C 59.7 H 5.5 O 27.8 N 7.0 M. G. 402. $C_{20}H_{22}O_7N_2$
 - 1) Diäthylester d. 2,2'-Azoxyphenoxylessigsäure. Sm. 113—114° (J. pr. [2] **29**, 160). — **IV**, *1342*.
 - 2) Verbindung (aus Helicin u. 3-Amidobenzol-1-Carbonsäureamid) + 2H₂O. Su. $112,5-113^{\circ}$ (wasserfrei) (A. 218, 192). — III, 74. C 53,8 — H 4,9 — O 28,7 — N 12,6 — M. G. 446.
- $C_{20}H_{22}O_8N_4$
 - 1) Phenylglykosazon-3-Carbonsäure. Sm. 206-2080 u. Zers. (A. 236, 172). — II, 1289.
- C₂₀H₂₂O₁₀Cl₂1) Tetraäthylester d. 3,6-Dichlor-1,4-Diketo-1,4-Dihydrobenzol-2,5-Di [Methyldicarbonsäure]. Sm. 132°. Na₂ (Am. 13, 38; 17, 598; B. **26**, 398). — II, 2097. C 41,8 — H 3,8 — O 44,6 — N 9,7 — M. G. 574.
- $\mathbf{C}_{20}\mathbf{H}_{22}\mathbf{O}_{16}\mathbf{N}_{\downarrow}$
 - 1) Tetraäthylester d. 2,4,6-Trinitrobenzol-1-Methyldicarbonsäure-3-Nitromethyldicarbonsäure (T. d. Trinitrophenylennitrodimalonsäure). Sm. 111° (A. 14, 356). — II, 2075.
- $\mathbf{C}_{20}\mathbf{H}_{22}\mathbf{N}_{2}\mathbf{S}$ 1) 2,5-Di[4-Isopropylphenyl]-1,3,4-Thiodiazol. Sm. 45° (B. 6, 333). — II, 1388.
- $C_{20}H_{22}N_4S_2$ 1) Di[Allylamid] d. Biphenylendi-4,4'-Amidothioameisensäure (Diallyl-
- 4,4'-Biphenylendithioharnstoff) (B. 11, 833). IV, 965. C 77,7 H 7,4 O 10,4 N 4,5 M. G. 309. $\mathbf{C}_{20}\mathbf{H}_{23}\mathbf{O}_{2}\mathbf{N}$
 - 1) Di[3-Oxy-1,2,3,4-Tetrahydro-2-Naphtyl]amin. Sm. 165—166°. (2 HCl, PtCl₄) (B. 26, 1838; A. 288, 129). — II, 855. 2) 2-Naphtylimid d. $\beta \varepsilon$ -Dimethylhexan- $\gamma \delta$ -Dicarbonsäure. Sm. 126°
 - (A. 292, 174).
- C 73.8 H 7.1 O 14.8 N 4.3 M. G. 325. $\mathbf{C}_{20}\mathbf{H}_{23}\mathbf{O}_{3}\mathbf{N}$
 - 1) Protocurin. Sm. 306° u. Zers. (2 HCl, PtCl₄), H₂SO₄ (C. 1897 [2] 1079).
- $\mathbf{C}_{20}\mathbf{H}_{23}\mathbf{O}_3\mathbf{N}_3$
- 2) Aethyläther d. Thebenin (Aethebenin). HCl, HJ + H₂O (B. 32, 182). C 68,0 H 6,5 O 13,6 N 11,9 M. G. 353. 1) 4,4',6'-Tri[Acetylamido]-3,3'-Dimethylbiphenyl. Sm. oberh. 290° (B. 32).
 - 25, 1035). IV, 1169. 2) Diäthyläther d. 6-Acetylamido-5,8-Dioxy-1-Phenyl-1,2-Dihydro-1,4-Benzdiazin. Sm. 162° (B. 24, 3826). — II, 950.
 - 3) Verbindung (aus Acetessigsäureäthylester u. α-Phenylhydrazidoessigsäurephenylamid). Sm. 147° (A. 301, 61). C 70,4 — H 6,7 — O 11,8 — N 4,1 — M. G. 341.
- $C_{20}H_{23}O_4N$
- 1) Acetylcodein. Sm. $133,5^{\circ}$. HCl $+ 2H_2O$, $(2HCl, PtCl_4)$ (Soc. 27, 1031; A. 222, 212). — III, 905.

 - Benzoylpellotin. Fl. (2HCl, PtCl₄), (HCl, AuCl₃) (B. 29, 217). III, 778.
 Diäthylester d. α-Phenylamido-α-Phenyläthan-ββ-Dicarbonsäure. Sm. 98—100°. HCl (B. 28, 1451; 31, 607). II, 1850.
 Acetat d. Bebeerin (A. d. Bebirin). Sm. 147—148° (B. 29, 2057). —
 - III, 798.
- $\mathbf{C}_{20}\mathbf{H}_{23}\mathbf{O}_4\mathbf{N}_3$ C 65,0 - H 6,2 - O 17,3 - N 11,4 - M. G. 369.
 - 1) 3,3'-Diisopropyldiazoamidobenzol-6,6'-Dicarbonsäure. Ba, Ag (A. 117, 62). $\stackrel{-}{-}$ IV, 1578. C 67,2 $\stackrel{-}{-}$ H 6,4 $\stackrel{-}{-}$ O 22,4 $\stackrel{-}{-}$ N 3,9 $\stackrel{-}{-}$ M. G. 357.
- $C_{20}H_{23}O_5N$
- 1) Aethylester d. Morphinearbonsäure. Sm. 113°. Oxalat + 2H,0 (B. **25** [2] 202). — III, 900. C 64,3 — H 6,2 — O 25,7 — N 3,7 — M. G. 373.
- $\mathbf{C}_{20}\mathbf{H}_{23}\mathbf{O}_{6}\mathbf{N}$
- 1) Helicintoluid (A. 154, 32). III, 69. C 59,9 H 5,7 O 23,9 N 10,5 M. G. 401. $C_{20}H_{23}O_6N_3$
 - 1) Diäthylester d. 6,6'-Dimethoxyldiazoamidobenzol-3,3'-Dicarbonsäure. Sm. noch nicht bei 250° (A. 117, 50). — IV, 1578.
- 1) Aethylester d. Di[α-Acetoxylbenzyl]phosphinsäure (Bl. 50, 604). $C_{20}H_{23}O_{6}P$ IV, 1664.
- C 61,7 H 5,9 O 28,8 N 3,6 M. G. 389. $\mathbf{C}_{20}\mathbf{H}_{23}\mathbf{O}_{7}\mathbf{N}$ 1) Diäthylester d. 1-Oximido-5-Methyl-3-[3,4-Dioxyphenyl]-1,2,3,4-Tetrahydrobenzol-3,4-Methylenäther-2,4-Dicarbonsäure. Sm. 2020
- u. Zers. (A. 303, 229). C 57,0 H 5,5 O 34,2 N 3,3 M. G. 421. $C_{20}H_{28}O_{9}N$
- 1) 3-Amidobenzol-1-Carbonsaures Helicin. Sm. 142° (B. 12, 2033).
- $C_{51,2} H_{4,9} O_{40,9} N_{3,0} M_{6,469}$ $C_{20}H_{23}O_{12}N$ 1) Indikanin (J. 1858, 471). — III, 596.

- C 45,4 H 4,3 O 42,3 N 8,0 M. G. 529. $C_{20}H_{23}O_{14}N_3$
 - 1) Tetraäthylester d. 2,4,6-Trinitrobenzoldi-1,3-[Methyldicarbonsäure] (T. d. s-Trinitrophenylendimalonsäure). Sm. 123° (Am. 12, 20). — II, 2075.
- $\mathbf{C}_{20}\mathbf{H}_{28}\mathbf{N}_{2}\mathbf{C}1$
- 1) Chlormethylat d. Cinchen. 2 + PtCl₄ (B. 18, 1221). III, 837.
 1) Jodmethylat d. Cinchen. Sm. 186° (B. 18, 1221). III, 837.
 2) 1-Jodäthylat d. 2-Methyl-1-Aethyl-4,5-Diphenylimidazol. Sm. 163° $C_{20}H_{23}N_2J$

(Soc. 67, 44). — IV, 1032. C 77,9 — H 7,8 — O 5,2 — N 9,1 — M. G. 308. $\mathbf{C}_{20}\mathbf{H}_{24}\mathbf{ON}_{2}$

- 1) Desoxychinin $+ 2^{1/2}H_{2}O$. Sm. 52° . (2HCl, PtCl₄) (B. 29, 372).
 - 2) Desoxyconchinin $+ 2H_2O$. Sm. $80-82^{\circ}$ (B. 28, 3147). III, 825.
 - 3) Methylcinchonin. Sm. $74-75^{\circ}$. $(2 HCl, PtCl_4 + H_2O)$, $(2 HCl, AuCl_8 + H_2O)$ $H_2O)$ (B. 13, 2292; 28, 1066; A. 90, 219; J. pr. [2] 3, 151). III, 832.
 - 4) Methyleinehonidin. Sm. $75-76^{\circ}$. (2 HCl, PtCl₄ + 3 H₂O), HBr + H₂O, $(2 \text{HJ} + \text{H}_2\text{O})$ (A. 90, 221; 269, 255; B. 13, 2192; J. 1882, 1109). III, 851.
 - 5) Methylcinchotoxin. Sm. 74-75° (B. 27, 1280; 28, 1066). III, 846.
 - 6) 3-Keto-2-Aethyl-1,4-Di[4-Methylphenyl]hexahydro-1,4-Diazin. Sm. 98-99,5° (B. **25**, 2938). — II, 508.
 - 7) 3-Keto-2, 2-Dimethyl-1, 4-Di [4-Methylphenyl]hexahydro-1, 4-Diazin. Sm. 129—130° (B. 25, 2940). — II, 508.
 - 8) Phenylmonamid d. Diäthyl-1,2,3,4-Tetrahydrochinolin-1-Carbonsäure. Sm. 149—150° (B. **29**, 2480). — **IV**, 210. C 74,1 — H 7,4 — O 9,9 — N 8,6 — M. G. 324. 1) αθ-Dioximido-αθ-Diphenyloktan. Sm. 192—193° (C. **1896** [2] 1091).

 $\mathbf{C}_{20}\mathbf{H}_{24}\mathbf{O}_{2}\mathbf{N}_{3}$

- 2) $\beta\eta$ -Dioximido- $\delta\varepsilon$ -Diphenyloktan. Sm. 235—237 δ (B. 29, 385).
- III, 301. 3) $\alpha \delta$ -Dioximido - $\alpha \delta$ -Di[2,4-Dimethylphenyl] butan. Sm. 140° (B. 20, 1375). — III, 301.
- 4) $\alpha \beta$ -Dioximido- $\alpha \beta$ -Di[4(?)-Isopropylphenyl]äthan (Cuminildioxim). Sm. 249° (B. 23, 2065). — III, 301.
- 5) isom. $\alpha \beta$ -Dioximido- $\alpha \beta$ -Di[4(?)-Isopropylphenyl]äthan. Sm. 2270 (B. 23, 2066). — III, 301.
- 6) $\alpha \zeta$ -Di[Benzoylamido]hexan. Sm. 154—155° (B. 29, 1167). 7) $\beta \varepsilon$ -Di[Benzoylamido]hexan. Sm. 238° (B. 28, 383).

- 8) isom. $\beta \in \text{Di}[\text{Benzoylamido}]$ hexan. Sm. 193—198° (B. 28, 385). 9) isom. P-Di[Benzoylamido] hexan. Sm. 125° (H. 17, 547). 10) $\beta \gamma$ -Di[Phenylacetylamido] butan. Sm. 195—196° (B. 25, 3281). II, 368.
- 11) $\alpha\beta$ -Di[Acetyl-2-Methylphenylamido]äthan. Sm. 152—153° (B. 25, 3257). — II, 461.
- 12) $\alpha\beta$ -Di[Acetyl-4-Methylphenylamido]äthan. Sm. 137—139° (B. 25,
- 3261). II, 491. 13) 4,4'-Di[Acetylamido]-3,3'-Diäthylbiphenyl. Sm. 307° (B. 17, 474).
- **IV**, 985. 14) 2,2'-Di[Acetylamido]-3,5,3',5'-Tetramethylbiphenyl. Sm. 210° (B. 28, 2802). — IV, 985.
- 15) Aethyläther d. 8-[4-Acetylamidophenyl]amido-5-Oxy-1,2,3,4-Tetra-
- hydronaphtalin. Sm. 177-178° (B. 31, 905). 16) $\alpha\beta$ -Di[8-Oxy-1,2,3,4-Tetrahydro-1-Chinolyl] äthan. Sm. 233° (B. 19, 1047). — IV, 200.
- 17) Pinolnitrol-2-Naphtylamin. Sm. 194-195° (A. 253, 266). III, 508.
- 18) Chinin $+3 \,\mathrm{H}_2\mathrm{O}$. Sm. 57° (174,5—175° wasserfrei); subl. 170—180°. Salze meist bekannt. Lit. bedeutend. — III, 807.
- 19) Isochinin. Sm. 185°. HCl+2H₂O, 2HCl, (2HCl, PtCl₄), H₂SO₄+10H₂O, +AgNO₈ (M. 12, 332; 14, 554). III, 821.
 20) Conchinin (Chinidin). Sm. 171,5°. Salze meist bekannt. Lit. bedeutend.
- **III**, 823.
- 21) Isoconchinin. $(2HCl, PtCl_4 + 3H_2O), H_2SO_4 + 8H_2O (A. 243, 149).$ III, 826.
- 22) Chinicin. Sm. 60°. Salze meist bekannt (Soc. 24, 61; 25, 101; J. 1853, 473; A. 166, 277; 178, 244; 243, 148; M. 10, 227). — III, 827.

- $\mathbf{C}_{20}\mathbf{H}_{24}\mathbf{O}_{2}\mathbf{N}_{2}$ 23) **Pseudonichin.** Sm. 190—191°. HCl + 1½H₂O, (2HCl, PtCl₄), HNO₃+

 - 3H₂O (M. 14, 446). III, 821. 24) Methylcupreïn. Chlorid, Jodid, Sulfat (A. 230, 66). III, 822. 25) Aethylester d. 1-Phenyl-4, 5-Camphylpyrazol-3-Carbonsäure. Sm. 114° (Am. 19, 404). — IV, 864.
 - 26) Aethylester d. Verb. $C_{18}H_{20}O_2N_2$ (aus Desoxycinchonin). (2 HCl, PtCl₄) (B. **28**, 3146). — III, 837.
 - 27) Phenylamid d. Hexan-α ε-Dicarbonsäure. Sm. 166—167° (A. 295, 179).
 - 28) Phenylamid d. β-Methylpentan-αε-Dicarbonsäure. Sm. 136'0 (Å. **295**, 181).
 - 29) Phenylamid d. γ-Methylpentan-αε-Dicarbonsäure. Sm. 158-159° (A. **295**, 186).
 - 30) Di[Aethylphenylamid] d. Bernsteinsäure. Sm. 101-101,50 (A. 292,
 - 31) Di[2,4,5-Trimethylphenylamid] d. Oxalsäure. Sm. 230° (M. 9, 750). - II, 552.
 - 32) Diphenylamid d. Korksäure (Suberanilid). Sm. 1830 (A. 68, 30). II, 415.
 - 33) Base (aus Dihydrojodconchinin). Sm. 78—79°. (2HCl, PtCl₄) (M. 12, 675). - III, 825.
 - 34) Verbindung (aus 1,4-Dioxybenzol u. 2-Amido-1-Methylbenzol) (B. 15, 1974).
 - 35) Verbindung (aus 1,4-Dioxybenzol u. 4-Amido-1-Methylbenzol). Sm. 95 bis 98° (B. 15, 1974). II, 939.
- 1) Aethylester d. $\beta\beta$ -Dimerkapto- α -Aethylbutterdiphenyläthersäure. Sm. 70-71° (A. 259, 371). II, 789. $C_{20}H_{24}O_{2}S_{2}$
 - 2) Aethylester d. $\beta\beta$ -Dimerkaptobutterdibenzyläthersäure. Fl. (B. 29, 1648).
- C 70,6 H 7,1 O 14,1 N 8,2 M. G. 340. C20 H24 O3 N2
 - 1) Aethyläther d. Cinchotenin. Sm. 210,5°. 2HCl, (2HCl, PtCl₄) (M. 15,
 - 171, 788; 16, 65). III, 841.
 2) Aethyläther d. 6-[4-Acetylamido-3-Methylphenyl]acetylamido-3-Oxy-1-Methylbenzol. Sm. 115° (A. 287, 206).
 - 3) Aethyläther d. 5-Acetylamido-2-[4-Methylphenyl]acetylamido-4-Oxy-1-Methylbenzol. Sm. 165° (B. 27, 2709).
 - 4) Diäthyläther d. 2-Keto-1,4-Di[4-Oxyphenyl]hexahydro-1,4-Diazin. Sm. 162° (B. 23, 2030). — II, 721.
 - 5) Säure (aus 3,6-Diketo 2,5-Diäthyl-1,4-Diphenylhexahydro-1,4-Diazin). Sm.
 - $40-80^{\circ}$ (B. 23, 2023). II, 434. 6) Aethylester d. Phenylazocamphoformencarbonsäure. Sm. 210° (Am.
 - 21, 258). 7) Verbindung (aus $\alpha\beta$ -Diamido- $\alpha\beta$ -Diphenyläthan u. Oxalsäurediäthylester).
- Sm. 242° u. Zers. (B. 28, 3179). IV, 978. C 65,2 H 6,5 O 13,0 N 15,2 M. G. 368. $\mathbf{C}_{20}\mathbf{H}_{24}\mathbf{O}_{3}\mathbf{N}_{4}$
- 1) Diäthyläther d. 3-Acetylamido-6-Dimethylamido-1,4-Dioxyphenazin. Sm. 179° (B. **24**, 3828). — II, 949. C 67,4 — H 6,7 — O 18,0 — N 7,9 — M. G. 356. $\mathbf{C}_{20}\mathbf{H}_{24}\mathbf{O}_{4}\mathbf{N}_{2}$
 - 1) Aethylenäther d. Aethylbenzhydroxamsäure. Fl. (B. 29, 1163). 2) Diäthyläther d. $\alpha\alpha$ -Dibenzoyl- β - $[\beta\beta$ -Dioxyäthyl] hydrazin. Sm. 125°
 - (B. 27, 182). II, 1191. 3) s-Di[2-Isopropylphenyl]phenylhydrazin-5,5'-Dicarbonsäure (J. r.
 - 19, 295; 21, 489). IV, 1508. 4) Diäthylester d. Phenylhydrazonanemonsäure. Sm. 167° (M. 17, 294).
 - **IV**, 797.
 - 5) Diäthylester d. $\alpha\beta$ -Di[Phenylamido]bernsteinsäure. Sm. 152° (150°; 145°) (B. 21, 1797; 27, 1604; Bl. 48, 728; A. 252, 170). — II, 438
 - 6) Diäthylester d. Aethylendiphenyldi [amidoameisensäure]. Sm. 87 bis 88° (B. 20, 785). — II, 374. 7) Diäthylester d. $\alpha\beta$ -Di[Phenylamido] äthan-2,2'-Dicarbonsäure (D. d.
 - Aethylendianthranilsäure). Sm. 117º (B. 28, 1686).
 - 8) Diäthylester d. α-[β-Phenylhydrazido]-α-Phenyläthan-ββ-Dicarbonsäure.
 Sm. 79—80°. HCl (B. 28, 1451) IV, 741.
 - 9) Diäthylester d. 3,3'-Dimethyl-4,4'-Biphenylendiamidoameisensäure. Sm. 187° (B. **21**, 1066). — IV, 981.
 - 10) $\mathbf{Di}[\mathbf{4}-\mathbf{Aethoxylphenylamid}]$ d. Bernsteinsäure. Sm. $258^{\circ}(C.\mathbf{1897}[1]49)$. 123*

C 62,5 - H 6,2 - O 16,7 - N 14,6 - M. G. 384. $\mathbf{C}_{20}\mathbf{H}_{24}\mathbf{O}_4\mathbf{N}_4$

1) Aethylester d. 4-Aethoxylphenylazo-4-Aethoxylphenylhydrazonessigsäure. Sm. 127—128° (B. 28, 1691). — IV, 1240.

2) Diäthylester d. Diphenyltetrazondiessigsäure. Sm. 117° (B. 28, 1226).

- IV, 1309.

C 64,5 - H 6,4 - O 21,5 - N 7,5 - M. G. 372. $C_{20}H_{24}O_5N_2$

1) Nitrosotetrahydropapaverin. Sm. 180-1820 (M. 19, 327)

2) Säure (aus d. 4-Aethoxylphenylamidoessigsäure). Sm. 1570 (B. 22, 1789). — II, 721. C 61,9 — H 6,2 — O 24,7 — N 7,2 — M. G. 388.

 $\mathbf{C}_{20}\mathbf{H}_{24}\mathbf{O}_{6}\mathbf{N}_{2}$

1) Tetramethyläther d. ?-Diacetyldiamido-1, 4, 1', 4'-Tetraoxybiphenyl. Sm. 251° (B. 17, 2128). — II, 1037.

2) Hexamethyläther d. Di[2,4,5-Trioxybenzyliden]hydrazin. Sm. 2630 (B. **32**, 290).

3) Yohimbinsäure (C. 1899 [1] 529).

4) 4-Methylphenylamid d. Schleimsäure (J. pr. [2] 6, 153). — II, 503. 5) Di [4-Aethoxylphenylamid] d. $\alpha\beta$ -Dioxyathan- $\alpha\beta$ -Dicarbonsaure.

Sm. 271° (C. 1897 [1] 49).

C 57,7 — H 5,8 — O 23,1 — N 13,4 — M. G. 416. $\mathbf{C}_{20}\mathbf{H}_{24}\mathbf{O}_{6}\mathbf{N}_{4}$

1) Verbindung (aus d. Diäthyläther d. 1,4-Di[4-Oxyphenyl]hexahydro-1,4-Diazin). Zers. bei 120—130° (B. 23, 1980). — II, 717.

1) Aethylester d. $\beta\beta$ -Diphenyldisulfon- α -Aethylbuttersäure. Sm. 1110 C20 H24 O6S (A. **259**, 372). — II, 789. C 59,5 — H 5,7 — O 27,8 — N 6,9 — M. G. 403.

 $\cdot \mathbf{C}_{20} \mathbf{H}_{24} \mathbf{O}_7 \mathbf{N}_2$

1) Glykovanillinphenylhydrazon. Sm. 1950 (B. 18, 1661). — IV, 763. 2) Monacetat d. Dioxim d. Säure C₁₈H₂₀O₆. Sm. 195 ° (B. 27 [2] 594).

 $\mathbf{C}_{20}\mathbf{H}_{24}\mathbf{O}_{10}\mathbf{N}_{2}$ C 53,1 - H 5,3 - O 35,4 - N 6,1 - M. G. 452

1) Diäthylester d. Tetracetyldiamidodihydrochinondicarbonsäure. Sm. 206° (B. 21, 1764). — II, 2004.

C₂₀H₂₄O₁₀Cl₂1) Tetraäthylester d. 2,5-Dichlor-3,6-Dioxybenzol-1,4-Di[Methyldicarbonsäure]. Sm. 160-1610 (Am. 13, 39). - II, 2096.

 $C_{20}H_{24}O_{21}J_2$ 1) Thymoljodid (C. 1898 [1] 1063).

 $\mathbf{C}_{20}\mathbf{H}_{24}\mathbf{N}_{2}\mathbf{Cl}_{2}$ 1) dimolec. Formmesididehlorid. Sm. 178° (B. 28, 750).

 $\mathbf{C}_{20}\mathbf{H}_{24}\mathbf{N}_{2}\mathbf{S}$ 1) s-Oenanthylidendiphenylthioharnstoff (A. 148, 335). — II, 445.

 $\mathbf{C}_{20}\mathbf{H}_{25}\mathbf{ON}$ C 81,4 - H 8,5 - O 5,4 - N 4,7 - M. G. 295.

 $1) \ \ \textbf{6} \ [\textbf{4-Isopropyl-l-Methylbenzol.} \\$ Sm. 153-154° (G. 25 [2] 391). - III, 56.

2) α -Oximido- $\alpha\beta$ -Diphenyloktan. Sm. 89° (B. 22, 347). — III, 239. C 77,2 — H 8,0 — O 10,3 — N 4,5 — M. G. 311. $C_{20}H_{25}O_{2}N$

 $C_{20}H_{25}O_{8}N$

 Benzoat d. Pulegenacetonoxim. Sm. 178-179° (C. 1899 [1] 38).
 C 73,4 — H 7,6 — O 14,7 — N 4,3 — M. G. 327.
 Aethocodeïn (B. 15, 1486). — III, 904.
 2 - Naphtylmonamid d. βε-Dimethylhexan-γδ-Dicarbonsäure. Sm. 164° (A. 292, 174).

 $\mathbf{C}_{20}\mathbf{H}_{25}\mathbf{O}_{8}\mathbf{N}_{8}$ C 67,6 - H 7,0 - O 13,5 - N 11,8 - M. G. 355.

1) 1,4-Diäthyläther d. 2-Oximido-1,4-Di[4-Oxyphenyl]hexahydro-1,4-Diazin. Sm. bei 80° (B. 23, 1980). — II, 717.

C 69,9 - H 7,3 - O 18,6 - N 4,1 - M. G. 343. $\mathbf{C}_{20}\mathbf{H}_{25}\mathbf{O}_{4}\mathbf{N}$

1) Codamin. Sm. 121°. (2HCl, $PtCl_4 + 2H_2O$), $HJ + 1^4/_2H_2O$ (A. 153, 56; 282, 213; A. Spl. 8, 280). — III, 911.

2) Laudanin. Sm. 166°. $HCl + 6H_2O$, (2HCl, $PtCl_4 + 2H_2O$), $HBr + 2H_2O$ 2H₂O₂, H_J + H₂O₃, H₂SO₄ + 4H₂O₃, Dioxalat + 6H₂O₄, Ditartrat + 3H₂O₅ (4. 153, 53; 176, 201; 282, 208; A. Spl. 8, 272; B. 13, 1074, 1075; M. 13, 693). — III, 912.

3) Laudanidin. Sm. 177°. (2HCl, PtCl₄ + 4H₂O), H_J, Oxalat + 2H₂O (A. 282, 209). — III, 912.

4) d-Tetrahydropapaverin. Sm. 223-224°. d-Bromcamphersulfonat (Soc. 73, 898).

5) 1-Tetrahydropapaverin. Sm. 223—224°. d-Chlorcamphersulfonat, d-Bromcamphersulfonat (Soc. 73, 897, 901).

6) i-Tetrahydropapaverin. Sm. 200 -201° . + CH₄O, HCl + 3H₂O, (2HCl, PtCl₄ + 3H₂O), H₂SO₄ + 7H₂O, H₂Cr₂O₇, Pikrat, Tartrat + H₂O (M. 7, 495; **19**, 321; Soc. **73**, 896, 902). - **IV**, 440.

ConHos OaN 7) Diäthylester d. 2,6-Dimethyl-4-Benzyl-1,4-Dihydropyridin-3,5-Dicarbonsäure. Sm. 115° (B. 21, 1783). — IV, 371. C 64,0 — H 6,7 — O 25,6 — N 3,7 — M. G. 375. C20H25O6N 1) Diäthylester d. α-Phtalylamidopentan-γγ-Dicarbonsäure. Sm. 62° (B. 23, 3692). — II, 1812. 2) Diäthylester d. 1-Oximido-5-Methyl-3-[2-Methoxylphenyl]-1,2,3,4-Tetrahydrobenzol-2,4-Dicarbonsäure. Sm. 145° (A. 303, 251). C 59,5 — H 6,2 — O 23,8 — N 10,4 — M. G. 403. 1) Trinitroditerebenthylen (Bl. 50, 420; 51, 119). — II, 220. 1) Tetraäthyläther d. Chlorhexaoxybiphenyl. Sm. 129—130° (B. 31, 616). $C_{20}H_{25}O_6N_3$ $\mathbf{C}_{20}\mathbf{H}_{25}\mathbf{O}_{6}\mathbf{C}\mathbf{1}$ C 56,7 — H 5,9 — O 34,0 — N 3,3 — M. G. 423.

1) Verbindung (aus d. Diäthyläther d. 1,2,3-Trioxybenzol) (M. 2, 216). $\mathbf{C}_{20}\mathbf{H}_{25}\mathbf{O}_{9}\mathbf{N}$ $\mathbf{C}_{20}\mathbf{H}_{25}\mathbf{O}_{10}\mathbf{Br}_5\mathbf{1})$ Pentabromderivat d. Farbstoffs $\mathbf{C}_{20}\mathbf{H}_{30}\mathbf{O}_{10}$ (Sec. 35, 22). — III, 667. $\mathbf{C}_{20}\mathbf{H}_{25}\mathbf{NS}_2$ 1) Diphenyläther d. 4,4-Dimerkapto-2,2,6-Trimethylhexahydropyri din. Sm. 87°. HCl (B. 31, 3149). Jodmethylat d. Desoxycinchonin. Sm. 176° (B. 31, 2357).
 Jodmethylat d. Desoxycinchonidin. Sm. 167—168° (B. 31, 2355).
 C 77,4 — H 8,4 — O 5,2 — N 9,0 — M. G. 310. $\mathbf{C}_{20}\mathbf{H}_{25}\mathbf{N}_{2}\mathbf{J}$ C20H26ON2 1) Methylcinchonamin. Sm. 139°. (2 HCl, PtCl₄) (A. 225, 230; A. ch. [6]) 19, 115). — III, 928. 2) Di[4-Isopropylbenzyl]nitrosamin (A. 245, 310). — II, 560. C 73.6 - H 8.0 - O 9.8 - N 8.6 - M. G. 326. $\mathbf{C}_{20}\mathbf{H}_{26}\mathbf{O}_{2}\mathbf{N}_{2}$ Hydrochinin + 2H₂O. Sm. 172,3° (wasserfrei). Salze meist bek. (B. 15, 856; A. 241, 257; Fr. 27, 561; M. 16, 72). — III, 859.
 Hydroconchinin (Hydrochinidin) + 2½ H₂O. Sm. 166—167°. Salze meist bek. (B. 14, 1955; 15, 520, 855, 1656, 3008; A. 243, 146). — III, 827. 3) Hydrochinicin. (2HCl, PtCl₄ + H_2O), Oxalat (A. 241, 273). — III, 860. 4) Diäthyläther d. 1,4-Di[4-Oxyphenyl]hexahydro-1,4-Diazin. Sm. 2230 (B. 22, 1782; 23, 1979). — II, 717. 5) dimolec. Formmesidid. Sm. 285° (B. 28, 751). 1) Di[2,3,5,6-Tetramethylphenyl]sulfon. Sm. 37° (B. 18, 2843). C20H26O2S II, 828.
2) Di[3-Oxy-4-Isopropyl-1-Methylphenyl]-?-Sulfid. Sm. 152—153° (G. 17, 93). — II, 971. C 70,2 — H 7,6 — O 14,0 — N 8,2 — M. G. 342. $C_{20}H_{26}O_3N_2$ 1) Hydrochinin $+ H_2O$. Sm. bei 100° . (2HCl, PtCl₄) (A. 108, 347). — III, 815. 2) Cupreïnmethyloxydhydrat. Salze siehe (A. 230, 66). — III, 822. 3) Aethylester d. Phenylhydrazoncampheroxalsäure. Sm. 2120 (Am. 19, 402). — IV, 709. 4) Verbindung (Base aus Harn) (B. 25 [2] 755). C 67,0 — H 7,3 — O 17,9 — N 7,8 — M. G. 358. $\mathbf{C}_{20}\mathbf{H}_{26}\mathbf{O}_4\mathbf{N}_2$ 1) Tetraäthyläther d. 2,5,2',5'-Tetraoxyazobenzol. Sm. 128° (A. 215, 147). — IV, 1446. C 62,2 — H 6,7 — O 16,6 — N 14,5 — M. G. 386. $\mathbf{C}_{20}\mathbf{H}_{26}\mathbf{O}_4\mathbf{N}_4$ 1) Di[Methylphenylhydrazon] d. Glykose. Sm. 152° u. Zers. (B. 22, 91). **- IV**, 792. 2) Di[2-Methylphenylhydrazon] d. Glykose. Sm. 2010 u. Zers. (A. 239, 229). **— IV**, 804. 3) Di[4-Methylphenylhydrazon] d. Glykose. Sm. 193-1940 (A. 239) 229). **— IV**, 810. 4) Harnstoff (aus Acetalylphenylsemicarbazid). Sm. 171-1720 (B. 27, 2207). 1) $Di[3-Oxy-4-Isopropyl-1-Methylphenyl]-?-Sulfon. Sm. 213-214° (<math>\hat{G}$. C20 H26 O4S **19**, 348). — **II**, 971.

2) 3-Methyl-6-Isopropylphenylester d. 3-Oxy-4-Isopropyl-1-Methylbenzol-6-Sulfonsäure (J. pr. [2] 13, 172). — II, 847.

1) Rhamnosebenzylmerkaptal. Sm. 125° (B. 29, 552).
C 59,7 — H 6,5 — O 19,9 — N 13,9 — M. G. 402.

1) Di[Phenylhydrazon] d. Rhamnoheptose. Sm. bei 200° u. Zers. (B. $C_{20}H_{26}O_4S_2$

 $\mathbf{C}_{20}\mathbf{H}_{26}\mathbf{O}_5\mathbf{N}_4$ **23**, 3108). — IV, 793 1) Triphenylmethan-α-Carbonsäure-?-Sulfonsäure. Ba + H₂O (J. pr. [2]) C20H26O5S

32, 624). — II, 1481. 1) Glykosebenzylmerkaptal. Sm. 1330 (B. 29, 551). $C_{20}H_{26}O_5S_2$

 $\mathbf{C}_{20}\mathbf{H}_{27}\mathbf{O}_{6}\mathbf{N}_{3}$

 $\mathbf{C}_{20}\mathbf{H}_{27}\mathbf{O}_{9}\mathbf{N}_{3}$

2) Galaktosebenzylmerkaptal. Sm. 130° (B. 29, 551). $C_{20}H_{26}O_5S_2$ 3) Di[γ-4-Methylphenylsulfonpropyl]äther. Sm. 79-80° (B. 24, 1835; J. pr. [2] 51, 297). C 61,5 — H 6,7 — O 24,6 — N 7,2 — M. G. 390. 1) m-d-Cocaïnurethan. Sm. 100—101°. HCl (B. 27, 1884). — III, 868. 2) m-l-Cocaïnurethan. Sm. 143°. HCl, HBr (B. 27, 1878). — III, 868. $\mathbf{C}_{20}\mathbf{H}_{26}\mathbf{O}_{6}\mathbf{N}_{2}$ C 57.4 - H 6.2 - O 23.0 - N 13.4 - M. G. 418. $\mathbf{C}_{20}\mathbf{H}_{26}\mathbf{O}_{6}\mathbf{N}_{4}$ 1) Di[Phenylhydrazon] d. α-Glykooktose. Sm. 210-212° u. Zers. (A. 270, 98). — IV, 792. 2) Di[Phenylhydrazon] d. d-Mannoktose. Sm. bei 2230 u. Zers. (B. 23, 2235). — IV, 794. 3) Diäthylester d. $\alpha\beta$ -Di[Phenylhydrazido]- $\alpha\beta$ -Dioxyäthan- $\alpha\beta$ -Dicarbonsäure. Sm. 116-118 u. Zers. (B. 28, 67). - IV, 728. 4) Diäthylester d. 1,3-Phtalyldi $[\beta$ -Hydrazonbuttersäure] (D. d. Isophtalylhydrazinacetessigsäure). Sm. 1450 (J. pr. [2] 54, 77). 5) Diäthylester d. 1,4-Phtalyldiβ-Hydrazonbuttersäure]. (J. pr. [2] 54, 83). 6) Verbindung (d. 2-Amidobenzol-1-Carbonsäureamid mit Oxalsäurediäthylester). Sm. $87-90^{\circ}$ (*J. pr.* [2] **43**, 231). — II, *1246*. C 55,3 — H 6,0 — O 25,8 — N 12,9 — M. G. 434. $C_{20}H_{26}O_7N_4$ Verbindung (aus Acetessigsäureäthylester u. Hydroxylamin). Zers. bei 140° (B. 24, 500). — I, 495.
 C 54,8 — H 5,9 — O 32,9 — N 6,4 — M. G. 438. $\mathbf{C}_{20}\mathbf{H}_{26}\mathbf{O}_{9}\mathbf{N}_{2}$ Verbindung (aus Acetchloressigsäureäthylester). Sm. 82° (A. 278, 74).
 C 52,9 — H 5,7 — O 35,2 — N 6,2 — M. G. 454. $\mathbf{C}_{20}\mathbf{H}_{26}\mathbf{O}_{10}\mathbf{N}_{2}$ 1) Tetraäthylester d. 3,6-Diamido-1,4-Diketo-1,4-Dihydrobenzol-2,5-Di[Methyldicarbonsäure]. Sm. 159—160° (Am. 13, 40). — II, 2097. 1) Benzylimidobenzylamidomethylisoamylsulfid (B. 19, 2349). — II, 529. C20 H26 N2S 1) Aethylsenfölauramin. Sm. 179° (J. pr. [2] 50, 442). — IV, 1175. $\mathbf{C}_{20}\mathbf{H}_{26}\mathbf{N}_{4}\mathbf{S}$ 1) 4,4'-Biphenylendi [Isopropylthioharnstoff]. α-Modif. Sm. noch nicht $\mathbf{C}_{20}\mathbf{H}_{26}\mathbf{N}_{4}\mathbf{S}_{2}$ bei 300°; β -Modif. Sm. 170° (B. 27, 1559). — IV, 965. C 76,7 — H 8,6 — O 10,2 — N 4,5 — M. G. 313. $\mathbf{C}_{20}\mathbf{H}_{27}\mathbf{O}_{2}\mathbf{N}$ 1) Benzoat d. 1-Oximido-3-Hexyl-5-Methyl-1,2,3,4-Tetrahydrobenzol. Sm. 150—152° (A. 288, 345). C 73,0 — H 8,2 — O 14,6 — N 4,2 — M. G. 329. 1) Aethylester d. Propylphenyltetrahydroazindoncarbonsäure. Sm. $\mathbf{C}_{20}\mathbf{H}_{27}\mathbf{O}_{3}\mathbf{N}$ 150—152°. (2HCl, PtCl₄), (HCl, AuCl₃) (B. 29, 816). — IV, 367. C 67.2 - H 7.6 - O 13.4 - N 11.8 - M. G. 357. $C_{20}H_{27}O_{3}N_{3}$ Nitrosotetrahydrochinin. Fl. HNO₂ (B. 29, 803). — III, 816.
 Nitrosotetrahydrochinidin. Fl. HNO₂ (B. 29, 804). — III, 826. C 62,3 — H 7,0 — O 12,5 — N 18,2 — M. G. 385. $C_{20}H_{27}O_8N_5$ 1) Verbindung (aus d. Propionylcyanessigsäureäthylester u. Phenylhydrazin). Sm. 87° (C. **1895** [2] 83). C 69,6 — H 7,8 — O 18,6 — N 4,0 — M. G. 345. $\mathbf{C}_{20}\mathbf{H}_{27}\mathbf{O}_{4}\mathbf{N}$ 1) Echitenin. Sm. oberh. 120°. (2 HCl, HgCl₂ + 2 H₂O), (2 HCl, PtCl₄) (A. 203, 164). — III, 881. 2) Codeinäthyloxydhydrat. Jodid (A. 88, 339; C. r. 93, 591). — III, 904. 3) Morphinäthyläthermethyloxydhydrat. Sm. 132° (A. ch. [5] 27, 278). **- III**, 908. 4) Isobutylester d. Benzoylecgonin. Sm. 61-620 (Am. 10, 148). -III, 867.

1) Di [3-Methyl-6-Isopropylphenyl] phosphorsäure. Na, Ba $+ 5H_2O$ $C_{20}H_{27}O_4P$ (B. 18, 1705; G. 15, 280). - II, 770.

2) Di[a-Oxy-4-Isopropylbenzyl] phosphinsäure (Dioxycumylphosphinsäure). Sm. bei 140°. Ba + H_2 O (Bl. [3] 2, 206). — $I\vec{V}$, 1680. C 59,3 — H 6,7 — O 23,7 — N 10,5 — M. G. 405.

5) Isobutylester d. d-Benzoylecgonin. HCl + H₂O (B. 23, 987). —

1) Phenylhydrazid d. 4-Methylphenylgalaktosecarbonsäure. Sm. 2060 (B. 27, 1291). — IV, 726. 2) Phenylhydrazid d. 4-Methylphenylamidoglykosecarbonsäure. Sm.

211-212° (B. **27**, 1290). — **IV**, 726. C 53,0 — H 5,9 — O 31,8 — N 9,3 — M. G. 453. 1) Trinitroditerebenthyl (Soc. 54, 161). - II, 176.

- $\mathbf{C}_{20}\mathbf{H}_{27}\mathbf{O}_{11}\mathbf{N}$
- C 52,5 H 5,9 O 38,5 N 3,1 M. G. 457. 1) Amygdalin + 3 + 3 + 20. Sm. 200° (wasserfrei). Lit. bedeutend. III, 569.
 - 2) amorphes Amygdalin (A. 31, 263; Berz. J. 20, 428; J. 1874, 887). - III, 570.
- C20 H27 N2J 1) Jodäthylat d. 1,4-Dibenzylhexahydro-1,4-Diazin. Sm. 1970 (C. 1898)
- [1] 381). C 76,9 H 9,0 O 5,1 **N** 9,0 M. G. 312. $\mathbf{C}_{20}\mathbf{H}_{28}\mathbf{ON}_{2}$
 - 1) Tetraäthyldiamidophenyläther. Sm. 89°. (2 HCl, PtCl₄), Pikrat (B. **21**, 2061). — **II**, 657.
- C 73.2 H 8.5 O 9.8 N 8.5 M. G. 328. $C_{20}H_{28}O_{2}N_{2}$
 - 1) 7-Nitro-3-Amyl-2-Hexylchinolin. Sm. 53°. Pikrat (B. 24, 1737). IV, 344.
 - 2) Tetrahydrochinin. HCl + H₂O, (2HCl, PtCl₄) (M. 16, 631; B. 29, 803). **- III**, 816.
 - 3) Tetrahydrochinidin. Fl. (B. 29, 804). III, 826.
 - Azocamphanon (Bicamphanonazin). Sm. bei 222° (217—218°) (G. 24 [2] 47, 319; 26 [2] 292; 27 [2] 118). III, 495.
 Tetraäthyldiamidophenyldioxyd. Sm. 67° (B. 20, 1640). II, 817.

 - 6) Aethylester d.1-Phenylhydrazon-3-Isobutyl-5-Methyl-1,2,3,4-Tetrahydrobenzol-2-Carbonsäure. Sm. 162—163° (A. 288, 335). — IV, 693.
- C 69.8 H 8.1 O 13.9 N 8.1 M. G. 344. $C_{20}H_{28}O_3N_2$ 1) Anhydrid d. Camphersäuremononitril. Sm. 172-1730 (175-1760) (G. 26 [1] 420; Bl. [3] 15, 986).
- C 66,7 H 7,8 O 17,7 N 7,8 M. G. 360. $C_{20}H_{28}O_4N_2$
 - 1) Tetraäthyläther d. ?-Diamido-1,4,1',4'-Tetraoxybiphenyl. Sm. 129°. 2HCl, (2HCl, PtCl₄) (B. 12, 40; A. 215, 148). — II, 1037.
- C₂₀H₂₈O₄Br₄ 1) Verbindung (aus Dammarharz). III, 555.
- C 63,8 H 7,4 O 21,3 N 7,4 M. G. 376. $\mathbf{C}_{20}\mathbf{H}_{28}\mathbf{O}_{5}\mathbf{N}_{2}$
- 1) Anhydropseudonitrocampher. Sm. 190° u. Zers. (Soc. 73, 996).
- C 61,2 H 7,1 O 24,5 N 7,1 M. G. 392. $C_{20}H_{28}O_6N_2$ 1) Acetat d. 2,6-Tetracetyldiamido-3-Oxy-4-Isopropyl-1-Methylbenzol.
 - Sm. 184—186° (G. 20, 418). II, 773. Triäthylester d. γ-Phenylhydrazonbutan-αβ-Dicarbonsäure-β-Methylearbonsäure (Tr. d. Phenylhydrazon-β-Acetricarballylsäure). Sm. 100-101° (B. 21, 3756). — IV, 727.
 C 57,1 — H 6,7 — O 22,9 — N 13,3 — M. G. 420.
- $\mathbf{C}_{20}\mathbf{H}_{28}\mathbf{O}_{6}\mathbf{N}_{4}$
- 1) Di [Phenylhydrazon] d. Galaoktose. Sm. 220—225° u. Zers. (A. 288, 151). — IV, 794. C 58,8 — H 6,9 — O 27,4 — N 6,9 — M. G. 408.
- $C_{20}H_{28}O_7N_2$ 1) Diathylester d. 1-Oxamido-5-Oximido-3-[4-Methoxylphenyl]-1-Methylhexahydrobenzol-2,4-Dicarbonsäure. Sm. 1950 (A. 303, 248).
- $\mathbf{C}_{20}\mathbf{H}_{28}\mathbf{O}_{10}\mathbf{Cl}_{2}\mathbf{1}$) Dichlorderivat d. Farbstoffs $\mathbf{C}_{20}\mathbf{H}_{30}\mathbf{O}_{10}$ (Soc. 35, 22). III, 667. $\mathbf{C}_{20}\mathbf{H}_{28}\mathbf{N}_{2}\mathbf{J}_{2}$ 1) Jodmethylat d. Base $\mathbf{C}_{18}\mathbf{H}_{22}\mathbf{N}_{2}$ (aus Di-o-Xylylendiimin) (B. 24, 2406).
- **IV**, 996. 1) s-Tetraäthyldiamidodiphenylsulfid. Sm. 83° (79,5-80°). 2HCl, (2HCl, $\mathbf{C}_{20}\mathbf{H}_{28}\mathbf{N}_{2}\mathbf{S}$
- PtCl₄), H₂SO₄, Pikrat (B. 21, 2059; 23, 556). II, 804. 1) Tetraäthyldiamidodiphenyldisulfid. Sm. 72°. (2 HCl, PtCl₄ + 4 H₂O), $\mathbf{C}_{20}\mathbf{H}_{28}\mathbf{N}_{2}\mathbf{S}_{2}$
- Pikrat (B. **20**, 1637). **II**, 817. $\mathbf{C}_{20}\mathbf{H}_{28}\mathbf{N}_2\mathbf{A}\mathbf{s}_2$ 1) $\mathbf{Di}[\mathbf{4}-\mathbf{Di\ddot{a}thylamidophenyl}]$ diarsenid. Sm. 180° (A. 270, 147). — IV, 1686.
- $\mathbf{C}_{20}\mathbf{H}_{28}\mathbf{N}_{2}\mathbf{H}\mathbf{g}$ 1) Quecksilberdi [4-Diäthylamidophenyl]. Sm. 160,5° (G. 23 [2] 541). - IV, 1707.
- C₂₀H₂₈N₂Se 1) Tetraäthyldiamidodiphenylselenid. Sm. 83°. 2 HCl, Pikrat (B. 24,
- 766). II, *819*. 1) Chlorid d. Dextropimarsäure. Sm. 64-66° (B. 19, 2172). — II, 1437. $\mathbf{C}_{20}\mathbf{H}_{29}\mathbf{OCI}$
- l) Chlormethylat d. $\beta\beta$ -Di[4-Dimethylamidophenyl] propan. 2 + PtCl₄ $\mathbf{C}_{20}\mathbf{H}_{29}\mathbf{N}_{2}\mathbf{C}\mathbf{1}$ (B. 6, 350). — IV, 984. 1) Jodmethylat d. $\beta\beta$ -Di[4-Dimethylamidophenyl] propan (B. 6, 349).
- $\mathbf{C}_{20}\mathbf{H}_{29}\mathbf{N}_{2}\mathbf{J}$ — IV, 984. C 76,4 — H 9,6 — O 5,1 — N 8,9 — M. G. 314.
- $\mathbf{C}_{20}\mathbf{H}_{30}\mathbf{ON}_{2}$ 1) Methyloxydhydrat d. $\beta\beta$ -Di[4-Dimethylamidophenyl]propan. Chlorid, Jodid (B. 6, 349). — IV, 984.

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C 67.0 - H 8.4 - O 8.9 - N 15.6 - M. G. 358.
C_{90}H_{30}O_{9}N_{4}
                        1) Aethylenäther d. 6-Oxy-5-Methyl-2,4-Diäthyl-1,3-Diazin. Sm. 153,5°. (2HCl, PtCl<sub>4</sub>) (J. pr. [2] 26, 351). — IV, 829.
1) Dibrombicampher. Sm. 128—129° (G. 27 [2] 127).
\mathbf{C}_{20}\mathbf{H}_{30}\mathbf{O}_{2}\mathbf{Br}_{2} 1)
                        1) Diterebenthylsulfonsäure (Soc. 54, 162). — II, 176.
C 66,2 — H 8,3 — O 17,7 — N 7,7 — M. G. 362.
1) d-Bisnitrosocaron. Zers. bei 112—118° (B. 28, 641, 652). — III, 502.
C_{20}H_{30}O_3S
C_{20}H_{30}O_4N_2
                       2) i-Bisnitrosocaron. Sm. 145° u. Zers. (B. 28, 642). — III, 503.
3) Bisnitrosocarveol. Sm. 133° u. Zers. (B. 28, 646). — III, 504.
4) Binitrosopulegon (B. 28, 654; 29, 1080). — III, 510.
                       5) 2,5-Dimethylhexahydro-1,4-Diazin + 2 Molec. Guajakol. Sm. 66
                            bis 67° (Bl. [3] 19, 620).
C 46,7 — H 5,8 — O 31,1 — N 16,3 — M. G. 514.
\mathbf{C}_{20}\mathbf{H}_{30}\mathbf{O}_{10}\mathbf{N}_{6}
                        1) Säure (aus Fleisch) (B. 26 [2] 897).
C<sub>20</sub>H<sub>20</sub>O<sub>10</sub>Cl<sub>2</sub>1) Diäthylester d. 3,6-Dichlor-2,5-Diäthoxyl-1,4-Benzochinondiäthyl-
                             acetaldicarbonsäure. Sm. 122° (Am. 17, 645). — III, 351.
\mathbf{C}_{20}\mathbf{H}_{20}\mathbf{N}_{2}\mathbf{Cl}_{2} 1) Tetramethyldi[4-Methylphenyl]äthylendiammoniumchlorid.+PtCl..
                              + 2 HgCl<sub>2</sub> (A. 224, 338). — II, 487.
C<sub>20</sub>H<sub>30</sub>N<sub>2</sub>Br<sub>2</sub> 1) Tetramethyldi[4-Methylphenyl]äthylendiammoniumbromid (A. 224,
                            337). — II, 487.

    Di[2-Amido-5-Diäthylamidophenyl] disulfid. Fl. Pikrat (A. 251, 57).

            II, 817.
            C 75,7 - H 9,8 - O 10,1 - N 4,4 - M. G. 317.

    Dicamphorylimid. Sm. 160° (B. 13, 1405). - III, 497.

C20 H30 N4S
C_{20}H_{31}O_{2}N
\mathbf{C}_{20}\mathbf{H}_{31}\mathbf{O}_{2}\mathbf{C}\mathbf{l}
                       1) Verbindung (aus Dammarharz). - III, 555.
                            C 76,0 - H 10,1 - O 5,1 - N 8,8 - M. G. 316.
\mathbf{C}_{20}\mathbf{H}_{32}\mathbf{ON}_{2}

    Verbindung (aus Isodicampher). Sm. 165—166° (G. 27 [1] 168).
    C 72,3 — H 9,6 — O 9,6 — N 8,4 — M. G. 332.
    Bisnitrinearon. Sm. 120—130° (B. 28, 644). — III, 503.

C_{20}H_{32}O_2N_2

    Dioxim d. 1-α-Dicarvelon. Sm. 223° (A. 305, 227).
    Dioxim d. i-α-Dicarvelon. Sm. 223° (A. 305, 227).
    Verbindung (aus Campheroxim). Sm. 100—105° (G. 26 [2] 513). C 61,9 — H 8,2 — O 8,2 — N 21,6 — M. G. 388.

C_{20}H_{32}O_{2}N_{6}
                       1) 2, 3, 5, 6-Tetramethyl-1, 4-Diazin +\beta\gamma-Dioximidobutan. Sm. 178°
(A. 264, 244). — IV, 827. C_{20}H_{32}O_2Br_2 1) 1-\alpha-Dicarvelondihydrobromid. Sm. 165° (A. 305, 228).
C<sub>20</sub>H<sub>32</sub>O<sub>2</sub>Hg 1) Myristinat d. Quecksilberphenyloxydhydrat (J. pr. [2] 1, 185). —
                            IV, 1705.
                             C 65.9 - H 8.8 - O 17.6 - N 7.7 - M. G. 364.
C_{20}H_{32}O_4N_2
                        1) Caronbisnitroson (B. 28, 645, 1602).
                       2) Succinyltropeïn. HBr (C. 1895 [1] 434).

C 63,2 — H 8,4 — O 21,0 — N 7,4 — M. G. 380.

1) Malyltropeïn. (HCl, AuCl<sub>8</sub>), HBr (C. 1895 [1] 434).

1) Anhydrid d. α-Camphenphosphonsäure. Sm. 184° (Soc. 65, 37). —
C_{20}H_{32}O_5N_2
\mathbf{C}_{20}\mathbf{H}_{32}\mathbf{O}_{5}\mathbf{P}_{2}
                            IV, 1681.
C 60,6 — H 8,1 — O 24,2 — N 7,1 — M. G. 396.
\mathbf{C}_{20}\mathbf{H}_{32}\mathbf{O}_{6}\mathbf{N}_{2}
                       1) Tartryltropein. (HCl, AuCl<sub>3</sub>), HBr (C. 1895 [1] 434).
                        2) Tetraäthyläther d. Di[\beta\beta-Dioxyäthylamid] d. Benzol-1,2-Dicarbon-
                            säure (Phtalyldiamidoacetal). Sm. 90° (B. 27, 3102). — II, 1813.

    3) Tetraäthyläther d. Di[ββ-Dioxyäthylamid] d. Benzol-1,3-Dicarbonsäure. Sm. bei 75° (B. 27, 3105). — II, 1827.
    4) Tetraäthyläther d. Di[ββ-Dioxyäthylamid] d. Benzol-1,4-Dicarbonsenter.

                        säure (Terephtalyldiamidoacetal). Sm. 165° (B. 27, 3103). — II, 1832. C 58,2 — H 7,8 — O 27,2 — N 6,8 — M. G. 412. 1) Camphernitrat. Fl. (A. 159, 283). — III, 487. C 47,2 — H 6,3 — O 40,9 — N 5,5 — M. G. 508.
C_{20}H_{32}O_7N_2
\mathbf{C}_{20}\mathbf{H}_{32}\mathbf{O}_{13}\mathbf{N}_{2}

    Triacetylchitosan (H. 20, 503). — III, 576.
    Stärkeschwefelsäure (A. 55, 13). — I, 1087.
    C 79,2 — H 10,9 — O 5,3 — N 4,6 — M. G. 303.

\mathbf{C}_{20}\mathbf{H}_{32}\mathbf{O}_{19}\mathbf{S}
\mathbf{C}_{20}\mathbf{H}_{33}\mathbf{ON}
                        1) Phenylamid d. Myristinsäure. Sm. 84° (A. 202, 174; J. pr. [2] 52,
                            60). — II, 370.
                       1) Verbindung (aus Pinen). Fl. (Soc. 55, 47). — III, 519. C 75,2 — H 10,3 — O 10,0 — N 4,4 — M. G. 319. 1) Phenylamidostearinsäure. Sm. 143° (B. 22, 1748). — II, 436.
\mathbf{C}_{20}\mathbf{H}_{33}\mathbf{OC1}
\mathbf{C}_{20}\mathbf{H}_{33}\mathbf{O}_{2}\mathbf{N}
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- $\mathbf{C}_{90}\mathbf{H}_{93}\mathbf{O}_{9}\mathbf{N}$ 2) β - Diisoamylamidoisopropylester d. Benzolcarbonsäure.
- C20 H34 ON2
- (A. ch. [6] 13, 439). II, 1140. C 75,5 H 10,7 O 5,0 N 8,8 M. G. 318. 1) Humulennitrolpiperidin. Sm. 153°. HCl, (2HCl, PtCl₄) (Soc. 67, 62, 780). — IV, 23.
 - 2) Caryophyllennitrolpiperidin. Sm. 141—143° (A. 279, 392). III, 538.
- $C_{20}H_{34}OBr_{2}$ 1) Dibromexcretin (A. 166, 215). III, 631.
- C20H34O2S8 1) Diamyläther d. α -[2-Methylphenyl]sulfon- $\beta\gamma$ -Dimerkaptopropan. Fl. (J. pr. [2] 56, 463).
 - Diamyläther d. α-[4-Methylphenyl]sulfon-βγ-Dimerkaptopropan.
 Fl. (J. pr. [2] 56, 459).
 C 65,6 H 9,3 O 17,5 N 7,6 M. G. 366.
- $C_{20}H_{34}O_4N_2$
- 1) tert. Nitrosomenthon (3-Keto-4-Nitroso-1-Methyl-4-Propylhexahydrobenzol; Bisnitrosomenthon). Sm. 112,5° (B. 27, 1915; 28, 1586). -III, 480.
 - 2) act. Bisnitrotetrahydrocarvon. Sm. 119° (B. 29, 33). III, 484.
- 1) $\beta \gamma$ -Diamylsulfon- α -[4-Methylphenyl]sulfonpropan. Sm. 112—1130 $C_{20}H_{34}O_6S_3$
- (J. pr. [2] 56, 460). 1) Di[Jodmethylat] d. 1,2-Di[1-Piperidylmethyl]benzol. Sm. 234° (B. $\mathbf{C}_{20}\mathbf{H}_{34}\mathbf{N}_{2}\mathbf{J}_{2}$ 31, 427).
- $\mathbf{C}_{20}\mathbf{H}_{35}\mathbf{N}_{2}\mathbf{C}1$ 1) Verbindung (Base aus Iso-l-Menthonoxim). Sm. 59—60°. 2 HCl, 2 HJ (A. 278, 305). III, 479.
- $\begin{array}{c} \mathbf{C}_{20}\mathbf{H}_{36}\mathbf{O}_{2}\mathbf{Br}_{2} \ 1) \ \mathbf{Verbindung} \ (\text{aus Cincol}) \ (A. \ \mathbf{230}, \ 228). \ \ \mathbf{III}, \ 474. \\ \mathbf{C}_{20}\mathbf{H}_{36}\mathbf{N}_{2}\mathbf{C}_{2} \ 1) \ \mathbf{Dichlorisoamylat} \ \mathbf{d.} \ \mathbf{Nikotin.} \ + \mathbf{PtCl}_{4} \ (A. \ \mathbf{90}, \ 226). \ \ \mathbf{IV}, \ 857. \\ \mathbf{C}_{20}\mathbf{H}_{36}\mathbf{N}_{2}\mathbf{J}_{2} \ 1) \ \mathbf{Dijodisoamylat} \ \mathbf{d.} \ \mathbf{Nikotin} \ (A. \ \mathbf{90}, \ 226). \ \ \mathbf{IV}, \ 857. \\ \mathbf{C}_{20}\mathbf{H}_{37}\mathbf{O}_{10}\mathbf{N}_{3} \ \ \mathbf{C} \ 50,1 \ \ \mathbf{H} \ 7,7 \ \ \mathbf{O} \ 33,4 \ \ \mathbf{N} \ 8,8 \ \ \mathbf{M.} \ \mathbf{G}. \ 479. \end{array}$

- Trinitrodracoalban (C. 1896 [2] 713).
 C 74,5 H 11,8 O 5,0 N 8,7 M. G. 322. $\mathbf{C}_{20}\mathbf{H}_{38}\mathbf{ON}_{2}$
 - 1) s-Camphelylcampholylharnstoff. Sm. 259-260° (G. 22 [2] 113).
- $\begin{array}{c} \textbf{I, } 130I. \\ \textbf{C}_{20}\textbf{H}_{38}\textbf{O}_{15}\textbf{N}_{2} & \textbf{C} \ 44,0 \ \ \textbf{H} \ 6,9 \ \ \textbf{O} \ 44,0 \ \ \textbf{N} \ 5,1 \ \ \textbf{M.} \ \textbf{G. } 546. \\ \textbf{1) Achille "in } \ (A. \ 58, \ 27; \ \textbf{155}, \ 153). \ \ \textbf{III}, \ 772. \\ \textbf{C}_{20}\textbf{H}_{38}\textbf{N}_{2}\textbf{Cl}_{2} \ \textbf{1) Dichlor "athylat d. } \ \textbf{1,2-Di [Di "athylamido methyl] benzol.} \ \ + \ \textbf{PtCl}_{4} \ \ (B. \ \textbf{C}_{20}\textbf{H}_{38}\textbf{N}_{2}\textbf{Cl}_{2} \ \textbf{1}) \ \textbf{Dichlor "athylat d. } \ \textbf{1,2-Di [Di "athylamido methyl] benzol.} \end{array}$ 31, 594).
- C₂₀H₃₈N₂Br₂1) Dibromäthylat d. 1,2-[Diäthylamidomethyl]benzol (B. 31, 593).
- $\mathbf{C}_{20}\mathbf{H}_{89}\mathbf{OC1}$ 1) Chlorid d. Arachinsäure. Sm. 66-67° (B. 11, 2031). — I, 460.
- $\mathbf{C}_{20}\mathbf{H}_{39}\mathbf{O}_{2}\mathbf{Br}$ 1) α -Bromarachinsäure. Sm. 62—64°. Na, Ca, Cu, Ag (M. 17, 530). 2) Aethylester d. α-Bromstearinsäure. Sm. 35-36° (33-34,5°) (B. 24, 2227, 2391). — I, 488.
- $C_{20}H_{39}O_2J$
- $C_{20}H_{39}O_4N$
- C20 H40 O2 N2
- 1) α-Jodarachinsäure. Sm. 70° (M. 17, 533). C 67,2 H 10,9 O 17,9 N 3,9 M. G. 357. 1) Nitroarachinsäure. Sm. 70° (B. 11, 2031). I, 498. C 70,6 H 11,8 O 9,4 N 8,2 M. G. 340. 1) sym. Nonyldekoxylharnstoff. Sm. 101° (B. 15, 761). I, 1304.
- 2) Dinonylamid d. Oxalsäure. Sm. 92° (B. 24, 3358). I, 1366. C 77,1 H 13,2 O 5,1 N 4,5 M. G. 311.

 1) Palmitinimidoisobutyläther. HCl (Sm. 73°) (B. 26, 2841). $\mathbf{C}_{20}\mathbf{H}_{41}\mathbf{ON}$
- - 2) Stearinimidoäthyläther. HCl (Sm. 85° u. Zers.). I, 1489. 3) Amid d. Arachinsäure. Sm. 108° (A. 97, 262; J. pr. [2] 48, 330; M. 17, 545). — I, 1249. C 73,4 — H 12,5 — O 9,8 — N 4,3 — M. G. 327. 1) α-Amidoarachinsäure. Sm. 212—214° u. Zers. Na, Ca (M. 17, 539). 2) isom. Amidoarachinsäure. Sm. 59° (B. 11, 2031). — I, 1205. 3) Aethylester d. Heptadekylamidoameisensäure. Sm. 62° (B. 21, 2491).
- $C_{20}H_{41}O_{2}N$
- I, 1255. C 61,7 H 11,0,— O 16,4 N 10,8 M. G. 389. $\mathbf{C}_{20}\mathbf{H}_{43}\mathbf{O}_{4}\mathbf{N}_{3}$
- 1) Triamidodracoalban (C. 1896 [2] 713). 1) Kieselsäuretetraisoamylester. Sd. 322-325° (A. 57, 344). — I, 347. $\mathbf{C}_{20}\mathbf{H}_{44}\mathbf{O}_{4}\mathbf{Si}$
- $\mathbf{C}_{20}\mathbf{H}_{44}\mathbf{O}_{6}\mathbf{P}_{2}$
- 1) Unterphosphorsäuretetraisoamylester (A. 232, 13). I, 339.

 1) Tetraisoamylammoniumchlorid. 2 + PtCl₄ (J. 1867, 491). I, 1135. $\mathbf{C}_{20}\mathbf{H}_{44}\mathbf{NCl}$
- C₂₀H₄₄NJ 1) Aethyltrihexylammoniumjodid (A. 101, 313; 102, 313). I, 1136. 2) Tetraisoamylammoniumjodid (A. 79, 24; J. 1867, 491). I, 1135. C₂₀H₄₄N₄Br₄ 1) Hexaäthylentetraäthyltetraammoniumbromid (J. 1861, 521). I, 1166.

1) Tetraisoamylphosphoniumjodid (B. 6, 299). — I, 1505. $\mathbf{C}_{20}\mathbf{H}_{44}\mathbf{JP}$

C 76,2 - H 14,3 - O 5,1 - N 4,4 - M. G. 315.CooHas ON

1) Tetraisoamylammoniumhydrat. Salze siehe (A. 79, 24; J. 1867, 491). I, 1135.

 $C_{20}H_{46}N_4Br_41$) Pentaäthylenpentaäthyltetrammoniumbromid (J. 1861, 521). — I, 1166.

 $C_{20}H_{46}N_4J_4$ 1) Pentaäthylenpentaäthyltetrammoniumjodid (J. 1861, 522). — I, 1166.

C₂₀-Gruppe mit vier Elementen.

 $C_{20}H_6O_3Cl_2Br_4$ 1) Verbindung (aus Tetrabromfluoresceïn) (A. 183, 54). — II, 2064.

 Dichlortetrabromfluorescein. K₂ (A. 238, 358). — II, 2064.
 Trichlordinitrodinaphtalin. Sm. 104—106° (A. 160, 72). $\mathbf{C}_{20}\mathbf{H}_{6}\mathbf{O}_{5}\mathbf{Cl}_{2}\mathbf{Br}_{4}$

 $\mathbf{C}_{20}\mathbf{H}_7\mathbf{O}_4\mathbf{N}_2\mathbf{Cl}_7$

1) Nitrosoderivat d. 2-Oxynaphtalin-7-Sulfonsäure. Na + 2H₂O $\mathbf{C}_{20}\mathbf{H}_7\mathbf{O}_5\mathbf{NS}$ (B. **20**, 2908). — **II**, 890.

1) Di [2,4-Dichlor-6-Bromphenylester] d. Benzol-1,2-Dicarbonsäure. Sm. 216—217° (G. 17, 501). — II, 1794. ConH8O4Cl4Br2

1) Dichlortetrajodfluoresceïnsäure. Na, K (A. 238, 359). — II, 2064. $\mathbf{C}_{20}\mathbf{H}_{8}\mathbf{O}_{6}\mathbf{Cl}_{2}\mathbf{J}_{4}$ 1) Dibromdinitrofluorescein (A. 183, 62). — II, 2065. $\mathbf{C}_{20}\mathbf{H}_{8}\mathbf{O}_{9}\mathbf{N}_{2}\mathbf{Br}_{2}$

1) 1,4-Naphtochinonchlorimid. Sm. 85° (B. 13, 1910). — III, 371. 1) P-Dichlordinitro-2,2'-Dinaphtyläther. Sm. 76° (B. 26, 253). — $\mathbf{C}_{20}\mathbf{H}_{10}\mathbf{O}_{3}\mathbf{NCl}$

 $\mathbf{C}_{\mathbf{2}0}\mathbf{H}_{\mathbf{1}0}\mathbf{O}_{\mathbf{5}}\mathbf{N}_{\mathbf{2}}\mathbf{Cl}_{\mathbf{2}}$ II, 884.

 $C_{20}H_{10}O_5N_2Br_2$ 1) ?-Dibrom-?-Dinitro-2, 2'-Dinaphtyläther. Sm. 87° (B. 26, 253). — II, 884.

 $\begin{array}{c} \mathbf{C}_{20}\mathbf{H}_{10}\mathbf{O}_8\mathbf{N}_2\mathbf{Br}_2 \ 1) \ \alpha, \\ \mathbf{2}^2 - \mathbf{Lakton} \ \mathbf{d.} \ 5', \\ \mathbf{5}^2 - \mathbf{Dibrom} - \mathbf{3}', \\ \mathbf{3}^2 - \mathbf{Dinitro} - \alpha, \\ \mathbf{4}', \\ \mathbf{4}^2 - \mathbf{Trioxytriphenylmethan} - \mathbf{2}^8 - \mathbf{Carbons\"{a}ure} \ (Dibromdinitrophenolphtale\H{n}). \\ \mathbf{Sm.} \end{array}$ 235—236° (G. **26** [1] 266).

1) Di[4,5-Dinitro-2-Naphtyl] disulfid. Sm. 272-276° u. Zers. - $C_{20}H_{10}O_8N_4S_2$ II, 888.

 $\mathbf{C}_{20}\mathbf{H}_{11}\mathbf{O}_{2}\mathbf{NS}$ 1) 1-[1, 3-Diketo-2, 3-Dihydroindenyl-2]- α -Naphtthiazol (B. 21, 2630). - III, 278.

 $\mathbf{C}_{20}\mathbf{H}_{11}\mathbf{O}_{3}\mathbf{N}\mathbf{Br}_{4}$ 1) 1 - Keto - 3, 3 - Di[?-Dibrom-?-Oxyphenyl]-1, 3-Dihydroisoindol (Tetrabromimidophenolphtaleïn). Sm. 310° u. Zers. (G. 24 [1] 77). — II, 1985.

1) Tetrabromphenolphtaleïnoxim (B. 26, 2260). — II, 1986. $\mathbf{C}_{20}\mathbf{H}_{11}\mathbf{O}_{4}\mathbf{N}\mathbf{Br}_{4}$

- II, 1985.

 $\mathbf{C}_{20}\mathbf{H}_{12}\mathbf{O}_{3}\mathbf{Cl}_{4}\mathbf{S}$ 1) Verbindung (aus Methylsulfonfluorescein) (Am. 17, 565). — III, 212. $C_{20}H_{12}O_{4}N_{2}S$ 1) Di[?-Nitro-1-Naphtyl]sulfid. Sm. 230-231° (J. pr. [2] 38, 143). -

II, 868. 1) Di [4-Nitro-1-Naphtyl] disulfid. Sm. 186° (B. 23, 960). — II, 868. 2) Di [5-Nitro-1-Naphtyl] disulfid. Sm. 167° (B. 20, 1535). — II, 868. 3) Di [4-Nitro-2-Naphtyl] disulfid. Sm. 124° (B. 20, 1536). — II, 869. 4) Di [5-Nitro-2-Naphtyl] disulfid. Sm. 180° (B. 20, 1536). — II, 868. 5) Di [8-Nitro-2-Naphtyl] disulfid. Sm. 173° (B. 20, 1536). — II, 869. 1) P-Dinitro-1,1-Dinaphtylsulfoxyd. Sm. 230—231° (B. 17, 2604). — $\mathbf{C}_{20}\mathbf{H}_{12}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{S}_{2}$

 $C_{20}H_{12}O_5N_2S$ II, 868.

 $\mathbf{C}_{20}\mathbf{H}_{12}\mathbf{O}_{6}\mathbf{N}_{2}\mathbf{Cl}_{2}$ 1) 3,6-Dichlor-1,4-Benzochinondi [Amidobenzol-2-Carbonsäure]. Zers. bei 320° (Bl. [3] 15, 1028).

 $C_{20}H_{12}O_6N_2S$ 1) 3-[1-Naphtyl]azo-2-Oxy-1,4-Naphtochinon-34-Sulfonsäure. Na (B. 30, 2129). — IV, 1481.

 $\mathbf{C}_{20}\mathbf{H}_{12}\mathbf{O}_{6}\mathbf{N}_{3}\mathbf{C}\mathbf{I}$ 1) Chlortrinitrobenzol + Phenanthren. Sm. 88° (B. 8, 378). - II, 267. C20H12O6N4Br 1) Dibromdinitrodiimidophenolphtalein (A. 202, 116). — II, 1985. $\mathbf{C}_{20}\mathbf{H}_{12}\mathbf{O}_{6}\mathbf{Cl}_{2}\mathbf{S}_{4}$ 1) Di[1-Chlor-2-Naphtyl]disulfid-7,7'-Disulfonsäure. $K_2 + \frac{1}{2}H_2O$ (C. 1895 [2] 121).

 $\mathbf{C}_{20}\mathbf{H}_{12}\mathbf{O}_{6}\mathbf{Br}_{2}\mathbf{S}$ 1) Methylsulfondibromfluorescein + 2H₂O (Am. 17, 566). — III, 212 $\mathbf{C}_{20}\mathbf{H}_{13}\mathbf{ON}_{2}\mathbf{Cl}$ 1) 5-Chlor-6-Oxy-2, 3-Diphenyl-1, 4-Benzdiazin (Luteol). Sm. 2460

(C. 1895 [1] 854).
1) 2-Phenylindol + 3,5-Dibrom-4-Oxydiazobenzol. Sm. 198° u. $\mathbf{C}_{20}\mathbf{H}_{13}\mathbf{ON}_{3}\mathbf{Br}_{2}$ Zers. (B. 15, 2492). — IV, 414.

- 1) 4-Thionylamido-1-[1-Naphtyl]azonaphtalin. Sm. 156-1570 (B. 28. $\mathbf{C}_{20}\mathbf{H}_{13}\mathbf{ON}_{3}\mathbf{S}$ 2199). - IV, 1390.
- C20H13ON4Br3 1) Tribromderivat d. Verbindung C₉₀H₁₆ON₄. Sm. 227⁶ (B. 26, 1186). - IV, 1225.
- C,0H,3O,NS 1) Phenylamid d. 9,10-Anthrachinon-2-Sulfonsäure. Sm. 1930 (B. 13, 692). — III, 415.
- 1) 1-Chlor-2, 4-Dinitrobenzol + Phenanthren. Sm. 44° (B. 11, 604). C20H13O4N,Cl - II, 267.
- 1) Di[1-Chlor-2-Naphtylester] d. Phosphorsäure. Sm. 251°(B. 30, 2379). C20 H18 O4 Cl2 P 1) 4-[4-Sulfo-1-Naphtyl]amido-2-Oxy-1-Ketonaphtalin (B. 27, 27). $\mathbf{C}_{20}\mathbf{H}_{13}\mathbf{O}_{5}\mathbf{N}\mathbf{S}$
- $\mathbf{C}_{20}\mathbf{H}_{18}\mathbf{O}_{7}\mathbf{NS}$ 1) Verbindung (aus Resorcin u. Phtalimid). Na + 7 H₂O (M. 11, 425). **- II**, 1807.
- 1) Verbindung (aus 2-Oxynaphtalin-6-Sulfonsäure) + H₂O (B. 30, 188). $C_{20}H_{13}O_8NS_2$ **- IV**, 1427.
- 1) Acetylamido-?-Bromchrysen (B. 24, 952). II, 643. CooH 4ONBr
- β -Phenylhydrazon - α -Keto- $\alpha\beta$ -Di[3-Chlorphenyl]äthan. Sm. 104 C22H14ON2Cl2 bis 105°. — IV, 785.
- 1) 4-Thionylamido-1-[1-Naphtyl]amidonaphtalin. C₂₀H₁₄ON₂S 31, 2182).
- 1) Verbindung (aus Chloralbenzamid). Sm. 131° (J. 1879, 552). C₂₀H₁₄ON₄Cl₄ II, 1194.
- 1) Phenylfluoflavylsulfon. Sm. oberh. 340° (B. 29, 787). IV, 1293. $\mathbf{C}_{20}\mathbf{H}_{14}\mathbf{O}_{2}\mathbf{N}_{4}\mathbf{S}$
- 1) Benzoat d. 2-Brom-4-Benzoylamido-1-Oxybenzol. Sm. 1920 (B. $\mathbf{C}_{20}\mathbf{H}_{14}\mathbf{O}_{3}\mathbf{NBr}$
- 27, 1931). II, 1177. $\mathbf{C}_{20}\mathbf{H}_{14}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{Br}_{2} \quad 1) \quad \alpha, \mathbf{2}^{3}\text{-Lakton d.} \quad 5', 5^{2}\text{-Dibrom-3'}, \mathbf{3}^{2}\text{-Diamido-}\alpha, \mathbf{4'}, \mathbf{4}^{2}\text{-Trioxy-triphenylmethan-}\mathbf{2}^{3}\text{-Carbonsäure} \quad \text{(Dibromdiamidophenolphtale"in)}.$ 2HCl (G. **26** [1] 269).
- 1) 2-Oxy-1, 1'-Azonaphtalin-4'-Sulfonsäure. Ba (B. 11, 2199; 13, 268; $\mathbf{C}_{20}\mathbf{H}_{14}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{S}$ Soc. 51, 197). — IV, 1438.
- 1) Verbindung + H₂O (aus 4-Amido-1-Oxynaphtalin-2-Sulfonsäure) (B. $C_{20}H_{14}O_5N_2S$ **25**, 429). — II, 875.
- 1) Stilben + 1-Chlor-2, 4, 6-Trinitrobenzol. Sm. 70-71° (B. 8, 378). $\mathbf{C}_{20}\mathbf{H}_{14}\mathbf{O}_{6}\mathbf{N}_{3}\mathbf{Cl}$ - II, 248.
- 1) 1,1'-Azoxynaphtalin-4,4'-Disulfonsäure? Na₂ + 2 H₂O, K₂ + H₂O, Ca + 2 H₂O, Ba + H₂O, Pb + 2 H₂O (Bl. 45, 184). IV, 1341.
 2) 2-Oxy-1,1'-Azonaphtalin-2',7'-Disulfonsäure. Ba + 7 H₂O. $C_{20}H_{14}O_{7}N_{2}S_{2}$
 - IV, 1439.
- 1) α -Phenyl β -4-[α -Cyan- β -Furanyläthenyl] phenylthioharnstoff. $\mathbf{C}_{20}\mathbf{H}_{15}\mathbf{ON}_3\mathbf{S}$ Sm. 159—160° (B. 23, 2856). — III, 713. 1) 2-Chlorphenylat d. 4-Benzoyl-1-Phenyl-1, 2, 3, 5-Tetrazol. Sm.
- $\mathbf{C}_{20}\mathbf{H}_{15}\mathbf{ON_4Cl}$ 220—225° (B. 30, 2998). — IV, 1242. 1) 2-Phenylimido-5-Phenylnitrosamido-3-Phenyl-2, 3-Dihydro-
- $\mathbf{C}_{20}\mathbf{H}_{15}\mathbf{ON}_{5}\mathbf{S}$ 1,3,4-Thiodiazol. Zers. bei 110° (B. 26, 2873). — IV, 687.
- 1) Diazorosanilinehlorid. + 3 AuCl₃ (Z. 1866, 511; A. 194, 279). - $\mathbf{C}_{20}\mathbf{H}_{15}\mathbf{ON}_{6}\mathbf{Cl}_{3}$ IV, 1552.
- 1) Phenylamid d. Anthracen-2-Sulfonsäure. Sm. 2010 (B. 28, 2259). $\mathbf{C}_{20}\mathbf{H}_{15}\mathbf{O}_{2}\mathbf{NS}$ 2) 1-Naphtylamid d. Naphtalin-1-Sulfonsäure. Sm. 82° (Bl. 27, 360). **- II**, 613.
 - 3) 1-Naphtylamid d. Naphtalin-2-Sulfonsäure. Sm. 177,5° (Bl. 27, 360). **- II**, 613.
- 1) Benzoat d. 3'-Chlor-6-Oxy-3-Methylazobenzol. Sm. 90° (B. 25, $\mathbf{C}_{20}\mathbf{H}_{15}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{Cl}$
 - 1330). IV, 1420. 2) Benzoat d. 4'-Chlor-6-Oxy-3-Methylazobenzol. Sm. 115° (B. 25,
- 1328). IV, 1421. 1) Benzoat d. 2-Brom-4'-Oxy-4-Methylazobenzol. Sm. 137—139° $\mathbf{C}_{20}\mathbf{H}_{15}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{Br}$ (B. 31, 1783). — IV, 1414.
- 1) III 2 Chlorformazylbenzol II 3 Carbonsäure. Sm. 217° (B. $\mathbf{C}_{20}\mathbf{H}_{15}\mathbf{O}_{2}\mathbf{N}_{4}\mathbf{C}\mathbf{1}$ 31, 1755).
- 1) 2-Phenylindol + Diazobenzol-4-Sulfonsäure. Na + $x H_2 O$ (B. 15, $C_{20}H_{15}O_8N_3S$ 2495). **— IV**, *414.*
- 1) Dibenzoylamid d. Benzolsulfonsäure. Sm. 105° (J. 1856, 505 bis C₂₀H₁₅O₄NS 506). — II, 1174.

1) Diacetat d. 2-Chlor-4-Phenylazo-1, 3-Dioxynaphtalin. Sm. 150° C₂₀H₁₅O₄N₂Cl (A. 300, 195). — IV, 1450. Phenyldi[2-Chlor-4-Nitrobenzyl]amin. Sm. 172° (B. 25, 88). — C₂₀H₁₅O₄N₃Cl₂ II, 521.

1) 2-[1,2-Phtalyl] methyl-6,8-Dimethylchinolin-?-Sulfonsäure (0-p-C20H15O5NS

Dimethylchinophtalon-?-Sulfonsäure) (B. 28, 1512). — IV, 459 1) Farbstoff (aus 1-Amidonaphtalin-7-Sulfonsäure) (B. 21, 3265). — $C_{20}H_{15}O_6N_3S_2$

IV, 1542.

1) Methyläther d. 4-Chlorphenylimido-4-Oxydiphenylmethan. Sm. C₂₀H₁₆ONCI 104° (B. **24**, 3519). — **III**, 194. Benzyläther d. anti-α-Oximido-4-Chlordiphenylmethan. Sm. 74 bis 75° (B. 23, 3613). — III, 189.

3) Benzyläther d. syn-a-Oximido-4-Chlordiphenylmethan. Sm. 98 bis 99° (B. **23**, 3613). — III, 189.

1) β -[?-Bromphenyl]amido- α -Keto- $\alpha\beta$ -Diphenyläthan? (Bromdesyletta) CooHigONBr anilid). Sm. 167-168° (J. pr. [2] 34, 10). - III, 220.

> 2) Benzyläther d. syn-a-Oximido-3-Bromdiphenylmethan. Sm. 77° (A. **264**, 173). — III, 190. 3) Benzyläther d. anti-a-Oximido-3-Bromdiphenylmethan. Sm. 730

(A. **264**, 173). — III, 190.

4) Benzyläther d. anti-α-Oximido-4-Bromdiphenylmethan. Sm. 89

bis 90° (A. 264, 155). — III, 190. 5) Benzyläther d. syn-α-Oximido-4-Bromdiphenylmethan. Sm. 99 bis 100° (A. **264**, 157). — III, 190.

1) Anhydrid d. 5,8-Dibromchinolinmethyloxydhydrat (B. 15, 191). $C_{20}H_{16}ON_2Br_4$ - IV, 259.

C20H16ON2S 1) s-Cinnamoyl-1-Naphtylthioharnstoff. Sm. 203-204° (Soc. 67,

1) β-Phenylhydrazid d. Anthracen-2-Sulfonsäure. Sm. 210° (B. 28, $\mathbf{C}_{20}\mathbf{H}_{16}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{S}$ 2260). **— IV**, 734.

1) Di[Phenylamidoformiat] d. 1,3-Dimerkaptobenzol. Sm. 178-179° $C_{20}H_{16}O_{2}N_{2}S_{2}$ (Soc. 69, 100). 2) Di [Phenylamidoformiat] d. 1,4-Dimerkaptobenzol. Sm. 200-2020

(Soc. 69, 101).

1) 2 - [3 - Nitrobenzyliden]amido-1-[4-Chlorphenylamido]methyl- $\mathbf{C}_{20}\mathbf{H}_{16}\mathbf{O}_{2}\mathbf{N}_{3}\mathbf{C}\mathbf{1}$ benzol. Sm. 86° (J. pr. [2] 52, 383). — IV, 627.

1) 2 - [4 - Nitrobenzyliden]amido-1- [4-Bromphenylamido]methyl-

 $\mathbf{C}_{20}\mathbf{H}_{16}\mathbf{O}_{2}\mathbf{N}_{3}\mathbf{Br}$ benzol. Sm. 144° (J. pr. [2] 52, 391). — IV, 638.

1) 5-Phenylamido-2-[3-Nitrophenyl]-3-Phenyl-2, 3-Dihydro-1, 3, 4-C20 H16 O2 N4S Thiodiazol. Fl. HCl (B. 30, 854). — IV, 686. $\mathbf{C}_{20}\mathbf{H}_{16}\mathbf{O}_{3}\mathbf{NP}$

1) Amid d. Di[2-Naphtyl]phosphorsäure. Sm. 215° (B. 30, 2378).
1) Verbindung (aus 2,4,6-Trichlor-1-Oxybenzol u. 4-Nitroso-1-Dimethyl- $\mathbf{C}_{20}\mathbf{H}_{16}\mathbf{O}_{3}\mathbf{N}_{2}\mathbf{Cl}_{6}$ amidobenzol). Sm. 90—91° (Bl. [3] 13, 1069). Verbindung (aus 2,4,6-Tribrom-1-Oxybenzol u. 4-Nitroso-1-Dimethyl-

amidobenzol). Sm. 89-90° (Bl. [3] 13, 1069).

1) 2-[4-Methoxyljodphenylat] d. 4-[4-Nitrophenyl]-1-Phenyl-1,2,3,5-[4-Nitrophenyl] $\mathbf{C}_{20}\mathbf{H}_{16}\mathbf{O}_{3}\mathbf{N}_{5}\mathbf{J}$ **Tetrazol.** Sm. $166-168^{\circ}$ (B. 31, 476). — IV, 1232.

 $\mathbf{C}_{20}\mathbf{H}_{16}\mathbf{O}_{4}\mathbf{NBr}$ 1) 1,2-Lakton d. P-Brom-3,4-Dioxy-1-[2-Naphtylamido]oxymethylbenzol-3,4-Dimethyläther-2-Carbonsäure (Bromopiansäure-β-Naphtylamid). Sm. 213° (B. 29, 2032).

 $C_{20}H_{16}O_4N_2Br_2$ 1) Isobutylbromisatord. Sm. 210° (B. 15, 2097). — II, 1606.

1) ?-Tetrabrom-4,4'-Di[Diacetylamido]biphenyl. Sm. bei 3060 (Soc. $\mathbf{C}_{20}\mathbf{H}_{16}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{Br}_{4}$ 65, 55). — IV, 964.

C20H16O4N2S 1) αβ-Di[2-Naphtylsulfon]hydrazin. Sm. 215° u. Zers. Na₂ (J. pr. [2] **58**, 187). 2) Di[β -1,2-Phtalylamidoäthyl]sulfid. Sm. 128—129° (B. 24, 1112),

· II, 1801.

 $C_{20}H_{16}O_4N_2S_2$ 1) $Di[\beta-1, 2-Phtalylamidoäthyl]$ disulfid. Sm. 138—139° (B. 24, 1122). II, 1802.
 Di[β-1,2-Phtalylamidoäthyl]sulfoxyd. Sm. 191° (B. 24, 3100). $C_{20}H_{16}O_5N_2S$

II, 1801.

C₂₀H₁₆O₆N₂Br₂ 1) Bis-Brom-m-Opindolon. Sm. noch nicht bei 325° (B. 31, 931). $\mathbf{C}_{20}\mathbf{H}_{16}\mathbf{O}_{6}\mathbf{N}_{2}\mathbf{S}$ 1) $Di[\beta-1,2-Phtalylamidoäthyl]$ sulfon. Sm. 255—256° (B. 24, 3102). - II, 1802.

- $\mathbf{C}_{20}\mathbf{H}_{16}\mathbf{O}_{6}\mathbf{N}_{2}\mathbf{S}_{2}$ 1) 1,4-Di Benzylidenamido benzol-1,4-Disulfonsäure. Na. (B. 24, 793). — IV, 597.
- $\mathbf{C}_{20}\mathbf{H}_{16}\mathbf{O}_{6}\mathbf{N}_{7}\mathbf{C}\mathbf{l}$ 1) N-2,4,6-Trinitrophenyldimethylsafraninchlorid (B. 31, 1183). IV. 1283.
- C₂₀H₁₆O₇NCl 1) Chlorid d. Anhydroberberilsäure. Sm. 167° (Soc. 57, 1042). — III, 802.
- 1) Pyrophosphat d. 2-Oxynaphtalin-6-Sulfonsäure. Ba. (B. 14, 1482). $C_{20}H_{16}O_{13}S_2P_2$ **— II**, 890.
- Di [Chlormethylat] d. Thiochinanthren. Sm. 284—285° u. Zers. 2 + PtCl₄ (J. pr. [2] 54, 343). IV, 292.
 2-Dinaphtylamid d. Dichlorkieselsäure (Soc. 51, 45). II, 615.
 Di [Jodmethylat] d. Thiochinanthren (J. pr. [2] 54, 343). IV, 292. C₂₀H₁₆N₂Cl₂S₂
- C₂₀H₁₆N₂Cl₂Si $\mathbf{C}_{20}\mathbf{H}_{16}\mathbf{N}_{2}\mathbf{J}_{2}\mathbf{S}_{2}$
- $\mathbf{C}_{20}\mathbf{H}_{17}\mathbf{ON}_{2}\mathbf{Cl}$ 1) 2-[2-Oxybenzyliden]amido-l-[4-Chlorphenylamido]methylbenzol. Sm. 124° (J. pr. [2] **52**, 383). — IV, 627.
- 1) 2-[2-Oxybenzyliden]amido-1-[4-Bromphenylamido]methylbenzol. $\mathbf{C}_{20}\mathbf{H}_{17}\mathbf{ON}_{2}\mathbf{Br}$ Sm. 143—144° (J. pr. [2] 52, 390). — IV, 638.
- C20 H17 ON2 J 1) Jodmethylat d. 6-Oxy-P-Bichinolylmethyläther (B. 20, 1926). — IV, 1071.
- Tetrabromrosanilin (A. 179, 203). II, 1091.
 Triphenylthiobiuret. Sm. 234° (A. 285, 172, 189). $\mathbf{C}_{20}\mathbf{H}_{17}\mathbf{ON}_{3}\mathbf{Br}_{4}$ $\mathbf{C}_{20}\mathbf{H}_{17}\mathbf{ON}_{8}\mathbf{S}$
- 2) s-Phenyl-4-Benzoylphenylamidothioharnstoff. Sm. 203 ° u. Zers. (Soc. 55, 615). — III, 186.
 - 3) β -Benzoylphenylamido- α -Phenylthioharnstoff. Sm. 310° (B. 20,
- 1717). \overline{IV} , 687. 1) α -Phenyl- β -[4-Methylphenyl] azo- β -[3-Chlorphenyl] harnstoff. Sm. $\mathbf{C}_{20}\mathbf{H}_{17}\mathbf{ON}_{4}\mathbf{Cl}$ 104° (B. 25, 1365). — IV, 1570.
 - - α-Phenyl-β-[4-Chlorphenyl]azo-β-[4-Methylphenyl]harnstoff. Sm. 122° (B. 25, 1363). IV, 1570.
 Methyläther d. 2-Chlor-2-[4-Oxyphenyl]-1,4-Diphenyl-2,2-Dihydro-1,2,3,5-Tetrazol (B. 29, 1851).
- 1) α -[4-Methylphenyl]- β -Phenylazo- β -[4-Bromphenyl]harnstoff. Sm. $\mathbf{C}_{20}\mathbf{H}_{17}\mathbf{ON}_{4}\mathbf{Br}$
 - 138° (B. 21, 2570). IV, 1562. 2) α -Phenyl- β -[4-Methylphenyl]azo- β -[4-Bromphenyl]harnstoff. Sm. 124° (B. 21, 2568). IV, 1571.
- 1) Methyläther d. 2-Jod-2-[4-Oxyphenyl]-1,4-Diphenyl-2,2-Di- $\mathbf{C}_{20}\mathbf{H}_{17}\mathbf{ON}_{4}\mathbf{J}$ hydro-1, 2, 3, 5-Tetrazol. Sm. 135-140° (B. 29, 1852). — IV, 1269.
- α-Benzoyl-α-[4-Chlorphenyl] β-[6-Oxy-3-Methylphenyl] hydrazin. Sm. 172° (B. 25, 1328). IV, 1506.
 Phenylbenzoylamid d. 1-Methylbenzol-4-Sulfonsäure. Sm. 149° C₂₀H₁₇O₂N₂Cl
- C20 H17 O3 NS (Am. 8, 242). — II, 1175.
 - 2) Benzylbenzoylamid d. Benzolsulfonsäure. Sm. $70-71^{\circ}$ (C. 1897) [2] 848).
- C20 H17 O2 N2 Cl 1) Aethyläther d. 5-Chlor-3, 6-Di[Phenylamido]-2-Oxy-1, 4-Benzo
 - chinon. Sm. 232—233° (*J. pr.* [2] **43**, 261). III, 348.

 2) Aethylester d. **4**-Chlor-1, **2**, **7**-Trimethylphenazinfuran-3-Carbon-
- säure. Sm. 162° (A. 283, 264). III, 732. 1) α -Phenylsulfon- β -[α -Benzoylamidobenzyliden]hydrazin (A. 296, $C_{20}H_{17}O_{3}N_{3}S$ 290).
- 1) Hydrastphtalimidindibromid. Sm. 158° (B. 23, 2915). II, 2054. $\mathbf{C}_{20}\mathbf{H}_{17}\mathbf{O}_{5}\mathbf{NBr}_{2}$ 1) Chlorbenzylat d. 5-Brom-1-Benzyl-1, 2, 3-Benztriazol. 2 + PtCl₄ $\mathbf{C}_{20}\mathbf{H}_{17}\mathbf{N}_{3}\mathbf{ClBr}$ (A. **249**, 368). — IV, 1144.
- 1) 7-Chloräthylat d. 9-Acetylamido-αβ-Naphtophenazin (C. 1898 C₂₀H₁₈ON₈Cl [2] 920). — IV, 1201.
- 1) α -Phenylsulfonimido- α -[4-Methylphenyl]amido- α -Phenylmethan. $\mathbf{C}_{20}\mathbf{H}_{18}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{S}$
- Sm. 145—146° (A. 214, 216). IV, 847. 1) 4,4'-Di[5-Keto-3-Methyl-1-Phenyl-4,5-Dihydropyrazolyl]sulfid. $\mathbf{C}_{20}\mathbf{H}_{18}\mathbf{O}_{2}\mathbf{N}_{4}\mathbf{S}$ Zers. bei 183°. $HCl + C_2H_6O$, Acetat (B. 23, 850, 2477; Soc. 59, 332, 334). — IV, 514.
- Methylphenylpyrazolondisufid (Soc. 59, 337, 338). IV, 691.
 Triphenylchlorphosphidoessigsäure. 2 + PtCl₄ (B. 27, 275). $\mathbf{C}_{20}\mathbf{H}_{18}\mathbf{O}_{2}\mathbf{N}_{4}\mathbf{S}_{2}$
- $\mathbf{C}_{20}\mathbf{H}_{18}\mathbf{O}_{2}\mathbf{ClP}$ $\mathbf{C}_{20}\mathbf{H}_{18}\mathbf{O_4N_2Br_2}$ 1) ?-Dibrom-4,4'-Di $[\beta$ -Ketobutyrylamido] biphenyl. Zers. bei 250° (M. 19, 696).
- $\mathbf{C_{20}H_{18}O_4N_2Br_8}$ 1) Diäthylester d. $\alpha\beta$ -Di[?-Tribromphenylamido]bernsteinsäure. Sm. $103-104^\circ$ (B. 21, 1800). II, 438.

 $\mathbf{C}_{20}\mathbf{H}_{20}\mathbf{O}_{4}\mathbf{NBr}$

1) Benzolsulfonat d. α-Oxy-β-Phenyl-α-Benzylharnstoff. Sm. 1200 C20 H18 O4 N2S u. Zers. (J. pr. [2] 56, 80).

2) 4'-Benzolsulfonat d. 2,4'-Dioxybenzol-2-Aethyläther. Sm. 84°
(B. 31, 2118; C. 1897 [2] 549). — IV, 1407.

3) 4'-Benzolsulfonat d. 3,4'-Dioxybenzol-3-Aethyläther. Sm. 77°

(B. 31, 2119). — IV, 1407. Sm.

4) 4'-Benzolsulfonat d. 4,4'-Dioxyazobenzol-4-Aethyläther. 105° (B. 31, 2120; C. 1897 [2] 549). — IV, 1406.

5) 4-Methylphenyl-2-Nitrobenzylamid d. Benzolsulfonsäure. Sm. 124° (J. pr. [2] 51, 268).

 1) 1,4-Di[Phenylsulfon]-1,2,3,4-Tetrahydro-1,4-Benzdiazin (Dibenzolsulfonäthylen-o-Phenylendiamin). Sm. 180° (A. 287, 225). $C_{20}H_{18}O_4N_2S_2$ 2) Verbindung (aus 1,3 Diphenylsulfonamidobenzol). Sm. 190-1950 (A.

287, 229). — IV, 577. 1) Jodmethylat d. 3,5-Di[4-Nitrobenzyl]pyridin. Sm. 190-193° (A. $C_{20}H_{18}O_4N_3J$ 280, 56). — IV, 456.

1) 1,2-Phenylenester d. 4-Methylphenylphosphinsäuremonochlorid. $\mathbf{C}_{20}\mathbf{H}_{18}\mathbf{O}_{4}\mathbf{Cl}_{2}\mathbf{P}_{2}$ Sd. oberh. 360° (A. 293, 265). — IV, 1669.

1) Dihydrobis-Brom-m-Opindolon. Sm. noch nicht bei 325° (B. 31, 932). $\mathbf{C}_{20}\mathbf{H}_{18}\mathbf{O}_{6}\mathbf{N}_{2}\mathbf{Br}_{2}$ 1) 4,4'-Bi[5-Keto-3-Methyl-1-Phenyl-4,5-Dihydropyrazol-14 Sulfon- $C_{20}H_{18}O_8N_4S_2$

säure] (B. 25, 1950). — IV, 737.

1) Verbindung (aus 2,4-Dinitro-1-Oxynaphtalin-7-Sulfonsäure) (B. 14, 2030). — II, 874. $\mathbf{C}_{20}\mathbf{H}_{18}\mathbf{O}_{12}\mathbf{N}_{3}\mathbf{S}_{2}$

1) 7-Chloräthylat d. 5-Amido-10-Acetylamido- $\alpha\beta$ -Naphtophenazin $\mathbf{C}_{20}\mathbf{H}_{19}\mathbf{ON}_4\mathbf{Cl}$ $(C. 1898 [2] 920). \leftarrow IV, 1296.$ 1) Dibenzylamid d. Benzolsulfonsäure. Sm. 680 (A. 273, 22). — II, 531. C20H19O2NS

1) Verbindung (aus Thionylamidobenzol u. Methylamidobenzol) (A. 274, $\mathbf{C}_{20}\mathbf{H}_{19}\mathbf{O}_{2}\mathbf{N}_{3}\mathbf{S}$ 211). — II, 355.

1) Cusparindibromid. Sm. 236° (B. 29 [2] 36). — III, 777. $\mathbf{C}_{20}\mathbf{H}_{19}\mathbf{O}_{3}\mathbf{N}\mathbf{Br}_{2}$

1) α -[4-Methylphenyl]sulfon- γ -[2-Naphtyl]sulfon- β -Oximidopropan. Sm. 158° (*J. pr.* [2] 55, 409). 1) ?-Nitrophenylamiddi[?-Nitro-4-Methylphenylamid] d. Phosphor- $\mathbf{C}_{20}\mathbf{H}_{19}\mathbf{O}_{5}\mathbf{NS}_{2}$

 $\mathbf{C}_{20}\mathbf{H}_{19}\mathbf{O}_{7}\mathbf{N}_{6}\mathbf{P}$ säure. Sm. 220° (B. 27, 2576).

 Verbindung (aus uns-Diphenylthioharnstoff u. Benzylchlorid). Sm. 182-183° (B. 26 [2] 607). — II, 396. C₂₀H₁₉N₂ClS 1) 4-Dimethylamidotriphenylphosphinoxyd. Sm. 183,5° (A. 260, 30).

 $C_{20}H_{20}ONP$ **– IV**, 1660.

1) α -Phenyl- β -[γ -Furyl- β -Phenylpropyl]thioharnstoff. Sm. 1130 (B. C₂₀H₂₀ON₂S 23, 2851). — III, 694. 1) β-Oxyäthyltriphenylphosphoniumehlorid. Sm. 129—130°. 2 + PtCl₄ C₂₀H₂₀OClP

(B. 27, 275). - IV, 1661.1) β -Oxyathyltriphenylphosphoniumbromid. Sm. 1140 (B. 27, 276). $\mathbf{C}_{20}\mathbf{H}_{20}\mathbf{OBrP}$

· IV, 1661. 1) β -Oxyäthyltriphenylphosphoniumjodid. Sm. 185—186° (B. 27, 276). $\mathbf{C}_{20}\mathbf{H}_{20}\mathbf{OJP}$

- IV, 1661. 1) 4-Methylphenylmonamid d. 4-Methylphenylphosphinsäuremono- $\mathbf{C}_{20}\mathbf{H}_{20}\mathbf{O}_{2}\mathbf{NP}$

phenylester. Sm. 48°; Sd. 280°₉₂ (A. 293, 269). — IV, 1669.
1) Chlorid d. 2,2'-Diisopropylazobenzol-5,5'-Dicarbonsäure. $\mathbf{C}_{20}\mathbf{H}_{20}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{Cl}_{2}$

135° (Bl. [3] 3, 206). — IV, 1466. 1) 1,1'-Disulfid d. Di-3,4,6-Trimethylbenzoxazol. Sm. 150-151° $\mathbf{C}_{20}\mathbf{H}_{20}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{S}$

(B. 22, 3238). — II, 764. 2) 4-Methylphenyl-2-Amidobenzylamid d. Benzolsulfonsäure. Sm.

132° (J. pr. [2] 51, 269). — IV, 627. 1) Jodmethylat d. Cusparidin. Sm. 149° (B. 25 [2] 201). — III, 778. $\mathbf{C}_{20}\mathbf{H}_{20}\mathbf{O}_{3}\mathbf{NJ}$ 1) Phenylamid d. Phosphorsäuredi [4-Methylphenylester]. Sm. 133°

CooHooONP (B. **27**, 2573).

 $\mathbf{C}_{20}\mathbf{H}_{20}\mathbf{O}_{3}\mathbf{N}_{2}\mathbf{S}$ 1) Aethyläther d. 3,4-Di[Phenylsulfonamido]-1-Oxybenzol. 159-160°. - II, 723.

 Sulfit einer Base (aus Methylacetanilid) (Bl. [3] 11, 1032).
 Brompapaverin. Sm. 144—145°. HBr (A. 94, 239; M. 6, 673). IV, 440.

C20H20O4N2S2 1) 1, 2-Di[Phenylsulfonamidomethyl]benzol. Sm. 127° (B. 26, 2213). **– IV**, 642.

- 2) 2,5-Diphenylsulfon-4-Amido-1-Dimethylamidobenzol. Sm. 2230 C20H20O4N2S2 (B. **27**, 3260; **29**, 2028).
- $\mathbf{C}_{20}\mathbf{H}_{20}\mathbf{O}_{6}\mathbf{N}_{2}\mathbf{S}_{2}$ 1) Dibenzoyleystin. Sm. $180-181^{\circ}$. Ba + $5H_2O$, Ag₂ (H. 12, 254; **16**, 572). — **II**, 1192.
 - 2) Di [γ-Benzoylamidoäthylsulfid] 2, 2'-Dicarbonsäure (Diäthyldisulfiddiphtalamidsäure). Sm. 128-130° (B. 24, 2131). - II, 1796.
- 1) Di [β -Benzoylamidoäthylselenid] 2, 2'-Dicarbonsäure (Diäthyl- β - $\mathbf{C}_{20}\mathbf{H}_{20}\mathbf{O}_{6}\mathbf{N}_{2}\mathbf{Se}_{2}$ Diseleniddiphtalamidsäure). Sm. 118—119° (B. 24, 2134). — II, 1796.
- $C_{20}H_{20}O_8N_2S$ 1) Di[β-Benzoylamidoäthyl]sulfon-2, 2'-Dicarbonsäure (Aethylsulfon-
- diphtalamidsäure). Ag₂ (B. 24, 3103). II, 1796.

 1) Alloxanbenzidindisulfit + H₂O (A. 248, 149). IV, 961. $\mathbf{C}_{20}\mathbf{H}_{20}\mathbf{O}_{14}\mathbf{N}_{6}\mathbf{S}_{2}$
- C₂₀H₂₀NSP 1) 4-Dimethylamidotriphenylphosphinsulfid. Sm. 183° (A. 260, 30). - IV, 1660.
- Verbindung (aus Bismethylphenylpyrazolon). Sm. 217° u. Zers. (B. 20, 2750). IV, 1263.
 Chinendibromid. 2 HBr + 2 H₂O (B. 20, 2516). III, 817. $\mathbf{C}_{20}\mathbf{H}_{21}\mathbf{O}_{4}\mathbf{N}_{4}\mathbf{Br}$
- C, H, ON, Br,
- 1) Phenylamiddi 2-Methylphenylamid d. Phosphorsäure. Sm. 2010 $\mathbf{C}_{20}\mathbf{H}_{22}\mathbf{ON}_{3}\mathbf{P}$ (B. 27, 2576).
 - 2) Phenylamiddi [4-Methylphenylamid] d. Phosphorsäure. Sm. 168°
- (B. 27, 2575).

 1) 2-[2, 4 Dimethylphenylacetylamido] 5 [2, 4 Dimethylphenyl- $\mathbf{C}_{20}\mathbf{H}_{22}\mathbf{ON}_{4}\mathbf{S}$ amido]-1, 3, 4-Thiodiazol (B. 23, 369). — IV, 1237.
- $\mathbf{C}_{20}\mathbf{H}_{22}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{Cl}_{2}$ 1) αβ-Di[Chloracetyl-2-Methylphenylamido]äthan. Sm. 211—212° (B. 23, 2032). — II, 461.
- $C_{20}H_{22}O_2N_2Br_2$ 1) $\alpha\beta$ -Di[Phenyl- α -Brompropionylamido] äthan. Sm. 184° (B. 25, 3255). — II, 370.
 - 2) α β-Di[Bromacetyl-2-Methylphenylamido]äthan. Sm. 205° (B. 25, 3258). — II, 461.
 - 3) $\alpha \beta$ -Di[Bromacetyl-4-Methylphenylamido]äthan. Sm. 196° (B. 25, 321). — II, 491.
- 1) $\alpha \alpha$ -Succinyldi[β -2-Methylphenylthioharnstoff]. Sm. 217—218° $\mathbf{C}_{20}\mathbf{H}_{22}\mathbf{O}_{2}\mathbf{N}_{4}\mathbf{S}_{2}$ (Soc. 67, 569).
 - 2) $\alpha \alpha$ -Succinyldi [β -Methyl- β -Phenylpseudothioharnstoff]. Sm. 138 bis 139° (Soc. 67, 570).
- Dimethyläther d. Di [3, 6-Dibrom-4-Oxy-2, 5-Dimethylbenzyl]-sulfid. Sm. 169° (B. 29, 2347).
 Jodmethylat d. Gallipidin. Sm. 142° (B. 25 [2] 201). III, 778. $C_{20}H_{22}O_2Br_4S$
- $\mathbf{C}_{20}\mathbf{H}_{22}\mathbf{O}_{3}\mathbf{N}\mathbf{J}$
- 1) Jodnethylat d. Bulbocapnin. Sm. 257° (235-240°) (A. 277, 14; $\mathbf{C}_{20}\mathbf{H}_{22}\mathbf{O}_{4}\mathbf{N}\mathbf{J}$ C. 1896 [2] 793). — III, 877.
- $C_{20}H_{22}O_4N_2Br_2$ 1) Di[4-Aethoxylphenylamid] d. $\alpha\beta$ -Dibrombernsteinsäure. Sm. 1990 (G. 28 [2] 196).
- $\mathbf{C}_{20}\mathbf{H}_{22}\mathbf{O}_{6}\mathbf{N}_{2}\mathbf{Br}_{2}$ 1) Dibromdiacetylcantharidinphenylhydrazonhydrat. Sm. 194° (B. **26**, 140). — III, 624.
- $C_{20}H_{22}O_6N_2Hg_2$ 1) Diacetat d. Diquecksilberdi[4-Acetylamidophenyloxydhydrat]. Sm. 218—220° (G. 24 [2] 449). — IV, 1708.
- 1) $\beta\beta$ -Dichlor- $\alpha\alpha$ -Di[1,2,4-Trimethylphenyl]äthen- β -Disulfonsäure. $\mathbf{C}_{20}\mathbf{H}_{22}\mathbf{O}_6\mathbf{Cl}_2\mathbf{S}_2$ Mg + 6H₂O, Ba + 4¹/₂H₂O (J. pr. [2] 47, 49). — II, 255. 1) Chininchlorid + 2H₂O. Sm. 151° (B. 17, 1988). — III, 817. 2) Conchininchlorid. Sm. 131—132° (B. 18, 1229). — III, 825.
- $\mathbf{C}_{20}\mathbf{H}_{23}\mathbf{ON}_{2}\mathbf{Cl}$
- 1) Aethyldi[3,6-Dibrom-4-Oxy-2,5-Dimethylbenzyl]amin. Sm. 165,5°. $\mathbf{C}_{20}\mathbf{H}_{23}\mathbf{O}_{2}\mathbf{NBr}_{4}$ HBr (B. 29, 1114).
- 1) 5-Phenylazo-3-Methyl-1, 2, 3, 4, 7, 8, 9, 10-Oktohydro- β -Naphto- $C_{20}H_{28}O_{8}N_{8}S$ chinolin-54-Sulfonsäure (B. 24, 2667). — IV, 1485.
- $\mathbf{C}_{20}\mathbf{H}_{23}\mathbf{O_4N_3Br_2}$ 1) **Verbindung** (aus d. Methyläther d. $\alpha\beta\cdot$ Dibromäthyl 3 Brom-4-Oxyphenylketon) (B. **29**, 350). III, 142.
- 1) Aethylester d. 2-Chlor-1, 2-Di[4-Aethoxylphenyl]-2, 2-Dihydro- $\mathbf{C}_{20}\mathbf{H}_{23}\mathbf{O}_{4}\mathbf{N}_{4}\mathbf{C}\mathbf{1}$ 1,2,3,5-Tetrazol-4-Carbonsäure. Sm. 1870 (B. 28, 1694). IV, 1241.
- $C_{20}H_{24}O_2N_2Br_2$ 1) Chinindibromid. $+C_8H_6$, $2HBr+2H_2O$ (B. 25, 1550). III, 816.
- 1) $\mathbf{Di}[\gamma\text{-}\mathbf{Benzoylamidopropyl}]$ disulfid. Sm. 122° (B. 27, 2172). C20H24O2N2S2 II, 1161.
- 2) Di[2-Propionylamidobenzyl]disulfid. Sm. 190-1910 (B. 30, 1146).
- 1) Aethobromcodein (B. 15, 1484). III, 904. C₂₀H₂₄O₃NBr

20 IV.	
$\mathbf{C}_{20}\mathbf{H}_{24}\mathbf{O}_{3}\mathbf{N}\mathbf{J}$	1) Jodmethylat d. Oxyacanthin + 2H ₂ O. Sm. 248-250° (B. 28
	2) Jodmethylat d. Methylthebenin. Sm. 210° (206-208°) (B. 27, 2961; 30, 1378).
$\mathbf{C}_{20}\mathbf{H}_{24}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{S}$	3) Jodmethylat d. Thebain (B. 17, 532). — III, 909. 1) Thio [4 - Methylphenyl] urethan. Sm. 113° (B. 20, 668). —
$\mathbf{C}_{20}\mathbf{H}_{24}\mathbf{O_4N}_2\mathbf{S}_2$	11, 821. 1) Disulfid d. β -Merkapto- $\alpha\gamma$ -Diketo- α -Phenylbutan + 2 Molec. Ammoniak (Bl. [3] 19, 836).
$\mathbf{C}_{20}\mathbf{H}_{24}\mathbf{O}_{5}\mathbf{N}_{2}\mathbf{S}$	1) Chininsulfonsäure + H ₂ O. Sm. 209° u. Zers. (wasserfrei). (2HCl, +8H ₂ O) (A. 267 , 141). — III, 816.
$\mathbf{C}_{20}\mathbf{H}_{25}\mathbf{ON}_{2}\mathbf{Cl}$	2) Isochininsulfonsäure. (HCl, AuCl ₃) (A. 267 , 140). — III, 816. 1) Chlormethylat d. Cinchonin. (HCl, PtCl ₄ + H ₂ O) (A. 90 , 219). —
	III, 832. 2) Chlormethylat d. Cinchonicin. Sm. 159° (Bl. [3] 13, 1007). — III, 845.
	3) Chlormethylat d. Cinchonidin + H ₂ O. Sm. 158° (B. 13, 2192). — III, 851.
$\mathbf{C}_{20}\mathbf{H}_{25}\mathbf{ON}_{2}\mathbf{Br}$	4) Chlormethylat d. Cinchonifin $+ 2 \text{H}_2\text{O}$ (B. 27 [2] 257). 1) α -[2-Methylphenyl]amido- β -[α -Bromisobutyryl-2-Methylphenyl]-amidoäthan. Sm. 135—137° (B. 25, 3260). — II, 463.
	2) Brommethylat d. Cinchonin + H ₂ O. Sm. 259° (A. 90, 219; B. 13, 2292). — III. 832.
	3) Brommethylat d. Cinchonifin + 3H ₂ O. Sm. 225° u. Zers. (B. 27, [2] 257).
$\mathbf{C}_{20}\mathbf{H}_{25}\mathbf{ON}_{2}\mathbf{J}$	1) Jodmethylat d. Cinchonin. Sm. 254° u. Zers. (A. 90, 219; B. 13, 2292). — III, 832.
	 2) Jodmethylat d. β-Isocinchonin. Sm. 253° (J. 1888, 2287). — III, 847. 3) Jodmethylat d. Cinchonibin. Sm. bei 252° (J. 1888, 2288). —
	III, 848. 4) Jodmethylat d. Cinchonicin (Bl. [3] 13, 1007). — III, 845.
	5) Jodmethylat d. Cinchonidin. Sm. 248° u. Zers. (A. 90, 221; B. 13, 2192). — III. 851.
	6) Jodmethylat d. Cinchonifin + 2 H ₂ O. Sm. 251° u. Zers. (wasserfrei) (B. 27 [2] 257).
	7) Jodmethylat d. Cinchonilin. Sm. bei 235° (J. 1888, 2287). — III, 848.
$\mathbf{C}_{20}\mathbf{H}_{25}\mathbf{ON}_{2}\mathbf{J}_{8}$	1) Dijodid d. Cinchoninjodmethylat. Sm. 161—162° (J. pr. [2] 3, 151). — III, 832.
$\mathbf{C}_{20}\mathbf{H}_{25}\mathbf{O}_2\mathbf{N}_2\mathbf{Cl}$	1) Hydrochlorchinin. Sm. 186—187° (B. 20, 2517). — III, 816. 2) Chlormethylat d. Cupreïn. + (HCl, PtCl ₄ + 2H ₂ O) (A. 230, 67). — III, 822.
$egin{array}{l} \mathbf{C}_{20}\mathbf{H}_{25}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{Br} \ \mathbf{C}_{20}\mathbf{H}_{25}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{J} \end{array}$	1) Hydrobromeninin. 2 HBr (B. 20, 2518). — III, 816. 1) Hydrojodeninin. Sm. 155—160°. (2 HCl, PtCl ₄ + 2 H ₂ O), 2 HJ (M.
	12, 328, 679; 13, 437). — III, 816. 2) Hydrojodeonchinin. Sm. 205-206°. 2HCl + 5H ₂ O, (2HCl, PtCl ₄
	+ H ₂ O), HNO ₃ , 2 HNO ₃ , H ₂ SO ₄ + 3 H ₂ O (M. 13, 453). — III, 825. 3) Jodmethylat d. α-Oxycinchonin. Sm. 241—242° (J. 1889, 2019). — III, 840.
C II ON I	4) Jodmethylat d. Cupreïn (A. 230, 66). — III, 822. 1) Tetraäthylamidodiphenoxazimiumjodid (A. 289, 122). — IV, 1178.
$egin{array}{c} \mathbf{C}_{20}\mathbf{H}_{26}\mathbf{ON}_{3}\mathbf{J} \ \mathbf{C}_{20}\mathbf{H}_{26}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{J}_{2} \end{array}$	1) Dihydrojodeonchinin. Sm. 218—220°. HCl, HJ, Oxalat (M. 12, 669). — III. 824.
$\mathbf{C}_{20}\mathbf{H}_{26}\mathbf{O}_{3}\mathbf{NCl}$	1) Chlormethylat d. α -Methylmorphimethin. $(2 + \text{PtCl}_4 + 8\text{H}_2\text{O})$ (A. 222, 225). — III. 904.
·	2) Chlormethylat d. β -Methylmorphimethin + $\frac{1}{2}$ H ₂ O. (2 + PtCl ₄ + H ₂ O) (A. 222, 227). — III, 904 .
$\mathbf{C}_{20}\mathbf{H}_{26}\mathbf{O}_{3}\mathbf{N}\mathbf{J}$	1) Jödmethylat' d. α -Methylmorphimethin + $\frac{1}{2}$ H ₂ O. Sm. 245° (A. 222, 224; B. 27, 1146). — III, 904.
	2) Jodmethylat d. β-Methylmorphimethin. Sm. 297° (A. 222, 227; B. 27, 1146). — III, 904.
	3) Jodmethylat d. Morphinäthyläther (A. ch. [5] 27, 278). — III, 908.

- $\mathbf{C}_{20}\mathbf{H}_{26}\mathbf{O_{3}NJ}$ 1) Jodmethylat d. Dihydrothebaïn. Sm. 155-160°. + 3H₂O (Sm. 75—80°), $+ \text{CH}_4\text{O}$ (B. 32, 193).
 - 2) Jodmethylat d. Isodihydrothebain. Sm. 210—215° (B. 32, 195).
 - 3) Jodäthylat d. Codein (A. 88, 340). III, 904.
- C20H26O3ClP 1) Chlorid d. Di[3-Methyl-6-Isopropylphenyl]phosphorsäure. Sd.
- $\mathbf{C}_{20}\mathbf{H}_{26}\mathbf{O}_{4}\mathbf{N}\mathbf{Br}$
- $\mathbf{C}_{20}\mathbf{H}_{26}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{S}_{2}$ $\mathbf{C}_{20}\mathbf{H}_{26}\mathbf{O}_{5}\mathbf{N}_{2}\mathbf{S}$
- 330—340°₃₂₀ (G. 15, 280). II, 770.

 1) Bromcodeinäthyloxydhydrat (B. 15, 1484). III, 904.

 1) Di-p-Toluolsulfobistrimethylendiimid. Sm 215° (B. 31, 3265).

 1) Hydroconchininsulfonsäure + 5 H₂O (A. 243, 150). III, 825.

 2) Hydrochininsulfonsäure + 5 H₂O. Sm. 239° (wasserfrei). (2HCl, PtCl₄ + 8 H₂O) (A. 241, 283). III, 860.
- 1) Tetraäthylthioninchlorid. 2 + ZnCl₂ + 2H₂O (B. 22, 2067; A. C20H26N3ClS **251**, 89). — II, 811.
- 1) Chlormethylat d. Cinchonamin. 2 + PtCl₄ (A. 225, 229). -C₂₀H₂₇ON₂Cl III, 928.
- C20H27ON2J 1) Jodnethylat d. Cinchonamin + H₂O. Sm. 208-209° (A. **225**, 228; A. ch. [6] 19, 113). — III, 928.
 - 2) Jodnethylat d. Cinchotin (B. 14, 1266). III, 858.
- 1) Methylalkoholat d. Verb. C₁₉H₂₃ONBr₂ (aus Dibrompseudocumenol- $\mathbf{C}_{20}\mathbf{H}_{27}\mathbf{O}_{2}\mathbf{NBr}_{2}$ bromid). Sm. 191—192° (B. 29, 1127).
- 1) Oxyd d. Quecksilber-4-Diäthylamidophenylhydrat. Sm. 2200 C₂₀H₂₈ON₂Hg $(G. 24 [2] 467). \rightarrow IV, 1705.$
- $\mathbf{C}_{20}\mathbf{H}_{28}\mathbf{O}_{4}\mathbf{NJ}$ 1) Jodnethylat d. Corytuberin (Soc. 63, 485). — III, 877.
- Verbindung (aus d. Kohlenw. C₂₀H₃₀ aus Campher). Sm. 150° u. Zers. (B. 27, 2350). C20H30ONC1
- C₂₀H₃₀O₂N₂Hg₂ 1) p-Diquecksilberdiäthylamin. Sm. 200° u. Zers. Salze siehe (G. 23, 2] 534; **28** [2] 451). — **IV**, 1707.
- C₂₀H₃₂O₄N₂Cl₂ 1) Pinolbisnitrosochlorid. Sm. 116-120° (103°) (A. 253, 261; 306, 278). — III, 508.
 - 2) 1-Bisnitroso-4-Chlortetrahydro-i-Carvon. Sm. 142° (B. 28, 1595).
- C₂₀H₃₂O₄N₂Br₂ 1) 1-Bisnitroso-4-Bromtetrahydro-i-Carvon. Sm. 131° u. Zers. (B. 28, 1594). — III, 505.
- 1) Verbindung (aus Acetylchlorid u. Kyanathin). Sm. 142° (J. pr. [2] $\mathbf{C}_{20}\mathbf{H}_{33}\mathbf{ON}_{6}\mathbf{Cl}$ **53**, 249). — **IV**, 1132.
- 1) Propyl-4-Methylphenyldi[1-Piperidyl]phosphoniumjodid. Sm. $\mathbf{C}_{20}\mathbf{H}_{34}\mathbf{N}_{2}\mathbf{JP}$ 197° (B. 31, 1046). — IV, 1682.
- 1) Tetrahydroxyisoamylidenphosphoniumjodid. Sm. 1190 (A. ch. [6] $\mathbf{C}_{20}\mathbf{H}_{44}\mathbf{O}_{4}\mathbf{JP}$ **2**, 33). **— I**, 952.

C₂₀-Gruppe mit fünf Elementen.

- $C_{20}H_{10}O_4N_2Cl_2S_2$ 1) Di[7-Chlor-8-Nitro-1-Naphtyl]disulfid. Sm. 244°. II, 869.
 - 2) Di 5-Chlor-8-Nitro-2-Naphtyl disulfid. Sm. 141°. II, 888.
 - 3) Di [7-Chlor-8-Nitro-2-Naphtyl] disulfid. Sm. 2170 (B. 25, 2486). **II**, 888.
- 1) Monamid d. Thiophosphorsäuredi-2-Naphtylester. Sm. 2150 C20H16O2NSP (B. **31**, 1110).
- C₂₀H₁₇O₂N₂Br₂J 1) Verbindung (aus 5-Brom-8-Oxychinolinjodmethylat). Sm. 1820 (J. pr. [2] **54**, 10). — **IV**, 280.
- C₂₀H₁₉O₂N₂Br₂P 1) Di[2-Brom-4-Methylphenylamid] d. Phenylphosphorsäure. Sm. 221° (B. 29, 726).
- 1) Phenylmonamid d. Thiophosphorsäuredi-4-Methylphenylester. C20H20ONSP Sm. 106° (B. 31, 1108).
- 1) Di[2-Methylphenylamid]-4-Chlorphenylamidd. Phosphorsäure. C20H21ON3ClP Sm. 150° (B. 28, 620).
- 1) Jodmethylat d. Monacetylbrommorphin. Sm. 215 220° (A. C₂₀H₂₃O₄NBrJ 297, 217).
- 1) Jodäthylat d. Bromcodein (B. 15, 1484). III, 904. $\mathbf{C}_{20}\mathbf{H}_{25}\mathbf{O}_{3}\mathbf{NBrJ}$
- Jodmethylat d. Verb. C₁₉H

 ₂₃ONBr

 ₂ (aus Dibrompseudocumenol-bromid). Sm. 177-178° (B. 29, 1127). $\mathbf{C}_{20}\mathbf{H}_{26}\mathbf{ONBr}_{2}\mathbf{J}$

 $C_{21}H_{14}$

C₂₁-Gruppe mit einem Element.

C 94,7 — H 5,3 — M. G. 266.

1) 2,2'-Binaphtylenmethan (Picylenmethan). Sm. 306° (A. 284, 70). C 94,0 — H 6,0 — M. G. 268. $C_{21}H_{16}$ Sm. 109°; Sd. oberh. 360° (Pikrat Sm. 142-143°) 1) α-Dinaphtylmethan. (B. 7, 1605). — II, 296. (B. 7, 1000). — II, 290.
29 β-Dinaphtylmethan. Sm. 92° (B. 13, 1728). — II, 296.
3) isom. Dinaphtylmethan. Sm. 137° (J. pr. [2] 41, 53). — II, 4) Methylphenylanthracen. Sm. 119° (B. 16, 2367). — II, 297.
5) γ-Benzylanthracen. Sm. 119° (B. 23, 1570). — II, 297.
6) Benzylphenanthren. Sm. 155—156° (M. 2, 445). — II, 297. - II, 296. 7) Phtalacen. Sm. 173° (B. 17, 1390). — II, 297. C 93.3 - H 6.7 - M.G. 270. $\mathbf{C}_{21}\mathbf{H}_{18}$ 1) 9-Benzyl-9,10-Dihydroanthracen. Sm. 110-1110 (B. 23, 2530). -II, 294. 2) Kohlenwasserstoff (aus d. Keton $C_{21}H_{16}O$). Sm. $86-92^{\circ}$; Sd. 270°_{30} (Soc. 57, 687). — II, 294. C 92,7 — H 7,3 — M. G. 272. $\mathbf{C}_{21}\mathbf{H}_{20}$ α α β-Triphenylpropan.
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 3) 2,4-Dimethyltriphenylmethan. Sm. 61,5°; Sd. über 360° (B. 19, 3061). - II, 290. 4) 2,5-Dimethyltriphenylmethan. Sm. 92° (B. 16, 2360). — II, 290. 5) 3,4-Dimethyltriphenylmethan. Sm. 68,5°; Sd. über 360° (B. 19, 3070). **– II**, 290. 6) 4,4'-Dimethyltriphenylmethan. Sm. 55-56° (52°) (B. 11, 70; Bl. [3] 17, 974). — II, 290. 7) ?-Dimethyltriphenylmethan. Fl. Sd. 300-360° (A. 242, 332). -II, 290. 8) P-Dibenzyl-1-Methylbenzol. Sd. 392-396 (B. 7, 1154). - II, 289. 9) Kohlenwasserstoff (aus Benzylchlorid) (Bl. 46, 248). — II, 46. $C_{21}H_{28}$ C 90.0 — H 10.0 — M. G. 280. 1) $\beta\beta$ -Di[1,2,4-Trimethylphenyl]propan. Sd. oberh. 300° (B. 24, 2788). **II**, 243. C 85,1 - H 14,9 - M. G. 296.C21 H44 1) norm. Heneikosan. Sm. $40,4^{\circ}$; Sd. 215°_{15} (129°_{0}) (B. 15, 1719; 21, 2261; 22, 2135; 29, 1323). — I, 107. 1) Verbindung (aus Trichlormethylbenzol). Sm. 152-153° (J. 1877, 420; C21 Cl26 B. 13, 33). — II, 49. C₂₁-Gruppe mit zwei Elementen. 1) Verbindung (aus Trichlormethylbenzol). Sm. 102° (J. 1877, 421). -C21 HCl25 II, 49. C 81,3 — H 3,2 — O 15,5 — M. G. 310. $C_{21}H_{10}O_{3}$ 1) Anhydrobenzoingelb (B. 31, 2978). C 75,4 — H 2,8 — O 26,8 — M. G. 358. $\mathbf{C}_{21}\mathbf{H}_{10}\mathbf{O}_{6}$ 1) Anhydrid d. Fluorescein-3-Carbonsäure (A. 290, 236). C21H12O C 90,0 - H 4,3 - O 5,7 - M. G. 280.1) Picylenketon (Binaphtylenketon). Sm. 185,5° (188°) (A. 284, 66, 74; A. ch. [5] 28, 192). — III, 265. C 85,1 — H 4,0 — O 10,8 — M. G. 296. 1) Diphenylindon. Sm. 150—151° (B. 28, 2787). — III, 263. 2) α-Dinaphtylenketonoxyd (α-Dinaphtoxanthon). Sm. 240° (B. 13, 702; $C_{21}H_{12}O_{2}$ 19, 2266; 25, 1641). — III, 262. 3) β -Dinaphtylenketonoxyd. Sm. 149° (J. pr. [2] 41, 49). — III, 263. 4) γ -Dinaphtylenketonoxyd. Sm. 241° (B. 25, 1642). — III, 263. C 80,8 — H 3,8 — O 15,4 — M. G. 312. $C_{21}H_{12}O_{3}$ 1) Formaldehydoxynaphtofluoron (B. 31, 147).

C 76,8 — H 3,6 — O 19,5 — M. G. 328. $C_{21}H_{12}O_4$ 1) Benzoingelb. Zers. bei 250°. Pb (B. 31, 2976). C 67,0 - H 3,2 - O 29,8 - M. G. 376.C21H12O7 1) Fluorescein-6-Carbonsäure. Sm. noch nicht bei 280° (A. 290, 237). 2) Fluoresceincarbonsäure. Ca₃, Ba₃ (B. 11, 1340). — II, 2088. $C_{21}H_{13}O_{2}$ 1) Verbindung (aus α -Oxy- α α -Diphenylessigsäure) = $(C_{21}H_{13}O_2)_{x}$. Sm. 256 bis 257°) (B. 22, 1215). — II, 1696. C 90,3 — H 4,7 — N 5,0 — M. G. 279. 1) β-Naphtoakridin. Sm. 216°. HJ, HNO₂, Pikrat (J. pr. [2] **35**, 317; $C_{21}H_{13}N$ Soc. 73, 542, 548). — IV, 476. 2) Iso-β-Naphtoakridin. Sm. 225—226° (Soc. 73, 541). C 89.4 - H 4.9 - O 5.7 - M. G. 282. $C_{21}H_{14}O$ 1) Picylencarbinol (Binaphtylenoxymethan). Sm. 230° (A. 284, 69). 2) 1-Keto-2,3-Diphenylinden. Sm. 150—151° (B. 28, 2787; 29, 2839; 30, 1281). 3) 9-Keto-10-Benzyliden-9,10-Dihydroanthracen. Sm. 1270 (B. 18, 2153). - III, 245. 4) 1,2'-Dinaphtylketon. Sm. 135° (B. 6, 544, 1241, 1248). — III, 262. 5) 2,2'-Dinaphtylketon (2 isom. Formen). α-Modif. Sm. 125,5°; β-Modif. Sm. 164—164,5° (B. 6, 545, 1242). — III, 262. 6) isom. Dinaphtylketon. Sm. 140° (B. 6, 546). — III, 262. 7) Phtalacenoxyd. Sm. 211—214° (B. 17, 1397). — II, 297. 8) Anhydrid d. Di[2-Oxynaphtyl] methan. Sm. 1990 (B. 26, 84). — II, 1006. 9) isom. Anhydrid d. Di[2-Oxynaphtyl]methan. Sm. 165° (J. pr. [2] 41, 52). — II, 1006. 10) Verbindung (aus 2-Oxynaphtalin). Sm. 300-305° (B. 15, 1123). C 84,6 - H 4,7 - O 10,7 - M. G. 298. $C_{21}H_{14}O_{2}$ 1) Methylenäther d. 2,2'-Dioxy-1,1'-Binaphtyl (Bl. [3] 19, 612). 2) 2, 2'- Diketodinaphtylmethan. Sm. 168-169° (B. 25, 3482). -II, 1006. 3) Picensäure (2, 2'-Binaphtyl-?-Carbonsäure). Sm. 201°. Ag (A. 284, 70) II, 1483. C 80,3 - H 4,4 - O 15,3 - M. G. 314. $C_{21}H_{14}O_{3}$ Sm. 177-178° (A. 249, 1) Monobenzoat d. 9,10-Dioxyphenanthren. 143). — II, 1001. 2) 1,1-Dinaphtylester d. Kohlensäure. Sm. 130° (B. 27, 3459; 28, 3050; Bl. [3] 13, 215). 3) 2,2-Dinaphtylester d. Kohlensäure. Sm. 176-1770 (1780) (B. 28, 3055; A. 301, 115). C 76,4 - H 4,2 - O 19,4 - M. G. 330. $C_{21}H_{14}O_4$ 1) 2,3-Dibenzoylbenzol-1-Carbonsäure. Sm. 2080 (A. 290, 233). 2) 2,6-Dibenzoylbenzol-1-Carbonsäure. Sm. bei 100° (A. 290, 235). 3) α -?-Dibenzoylbenzol-1-Carbonsäure. Sm. 80—82° (B. 7, 1154). — II, 1914. 4) β-?-Dibenzoylbenzol-l-Carbonsäure. Sm. 210-212° (B. 7, 1154). — II, 1914. 5) α , 2-Lakton d. α -Oxytriphenylmethan-2, 4-Dicarbonsäure (Diphenylphtalidearbonsäure). Sm. 228°. $+ C_2H_6O$, Ca $+ 3H_2O$, Ag (B. 19, 3067). **— II**, 1988. 6) α, 2-Lakton d. α-Oxytriphenylmethan-2, 5-Dicarbonsäure. Sm. 244 bis 246°. Ag (B. 16, 2373). — II, 1988. 7) Anhydrid d. α-Oxytriphenylmethan-3, 4-Dicarbonsäure (B. 19, 3073). **- II**, 1988. C 72,8 — H 4,0 \neq 0 23,1 — M. G. 346. C21H14O5 1) Methyläther d. Fluorescein. Sm. 262° (B. 28, 397). — II, 2060. C 66,7 — H 3,7 — O 29,6 — M. G. 378. C21H14O7 1) Aurindicarbonsäure. Ca₄ (B. 25, 943). — II, 2087. 2) Säure (aus 4-Oxybenzol-1-Carbonsäure). Sm. 280°. Na (J. pr. [2] 28,

C 64,0 — H 3,5 — O 32,5 — M. G. 394. 1) Oxyaurindicarbonsäure. Zers. bei 140°. Ca (B. 25, 2671). — II, 2093. $C_{21}H_{14}O_{8}$ 124*

206). — II, *1528*.

C 61.4 - H 3.4 - O 35.1 - M. G. 410.C21 H14O9 1) Dioxyaurindicarbonsaure. Ca (B. 25, 2672). — II, 2100. C 59,2 — H 3,3 — O 37,5 — M. G. 426.

1) Trioxyaurindicarbonsäure. Ca (B. 25, 2673). — II, 2103. $\mathbf{C}_{21}\mathbf{H}_{14}\mathbf{O}_{10}$ 2) Verbindung (aus Katechin) (Bl. 4, 8). — III, 687. C 57,0 — H 3,2 — O 39,8 — M. G. 442. C21 H14 O11 1) Tetraoxyaurindicarbonsäure. Ca (B. 25, 2673). — II, 2107. 2) Verbindung (aus 1,4-Benzochinou) (A. 218, 212). — III, 328. C 55,0 — H 3,1 — O 41,9 — M. G. 458. C21H14O12 1) Pentaoxyaurindicarbonsäure. Ca (B. 25, 2673). — II, 2108. 2) Triäthylester d. 2,4,6-Triacetoxylbenzol-1,3,5-Tricarbonsäure. Sm. 75-76° (B. 21, 1768). — II, 2089. C 53,2 — H 2,9 — O 43,9 — M. G. 474. $\mathbf{C}_{21}\mathbf{H}_{14}\mathbf{O}_{18}$ 1) Tetracetylgalloflavin. Sm. 230° (B. 20, 2330). — II, 1926. 1) Tetracetylgallollavin. Sin. 250 (B. 26, 2550). — 11, 1526.

C 85,7 — H 4,8 — N 9,5 — M. G. 294.

1) Di[1-Naphtylimido]methan. Sin. 93—940 (B. 19, 2405). — II, 624.

2) Di[2-Naphtylimido]methan. Sin. 145—1460 (B. 19, 2406). — II, 624.

3) 6-Methyl-2,3-Biphenylen-1,4-Benzdiazin (Toluphenanthrazin). Sin. 212—2130 (A. 237, 341). — IV, 1087.

4) Chrysomethylpiazin. Sin. 144—1460 (Soc. 63, 1292). — IV, 1087. $\mathbf{C}_{21}\mathbf{H}_{14}\mathbf{N}_{2}$ 1) Dibrom- α -Dinaphtylmethan. Sm. 193 $^{\circ}$ (B. 7, 1608). — II, 296. $\mathbf{C}_{21}\mathbf{H}_{14}\mathbf{Br}_{2}$ Dibrom-β-Dinaphtylmethan. Sm. 164° (B. 13, 1728). — II, 296.
 C 89,7 — H 5,3 — N 5,0 — M. G. 281. $C_{21}H_{15}N$ 1) 1-[1-Naphtylimido] methylnaphtalin. Sm. 117° (B. 22, 2150). – III, 63. 2) 2,3-Diphenylchinolin. Sm. 90—91° (95—96°); Sd. 420° (310°₈₀). (2 HCl, PtCl₄), Pikrat (B. 23, 2075; J. pr. [2] 56, 304). — IV, 473. 3) ?-Diphenylchinolin. Sm. 112°. (2HCl, PtCl₄ + 2H₂O) (B. 20, 1772). — IV, 475. 4) $2 \cdot [\beta$ -Phenyläthenyl]- α -Naphtochinolin. Sm. 104° . (2HCl, PtCl₄ + $2 \, \mathrm{H_2^2O}$), $\mathrm{H_2Cr_2O_7}$, Pikrat (B. 23, 1233). — IV, 473. 5) $3 - [\beta - \mathrm{Phenyl\ddot{a}thenyl}] - \beta - \mathrm{Naphtochinolin}$. Sm. 175%. (2 HCl, PtCl₄ + $2 H_2 O$, $H_2 Cr_2 O_7$, Pikrat (B. 23, 1239). — IV, 474. 6) Nitril d. Triphenylakrylsäure. Sm. 162—163° (B. 28, 1798, 2785). C 81,6 — H 4,8 — N 13,6 — M. G. 309. $C_{21}H_{15}N_3$ U 81,6 — H 4,8 — N 15,6 — M. G. 309.

1) Kyaphenin (2,4,6-Triphenyl-1,3,5-Triazin). Sm. 233° (231°); Sd. oberh. 350° (A. 115, 23; 133, 147; 149, 310; 290, 182; B. 2, 307; 11, 6, 764; 22, 1611, 1760; 25, 2267; J. 1868, 715; Soc. 37, 563; J. pr. [2] 35, 83; [2] 51, 408; [2] 54, 132). — II, 1215.

1) Bromphtalacen. Sm. 184—184,5° (B. 17, 1397). — II, 297. 2 Brombenzylanthracen. Zers. bei 113—114° (B. 23, 1570). — II, 297. C 88,7 — H 5,6 — O 5,6 — M. G. 284. $\mathbf{C}_{21}\mathbf{H}_{15}\mathbf{Br}$ $\mathbf{C}_{21}\mathbf{H}_{16}\mathbf{O}$ γ-Keto-αβγ-Triphenylpropen (Benzylidendesoxybenzoïn). Sm. 100° (B. 26, 442, 449). — III, 261. 2) 10-Oxy-9-Benzylanthracen. Sm. 183-184° (B. 23, 2529). — II, 905. 3) 10-Oxy-3-Methyl-9-Phenylanthracen (Phenylmethylanthronol) (Bl. [3] **17**, 980). 4) 10-Oxy-?-Methyl-9-Phenylanthracen. Sm. 156-157° (B. 16, 2365). — II, 1095. 5) α -Keto- β -Phenyl- α -Fluorenyläthan (Benzylfluorenylketon). Sm. 156° (B. 21, 1341). — III, 261. 6) Keton (aus $\alpha\beta$ -Dibenzoylstyrol). Sm. 92—93° (Soc. 57, 685, 745). — III, 262. 7) Verbindung (aus Benzamaron). 2 Isomere. α-Modif. Sm. 101—102°; β-Modif. Sm. 89—90° (A. 275, 61, 62). — III, 314. C 84,0 — H 5,3 — O 10,7 — M. G. 300. 1) Di[2-Oxynaphtyl]methan. Sm. 194° u. Zers. (200°). Na, Pikrat (B. 25, $\mathbf{C}_{21}\mathbf{H}_{16}\mathbf{O}_{2}$ 3214, 3478; **26**, 84; **27**, 2412). — II, 1006. 2) **2**, 2'-Dinaphtyläther d. Dioxymethan. Sm. 133—134° (B. **13**, 1954).

3) 9-Oxy-10-Keto-9-Benzyl-9,10-Dihydroanthracen (Benzyloxanthranol).

4) 9-Oxy-10-Keto-9-Phenyl-3-Methyl-9,10-Dihydroanthracen. Sm.

213° (216°) (B. 19, 3065; Bl. [3] 17, 981). — III, 262.

· II, 877.

Sm. 146° (B. 18, 2152). — III, 245.

 $C_{21}H_{16}O_{21}$ 5) 9-Oxy-10-Keto-9-Phenyl-2-Methyl-9,10-Dihydroanthracen. Sm. 195° (B. 16, 2366). — III, 262.

 6) αγ-Diketo-αβγ-Triphenylpropan (Phenyldibenzoylmethan). Sm. 119 bis 120°; Sd. 300—305°₁₅ (Soc. 69, 742). — III, 306.
 7) Keton (aus Dibenzyltoluol). 2 Isomere. Sd. 300—305°_{30—40} (B. 7, 1156). - III, 306.

- 8) Picencarbonsäure. Sm. 245° (A. 284, 79). II, 1483. 9) Phtalacensäure. Sm. 245-247° (B. 17, 1399). II, 1483. 10) Triphenylakrylsäure. Sm. 212-213° (B. 28, 1799, 2783; 29, 2842). 11) ααβ-Triphenyläthen-α²-Carbonsäure. Sm. 189° (185-186°) (B. 29, 2841; **30**, 1283).
- 12) Lakton d. α -Oxy- $\alpha'\alpha^2$ -Diphenyl- α^3 -[4-Methylphenyl]methan- α^3 2-Carbonsäure. Sm. 147°; Sd. oberh. 360° (B. 19, 3062; Bl. [3] 17, 977). **– II**, 1724.

13) Lakton d. α -Oxy- $\alpha'\alpha^2$ -Diphenyl- α^3 -[3-Methylphenyl]methan- α^3 6-Carbonsäure. Sm. 1790 (B. 16, 2361). — II, 1724.

- 14) Lakton d. α -Oxy- $\alpha'\alpha^2$ -Diphenyl- α^3 -[4-Methylphenyl]methan- α' 2-Carbonsäure. Sm. 106° (B. 14, 1867; A. 299, 309). — II, 1724.
- 15) Benzoat d. 2-Oxy-9,10-Dihydroanthracen. Sm. 124° (B. 26, 3070). II, 1149. C 79,8 — H 5,0 — O 15,2 — M. G. 316. 1) Methylester d. Hydrofluoransäure. Sm. 123—125° (B. 28, 432).

 $C_{21}H_{16}O_{3}$

- 2) Methylester d. 2-[4-Phenylbenzoyl]benzol-1-Carbonsäure. Sm. 85 bis 90° (A. **257**, 98). — II, 1726.
- 3) Phenylèster d. α-Oxy-β-Phenylakrylphenyläthersäure. Sm. 74°; Sd. 250—260°₉₀ (C. 1897 [1] 1120).
- 4) Acetat d. γ-Keto-γ-[1-Oxy-2-Naphtyl]-α-Phenylpropen. Sm. 95—96° (B. 31, 706).
- 5) Benzoat d. β -Oxy- α -Keto- $\alpha\beta$ -Diphenyläthan (B. d. Benzoïn). Sm. 125° (A. **104**, 117). — III, 223. C 75,9 — H 4,8 — O 19,3 — M. G. 332.

C21 H16 O4

C21 H16O5

 $\mathbf{C}_{21}\mathbf{H}_{16}\mathbf{O}_{6}$

C21H16O7

- 1) Di[2,4-Dioxy-1-Naphtyl]methan. Sm. 164,5° (B. 31, 146).
- 2) Di[2,7-Dioxynaphtyl] methan. Sm. 252° u. Zers. (B. 26, 85). II, 1039. 3) Resorcincinnamylein + H_2 0. HCl (J. pr. [2] 48, 406). II, 1123.
- 4) 2-Benzoat-1-Methyläther d. 1,2-Dioxydiphenylketon. Sm. 95,5 bis 96,5° (G. **26** [2] 434).
- 5) Dibenzoat d. Dioxymethylbenzol (A. 102, 370; J. 1857, 471). II, 13.
- 6) Dibenzoat d. 3,4-Dioxy-1-Methylbenzol. Sm. 58° (C. 1898 [1] 1025).
 7) Dibenzoat d. 3,5-Dioxy-1-Methylbenzol. Sm. 88° (40°) (A. ch. [4] 6, 197; J. pr. [2] 26, 65). II, 1150.
- 8) Triphenylmethan 2,4 Dicarbonsäure. Sm. 278°. Ca + 2H₂O, Ag₂: (B. **19**, 3008). — **II**, 1912.
- 9) Triphenylmethan-?-Dicarbonsäure. Sm. 278—280°. Ba + 5H₂O, Ag₂: $(B. \ 16, \ 2375). - II, \ 1913.$

10) **2-Benzoxylphenylessigsäure.** Sm. 152° . Ag (B. **30**, 127). C 72,4 — H 4,6 — O 23,0 — M. G. 348.

- 1) α-Oxytriphenylmethan-3,4-Dicarbonsäure. Sm. 180°. Ca, Ba, Ag₂ (B. 19, 3071). — II, 1988.
- 2) Diacetat d. ?-Oxy-2-[2-Oxybenzoyl]naphtalin. Sm. 107—108° (A. 257,
- 91). III, 256. 3) Diacetat d. P-Oxy-2-[2-Oxybenzoyl]naphtalin. Sm. 135—137° (A. 257, 93). — III, 255.
- 4) Monobenzoat d. Cotoin (M. d. 2,4,6-Trioxydiphenylketoumonomethyläther). Sm. 110—112° (A. 282, 193). — III, 203. C 69,1 — H 4,4 — O 26,4 — M. G. 364.
- 1) Diacetat d. 5,6-Dioxy-2-Keto-1-Cinnamyliden-1,2-Dihydrobenz-
- furan. Sm. 176° (B. 30, 2951).

 2) Monomethylester d. Acetylpulvinsäure. Sm. 153—155° (156°) (B. 13, 1634; A. 219, 17; 282, 14; 284, 121). II, 2030.

 C 66,3 H 4,2 O 29,5 M. G. 380.
- 1) Katechinanhydrid (A. 96, 356; 186, 337). III, 686.
- 2) Monobenzoat d. Baptigenin. Sm. bei 148° (C. 1897 [2] 430). 3) Diacetat d. Citrakonfluorescein (Soc. 63, 679). — II, 2026.

 $C_{21}H_{16}O_7$ $C_{21}H_{16}O_{8}$ 4) Acetylchrysocetrarsäure. Sm. 163-164° (J. pr. [2] 57, 312). C 63,6 — H 4,0 — O 32,3 — M. G. 396.

1) Triacetat d. 7,8-Dioxy-2-[2-Oxyphenyl]-1,4-Benzpyron. Sm. 160° (B. 29, 2433). 2) Triacetat d. 7,8-Dioxy-2-[3-Oxyphenyl]-1,4-Benzpyron. Sm. 166

bis 167° (B. 29, 2433).
3) Triacetat d. 7,8-Dioxy-2-[4-Oxyphenyl]-1,4-Benzpyron. Sm. 199 bis 201° (B. 29, 2434).

4) Triacetat d. 7-0xy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron (Tr. d. Trioxyflavon). Sm. 168° (B. 30, 300).
5) Triacetat d. 5,6,7-Trioxy-1-Methyl-9,10-Anthrachinon. Sm. 217

bis 218° (A. 240, 284). — III, 449.

6) Triacetat d. 6,7,8-Trioxy-1-Methyl-9,10-Anthrachinon. bis 210° (A. **240**, 284). — III, 449.

7) Triacetat d. 5,6,7-Trioxy-2-Methyl-9,10-Anthrachinon. Sm. 2040 (A. 240, 284). — III, 453.

(A. 240, 284). — III, 455.

8) Triacetat d. 6,7,8-Trioxy-2-Methyl-9,10-Anthrachinon. Sm. 188 bis 190° (A. 240, 284). — III, 449.

9) Triacetat d. Emodin. Sm. 190° (A. 183, 163). — III, 454.

10) Triacetat d. Galangin. Sm. 140—142° (B. 14, 2808). — III, 632.

11) Triacetat d. Morindon. Sm. 222° (Soc. 65, 856). — III, 455.

12) Verbindung (aus Katechin) (A. 186, 339). — III, 686. C 61,2 — H 3,9 — O 34,9 — M. G. 412.

 $C_{21}H_{16}O_{9}$

1) Parellsäure + 1 u. $3 \, \mathrm{H}_2\mathrm{O}$ (oder $\mathrm{C}_{20}\mathrm{H}_{14}\mathrm{O}_9$ Psoromsäure). Sm. $262-265^\circ$ (wasserfrei). K_2 , Ba, Pb+ H_2 O, Ag, Ag, (J. pr. [2] 58, 517). — II, 2093, 2112. C 58,9 — H 3,7 — O 37,4 — M. G. 428. 1) Tetracetat d. Anhydropyrogallolketon. Sm. 2370 (A. 209, 271). -

III, 210. 2) Monäthylester d. αγ-Diketo-αγ-Diphenylpropan-ββ, 2, 2'-Tetracarbonsäure. Sm. oberh. 180° (B. 20, 1012). — II, 2100.
 C 85,1 — H 5,4 — N 9,5 — M. G. 296.

 $C_{21}H_{16}N_{2}$

 $\mathbf{C}_{21}\mathbf{H}_{16}\mathbf{O}_{10}$

- 1) 1,1'-Dinaphtylmethanamidin. Sm. 1990 (Am. 13, 516). II, 604. 2) 1,3,4-Triphenylpyrazol. Sm. 1850 (A. 289, 332; Soc. 71, 1148). IV, 1027.
- 3) 1,3,5-Triphenylpyrazol. Sm. 137—138° (B. 21, 1206; J. pr. [2] 58, 153). **- IV**, 1028.

4) 1,4,5-Triphenylpyrazol. Sm. 212° (206°); Sd. oberh. 400° (Soc. 57, 708;

B. 26, 1889). — IV, 1028.

5) 2,4,5-Triphenylimidazol (Lophin). Sm. 275°. HCl + $^{1}/_{2}$ H₂O, (2HCl, PtCl₄), HJ, HNO₃ + H₂O, + AgNO₃, 2 + AgNO₃, 2 + 3 AgNO₃ (A. 54, 368; 93, 329; 97, 283; 112, 166; 151, 135; B. 10, 70; 13, 706; 14, 444; 15, 1268, 1493, 2410; 27, 311; M. 17, 302; Bl. |3| 17, 862). — III, 26. 6) isom. Lophin + $^{1}/_{2}$ H₂O. Sm. 170°. HCl, (2HCl, PtCl₄ + 2H₂O) (A. 112, 214).

314). — III, 27.

7) 1-Phenylamido-3-Phenylisochinolin. Sm. 126° Pikrat (B. 25, 2709). **— IV**, 1026.

8) α -[2-Chinolyl]- β -[2-Methyl-6-Chinolyl]äthen. Sm. 157,5° (B. 22, 289). - IV, 1081.

9) α -[6-Chinolyl]- β -[2-Methyl-6-Chinolyl]äthen. Sm. oberh. 300° (B. 18, 3238). — IV, 372.

10) α - [2-Chinolyl] - β - [2-Methyl-7-Chinolyl] äthen. Fl. HNO₂ + $1\frac{1}{2}$ H₂O (B. 23, 3652). — IV, 1081.

11) 6-Methyl-2, 3-Diphenyl-1, 4-Benzdiazin. Sm. 1110 (A. 237, 339; B. 26, 1348). — IV, 1081.

12) Base (aus Benzaldehyd, p-Toluidin u. salz. p-Toluidin). Sm. 177—178°. (2 HCl, PtCl₄ + 2 H₂O) (J. pr. [2] 36, 267). — IV, 1081. C 77,8 — H 4,9 — N 17,3 — M. G. 324.

 $\mathbf{C}_{21}\mathbf{H}_{16}\mathbf{N}_{4}$

1) 6-Phenylamido-2, 4-Diphenyl-1, 3, 5-Triazin. Sm. 155° (B. 26, 2227). - IV, 1294. C 89,1 - H 6,0 - N 4,9 - M. G. 283.

 $C_{21}H_{17}N$

1) Methyl-2, 2'-Dinaphtylamin. Sm. 139—140° (123—124°) (B. 20, 2619; **23**, 2460). — **II**, 604.

2) 5-Methyl-2-Phenyl-1-[1-Naphtyl]pyrrol. Sm. 74° (B. 18, 2598). — IV, 333.

C21 H17 N

- 3) 5-Methyl-2-Phenyl-1-[2-Naphtyl]pyrrol. Sm. 520 (B. 18, 2599). —
- IV, 333.
 4) 2,6-Di[β-Phenyläthenyl]pyridin. Sm. 167,5°. (HCl, HgCl₂), (2HCl, PtCl₄), (HCl, AuCl₉), Pikrat (B. 25, 2403). IV, 469.
 5) 1-Methyl-2,3-Diphenylindol. Sm. 139°. Pikrat (B. 26, 1345). —
- IV, 469.
- 6) 5-Methyl-2,3-Diphenylindol. Sm. 153°. Pikrat, + Aceton (B. 26, 1343; M. 14, 285; 15, 402; Soc. 65, 896.) — IV, 470.
- 7. Methyl-2, 3-Diphenylindol. α-Modif. Sm. 102°; β-Modif. Sm. 128°; γ-Modif. Sm. 136° (B. 26, 1344; Soc. 65, 893). IV, 469.
- 8) 2-Phenyl-3-Benzylindol. Sm. 100—101° (A. 248, 113). IV,
- 9) Nitril d. $\alpha \alpha \beta$ -Triphenyläthan- α -Carbonsäure. Sm. 126° (A. 250, 143). • II, *1483*. C 81,0 - H 5,4 - N 13,5 - M. G. 311.

 $C_{21}H_{17}N_3$

- 1) 1,1'-Dinaphtylguanidin. Sm. 200°. HCl, (2HCl, PtCl₄) (A. 98, 238; B. 21, 969). — II, 605.
- 2) 2,4-Di[Phenylamido]chinolin. Sm. 149° (B. 26, 2230). IV, 1159.
- 3) I-Phenylhydrazido-3-Phenylisochinolin. Sm. 1850 (B. 25, 2709). -IV, 1189.
- 4) Nitril d. β -Phenylhydrazon- $\alpha\beta$ -Diphenylpropionsäure. Sm. 169°
- (J. pr. [2] 55, 311). IV, 698.
 Nitril d. β-Diphenylhydrazon-β-Phenylpropionsäure.
 (J. pr. [2] 58, 149).
 C 74,3 H 5,0 N 20,6 M. G. 339.

 $C_{21}H_{17}N_5$

- 1) Cyanid d. α -Triphenylguanidin (B. 3, 764; 11, 973). II, 350.
- 2) Cyanid d. uns. β-Triphenylguanidin + ½ H₂O. Sm. 172,5°. HCl + 3H₂O (A. 66, 129; B. 3, 763; 10, 1593; 11, 973). II, 351.
- 3) 6-Phenylhydrazido-2,4-Diphenyl-1,3,5-Triazin. Sm. 140° (B. 26, 2226). — IV, 1294.

 $\mathbf{C}_{21}\mathbf{H}_{17}\mathbf{Cl}$ $\mathbf{C}_{21}\mathbf{H}_{18}\mathbf{O}$

- α-Chlor-αβγ-Triphenylpropen. Sm. 80° (B. 25, 2237). II, 294.
 C 88,1 H 6,3 O 5,6 M. G. 286.
 - 1) 10-Oxy-9-Benzyl-9,10-Dihydroanthracen. Zers. bei 130—140° (B. 23, 2528). — II, 905.
 - 2) ε -Keto- $\alpha \iota$ -Diphenyl- $\alpha \gamma \zeta \vartheta$ -Nonatetraën. Sm. 142° (B. 18, 2325). III, 258.
 - 3) α-Keto-αβγ-Triphenylpropan (Benzyldesoxybenzoïn). Sm. 120° (B. 21, 1300; A. **250**, 132). — III, 259.
- 4) Verbindung (aus d. Verb. C₂₁H₁₆O aus Benzamaron). Sm. 118°; Sd. 210 bis 220°_{15} (A. **275**, 65). — III, 314. C 83,5 — H 5,9 — O 10,6 — M. G. 302.

 $C_{21}H_{18}O_{2}$

C21H18O3

- 1) 9,10-Dioxy-10-Benzyl-9,10-Dihydroanthracen. Sm. 60-61° (Bl. [3] **6**, 92). — III, 245.
- Methyläther d. β-Keto-αβ-Diphenyl-α-[4-Oxyphenyl]äthan. Sm. 90 bis 92°; Sd. 292 298° (soc. 57, 965). III, 258.
 Aethyläther d. γ-Keto-α-Phenyl-γ-[4-Oxy-2-Naphtyl] propen? Sm. 85-86° (B. 25, 3537). III, 258.
- 4) $\beta\beta\beta$ -Triphenylpropionsäure. Sm. 177°. Na + H₂O, K + H₂O, Ba + H₂O, Ag (Soc. 51, 226). — II, 1483.
- 5) $\alpha \alpha \beta$ -Triphenyläthan- α -Carbonsäure. Sm. 162°. Ag (A. 250, 143). II, 1482.
- 6) 3-Methyltriphenylmethan-6-Carbonsäure. Sm. 217°. Ba + 4H₂O, Ag (B. 16, 2364). — II, 1482.
- 7) 4-Methyltriphenylmethan-2-Carbonsäure. Sm. 203°. Ba + 3 H₂O, Ag (B. 19, 3064). — II, 1482.
- 8) 4'-Methyltriphenylmethan-2²-Carbonsäure. Sm. 172⁰. Ba+3¹/₂(4)H₂O (A. 234, 242; Bl. [3] 17, 978).
- 9) Acetat d. α-Oxytriphenylmethan. Sm. 99° (A. 227, 116). II, 1083.
- 10) Verbindung (aus Amarsäure). Sm. 168° (A. 275, 73). II, 1725.
 C 79,3 H 5,6 O 15,1 M. G. 318.
- 1) $\alpha \varepsilon$ -Diketo- γ -[2-Furanyl] $\alpha \varepsilon$ -Diphenylpentan (Furaldiacetophenon). Sm. 95° (B. 29, 2248). III, 730.
- 2) Monobenzoat d. $\alpha\beta$ -Dioxy- $\alpha\beta$ -Diphenyläthan. Sm. 160—161° (A. 182, 277). — II, *1145*.
- 3) Monobenzoat d. Isohydrobenzoin. Sm. 130° (A. 182, 285). II, 1145.

C21 H18 O7

 $C_{21}H_{18}N_4$

4) α -Oxy- $\alpha'\alpha^2$ -Diphenyl- α^3 -[4-Methylphenyl] methan- α^8 2-Carbonsäure. $C_{21}H_{18}O_{3}$

Na (B. 19, 3062). — II, 1724. 5) α -Oxy- $\alpha'\alpha^2$ -Diphenyl- α^3 -[3-Methylphenyl]methan- α^5 6-Carbonsäure.

- Na (B. 16, 2361). II, 1724. 6) α -Oxy- $\alpha'\alpha^2$ -Diphenyl- α^3 -[2-Methylphenyl] methan- α^3 5-Carbonsäure. Sm. $250-255^{\circ}$ u. Zers. Ca + xH₂O, Ba + xH₂O (B. **16**, 2371). — II, 1724.
- 7) Benzylester d. α-Oxydiphenylessigsäure. Sm. 75-76° (B. 22, 1212). - II, 1696.

C 72.0 — H 5.1 — O 22.9 — M. G. 350. C., H., O.

- 1) P-Dibenzoyl- $\beta\delta\zeta$ -Triketoheptan (Dibenzoyldiacetylaceton). Sm. 55° (B.
- 2) Methyläthylester d. Pulvinsäure. Sm. 138-139° (A. 282, 41). -II, 2030.
- 3) isom. Methyläthylester d. Pulvinsäure. Sm. 150-151° (A. 282, 42). **— II**, 2030.

4) norm. Propylester d. Pulvinsäure. Sm. 1340 (A. 282, 42). C 68,8 - H 4,9 - O 26,2 - M. G. 366.

- C,1H18O6 1) Trimethyläther d. Dehydrobrasilinmonacetat. Sm. 174-176° (M. 16, 914). — III, 655.
 - 2) Aethylester d. Chrysocetrarsäure. Sm. 146° (J. pr. [2] 57, 311). C 66,0 — H 4,7 — O 29,3 — M. G. 382.
- 1) Verbindung (aus Dichlorbisdiketohydrinden). Na (B. 31, 1168). $\mathbf{C}_{21}\mathbf{H}_{18}\mathbf{O}_{8}$ C 63,3 - H 4,5 - O 32,2 - M. G. 398.
 - 1) Katechinanhydrid (Katechugerbsäure). Ca, Ba, 2+3PbO (A. 186, 332; Fr. 12, 285; 13, 119). III, 686. 2) Verbindung + $\frac{1}{2}$ H₂O (aus Fuscophlobaphen) (Z. 1870, 178, 179). —
 - III, 689.
- C 60.9 H 4.3 O 34.8 M. G. 414.C21 H18 O9 1) Tetracetat d. 2,5,2',6'-Tetraoxydiphenylketon. Sm. 118-119° (M. 13, 414). — III, 205.
 - 2) Tetracetat d. 2,2',3',4'-Tetraoxydiphenylketon. Sm. 118° (A. 269, 309). - III, 204.
- $\mathbf{C}_{21}\mathbf{H}_{18}\mathbf{N}_2$ C 84.6 - H 6.0 - N 9.4 - M. G. 298.1) 2,4-Di[Benzylidenamido]-1-Methylbenzol. Sm. 122-128° (A. 140, 98). — IV, 607.
 - 2) α-Diphenylmethylenhydrazon-α-Phenyläthan. Sm. 105° (J. pr. [2]
 - 44, 207). III, 187. 3) Amarin. Sm. 100° (u. 126°). Ag, + AgNO₃ + H₂O, HCl, (2 HCl, PtCl₄),
 - HJ, HNO₃, H₂SO₄ + 3¹/₂H₂O, H₂Cr₂O₇. Lit. bedeutend. III, 22. 4) Hydrobenzamid. Sm. 110° (A. 21, 130; 41, 89; 102, 369; 110, 78; 112, 151, 305; 241, 329; B. 14, 444, 1139; 19, 748; 29, 2146; M. 9, 695; Bl. [3] 17, 860). III, 20.
 - 5) Benzoïnamid (= Benzoïnam) (Berz. J. 18, 354). III, 223.
 - 6) 1-Phenylhydrazon-2-Phenyl-2, 3-Dihydroinden. Sm. 137—138° (130°) (B. 25, 2097, 2129). - IV, 778.
 - 7) 1, 3, 5-Triphenyl-4, 5-Dihydropyrazol. Sm. 134-135° (136°) (B. 21, 1209; **28**, 958). — IV, 1017.
 - 8) 2,4,5-Triphenyl-4,5-Dihydroimidazol (Isoamarin). Sm. 1750 (B. 28, 3177). **— IV**, *979*.
 - 9) 6-Methyl-2-Phenyl-1-[4-Methylphenyl]benzimidazol. Sm. 185° (B.
 - 25, 1024). IV, 612.

 10) 5 oder 6-Methyl-2-Phenyl-1-Benzylbenzimidazol (Tolubenzaldehydin). Sm. $195,5^{\circ}$. HCl + H₂O, (2HCl, PtCl₄) (B. 10, 1126; 11, 592; 19, 2026). - IV, 619.
 - 11) I-Methyl-2, 3-Diphenyl-1, 2-Dihydro-1, 4-Benzdiazin. Sm. 133° (B. 24,
 - 2682). IV, 1074. 12) 7-Methyl-2, 3-Diphenyl-1, 2-Dihydro-1, 4-Benzdiazin. Sm. 143° (B. 26, 192). — IV, 1075. 13) Base (aus Cyanammonium u. Benzaldehyd).
 - Sm. 198°. $HCl + H_{\circ}O_{\bullet}$ $(2 \text{HCl}, \text{PtCl}_4), \text{HNO}_8 + \text{H}_2\text{O}, \text{Ag (Soc. 75, 208)}.$ $C_{77,3} - H_{5,5} - N_{17,2} - M_{6,326}$
 - 1) 1,2-Di[Phenylhydrazon]-2,3-Dihydroinden. Sm. 228—229° u. Zers. . (B. **29**, 2605). — IV, 784.

- $\mathbf{C}_{21}\mathbf{H}_{18}\mathbf{N}_{4}$ 2) 1,3-Di[Phenylhydrazon]-2,3-Dihydroinden. Sm. 171° (A. 252, 73). - IV, 784. C 71,2 - H 5,1 - N 23,7 - M. G. 354. $C_{21}H_{18}N_6$
- 1) 1,3,5-Triphenylmelamin. Sm. 1856. (2HCl, PtCl₄) (B. 3, 267; 18, 3223; 20, 1071; 23, 1678). II, 450.
 2) 2,3,5-Triphenylmelamin. Sm. 2176. (2HCl, PtCl₄ + H₂O), (2HCl, 2AuCl₃) (B. 18, 3226). II, 450.
 3) 2,3,6-Triphenylmelamin. Sm. 2216 (B. 21, 869). II, 450.
 4) 2,4,6-Triphenylmelamin. Sm. 2286 (2256). (2HCl, PtCl₄) (J. pr. [2]

 - 33, 294; B. 18, 3218; 21, 870). II, 450.

 5) Phenylhydrazon d. Cykloformazylmethylketon. Sm. 205—210° (A. 300, 251). — IV, 1230.
- 1) 2,5-Dichlorphenyldi [4-Methylphenyl] methan. Sm. 89° (A. 299, 355). $\mathbf{C}_{21}\mathbf{H}_{18}\mathbf{Cl}_2$
- $\mathbf{C}_{21}\mathbf{H}_{18}\mathbf{J}_{2}$ 1) Phenyldi [6-Jod-3-Methylphenyl] methan. Sm. $167-168^{\circ}$ (J. pr. [2]
- 35, 262). II, 290. 1) Diphenyläther d. $\gamma\gamma$ -Dimerkapto- α -Phenylpropen. Sm. 80—81° (B. $C_{21}H_{18}S_{2}$ 18, 885). — III, 59.
- α-Trithiobenzaldehyd oder (C₇H₆S)₁₀. Zers. bei 150° (A. 37, 348; 38, 320; B. 9, 1895; 12, 1056; 15, 861; 24, 1439; J. 1847/48, 590).
 III, 18. $\mathbf{C}_{21}\mathbf{H}_{18}\mathbf{S}_{3}$
 - 111, 16.

 2) β-Trithiobenzaldehyd. Sm. 225—226° u. Zers. + Thiophen (B. 10, 1877; 15, 861; 22, 2605; 29, 146 Anm.). III, 19.

 3) γ-Trithiobenzaldehyd. Sm. 166—167° (B. 22, 2605). III, 19.

 C 80,5 H 6,1 N 13,4 M. G. 313.

 1) ο-Azodibenzyl-p-Toluidin. Sm. 211° (B. 25, 3579). IV, 1385.
- $\mathbf{C}_{21}\mathbf{H}_{19}\mathbf{N}_3$

 $C_{21}H_{19}N_5$

- 2) 7-Methyl-3-Phenyl-2-[4-Methylphenyl]-2,3-Dihydro-1,2,4-Benztriazin. Sm. 220° (B. 23, 505). — IV, 1378. C 73,9 — H 5,6 — N 20,5 — M. G. 341.
- 1) 2, 3-Di[Phenylhydrazon]-5-Methyl-2, 3-Dihydroindol (Diphenylhydrazinmethylisatin). Sm. 255° u. Zers. (J. pr. [2] 33, 74). — II, 1652. $\mathbf{C}_{21}\mathbf{H}_{20}\mathbf{O}$
- C 87,4 H 6,9 O 5,6 M. G. 288.

 1) Aethyläther d. α -Oxytriphenylmethan. Sm. 83° (B. 7, 1208; 28, 2518; J. 1884, 462; A. ch. [6] 1, 502; A. 227, 114; C. 1897 [2] 408).
 - II, 1083. 2) 1-Keto-2,7-Dibenzyliden-R-Heptamethylen (Dibenzylidensuberon). Sm. 107—108° (B. 29, 1600; 30, 2263).
 - 3) d-3-Keto-2,4-Dibenzyliden-1-Methylhexahydrobenzol. Sm. 126—128° (B. **29**, 1597).
 - 4) i-3-Keto-2,4-Dibenzyliden-1-Methylhexahydrobenzol. Sm. 121—122° (A. **295**, 182).
- \dot{C} 82,9 H 6,6 O 10,5 M. G. 304. C21 H20 O2 1) ?-Dioxy-?-Dimethyltriphenylmethan. Sm. 170—171° (A. 257, 70). — II, 1003. C 78,8 — H 6,2 — O 15,0 — M. G. 320.
- $\mathbf{C}_{21}\mathbf{H}_{20}\mathbf{O}_{3}$ 1) α-Oxy-Phenyldi [2-Oxy-1-Methylphenyl] methan. Sm. 220—225° (A. **257**, 69). — II, 1115.
 - 2) Dimethyläther d. 2-Keto-1,3-Di[4-Oxybenzyliden]-R-Pentamethylen.
 - Sm. 212° (B. **29**, 1838). 3) Diäthyläther d. ?-Oxy-2-[2-Oxybenzoyl]naphtalin. Sm. 138—141° (A. 257, 91). - III, 256.
 - 4) Säure (aus Amarsäure). Ag (A. 275, 75). II, 1725.
 - 5) Aethylester d. 4-Keto-2,6-Diphenyl-1,2,3,4-Tetrahydrobenzol-3-Carbonsäure. Sm. 109° (A. 281, 58). II, 1721. C. 75,0 H 6,0 O 19,0 M. G. 336.
- $C_{21}H_{20}O_4$ 1) Diäthyläther d. 5,6-Dioxy-2-Keto-1-Cinnamyliden-1,2-Dihydrobenzfuran. Sm. 123° (B. 30, 2952).
 - 2) $\alpha \eta$ -Diphenyl- $\alpha \zeta$ -Butadiën- $\beta \zeta$ -Dicarbonsäure (Dibenzalpimelinsäure). Sm. 192—193°. Ag₂ (Soc. **59**, 850). — II, 1907. C 68,5 — H 5,4 — O 26,1 — M. G. 368. 1) Curcumin (oder $C_{14}H_{14}O_4$). Sm. 183° (B. **30**, 192).
- $C_{21}H_{20}O_6$
 - 2) Pentamethyläther d. Dehydrohämatoxylin. Sm. 160-1630 (M. 16,
 - 3) Monoacetat d. Brasileïntrimethyläther. Sm. 150-155° (M. 19, 741).
 - 4) Monacetat d. Apigenindiäthyläther. Sm. 181-182° (Soc. 71, 815).

 5) Benzoylfilixsäure. Sm. 123° (B. 21, 2965). — II, 1967.
 C 65,6 — H 5,2 — O 29,2 — M. G. 384. $C_{21}H_{20}O_6$ C21H20O7 1) Perlatin (*J.* pr. [2] **57**, 412). C 63,0 — H 5,0 — O 32,0 — M. G. 400. 1) Rufin (*A.* 30, 198; **33**, 226; **156**, 7). — III, 601. $C_{21}H_{20}O_8$ 2) Tetramethylätheracetat d. Quercetin. Sm. 167-169° (M. 5, 86; 9, 540). — III, 604. 3) Acetat d. Morintetramethyläther. Sm. 167° (Soc. 69, 797). — III, 683. 4) Triacetat d. Phloretin. Sm. 93,5-94,5° (B. 27, 2687; siehe auch B. 28, 1394). 5) Narceonsäure. Sm. 208—209°. Ag (A. 277, 56; 286, 253). — II, 2082. 6) Verbindung (aus Katechin) (Bl. 4, 8). — III, 687. C 60,6 — H 4,8 — O 34,6 — M. G. 416. 1) Frangulin + $\frac{1}{2}$ H₂O. Sm. 226° (A. 104, 77; 165, 230; B. 9, 1775; 21 [2] 842; Soc. 57, 44; 61, 1). — III, 455. 2 Katechin + 5H₂O (oder C_{18} H₁₈O₈). Sm. 217°. Lit. bedeutend. — III, 485.

 $\mathbf{C}_{21}\mathbf{H}_{20}\mathbf{O}_{9}$

 $\mathbf{C}_{21}\mathbf{H}_{20}\mathbf{O}_{10}$

 $\mathbf{C}_{21}\mathbf{H}_{20}\mathbf{N}_{2}$

3) Rubiadinglykosid. Sm. 270° u. Zers. Ba (Soc. 63, 969). — III, 607. C 58,3 — H 4,6 — O 37,0 — M. G. 432.

1) Carignanetraubenfarbstoff (J. 1858, 476). — III, 673.
2) Polygonin. Sm. 202—203° (Soc. 67, 1085). — III, 455.
3) Verbindung (aus Katechin). Sm. unter 100° (Bl. 4, 8). — III, 686.
4) Gerbstoff (aus d. Weichselkirschenbaumrinde) + ½ H₂O (Z. 1870, 181). - III, 689.

5) Verbindung (Weintraubenfarbstoff) (Bl. 32, 104; [3] 7, 823; J. 1858, 476). C 84.0 - H 6.7 - N 9.3 - M. G. 300.

1) α -Phenylimido- α -Methylbenzylamido- α -Phenylmethan. Sm. 67° (A. **273**, 7; B. **30**, 1787). — IV, 843.

2) α -Benzylimido - α - Methylphenylamido - α - Phenylmethan. Sm. $90,6^{\circ}$

(A. 273, 5; B. 30, 1787). — IV, 843. 3) α -[4-Methylphenyl]imido - α -[4-Methylphenyl]amido - α -Phenylmethan. Sm. 131°. HCl, (2HCl, PtCl₄) (A. 184, 357; B. 19, 981). — IV, 844.

4) 1,4-Di[4-Methylphenylimido]-2-Methyl-1,4-Dihydrobenzol. Sm. $145-146^{\circ}$ (B. **26**, 2781). — III, 357.

5) β -Phenylhydrazon- $\alpha \gamma$ -Diphenylpropan. Sm. 120° (126—128°) (A. 248, 112; **284**, 255). — \mathbf{IV} , 777.

6) 1, 2, 3-Triphenyltetrahydroimidazol (Benzylidenäthylenanilin). Sm. 1370 (B. **20**, 732). — **III**, 30.

7) 5-Methyl-2,3-[Methylisopropylbiphenylen]-1,4-Diazin (Methylisopropylphenanthramethylpiazin). Sm. 143—144°. (2HCl, $PtCl_4 + 1^{1/2}H_2O$)

(Soc. 63, 1291). — IV, 1065.

8) 5-Methyl-2-Phenyl-1-[4-Methylphenyl]-2, 3-Dihydrobenzimidazol.
Sm. 156°. (2HCl, -PtCl₄), (HCl, AuCl₃) (B. 23, 3800). — IV, 995.

9) \(\alpha \text{-Base} \) (aus Hydrobenzamid). Sm. 110°. (2HCl, PtCl₄ + 4H₂O), Oxalat

(A. 112, 170; 122, 321). — III, 21. 10) β -Base (aus Hydrobenzamid). Sm. 200° (190°). (2 HCl, PtCl₄) (A. 112,

170; **122**, 322). — III, 21. C 76,8 — H 6,1 — N 17,1 — M. G. 328.

 $C_{21}H_{20}N_4$

1) $\alpha\beta$ -Di[Phenylhydrazon]- α -Phenylpropan. Sm. 104—105° (B. 22, 2129).

TV, 783. 2) $\alpha\beta$ -Di[Phenylhydrazon]- α -[4-Methylphenyl]äthan. Sm. 145° (B. 22, 2561). — IV, 762.

3) III-2,4-Dimethylformazylbenzol. Sm. 137° (B. 31, 1756).

4) $\alpha - [4 - Methylphenyl]azo - \alpha - [4 - Methylphenyl]hydrazon - \alpha - Phenyl$ methan. Sm. 166° (B. 27, 1691). — IV, 1261. 5) Diamidoamarin. 3HCl, (3HCl, PtCl₄) (B. 18, 1675). — III, 23.

6) Hydrocyanrosanilin. HCl, (2HCl, PtCl₄), Pikrat (Z. 1866, 2). — II, 1091. 7) Dibenzenyl-2, 4-Diamido-1-Methylbenzol. (2HCl, PtCl₄) (B. 11, 1759). **– IV**, *1299*.

8) o-Tolusafranin. HCl, (2 HCl, PtCl₄), HNO₃, Pikrat (B. 5, 526; 10, 874; 11, 1772; 13, 207). — IV, 1299. C 70,8 — H 5,6 — N 23,6 — M. G. 356.

 $\mathbf{C}_{21}\mathbf{H}_{20}\mathbf{N}_{6}$

1) $\alpha\beta\gamma$ -Tri[Phenylhydrazon]propan. Sm. 166° (B. 24, 3258). — IV, 762.

C. H. N.

2) α-Phenylazo-αβ-Di[Phenylhydrazon] propan. Sm. 165° u. Zers. (B. 25, 3542). — IV, 1229.

C21 H20 S2

1) Dibenzyläther d. Dimerkaptomethylbenzol. Sm. 64° (B. 28, 1111).

 $\mathbf{C}_{21}\mathbf{H}_{20}\mathbf{S}_{3}$

1) Triphenyläther d. $\alpha\beta\beta$ -Trimerkaptopropan. Sm. $54-55^{\circ}$ (B. 24, 170). - II, 792.

C21H21O6 $\mathbf{C}_{21}\mathbf{H}_{21}\mathbf{N}$

 $\mathbf{C}_{21}\mathbf{H}_{21}\mathbf{N}_{5}$

- 1) **Harz** (aus Polisanderholz) = $(C_{21}H_{21}O_{6})_{X}$. Sm. 95° (*Bl.* 33, 435). III, 561. C 87,8 H 7,3 N 4,9 M. G. 287.
- 1) α-Dimethylamidotriphenylmethan. Sm. 97° (2 HCl, PtCl₄) (B. 17, 746). - II, 642.

2) P-Dimethylamidotriphenylmethan. Sm. 132°. HCl, (2 HCl, PtCl₄), HNO₃, H₂SO₄ (A. 187, 211; 206, 114). — II, 641.

3) Tribenzylamin. Sm. 91,3°. HCl, (2 HCl, PtCl₄), HBr, HJ, HNO₃, H₂SO₄, +Al(SO₄)₂ + 12 H₂O (J. 1856, 581; 1878, 476; A. 144, 307; 151, 366; 264, 195; B. 6, 678; 18, 2342; 19, 900, 1030; Soc. 63, 1314). — II, 521.

4) Dibenzyl [2-Methylphenyl] amin. Sm. 54,5-55°. HCl. (2HCl. PtCl.) (A. Spl. 4, 80). — II, 521.

5) 3, 5 - Di[2 - Methylbenzyl] pyridin. Sm. 40.5° . HCl, $(2 HCl, PtCl_4)$, Pikrat (A. 280, 83). — IV, 457.

6) 3,5-Di[3-Methylbenzyl]pyridin. Sm. 66-66,5°. HCl, (2HCl, PtCl₄ + 2¹/₂H₂O), Pikrat (A. 280, 79). — IV, 457.
7) 3,5-Di[4-Methylbenzyl]pyridin. Sm. 108,5°. HCl, (2HCl, PtCl₄),

Pikrat (A. 280, 74). — IV, 457.

8) 2,6-Di[β -Phenyläthyl]pyridin. Sm. 153°. (2HCl,PtCl₄ + H₂O), Pikrat (B. **25**, 2404). — IV, 457. C 80,0 — H 6,7 — N 13,3 — M. G. 315.

 $C_{21}H_{21}N_{3}$

- 1) 5-Amido-1, 4-Di [4-Methylphenylimido] -2-Methyl-1, 4-Dihydrobenzol. Sm. 227°. HCl (A. 207, 102; Soc. 37, 546; B. 17, 2440; 26, 2774, 2780; J. r. 19, 141). III, 359.

 2) Phenyldi [2-Methylphenyl] guanidin. Sm. 97—98° (102°; 112°). HCl, (2 HCl, PtCl₄), HNO₃ (B. 19, 2411, 2412; A. 286, 362). II, 459.
- 3) uns-Phenyldi [4-Methylphenyl] guanidin. HCl (B. 14, 1488). II, 489. 4) 1-[Benzyl-4-Methylphenyl] amido-4-Methyldiazobenzol. Sm. 1140 (Soc. 53, 672). — IV, 1569.

5) 1, 3, 5-Triphenylhexahydro-1, 3, 5-Triazin (Anhydroformaldehydanilin). Sm. 143° (140—141°). (2HCl, PtCl₄) (B. 17, 657; 18, 3309; 25, 2765; 31, 3251; J. r. 17, 237; G. 14, 351; Bl. [3] 13, 412). — II, 442. 6) 2-Phenyl-3-[2-Amidobenzyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin.

Sm. 140° (*J. pr.* [2] **55**, 369). — **IV**, 637.

7) Chrysotoluidin (*Z.* **1867**, 19). — **IV**, 1210.

8) Base (aus p-Ditolyltriamidotoluol). 3 HCl + H₂O (*J. r.* **19**, 143). — **IV**, 1129. 9) Verbindung (aus Dibenzylamin). HCl (Sm. 162-163°) (A. 151, 136).

• II, 523. C 73,4 - H 6,1 - N 20,4 - M. G. 343.

1) Bis-4-Diazomethylbenzol-4-Toluid. Zers. bei 88° (B. 27, 705, 1863, 2599; **29**, 460). C 63,1 — H 5,3 — N 31,6 — M. G. 399.

 $\mathbf{C}_{21}\mathbf{H}_{21}\mathbf{N}_{9}$ 1) Anilylmelamin (B. 19, 2060). — IV, 743.

 $\mathbf{C}_{21}\mathbf{H}_{21}\mathbf{P}$ $\mathbf{C}_{21}\mathbf{H}_{21}\mathbf{A}\mathbf{s}$

1) Tribenzylphosphin. — IV, 1665.
1) Tribenzylarsin. Sm. 104°. + HgCl₂ (A. 233, 62). — IV, 1690.
2) Tri[4-Methylphenyl]arsin. Sm. 145° (A. 201, 252; 208, 26). — IV, 1692.
1) Wismuthtri[2-Methylphenyl]. Sm. 128,5° (B. 30, 2846). — IV, 1698. $\mathbf{C}_{21}\mathbf{H}_{21}\mathbf{Bi}$

2) Wismuthtri [4-Methylphenyl]. Sm. 120° (A. 251, 331). — IV, 1699. 1) Antimontri [2-Methylphenyl]. Sm. 79-80°. + HgCl₂ (A. 242, 176). C21 H21 Sb

- IV, 1696. 2) Antimontri [3-Methylphenyl]. Sm. $67-68^{\circ}$. + HgCl₂ (A. 242, 184).

· IV, 1696. 3) Antimontri [4-Methylphenyl]. Sm. $127-128^{\circ}$. $+ \text{HgCl}_2$ (A. 242, 167).

- IV, 1697. 4) Antimontri [o-p-Methylphenyl]. Sm. 112-113°. $+ \text{HgCl}_2$ (A. 242, 177). — IV, 1697.

C 78,3 — \acute{H} 6,8 — O 14,9 — M. G. 322.

C21 H22 O3 Diäthyläther d. ε-Keto-α-Phenyl-ε-[2,4-Dioxyphenyl]-αγ-Pentadiën
 (D. d. Cinnamylidenresacetophenon). Sm. 125° (B. 30, 2950 Anm.).

2) Verbindung (aus d. Isoamyloxanthranolchlorid). Sm. 73º (A. 212, 90). C. H. O. - III, 244.

C 74.6 - H 6.5 - O 18.9 - M. G. 338.C. H. O.

1) β -Amyläther d. $\alpha\beta$ -Dioxy- $\gamma\delta$ -Diketo- $\alpha\delta$ -Diphenyl- α -Buten. (B. 27. 716). — III, *31*7.

Monäthylester d. α-Phenyl-β-Benzyl-α-Buten-γδ-Dicarbonsäure. Sm. 127,5—129°. Ba (B. 28, 3194; A. 308, 175).
 Diäthylester d. αα-Diphenylpropen-βγ-Dicarbonsäure (D. d. Diphenylitakonsäure). Sm. 44—45° (B. 30, 94).
 C 71,2 — H 6,2 — O 22,6 — M. G. 354.

C, H, O,

C,1H,2O7

1) Columbosaure + H₀O (A. 69, 47). - III, 629.

2) Säure (aus d. Stearopten $C_{28}H_{30}O_5$) (J. 1854, 590). — III, 58. C 68,1 — H 5,9 — O 26,0 — M. G. 370.

C21 H22 O6

1) Triäthyläther d. Luteolin. Sm. 140-143° (131-132°) (Soc. 69, 800; M. 17, 424). — III, 585.
Monacetat d. Brasilintrimethyläther. Sm. 172—173° (Sm. 80—90° amorph) (B. 27, 525; M. 15, 140; 16, 913). — III, 653.
Diphenylglycerintriacetat. Fl. (B. 19, 65). — II, 662.
Colombosäure (C. 1896 [1] 375).

5) Triacetat d. Hydrolapachosäure. Sm. 1390 (G. 19, 604). — II, 1028. C 65,3 — H 5,7 — O 29,0 — M. G. 386.

1) Columbin. Sm. 182º (P. 19, 441; Berx. J. 11, 288; A. 69, 37; B. 12, 685). - III. 629.

2) Guajacinsäure. Sm. bei 200° (C. 1897 [1] 167). C 62,7 — H 5,5 — O 31,8 — M. G. 402.

 $C_{21}H_{22}O_8$ 1) β-Salylsäure. Sm. 94-95°. Ag₃ (A. Spl. 7, 162). — III, 78.

2) Diacetat d. 3, 4, 2, 4, 6'-Pentaoxydiphenylketondimethylätheräthyläther. Sm. 118° (B. 25, 1137). — III, 208. C 60,3 — H 5,3 — O 34,4 — M. G. 418.

C, H, O,

1) Chrysotoxin (C. 1897 [1] 1059).

2) Triacetat d. α-Hexaoxybiphenyltrimethyläther (A. 169, 248). — II, 1041.

C'58,1 - H 5,0 - O 36,9 - M. G. 434. $\mathbf{C}_{21}\mathbf{H}_{22}\mathbf{O}_{10}$

1) Hämatomminsäure. Sm. 146—147° (A. 288, 46; B. 30, 360). — II, 2083. $\mathbf{C}_{21}\mathbf{H}_{22}\mathbf{O}_{12}$

C 54.1 — H 4.7 — O 41.2 — M. G. 466.

Quercitrin + 2 H₂O. Sm. 168° u. Zers. K (J. 1859, 522, 585; 1862, 499; 1868, 801; A. 37, 101; 90, 287; 112, 96; A. Spl. 1, 266; B. 12, 1178; Soc. 53, 264). — III, 602.
C 83.4 — H 7.3 — N 9.3 — M. G. 302.

 $\mathbf{C}_{21}\mathbf{H}_{22}\mathbf{N}_{2}$

1) 2,5-Di[4-Methylphenylamido]-1-Methylbenzol. Sm. 112-1130 (B. 26, 2781). — IV, 609.

2) 3,5-Di[Methylphenylamido]-1-Methylbenzol. Sm. 124° (J. pr. [2] 33,

546). — IV, 625. 3) 4-Amido-4'-Dimethylamidotriphenylmethan. Sm. 117—118°. 2 Pikrat (B. 30, 1140).

4) 2',22-Diamido-3',32-Dimethyltriphenylmethan? Sm. unterh. 100°.

(2HCl,PtCl₄) (J. pr. [2] 36, 252). — IV, 1046. 5) 6',62-Diamido-3',32-Dimethyltriphenylmethan. Sm. 185—186°; Sd. $427-433^{\circ}$ u. ger. Zers. $+ C_6H_6$, 2HCl, $(2HCl, PtCl_4)$, H_2SO_4 , Pikrat (J. pr. [2] 36, 255). - IV, 1047.

6) 1-Phenylhydrazon-2-Benzyliden-3,5-Dimethyl-1,2,3,4-Tetrahydrobenzol. Sm. 180° (181°) (G. 23 [1] 574; A. 281, 119). — IV, 775.

7) 6-Methyl-2, 3-[?-Methylisopropyl] biphenylen-1, 4-Dihydro-1, 4-Diazin. Sm. 83—85° (*Soc.* **63**, 1291). — **IV**, *1048*. C 76,4 — H 6,6 — N 17,0 — M. G. 330.

1) α -Phenylhydrazon- $\alpha\alpha$ -Di[4-Methylphenylamido]methan. Sm. 138°. (2HCl, PtCl₄) (B. **21**, 2274). — IV, 1225. C 79,5 — H 7,3 — N 13,2 — M. G. 317.

C21 H23 N3

 $C_{21}H_{22}N_4$

1) 3',52',58-Triamido-22,28-Dimethyltriphenylmethan. 3HCl, (6HCl, PtCl₄) (B. 21, 3211). — IV, 1198.

2) 2',2³,4³-Triamido-3',3²-Dimethyltriphenylmethan? (B. 15, 679). IV, 1198.

3) 4-Amido-2,5-Di[4-Methylphenylamido]-1-Methylbenzol. bis 166° (A. 207, 107; B. 17, 2440; 26, 2777). — IV, 1128.

C21 H23 N3 . 4) 2,2'-Diamidotribenzylamin. Sm. 1430 (B. 26, 2587). — IV, 628. 5) 4-Methylphenyldi[2-Amidobenzyl]amin. Sm. 145°. 3 HCl + 3 H $_{2}$ O, (6HCl, SnCl $_{4}$), 3 H $_{2}$ SO $_{4}$ + 4 H $_{2}$ O (B. 25, 3585). — IV, 628. 6) 2-Hexyl-4,6-Diphenyl-1,3,5-Triazin. Sm. 44°; Sd. 265° $_{15}$ (2HCl, PtCl₄) (B. **22**, 808). — **IV**, 1198. C 81.7 - H 7.8 - O 10.4 - M. G. 308. $C_{21}H_{24}O_{2}$ 1) αι-Diketo-αι-Diphenylnonan. Sm. 44° (C. 1896 [2] 1091). 2) $\alpha \gamma$ -Diketo- $\alpha \gamma$ -Di[2,4,6-Trimethylphenyl] propan. Sm. 96—97° (Bl. [3] 9, 702). — III, 302. 3) $\alpha \alpha$ -Di[4-Aethylbenzoyl] propan. Sm. 88-89° (A. ch. [6] 22, 353). -4) 3,5-Diäthyl-2,6-Diphenyltetrahydro-1,4-Pyron. Sd. oberh 220° (B. **30**, 2262). C 74,1 — H 7,1 — O 18,8 — M. G. 340. C21H24O4 1) $\alpha \eta$ -Diphenylheptan- $\beta \zeta$ -Dicarbonsäure (Dibenzylpimelinsäure). Sm. 120°. $Ba + 3H_2O$ (Soc. 59, 846; 61, 702). — II, 1895. 2) Dimethylester d. $\alpha \gamma$ -Di[3-Methylphenyl]propan- $\beta \beta$ -Dicarbonsäure. Sm. 122° (B. 23, 109). — II, 1894. 3) Diäthylester d. $\alpha \gamma$ -Diphenylpropan- $\beta \beta$ -Dicarbonsäure (D. d. Dibenzylmalonsäure). Sm. 13—14°; Sd. 250°₄₀ (256—257°₃₀) (Soc. 47, 821; A. 239, 97; B. 20, 439; R. 6, 88). — II, 1893.
4) Dibenzylester d. β-Methylbutan-αδ-Dicarbonsäure. Sd. 300—320° (Bl. [3] 13, 825). 5) Propionat d. Ostruthin. Sm. 99-100°. — III, 639.
 C 70,8 — H 6,7 — O 22,5 — M. G. 356. C21 H24 O5 Diäthylester d. 4-Keto-6-Methyl-2-[β-Phenyläthenyl]-1, 2, 3, 4-Tetrahydrobenzol-1, 3-Dicarbonsäure. Sm. 127° (A. 281, 92). — II, 1974. $C_{21}H_{24}O_6$ C 67.8 - H 6.4 - O 25.8 - M. G. 372.1) Phillygenin (A. 118, 127). — III, 600. 2) Dimethyläther d. Pinoresinol. Sm. 98° (M. 15, 514; 18, 486). — III, 563. 3) Pentamethyläther d. Hämatoxylin. Sm. 144—147° (M. 15, 143). — C 65,0 - H 6,2 - O 28,8 - M. G. 388. $C_{21}H_{24}O_7$ 1) Albopannin. Sm. 147° (C. 1897 [1] 660). 2) Columbin (C. 1896 [1] 375). 3) Dibenzylidenperseit. Erweicht bei 2190 (A. ch. [6] 19, 16). — III, 9. C 62.4 - H 5.9 - O 31.7 - M. G. 404. $C_{21}H_{24}O_{8}$ 1) Verbindung (aus Esparto) (Soc. 38, 668). — I, 1080. C 60,0 - H 5,7 - O 34,3 - M. G. 420. $C_{21}H_{24}O_{9}$ 1) Glycyphyllin $+ 3(4^{1}/_{2})H_{2}O$. Sm. 175-180° (Soc. 39, 237; 49, 857). -III, 591. C 57,8 — H 5,5 — O 36,7 — M. G. 436. 1) β -Erythrin + H₂O. Sm. 115—116°. Pb₂ (A. 134, 245; Bl. 2, 424). — $C_{21}H_{24}O_{10}$ 2) Phloridzin + 2H₂O. Sm. 108—109°. 2 + 3CaO + H₂O, 4 + 5BaO, + 3PbO (A. 15, 75, 258; 30, 192; 156, 1; 176, 116; B. 14, 303; 21, 988; Fr. 15, 28; Soc. 51, 636; C. 1898 [1] 347). — III, 600.

3) Isophloridzin. Sm. 105° (Z. 1868, 711). — III, 601. C 55,8 — H 5,9 — O 38,9 — M. G. 452.

1) Datisein + 2H₂O. Sm. 180° (A. 98, 167; 277, 266). — III, 580.

2) Teucrin. Sm. 228—230° (B. 12, 296; G. 13, 498). — III, 613.

3) Tetracetylhelicin (A. 154, 22). — III, 68. $\mathbf{C}_{21}\mathbf{H}_{24}\mathbf{O}_{11}$

 $\mathbf{C}_{21}\mathbf{H}_{26}\mathbf{O}_{2}$

C 75,9 — H 7,2 — N 16,9 — M. G. 332.

1) Tri[4-Amidobenzyl]amin, Sm. 136° (B. 6, 1061). — IV, 639. $\mathbf{C}_{21}\mathbf{H}_{24}\mathbf{N}_{4}$ $C_{21}H_{26}O$

C 85,7 — H 8,8 — O 5,4 — M. G. 294.

1) 4-Oktyldiphenylketon. Sd. 104—110°₈₅ (B. 31, 939).

2) Di[5-Methyl-2-Isopropylphenyl]keton? Sd. 220°₁₀ (C. 1896 [2] 92). C 81,3 — H 8,4 — O 10,3 — M. G. 310. 1) Cannabinol. Sd. 285°₈₀ (Soc. 69, 544; 73, 20, 27). — III, 621.

C 77,3 — H 8,0 — O 14,7 — M. G. 326.

 $\mathbf{C}_{21}\mathbf{H}_{26}\mathbf{O}_3$ 1) Di[3-Methyl-6-Isopropylphenylester] d. Kohlensäure. Sm. 60° (48°) (J. pr. [2] 27, 505; B. 19, 2268). — II, 771.

 $C_{21}H_{32}O_2$

[1] 186).

C 73,7 - H 7,6 - O 18,7 - M. G. 342. $C_{21}H_{26}O_4$ 1) Methyläther d. Bidurochinon. Sm. 126° (B. 29, 2182). C 70,4 — H 7,3 — O 22,3 — M. G. 358. $C_{21}H_{26}O_{5}$ Tetraäthyläther d. 2,5,2',6'-Tetraoxydiphenylketon. Sm. 93-95° (M. 13, 414). — III, 205.
 C 67,4 — H 6,9 — O 25,7 — M. G. 374. 1) Diäthylester d. $\beta\zeta$ -Diketo- δ -[β -Phenyläthenyl]heptan- γs -Dicarbon- $C_{21}H_{26}O_{6}$ säure. Sm. 160-161° (A. 281, 91). - II, 2021. 2) Verbindung (aus Acetessigsäureäthylester). Sm. 160-161° (G. 19, 213). - I, 593.
3) Verbindung (aus Tiglinaldehyd, Guajakol v. Dimethylpyrogallol) (C. 1897 [1] 168). C 64,6 — H 6,7 — O 28,7 — M. G. 390. 1) Flavopannin. Sm. 151° (C. 1897 [1] 660. $C_{21}H_{26}O_7$ C 55,5 - H 5,7 - O 38,8 - M. G. 454. $\mathbf{C}_{21}\mathbf{H}_{26}\mathbf{O}_{11}$ Naringin (Aurantiin; Hesperidin) + 4H₂O. Sm. 171° (B. 9, 691; 18, 1313; 20, 294; J. 1879, 909). — III, 594.
 Tetracetat d. Salicin. Sm. 130° (J. 1866, 676; A. 154, 9; C. 1897 [2] 1075). — III, 608. C 82,4 — H 8,5 — N 9,1 — M. G. 306. $C_{21}H_{26}N_2$ Di[4-Isobutylphenylimido] methan. Sm. 189° (B. 17, 1242). — II, 557.
 Strychnolin + 2H₂O. Sm. 175—178° (A. 301, 324).
 C 78,5 — H 8,4 — N 13,1 — M. G. 321. $\mathbf{C}_{21}\mathbf{H}_{27}\mathbf{N}_{3}$ triazin. Sm. 165°. HCl, (2HCl, PtCl.) (B. **24**, 1010). — IV, 1152. C 80,8 — H 9,0 — O 10,2 — M. G. 312. $\mathbf{C}_{21}\mathbf{H}_{28}\mathbf{O}_{2}$ 1) Diphenyläther d. αι-Dioxynonan. Sm. 620 (C. 1899 [1] 26). 1) Diplicity in the discrete $C_{21}H_{28}O_{14}$ $C_{21}H_{28}O_{28}$ 1) Glykosecitronensäure. Ca₄ + H₂O (A. ch. [3] **54**, 81). — I, 840. C 81,8 — H 9,1 — N 9,1 — M. G. 308. $\mathbf{C}_{21}\mathbf{H}_{28}\mathbf{N}_{2}$ 1) δ -Phenylhydrazon- δ -[2-Methyl-5-Isopropylphenyl]- β -Methylbutan. Fl. (J. pr. [2] **46**, 489). — **IV**, 773. 2) 2 - Hexyl-1, 3-Diphenyltetrahydroimidazol (Aethylenönanthylidendiphenyldiamin). Sm. 79° (B. 20, 734). — II, 445. 3) Dihydrostrychnolin. Sm. 129°; Sd. 267 - 270°₁₆. HCl, HNO₈ (A. 301, 326). C 75,0 — H 8,3 — N 16,7 — M. G. 336. $\mathbf{C}_{21}\mathbf{H}_{28}\mathbf{N}_4$ 1) $\zeta \eta$ -Di[Phenylhydrazon]- β -Methyloktan. Sm. 133—134° (G. 28 [2] 278; J. pr. [2] 58, 400). C 78,0 — H 9,0 — N 13.0 — M. G. 323. $\mathbf{C}_{21}\mathbf{H}_{29}\mathbf{N}_3$ 1) Di[4-Isobutylphenyl]guanidin. Sm. 173°. (2HCl, PtCl₄) (B. 17, 1240). — II, 557. C 80,2 — H 9,6 — O 10,2 — M. G. 314. $\mathbf{C}_{21}\mathbf{H}_{30}\mathbf{O}_{2}$ 1) Cordol. Fl. Pb (A. 63, 154; B. 15, 141). — III, 625. C 69,6 — H 8,3 — O 22,1 — M. G. 362. $\mathbf{C}_{21}\mathbf{H}_{30}\mathbf{O}_{5}$ 1) Antiarigenin. Sm. bei 180° (C. 1896 [2] 591). — III, 570. C 66,7 — H 7,9 — 0 25,4 — M. G. 378.

1) Argyräscetin (J. 1862, 490; 1867, 751). — III, 572. C 59,1 — H 7,0 — 0 33,8 — M. G. 426.

1) Polystichinol. Sm. 156,7° (C. 1898 [2] 1104). C 49,8 — H 5,9 — 0 44,3 — M. G. 506. $\mathbf{C}_{21}\mathbf{H}_{30}\mathbf{O}_{6}$ $\mathbf{C}_{21}\mathbf{H}_{30}\mathbf{O}_{9}$ $\mathbf{C}_{21}\mathbf{H}_{30}\mathbf{O}_{14}$ 1) Heptacetat d. α-Glykoheptit. Sm. 113-115° (A. 270, 82).

1) Methylester d. Dextropimarsäure. Sm. 69° (B. 19, 2171). — II, 1437. Aethylester d. Abietinsäure (Z. 1866, 33). — II, 1436.
 C 75,9 — H 9,6 — O 14,5 — M. G. 332. $C_{21}H_{82}O_{8}$ 1) Myristinbenzolcarbonsäureanhydrid. Sm. 380 (A. 91, 104). **- II**, 1158. 2) Methylester d. Camphanoncamphersäure. Sm. 94-95° (G. 27

C 79,8 — H 10,1 — O 10,1 — M. \dot{G} . 316.

2) Heptacetat d. Perseït. Sm. 119° (A. ch. [6] 19, 12). — I, 418.

C 72.4 - H 9.2 - O 18.4 - M. G. 348.C21 H32 O4

1) β -Digitoxenin (B. 28 [2] 1058).

- 2) Benzoyloxymyristinsäure. Sm. 68°. Ag (B. 14, 2482). II, 1154. 3) Säure (aus Campherylmalonsäurediäthylester). Sm. 224° (A. 257, 299). **- II**, 2041.
- C 63.6 H 8.1 O 28.3 M. G. 396.C21 H22 O7

1) Oxyheptinsäure. Sm. 185° (A. ch. [5] 20, 493). C 61,2 — H 7,8 — O 31,0 — M. G. 412.

C,1H,2O, 1) Tetraäthylester d. αθ-Nonadiën-δδζζ-Tetracarbonsäure (T. d. Diallyldicarboxylglutarsäure). Sm. 30-31°; Sd. 213-215°, (A. 256, 191).

C 52,9 - H 6,7 - O 40,3 - M. G. 476.C, H, O, 12 1) Hexaäthylester d. Propan- $\alpha \alpha \beta \beta \gamma \gamma$ -Hexacarbonsäure. Sd. $230-240^{\circ}_{17}$

(B. 29, 1277, 1278; Soc. 73, 1013) 1) Harz (aus Doona zeylanica) = $(C_{21}H_{88}O)_x$ (M. 12, 102). — III, 555. 1) Digitalin = $(C_{21}H_{88}O_9)_x$ (J. 1875, 776, 777). — III, 581. C 83,5 — H 11,2 — O 5,3 — M. G. 302.

 $C_{21}H_{33}O$

C21 H33 O9 $\mathbf{C}_{21}\mathbf{H}_{34}\mathbf{O}$

1) α-Methyläther d. Oxycampherpinakonan. Sm. 98° (B. 27, 2349; A. 292, 8).

- 2) β-Methyläther d. Oxycampherpinakonan. Sm. 67° (B. 27, 2349; A. 292, 10). C 79,2 — H 10,7 — O 10,1 — M. G. 318.
- $C_{21}H_{34}O_{2}$ 1) **4-Methylphenylester d. Myristinsäure.** Sm. 39°; Sd. 239,5°₁₅ (B. 17,
- 1379). II, 749. C 75,4 H 10,2 O 14,4 M. G. 334. 1) Carbonat d. d-Borneol. Sm. 215° (Bl. 37, 410). III, 470. 2) Carbonat d. 1-Borneol. Sm. 220—227° (Bl. 41, 329). III, 472. C 63,3 H 8,5 O 28,1 M. G. 398. $C_{21}H_{34}O_{3}$
- C21 H34 O7 1) Tetraäthyläther d. Salicin. Fl. (J. 1866, 676; A. 154, 14). — III, 608.
- C 80.3 H 10.8 N 8.9 M. G. 314. $\mathbf{C}_{21}\mathbf{H}_{34}\mathbf{N}_{2}$ 1) 2,4-Di[Oenanthylidenamido]-1-Methylbenzol. Fl. (A. 140, 97; 253,
 - 319). **IV**, 607.
- Bryoretin = (C₂₁H₃₅O₇)_x (J. 1858, 522). III, 573.
 C 78,8 H 11,2 O 10,0 M. G. 320.
 Methylenäther d. d-Borneol. Sm. 167-168°; Sd. 150-160°₃₀ (B. 24, $C_{21}H_{35}O_7$ $\mathbf{C}_{21}\mathbf{H}_{36}\mathbf{O}_{2}$
 - 3379). **III**, *470*.
- 2) Methylenäther d. Isoborneol. Sm. 167° (J. pr. [2] 49, 10). C 71,6 H 10,2 O 18,2 M. G. 352. C21 H36 O4
- 1) Aethylester d. Lichesterinsäure. Sm. 60° (C. 1898 [2] 964). C 65,6 - H 9,4 - O 25,0 - M. G. 384. $C_{21}H_{36}O_6$
- 1) Rangiformsäure $+2 H_2 O$ der $C_{11} H_{18} O_3$. Sm. 84° (102° wasserfrei). K_2 , Ca $+1^{1}/_{2} H_2 O$, Ba $+2 H_2 O$, Pb $+2 H_2 O$, Cu $+1^{1}/_{2} H_2 O$, Ag₂ (G. 12, 259; J. pr. [2] 57, 275). I, 625. C 60,6 H 8,6 O 30,8 M. G. 416. 1) Norcaperatsäure $+2 H_2 O$. Sm. 138° (wasserfrei). Ba₃ (J. pr. [2] 57,
- C21 H36 O8
 - 2) Tetraäthylester d. Nonan- $\gamma\gamma\eta\eta$ -Tetracarbonsäure. Sd. 247°_{so} (Soc. **59**, 833). — **I**, 862.
 - 3) Tetraäthylester d. Nonan-δδζζ-Tetracarbonsäure. Sm. 42°; Sd. 207 bis 208°_{12} (A. **256**, 189). — I, 862.
 - 4) Tetraäthylester d. β -Methylheptan- $\eta\eta$ -Dicarbonsäure- $\zeta\zeta$ -Dimethylcarbonsäure. Sd. 195°₁₈ (B. **31**, 2590). C 79,8 — H 11,4 — N 8,8 — M. G. 316.
- $C_{21}H_{36}N_2$ 1) 2-Diisobutylamidomethyl-l-Piperidylmethylbenzol. Sd. 196-1980 20 (B. **31**, 428)
 - 2) Dianhydrolupinin. Sd. 220°. (2 HCl, PtCl₄) (A. 214, 372; C. 1897 [2] 361). **— III**, *892*.
- 1) Hydrobryotin = $(C_{21}H_{87}O_8)_x$ (J. 1858, 522). III, 573. C 74,6 H 11,2 O 14,2 M. G. 338. $\mathbf{C}_{21}\mathbf{H}_{37}\mathbf{O}_{8}$ $C_{21}H_{38}O_{3}$
 - 1) Carbonat d. Menthol. Sm. 105° (A. ch. [6] 7, 469; J. pr. [2] 56, 43; C. 1898 [2] 1190). — III, 467. C 65,3 — H 9,8 — O 24,9 — M. G. 386.
- $\mathbf{C}_{21}\mathbf{H}_{38}\mathbf{O}_{6}$ Triisoamylester d. Propan-αβγ-Tricarbonsäure (Tr. d. Tricarballylsäure). Sd. oberh. 360° (J. 1865, 395; A. 163, 273). — I, 808.

C 81.8 - H 13.0 - O 5.2 - M. G. 308. $C_{21}H_{40}O$ 1) Triönanthaldehyd (aus Oenanthol). Sd. 315-320° (Soc. 43, 71).

I, 962. C 77,8 — H 12,3 — O 9,9 — M. G. 324.

 $\mathbf{C}_{21}\mathbf{H}_{40}\mathbf{O}_{2}$ 1) Lakton (d. Oxysäure C₂₁H₄₂O₃ im Carnaubawachs). Sm. 103,5° (A. 223, 311). — I, 580.

2) Aethylester d. Döglingsäure (J. 1847/48, 568). — I, 527.

C 70,8 — H 11,2 — O 18,0 — M. G. 356. $C_{21}H_{40}O_4$

1) Nonadekan-αα-Dicarbonsäure. Sm. 109—110° (M. 17, 544).
2) Diäthylester d. Rocellsäure (A. 117, 340). — I, 690.
3) Glycerinmonolein (A. ch. [3] 41, 244). — I, 526.
C 77,3 — H 12,9 — O 9,8 — M. G. 326.
1) Medullinsäure. Sm. 72,5° (J. 1860, 325; J. pr. [2] 49, 111).
2) Methylester d. Arachinsäure. Sm. 54—54,5° (A. 101, 98; J. pr. [2]

 $C_{21}H_{42}O_{2}$

48, 488). — I, 447.

3) Isoamylester d. Palmitinsäure. Sm. 90 (J. 1853, 503). — I, 443.

4) β -Methylbutylester d. Palmitinsäure. Sm. $12-13^{\circ}$ (Bl. [3] 15, 285). 5) Cetylester d. Isovaleriansäure. Sm. 25° ; Sd. $280-290^{\circ}_{202}$ (A. 131, 286).

 $\mathbf{C}_{21}\mathbf{H}_{42}\mathbf{O}_{3}$

— I, 428. C 73,7 — H 12,3 — O 14,0 — M. G. 342. 1) Säure (aus Carnaubawachs). Pb (A. 223, 10). — I, 580.

 $C_{21}H_{42}O_4$

 Methylester d. α-Oxyarachinsäure. Sm. 62-64° (M. 17, 536).
 C 70,4 — H 11,7 — O 17,9 — M. G. 358.
 Glycerinmonostearin. Sm. 61° (A. ch. [3] 41, 221; J. pr. [2] 28, 225). - I, 445.

C 78,3 — H 13,0 — N 8,7 — M. G. 322. $\mathbf{C}_{21}\mathbf{H}_{42}\mathbf{N}_{2}$

1) Triönanthylidendiamin. Sd. über 400° (A. Spl. 3, 367). — I, 955. C 80.8 - H 14.1 - O 5.1 - M. G. 312. $C_{21}H_{44}O$

1) Cetyläther d. α -Oxy- β -Methylbutan. Sm. 14°; Sd. bei 350° (Bl. [3] **15**, 304).

2) Isoam leetyläther. Sm. 30° (4. 102, 220). — I, 300. C 76,8 — H 13,4 — O 9,8 — M. G. 328.

 $C_{21}H_{44}O_{2}$

Verbindung (aus polym. Oenanthol). Sd. 297-300° (B. 16, 1039; Soc. 43, 80). — I, 955.

C₂₁-Gruppe mit drei Elementen.

 $C_{21}H_8O_7Br_4$ 1) Tetrabromfluoresceincarbonsäure. K₃ (B. 11, 1343). — II, 2089. $C_{21}H_9O_7Br$ 1) Heptabromkatechuretin? (A. 128, 292). — III, 686.

 $C_{21}H_{10}O_2Br_2$ 1) Dibrom- β -Dinaphtylenketonoxyd. Sm. 181° (J. pr. [2] 41, 51). — III, 263.

 $C_{21}H_{10}O_5Br_4$ 1) Methyläther d. Tetrabromfluoresceïn (Methylerythrin) (A. 183, 53). **– II**, 2063.

C 65,3 - H 2,6 - O 24,9 - N 7,2 - M. G. 386. $\mathbf{C}_{21}\mathbf{H}_{10}\mathbf{O}_{6}\mathbf{N}_{2}$

1) Dinitro- β -Dinaphtylenketonoxyd. Sm. 275° (J. pr. [2] 41, 50). — III, 263.

 $C_{21}H_{10}O_7Br_2$ 1) Dibromfluoresceincarbonsäure (B. 11, 1343). — II, 2089.

28, 3056).
1) Di[1-Jod-2-Naphtylester] d. Kohlensäure. Sm. 188—189° (B. 28, 3057).

 $\mathbf{C}_{21}\mathbf{H}_{12}\mathbf{O}_{6}\mathbf{N}_{6}$ C 56,7 — H 2,7 — O 21,6 — N 18,9 — M. G. 444.

1) m-Trinitrokyaphenin. Sm. 250—260° u. Zers. (A. 115, 25; J. pr. [2] 51, 399). — II, 1216. C 62,4 — H 3,0 — O 27,7 — N 6,9 — M. G. 404.

1) Di[4-Nitro-1-Naphtylester] d. Kohlensäure. Sm. 2120 (B. 28, 3050).

 $C_{21}H_{12}O_8N_4$

C 56,2 — H 2,7 — O 28,6 — N 12,5 — M. G. 448. 1) Tetranitro- α -Dinaphtylmethan. Zers. bei 260—270° (B. 7, 1607). —

2) Tétranitro-β-Dinaphtylmethan. Sm. 150—160° (B. 13, 1728). — II, 296.
C 51,2 — H 2,4 — O 29,3 — N 17,1 — M. G. 492.

 $C_{21}H_{12}O_{9}N_{6}$

1) Tetranitro-s-1,1-Dinaphtylharnstoff. Sm. oberh. 300° (Soc. 61, 467). - II, 608.

2) Tetranitro-s-2,2-Dinaphtylharnstoff (Soc. 61, 467). — II, 618.

3) Tri[4-Nitrophenyläther] d. Cyanursäure. Sm. 940 (B. 20, 2236). — II, 683.

 $\mathbf{C}_{21}\mathbf{H}_{12}\mathbf{N}_{2}\mathbf{Cl}_{6}$ 1) 2,5-Dichlor-1-Di[2,5-Dichlorbenzylidenamido]methylbenzol (2,5-Hexachlorhydrobenzamid). Sm. 167° (A. 299, 347). C 85,4 — H 4,4 — O 5,4 — N 4,8 — M. G. 295. 1) β-Dinaphtakridon. Sm. oberh. 300° (B. 28, 3098). — IV, 477.

 $\mathbf{C}_{21}\mathbf{H}_{13}\mathbf{ON}$

2) 1-Phenylphenanthrenoxazol. Sm. 2020 (Soc. 37, 668; 39, 225; 67, 46). — III, 446.

3) Oxim d. 2,2-Diketodinaphtylmethan (B. 25, 3483). — II, 1007.

1) 9-Keto-10-[α-Brombenzyliden]-9,10-Dihydroanthracen. Sm. 2540 $C_{21}H_{13}OBr$ (B. **23**, 1569). — **III**, 245. Bromphtalacenoxyd. Sm. bei 200° (B. 17, 1398). — II, 297.
 C 77,1 — H 3,9 — O 14,7 — N 4,3 — M. G. 327.

 $C_{21}H_{13}O_{3}N$

1) Phenylamid d. 9,10-Anthrachinon-2-Carbonsäure. Sm. 258-260° (B. 17, 890). — II, 1904.

2) 4-Benzoylphenylimid d. Benzol-1,2-Dicarbonsäure. Sm. 1830 (A. **210**, 267). — III, 184. C 73,5 — H 3,8 — O 18,6 — N 4,1 — M. G. 343.

 $\mathbf{C}_{21}\mathbf{H}_{13}\mathbf{O}_{4}\mathbf{N}$

3-[3,4-Dioxyphenylmethyläther]-β-Naphtochinolin-I-Carbonsäure (Piperonyl-β-Naphtochinolinsäure).
 Sm. 292° (B. 27, 2030). — IV, 472.

2) 4-Benzoxylphenylimid d. Benzol-1, 2-Dicarbonsäure. Sm. 256° (C. **1897** [1] **4**9). C 67,2 — H 3,5 — O 25,6 — N 3,7 — M. G. 375.

C21 H13 O6 N

1) 1-[3-Nitrobenzoyl]-4-[4-Carboxylbenzoyl]benzol? (m-Benzoyl-p-Benzoylbenzoësäure). Sm. 276°. Na + 3 H₂O (A. 286, 320). — II, 1914. 2) 1-[4-Nitrobenzoyl]-4-[4-Carboxylbenzoyl]benzo!? Sm. 306—308°

(A. **286**, 332). — **II**, 1914.

3) Diacetat d. Dioxyanthrachinolinchinon (D. d. Alizarinblau). Sm. 224,50 (Soc. 35, 800). - IV, 462.

4) 3,5-Dibenzoylpyridin-3³,5³-Dicarbonsäure. Sm. 270-271⁰ (A. 280, 82). **— IV**, *175*.

5) 3,5-Dibenzoylpyridin-34,54-Dicarbonsäure. Sm. 3080 u. Zers. Ca $\stackrel{+}{+}$ H₂O, Cu, Ag₂ (A. **280**, 66, 78). — IV, 175. C 58,5 — H 3,0 — O 22,3 — N 16,2 — M. G. 431.

 $C_{21}H_{13}O_6N_5$

1) ?-Trinitro-2, 4, 5-Triphenylimidazol + 2H₂O (Trinitrolophin) (J. pr. [1]

35, 459). — III, 27. C 60,1 — H 3,1 — O 26,7 — N 10,0 — M. G. 419. 1) Anthracenpikrat. Sm. 138° (Bl. 7, 34). — II, 260. 2) Fluoranthenpikrat. Sm. 182—183° (A. 193, 146). — II, 279. C 57,9 — H 3,0 — O 29,4 — N 9,7 — M. G. 435. $C_{21}H_{13}O_7N_3$

 $\mathbf{C}_{21}\mathbf{H}_{13}\mathbf{O}_{8}\mathbf{N}_{3}$

1) N-4-Nitrobenzoat d. 4-Nitrobenzoylbenzhydroxamsäure. Sm. 1870 (R. 15, 362).

 $\mathbf{C}_{21}\mathbf{H}_{13}\mathbf{N}_{2}\mathbf{Br}$ 1) 8-Brom-6-Methyl-2,3-Biphenylen-1,4-Benzdiazin. Sm. 209—210° (B. 23, 1050). — IV, 1087. C 81,3 — H 4,5 — O 5,2 — N 9,0 — M. G. 310. $\mathbf{C}_{21}\mathbf{H}_{14}\mathbf{ON}_{2}$

1) Carbanilamidophenanthrol (Phenylamidophenanthrenoxazol). Sm. 192 bis 193°. Pikrat (B. 22, 3242). — III, 442.

2) 2-[2-Oxyphenyl]phenanthrenimidazol. Sm. 270-276° u. Zers. (Soc. **41**, 146). — III, 446.

3) 2-[4-Oxyphenyl]phenanthrenimidazol. Sm. oberh. 350° (Soc. 41, 146).

C 74.6 - H 4.1 - O 4.7 - N 16.6 - M. G. 338. $\mathbf{C}_{21}\mathbf{H}_{14}\mathbf{ON}_{4}$

1) 3-Benzoylamido-1,5-2,3-Diphenylen-2,3-Dihydro-1,2,4-Triazol. Sm. 255—256° (B. 28, 153). — IV, 1292.

 $\mathbf{C}_{21}\mathbf{H}_{14}\mathbf{OBr}_{2}$ 1) 10-Brom-9-Keto-10-[α -Brombenzyl]-9,10-Dihydroanthracen. Sm. 148° (B. 23, 1569). — III, 245. RICHTER, Lex. d. Kohlenstoffverb. 125

1) α-Thiocarbonyl-γ-Keto-β-Phenyl-γ-Biphenylpropen. Sm. oberh. 320° C21H14OS (B. **21**, 1340). — **III**, 263.

C 77,3 — H 4,3 — O 9,8 — N 8,6 — M. G. 326. $C_{21}H_{14}O_2N_2$

1) 2,3-Diphenyl-1,4-Benzdiazin-6-Carbonsäure. Sm. 288°. Ba + 3H₂O (B. 23, 3627). — III, 286.

C 71.2 - H 4.0 - O 9.0 - N 15.8 - M. G. 354. $C_{21}H_{14}O_{2}N_{4}$

1) Phenylimid d. 2-Phenylimido-2,3-Dihydrobenzimidazol-1,3-Dicarbonsäure. Sm. 266° (B. 24, 2504). — IV, 567.

1) 2,2-Dinaphtylester d. Thiokohlensäure. Sm. 212º (B. 27, 3411). C21H14O2S

C 73.7 - H 4.1 - O 14.0 - N 8.2 - M. G. 342. $C_{21}H_{14}O_3N_2$

- 1) β -Phtalyl- α -Benzoyl- α -Phenylhydrazin. Sm. 193° (J. pr. [2] 35, 273). - IV, 710.
- 2) 1,4-Diketo-3-Benzoyl-2-Phenyl-1,2,3,4-Tetrahydro-2, 3-Benzdiazin. Sm. 122° (J. pr. [2] 35, 288). — IV, 711.
- 3) Benzoat d. 5-Phenyl-3-[2-Oxyphenyl]-1, 2, 4-Oxdiazol. Sm. 120° (B. **22**, 2783). — **II**, 1503.
- 4) Benzoat d. 5-Phenyl-3-[3-Oxyphenyl]-1,2,4-Oxdiazol. Sm. 146° (B. **24**, 831). — **II**, *1519*.
- 5) 4-Benzoat d. 5-Phenyl-3-[4-Oxyphenyl]-1,2,4-Oxdiazol. Sm. 140° (B. **24**, 837). — **II**, 1532.
- 6) 2-Oxy-1,1'-Azonaphtalin-3-Carbonsäure. Zers. bei 1820 (B. 28, 3090). - IV, 1473.
- 7) 4-Oxy-1,1'-Azonaphtalin-3-Carbonsäure? Sm. 1980 u. Zers. (B. 23,
- 1910). IV, 1473. 8) Phenylamid d. 3-[1,2-Phtalyl]amidobenzol-1-Carbonsäure. Sm. 207 bis 209° (B. 16, 1322). — II, 1813.
- 9) Verbindung (aus d. Verb. $C_{21}H_{18}O_5N_2$). Sm. 230° (A. 242, 252). —
- IV, $7\overline{19}$. $C_{21}H_{14}O_3Cl_4$ 1) Di[3,4-Dichlor-3,4-Dihydro-l-Naphtylester] d. Kohlensäure. Sm. 200° u. Zers. (B. 28, 3051).

 $C_{21}H_{14}O_4N_2$ C 70.4 - H 3.9 - O 17.9 - N 7.8 - M. G. 358.

1) Dinitrophtalacen. Sm. 270—280° u. Zers. (B. 17, 1398). — II, 297.

2) Di[?-Nitroso-2-Oxynaphtyl]methan. Sm. 106° u. Zers. (B. 25, 3482). - II, 1007.

- 3) Phenylphtalanilurethan. Sm. 160-165° (J. pr. [2] 41, 329). II, 1809.
- 4) Phenylhydrazonpyrensäure + 2 H₂O. Zers. bei 70-100°. Ba (A. 240, 176). **— IV**, 719.

C 65,3 — H 3,6 - $C_{21}H_{14}O_4N_4$ - O 16,6 - N 14,5 -- M. G. 386.

- 1) P-Dinitro-2, 4, 5-Triphenylimidazol (Dinitrolophin). Sm. 100° (A. 112,
- 161). III, 27.

 2) Benzoat d. 3-Oxy-5-Phenyl-1-[3-Nitrophenyl]-1,2,4-Triazol. Sm. 168° (Soc. 73, 373). — IV, 1157.
- 3) Benzoat d. 3-Oxy-5-[3-Nitrophenyl]-1-Phenyl-1, 2, 4-Triazol. Sm. 148° (Soc. 71, 211). — IV, 1158.
- 4) Benzoat d. 3-Oxy-5-[4-Nitrophenyl]-1-Phenyl-1,2,4-Triazol. Sm. 153° (Soc. 71, 207). — IV, 1158.

 $C_{21}H_{14}O_6Br_6$ 1) Verbindung (aus Aurin) (M. 3, 470). — II, 1120. $\mathbf{C}_{21}\mathbf{H}_{14}\mathbf{O}_{7}\mathbf{N}_{4}$ C 58,1 — H 3,2 — O 25,8 — N 12,9 — M. G. 434.

1) Benzoëdisazooxybenzoësäure. Ag₄ (J. pr. [2] 1, 107; B. 9, 629). — IV, 1471. C 59,7 — H 3,3 — O 30,3 — N 6,6 — M. G. 422.

 $C_{21}H_{14}O_8N_2$

- 1) Monomethyläther d. Dinitrophenolphtalein. Sm. 90-92° (G. 26
- $C_{21}H_{14}O_{10}N_3$ 1) Säure (aus 2,4-Dinitrophenylacetessigsäureäthylester) (A. **220**, 141). II, 1659.

 $\mathbf{C}_{21}\mathbf{H}_{14}\mathbf{O}_{10}\mathbf{Br}_{6}\mathbf{I}$) Hexabromfichtengerbsäure (B. 17, 1127). — III, 681.

C₂₁H₁₄N₇Cl₃ 1) Diazohydrocyanrosanilinchlorid (A. 194, 280). — IV, 1552. $\mathbf{C}_{21}\mathbf{H}_{15}\mathbf{ON}$

C 84,8 — H 5,0 — O 5,4 — N 4,7 — M. G. 297.
1) 9-Keto-10-[α-Amidobenzyliden]-9,10-Dihydroanthracen. Sm. 150 bis 152° (B. 23, 2529). — III, 245. 2) Benzyläther d. Anhydro- β -Oximido- α -Keto- $\alpha\beta$ -Diphenyläthan.

Sm. 114° (B. 22, 2007). — III, 289.

- $\mathbf{C}_{21}\mathbf{H}_{15}\mathbf{ON}$
- 3) Triphenyloxazol (Azobenzil; Benzilam). Sm. 115° (A. 34, 190; 228, 350; B. 15, 2413; 16, 891, 2638; J. pr. [1] 35, 461; [2] 41, 331; Soc. 49, 829; **63**, 474). — IV, 474. 4) Oximidophtalacen. Sm. 265—266° (B. 17, 1398). — II, 297.
- 5) 1-Naphtylamid d. Naphtalin-1-Carbonsäure. Sm. 244° (B. 1, 42). **— II**, 1445.
- 6) 1-Naphtylamid d. Naphtalin-2-Carbonsäure. Sm. 157° (A. 180, 325). - II, 1454.

 $\mathbf{C}_{21}\mathbf{H}_{15}\mathbf{ON}_{2}$ C21H15ON

- Verbindung (+ AlCl₄ aus Benzonitril)? (B. 25, 2263). II, 1212.
 C 77,5 H 4,6 O 4,9 N 12,9 M. G. 325.
- 1) ?-Nitroso-1, 3, 5-Triphenylpyrazol. Sm. 1830 (B. 21, 1208). IV, 1028.
- 2) 5-Phenylamido-7-Phenylimido-8-Keto-7,8-Dihydrochinolin. Sm.
- 222°. Acetat, Pikrat (B. 21, 2986). IV, 278.
 3) 3-Furanyl-2-Phenyl-2, 3-Dihydro-1, 2, 4-Naphtisotriazin.
- HCl, (2 HCl, PtCl₄) (B. 24, 1007). IV, 1394.

 4) Verbindung (aus Benzenylamidin u. Salicylsäureäthylester). Sm. 246° (B. 23, 2937, 3824). IV, 848.

 1) Verbindung (aus Benzyloxanthranol). Sm. 95—102° (B. 23, 2527). —

C21 H15 OC1

III, 245. C 80.5 - H 4.8 - O 10.2 - N 4.5 - M. G. 313.

 $C_{21}H_{15}O_{2}N$

- 1) 2-[1,2-Phtalyl]amidodiphenylmethan. Sm. 139° (B. 27, 2786). II, 1806.
- 2) Benzyläther d. 9-Oximido-10-Keto-9,10-Dihydroanthracen. Sm. 820 (Soc. 69, 73). — III, 410.
- 3) 2-Phenylamido-1, 3-Diketo-2-Phenyl-2, 3-Dihydroinden. Sm. 210 bis
- 211° (B. 26, 2580). III, 302. 4) Acetat d. 3-Oxy-5-Phenylakridin. Sm. 173—174° (B. 18, 697). IV, 468. C 73,9 — H 4,4 — O 9,4 — N 12,3 — M. G. 341.

 $C_{21}H_{15}O_2N_3$

- 1) Oxalyltriphenylguanidin. Sm. bei 230° (B. 3, 764; J. pr. [2] 32, 11). **— II**, 351.
- 2) 5-Phenyl-3-[3-Benzoylamidophenyl]-1,2,4-Oxdiazol. Sm. 213° (B. 18, 2474). — II, 1258.

3) 2-Benzoyl-3-Benzoylamidoindazol. Sm. 182° (A. 305, 349).

- 4) 2,3-Dibenzoyl-2,3-Dihydro-1,2,3-Benztriazin. Sm. 1820 (B. 29, 627). - IV, 1149.
- 5) 3,4-Diphenyl-1,2,5-Triazol-1-[Phenyl-4'-Carbonsäure]. Sm. 258° (B. **27**, 1137). — III, 288.
- 6) Benzoat d. 3-Oxy-1,5-Diphenyl-1,2,4-Triazol. Sm. 134° (Soc. 67, 1066). — IV, 1157. C 76,6 — H 4,6 — O 14,6 — N 4,2 — M. G. 329.

 $C_{21}H_{15}O_{3}N$

- Tribenzoylamin (Tribenzamid). Sm. 202° (207—208°) (B. 23, 3041; 25, 3121; 28, 435; Am. 20, 73). II, 1171.
 Benzoat d. β-Oximido-α-Keto-αβ-Diphenyläthan (B. d. Benziloxim). Sm. 137° (A. 296, 284).
- 3) Benzoat d. 5-Oxy-3-Methyl-1-Phenylbenzoxazol. Sm. 1330 (B. 30,
- 4) 3-[4-Methoxylphenyl]- β -Naphtochinolin-l-Carbonsäure. Sm. 283° (B. 27, 2029). - IV, 472. $\mathbf{\hat{C}}$ 70,6 — $\mathbf{\hat{H}}$ 4,2 — $\mathbf{\hat{O}}$ 13,4 — $\mathbf{\hat{N}}$ 11,8 — $\mathbf{\hat{M}}$. G. 357.

 $C_{21}H_{15}O_3N_3$

- 1) Triphenyleyanurat. Sm. 224° (B. 3, 275; 18, 765; 18 [2] 499; 19, 2083; 20, 2240; 28, 2472; A. 287, 319). II, 375.
 2) Triphenylisocyanurat. Sm. 274—275° (B. 3, 268; 18, 765, 3225; 28,
- 247 $\overline{2}$). II, 376. C 73,9 H 4,3 O 18,6 N 3,1 M. G. 345.

 $C_{21}H_{15}O_4N$

- Sm. 210° (A. 286, 1) 4-[3-Nitrobenzoyl]-1-[4-Methylbenzoyl] benzol. 320). — III, 306.
- 2) 4-[4-Nitrobenzoyl]-1-[4-Methylbenzoyl]benzol. Sm. 236° (A. 286,332). — III, *306*.
- 3) Dibenzoat d. 2-Oxybenzaldoxim. Sm. 126° (B. 26, 2625). III, 77. 4) 3-[4-Oxy-3-Methoxylphenyl]-β-Naphtochinolin-1-Carbonsaure
- (Vanillyl-β-Naphtocinchoninsäure). Sm. 288° (B. 27, 2029). IV, 472. 5) α-Benzoat d. Benzoylbenzhydroxamsäure (α-Tribenzhydroxylamin). Sm. 100° (A. 175, 282; 178, 237; 186, 104; 281, 270). — II, 1208.

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6) β-Benzoat d. Benzoylbenzhydroxamsäure (β-Tribenzhydroxylamin). Co. H. O. N Sm. 141—142° (A. 161, 360; 175, 282; 178, 225; 186, 106; 281, 270). - II, 1208.

7) γ-Benzoat d. Benzoylbenzhydroxamsäure (γ-Tribenzhydroxylamin).
 Sm. 112° (A. 178, 240; 186, 33, 107; 281, 270). — Π, 1208.

C 69.8 - H 4.1 - O 22.2 - N 3.9 - M. G. 361.Co, H, O, N

1) Diacetat d. 1,2-Dioxy-3,4-Naphtakridon. Sm. 280° (B. 27, 3075). — III, 395.

2) Benzoat d. P-Nitro-β-Oxy-α-Keto-αβ-Diphenyläthan (Nitrobenzoïnbenzoat). Sm. 137° (A. 104, 119). — III, 223.
3) Dibenzoat d. 2-Nitroso-3,5-Dioxy-1-Methylbenzol. Sm. 157—158°

(M. 18, 169).

C 58.2 - H 3.4 - O 22.2 - N 16.2 - M. G. 433.C21 H15 O6 N5

1) Trinitroamarin. HCl (A. 79, 276). — III, 23. 2) m-Trinitrohydrobenzamid (A. 79, 272). - III, 21.

C₂₁H₁₅O₆As 1) Triphenylarsin-4¹,4²,4³-Tricarbonsäure. Na₃ + H₂O, Ag₃ (A. 208, 30). — IV, 1693.

2) Arsenigbenzolcarbonsäureanhydrid (B. 22, 974). — II, 1157.

C 59.8 - H 3.6 - O 26.6 - N 10.0 - M. G. 421. $C_{21}H_{15}O_7N_3$ 1) Methanthrenpikrat. Sm. 117° (*J. pr.* [2] 9, 419). — II, 273. 2) Idrylhydrürpikrat. Sm. 186° (*M.* 1, 225). — IF, 279.

C 61.6 - H 3.7 - O 31.3 - N 3.4 - M. G. 409.Co. H. O. N

1) Nitrodioxytriphenylmethandicarbonsäure. o-Nitroderivat Sm. 214 bis 216°; m-Nitroderivat Zers. bei 200°; p-Nitroderivat Zers. oberh. 200° (G. 21 [2] 348). — II, 2038.

1) Thio-β-Dinaphtylmethylamin. Sm. 284—285° u. Zers. (B. 23, 2459). Co. H. NS - II, 869.

2) 2,4,5-Triphenylthiazol. Sm. 86-87° (A. 259, 245). - IV, 474.

C₂₁H₁₅N₂Br 1) ?-Brom-1, 3, 5-Triphenylpyrazol. Sm. 142° (B. 21, 1208). — IV, 1028. 2) 8-Brom - 6-Methyl-2, 3-Diphenyl-1, 4-Benzdiazin. Sm. 153-154° (B. 23, 1050). — IV, 1081.

C₂₁H₁₅N₂Br₃ 1) 4,4,5-Tribrom-1,3,5-Triphenyl-4,5-Dihydropyrazol. Sm. 179° (B.

21, 1210). — IV, 1017.

1) Jodmethylat d. s-αβ-Dinaphtazin (B. 26, 185). — IV, 1084. $C_{21}H_{15}N_{2}J$

2) Jodmethylat d. isom. Dinaphtazin (B. 26, 184). — IV, 1084. 1) Triphenylthiocyanurat. Sm. 97° (J. pr. [2] 33, 120). — II, 792. C21 H15 N2 S2 $C_{21}H_{15}Br_3S_3$ 1) α -Trithio-2-Brombenzaldehyd. Sm. 75° (B. 29, 153). — III, 19.

2) β -Trithio-2-Brombenzaldehyd. Sm. 155°. $+ C_6H_6$ (B. 29, 154). III, 19.

3) a-Trithio-4-Brombenzaldehyd. Sm. 174° (B. 29, 154). — III, 19.

4) β -Trithio-4-Brombenzaldehyd. Sm. 203°. + C_6H_6 (B. 29, 155). -III, 19.

 $\mathbf{C}_{21}\mathbf{H}_{16}\mathbf{ON}_{2}$

1203). — II, 618.

3) uns-2,2-Dinaphtylharnstoff. Sm. 192-193° (B. 23, 428). - II, 618. 4) 3-Phenylhydrazon-1-Keto-2-Phenyl-2, 3-Dihydroinden. Sm. 170 bis 174° (B. **26**, 2578). — IV, 786.

5) Phenylhydrazon d. 1-Benzoylbenzfuran. Sm. 128-129 (G. 25 [2] 288). — IV, 788.

6) Benzilbenzenylamidin. Sm. 232° (PINNER, Imidoäther 176). — IV, 849. 7) 2-[4-Oxyphenyl]-4,5-Diphenylimidazol (p-Oxylophin). Sm. 254 bis 255° (B. **15**, 1269). — III, 27.

8) 2-Keto-1,4,5-Triphenyl-2,3-Dihydroimidazol. Sm. noch nicht bei 290° (A. **284**, 34). — III, 223

9) 1-Keto-2-Phenyl-4-Benzyl-1,2-Dihydro-2,3-Benzdiazin? Sm. 171 bis 172° (B. **26**, 1376). — II, 1710.

10) Phenyläther d. 4-Oxy-1-Benzyl-2, 3-Benzdiazin. Sm. 155° (B. 29, 1436). **— IV**, 1027.

11) Benzoylisobenzalazin. Sm. 150°; Sd. 300°₈₀ (J. pr. [2] 44, 178). — III, 287.

- $C_{21}H_{16}ON_4$ C 74,1 - H 4,7 - O 4,7 - N 16,5 - M. G. 340.
 - 1) 5-Keto-4-Phenylhydrazon-1, 3-Diphenyl-4, 5-Dihydropyrazol. Sm. 169° (B. **20**, 2547; **21**, 2124; **27**, 784). — IV, 1472, 1490.
- C 68,5 H 4,3 O 4,3 N 22,8 M. G. 368. $\mathbf{C}_{21}\mathbf{H}_{16}\mathbf{ON}_{6}$
 - 1) 5-Keto-3-Phenylazo-4-Phenylhydrazon-1-Phenyl-4,5-Dihydropyrazol. Sm. 216-2170 (B. 27, 152). - IV, 1488.
- $\mathbf{C}_{21}\mathbf{H}_{18}\mathbf{OBr}_{2}$ 1) $\beta\gamma$ -Dibrom- α -Keto- $\alpha\beta\gamma$ -Triphenylpropan. Sm. 135° (B. 26, 450). III, 259.
- $C_{21}H_{16}O_2N_2$ C 76.8 - H 4.9 - O 9.7 - N 8.5 - M. G. 328.
 - 1) β -Phenylhydrazon- $\alpha \gamma$ -Diketo- $\alpha \gamma$ -Diphenylpropan. Sm. 135° (B. 23, 3382). — IV, 788. 2) Phenylazodibenzoylmethan. Sm. 153—154° (B. 21, 1703). — IV, 1480.

 - 3) Dianiläskuletin. (2HCl, PtCl₄) (B. 4, 473; 13, 1953). III, 568.
 - 4) 3,4-Di[Benzylidenamido]benzol-1-Carbonsäure. Sm. 253,5-254,5°. Ca, Ag (B. 11, 595, 1656). — IV, 619. C 70,8 — H 4,5 — O 9,0 — N 15,7 — M. G. 356.
- $C_{21}H_{16}O_2N_4$
 - 1) Carbobis-4,4'-[3-Methyl-1-Phenyl-5-Pyrazolon]. Sm. 235° (J. pr. [2] **54**, 190, 193). — **IV**, 1274.
 - 2) Verbindung (aus 1,3,5-Triphenylmelamin). Sm. 272°. (2HCl, PtCl₄) (B. 18, 3225). — II, 451.
- C 73.3 H 4.6 O 14.0 N 8.1 M. G. 344. $C_{21}H_{16}O_3N_2$
 - 1) 2-[Phenylbenzoylmethylen]hydrazidobenzol 1 Carbonsäure. 212° (B. **27**, 1139). — III, 288.
 - 2) 4-[Phenylbenzoylmethylen]hydrazidobenzol-1-Carbonsäure.
 - 212° u. Zers. (B. **27**, 1133). III, 288. 3) Phenylhydrazinderivat d. Benzhydroldicarbonsäure (A. 242, 241).
 - · IV, 719.
 - 4) Nitril d. Diphenylketipinmethyläthersäure. Sm. 229-231° (A. 282, 55). — II, 2032.
 - 5) Phenylamidoformiat d. β -Oximido- α -Keto- $\alpha\beta$ -Diphenyläthan (P. d.
 - α-Benziloxim). Sm. 144° (B. 22, 3111). III, 289.
 6) Phenylamidoformiat d. isom. β-Oximido-α-Keto-αβ-Diphenyläthan. Sm. 143° (B. 22, 3110). III, 290.
- $C_{21}H_{16}O_3N_4$
 - C 67,7 H 4,3 O 12,9 N 15,1 M. G. 372. 1) Benzylidenhydrazid d. 5-Nitro-2-Benzylidenamidobenzol-1-Carbonsäure. Sm. 224—225° (J. pr. [2] 53, 223).
- $\mathbf{C}_{21}\mathbf{H}_{16}\mathbf{O}_{3}\mathbf{Br}_{2}$ 1) Acetat d. $\alpha\beta$ -Dibrom- γ -Keto- γ -[1-Oxy-2-Naphtyl]- α -Phenylpropan.
- Sm. 186—187° (B. 31, 706).
- Benzylanthracensulfonsäure. Ba (B. 23, 1571). II, 297.
 C 70,0 H 4,4 O 17,8 N 7,8 M. G. 360. $C_{21}H_{16}O_3S$ $C_{21}H_{16}O_4N_2$
 - 1) α -Benzoyl- β -Phenylhydrazid d. Benzol-1,2-Dicarbonsäure. Sm. 172° (J. pr. [2] 35, 289). - IV, 710.
 - 2) Benzoat d. 4-Benzoxylbenzenylamidoxim. Sm. 185° (B. 24, 836). —
 - 3) Dibenzoat d. 2-Oxybenzenylamidoxim. Sm. 127° (B. 22, 2782). II, 1503.
 - 4) Dibenzoat d. 3-Oxybenzenylamidoxim. Sm. 152,5° (B. 24, 829). II, 1519.
 - 5) Verbindung (aus Phenylisocyanat u. 2-Benzoylamidobenzol-1-Carbonsäure). Sm. 165° (J. pr. [2] 55, 135).
- $\mathbf{C}_{21}\mathbf{H}_{16}\mathbf{O}_4\mathbf{N}_4$
- C 64,9 H 4,1 O 16,5 N 14,4 M. G. 388. 1) **Dinitroamarin**. Zers. bei 120°. HCl, $(2 \text{HCl}, \text{PtCl}_4 + 2 \text{H}_2\text{O})$, HNO_3 (B. 18, 1672). III, 22.
 - 2) 2-[2-Nitrobenzyliden] amido-1-[2-Nitrobenzyliden] amidomethylbenzol. Sm. $125-128^{\circ}$ (J. pr. [2] 53, 424). — IV, 638.
 - 3) Formazylbenzol-II-3-III-2-Dicarbonsäure. Sm. 225° (B. 31, 1755).
 - IV, 1261. 4) Formazylbenzol-II-3-III-3-Dicarbonsäure. Sm. 214° (B. 31, 1755).
 - **IV**, 1261. 5) Formazylbenzol-II-3-III-4-Dicarbonsäure. Sm. 218° (B. 31, 1755).
 - **IV**, 1261.
- $C_{21}H_{16}O_4Br_2$ 1) 1-Benzoat-2-[5-Brom-2-Oxybenzyl] äther d. 5-Brom-2-Oxy-1-Oxymethylbenzol (Benzoat d. Dibromsaliretin). Sm. 75° (C. 1896 [2] 738).

C 67.0 - H 4.3 - O 21.3 - N 7.4 - M. G. 376.Co, H, O, No

1) ε-Keto-α ι-Di[2-Nitrophenyl]-α γ ζ θ-Nonatetraën. Sm. 208.50 (B 18 2328). — III, 259.

Co, HI, NoS

- 1) s-1,1-Dinaphtylthioharnstoff. Sm. 207,5° (203°) (A. 64, 371; B. 12. 1860: **21**, 963). — **II**, 610.
- 2) s-2,2-Dinaphtylthioharnstoff. Sm. 203° (193°) (B. 14, 61; 17, 3045; 21, 964). — II, 619.
- 3) 2-Merkapto-1,4,5-Triphenylimidazol. Sm. noch nicht hei 2900 K (A. **284**, 29). — III. 224

 $C_{21}H_{16}Br_2S_2$ 1) Di[4-Bromphenyläther] d. $\gamma\gamma$ -Dimerkapto- α -Phenylpropen. Sm. $105-107^{\circ}$ u. Zers. (B. 18, 885). — III, 59. $C_{21}H_{17}ON$ C 84,2 — H 5,7 — O 5,3 — N 4,7 — M. G. 299.

- 1) γ -Oximido $\alpha\beta\gamma$ -Triphenylpropen. Sm. 208—209° (B. 26, 443). ÍII, 262.
- 2) β -[2-Methylphenyl]imido- α -Keto- $\alpha\beta$ -Diphenyläthan (Tolilbenzil). Sm. 104° (M. 9, 688; 16, 353). — III, 284.
- 3) β -[4-Methylphenyl]imido- α -Keto- $\alpha\beta$ -Diphenyläthan. Sm. 116—117° M. 9, 690). — III, 284.
- 4) 10-Acetyl-5-Phenyl-5,10-Dihydroakridin. Sm. 128° (B. 16, 1815). IV, 465.

5) Amid d. Triphenylakrylsäure. Sm. 223° (B. 28, 1799, 2785).

Diphenylamid d. β-Phenylakrylsäure. Sm. 152-153° (154°) (B. 20, 1554; C. 1899 [1] 730). — II, 1407.
 C 77,0 — H 5,2 — O 4,9 — N 12,9 — M. G. 327.

C21 H17 ON

1) Methyläther d. 4-Carboxylphenylimido-4-Oxydiphenylmethan. Sm. 216° (B. **24**, 3523). — III, 194. 2) Nitrosoamarin. Zers. bei 149-150° (B. 8, 933). - III. 22.

- 3) 6-Benzoylamido-5-Methyl-2-Phenylbenzimidazol + H₂O. Sm. 195 bis 218°. HCl (B. 14, 2656). — IV, 1183.
- 4) 3-[3-Benzoylamidophenyl]-3,4-Dihydro-1,3-Benzdiazin. Sm. 820 (J. pr. [2] 48, 566). — IV, 873. 5) 2-Methylphenylamido-4-Keto-3-Phenyl-3,4-Dihydro-1,3-Benz-
- diazin. Sm. 123° (Am. 21, 162). C21H17ON5

- diazin. Sm. 123° (Am. 21, 162). C 71,0 H 4,8 O 4,5 N 19,7 M. G. 355. 1) 1,3,4-Triphenylammelin. Sm. 265° (B. 18, 3230, 3231). II, 451. 2) 3,4,6-Triphenylammelin. Sm. 275° (B. 20, 1069). II, 451. 3) Verbindung (aus 1,3,5-Triphenylmelamin) (B. 18, 3225). II, 451. 1) γ -Chlor- α -Keto- $\alpha\beta\gamma$ -Triphenylpropan. Sm. 180—182° (B. 26, 447).
- C21H17OCl - III, 259. 2) isom. γ -Chlor- α -Keto- $\alpha\beta\gamma$ -Triphenylpropan. Sm. 165—167° (B. 26,
 - 449). III, 259. 3) α -Keto- β -[4-Chlorphenyl]- $\alpha\gamma$ -Diphenylpropan. Sm. 138° (B. 25, 2241). - III, 259.

C 80.0' - H 5.4 - O 20.2 - N 4.4 - M. G. 315. $C_{21}H_{17}O_{2}N$

- 1) Benzilimid. Sm. 137-139° (J. pr. [1] 35, 461; B. 16, 891; A. 228, 348). - III, 283.
- 2) Phenylbenzoylamidobenzoylmethan. Sm. 144-145° (B. 15, 2471). **— III**, 127.
- 3) Benzyläther d. β -Oximido- α -Keto- $\alpha\beta$ -Diphenyläthan (B. d. α -Benziloxim). Sm. 94° (B. 22, 2000). — III, 289.
- 4) Benzyläther d. isom. β -Oximido- α -Keto- $\alpha\beta$ -Diphenyläthan. Sm. 1140 (B. **22**, 2000). — III, 290.
- 5) Benzyläther d. isom. β -Oximido- α -Keto- $\alpha\beta$ -Diphenyläthan. Sm. 1370 (B. 22, 2008). III, 290.
- 6) Aethylester d. Chrysylamidoameisensäure (Chrysylurethan). Sm. 214° (B. **24**, 950). — **II**, 643.
- 7) Benzylimid d. Benzolcarbonsäure. Sm. 107-108° (B. 26, 2275). -II, 1171.
- 1) Xanthorocellin = $(C_{21}H_{17}O_2N_2)_x$. Sm. 185° (A. 185, 17). II, 1753. C 73,4 H 5,0 O 9,3 N 12,2 M. G. 343. C21 H17 O2 N2 $C_{21}H_{17}O_{2}N_{3}$

1) P-Nitro-1, 3, 5-Triphenyl-4, 5-Dihydropyrazol. Sm. 175—176° (B. 21, 1212). — IV, 1017.

Methyläther d. 6-Phenylazo-5-Oxy-3-Methyl-1-Phenylbenzoxazol. Sm. 149—150° (M. 19, 506). — IV, 1448.

C₂₁H₁₇O₂N₃ 3) Nitroamarin. HNO₃ (B. 18, 1677). — III, 22. 4) Aethylester d. α -Cyan- $\beta\beta'$ -Di[2-Cyanphenyl]isobuttersäure. Sm. 122—123° (B. **25**, 3026). — II, 1470. C 76,1 — H 5,1 — O 14,5 — N 4,2 — M. G. 331.

 $C_{21}H_{17}O_{3}N$

1) ε -Keto- α -[2-Nitrophenyl]- ι -Phenyl- $\alpha \gamma \zeta \vartheta$ -Nonatetraën. Sm. 136,5° (B. 18, 2329). — III, 259. 2) ε-Keto-α-[4-Nitrophenyl]-ι-Phenyl-αγζθ-Nonatetraën. Sm. 216—218° (A. 253, 355). — III, 259.

3) α -Keto- γ -[2-Nitrophenyl]- $\alpha\beta$ -Diphenylpropan. Sm. 100—102° (B. 23, 2071). — III, 259.

4) α -Kéto- γ -[4-Nitrophenyl]- $\alpha\beta$ -Diphenylpropan. Sm. 110—112° (B. 23, 2071). — III, 259.

5) γ -Phenylimido- $\beta\beta$ -Dioxy- α -Keto- $\alpha\gamma$ -Diphenylpropan. Sm. 99—100° (B. **23**, 3386). — III, *316*.

6) 4-Benzoylamidophenyläther d. Oxymethylphenylketon. Sm. 1660

- (C. 1897 [1] 411).
 7) Benzoat d. 4-Benzoylamido-2-Oxy-1-Methylbenzol. Sm. 194° (B. **26**, 2264). — II, 1179.
- 8) Benzoat d. 5-Benzoylamido-2-Oxy-1-Methylbenzol. Sm. 1940 (B. **27**, 194, 1930). — II, 1179.

9) Benzoat d. 6-Benzoylamido-3-Oxy-1-Methylbenzol. Sm. 161° (B. **27**, 195, 1930).

10) Benzoat d. 3-Benzoylamido-4-Oxy-1-Methylbenzol. Sm. 190-1910 (B. **31**, 2695).

11) Benzoat d. Benzoylbenzylhydroxylamin. Sm. 96-97° (B. 26, 2283, 2629, 2631). — II, 1209. 12) **2-Benzoat d. N-Benzyl-2-Oxybenzaldoxim.** Sm. 150° (B. **26**, 2628).

- III, 77.

13) 2-Benzoat d. 2-Oxybenzaldoxim-1-Benzyläther. Sm. 47° (B. 26, 2626). - III, 77.

14) Anthracenbenzylnitrat. Sm. 138° (Soc. 61, 871). — II, 261.

15) Hydrocyanrosolsäure (A. 179, 199). — II, 1122.
16) Benzoylphenylmethylester d. Phenylamidoameisensäure (Phenylcarbamat d. Benzoïn). Sm. 163° (J. pr. [2] 32, 280). — III, 223.

17) Benzylamid d. 2-Benzoxylbenzol-1-Carbonsäure. Sm. 1140 (B. 26, 2627). — II, 1500. C 70,2 — H 4,7 — O 13,4 — N 11,7 — M. G. 359.

 $C_{21}H_{17}O_3N_3$

1) β -[2-Nitrobenzyliden]hydrazon- α -Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 1950 (J. pr. [2] 52, 130). - III, 225.

2) β -[3-Nitrobenzyliden] hydrazon- α -Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 1920 (J. pr. [2] **52**, 130). — III, 225.

3) 2 - $[\beta$ - Oximido - $\alpha\beta$ - Diphenyläthyliden] hydrazidobenzol - 1 - Carbonsäure. Sm. 226° (B. 27, 1139). — III, 290.

4) 4 - [β - Oximido - αβ - Diphenyläthyliden] hydrazidobenzol - 1 - Carbonsäure. Sm. 249 - 250° (B. 27, 1134). — III, 291.
5) Di [Phenylamid] d. Benzol - 1 - Carbonsäure - 3 - Amidoketocarbonsäure.

 $C_{21}H_{17}O_4N$

 $C_{21}H_{17}O_4N_3$

Sm. 290—295° (A. 232, 137). — II, 1265. C 72,6 — H 4,9 — O 18,4 — N 4,0 — M. G. 347. 1) Chelerythrin. + C₂H₆O (Sm. 203°). HCl + 5H₂O, (2HCl, PtCl₄), (HCl, AuCl₃), HJ (A. 29, 120; 31, 250; 43, 233; J. 1855, 566; Bl. [3] 15, 541; C. 1895 [2] 305). — III, 804.

2) Phenyl-3-Methoxylphenylmonamid d. Benzol-1,2-Dicarbonsäure. Sm. $95-98^{\circ}$ (B. 31, 1332).

3) Phenyl-4-Methoxylphenylmonamid d. Benzol-1, 2-Dicarbonsäure. Sm. 90—92°. Ag (B. 31, 1330). C 67,2 — H 4,5 — O 17,1 — N 11,2 — M. G. 375.

- 1) ?-Nitro-2,4-Di[Benzoylamido]-1-Methylbenzol. Sm. 245° (B. 14, 2656). **IV**, 606.
- 2) ?-Nitro-3, 4-Di[Benzoylamido]-1-Methylbenzol. Sm. 246° (B. 25, 1994). - IV, 617.

Verbindung (aus Phenylcarbonimid u. N-Benzyl-syn-3-Nitrobenzaldoxim).
 Sm. 158—159° (B. 24, 2816). — III, 48.
 Verbindung (aus d. 2-Methyläther d. 2-Oxybenzaldoxim u. Phenylcarbonimid).
 Sm. 115° (B. 22, 3102). — III, 77.

 $C_{21}H_{18}ON_4$

 $\mathbf{C}_{21}\mathbf{H}_{18}\mathbf{OJ}_{4}$ $\mathbf{C}_{21}\mathbf{H}_{18}\mathbf{O}_{2}\mathbf{N}_{2}$

C21 H17 O4 N5 C 62.5 - H 4.2 - O 15.9 - N 17.4 - M. G. 403.

1) α-Phenylamidoformylamido-α-Phenylamidoformylimido-α-[3-Nitrophenyl] methan (3-Nitrobenzenyldiphenyldiurcid). Sm. 173° (B. 28, 484). — IV, 846. C 64,5 — H 4,3 — O 20,5 — N 10,7 — M. G. 391.

C. H. O. N.

1) β -[?-Dinitro-4-Methylphenyl]amido- α -Keto- $\alpha\beta$ -Diphenyläthan. Sm. 195° (J. pr. [2] **34**, 20). — III, 221.

2) Di[2-Nitro-?-Methylphenyl]amid d. Benzolcarbonsäure (B. 15, 831). - II. 1165.

 $C_{21}H_{17}O_7Cl_3$ 1) Dibenzoat d. α -Arabinochloral. Sm. 138° (C. 1895 [1] 478). 2) Dibenzoat d. β -Arabinochloral. Sm. 138° (C. 1895 [1] 478). $C_{21}H_{17}O_8Br_3$ 1) Tribromnarceonsäure. Sm. 231—232° (A. 286, 255). — II, 2082. $C_{21}H_{17}O_8As$ 1) Triphenyloxyarsoniumoxydhydrat-4', 4^2 , 4^3 -Tricarbonsäure(Tribenz-

arsinsäure). K_8 , $Ca_3 + xH_2O$ (A. 208, 28). — IV, 1693. $C_0, H_{17}NBr_4$ 1) 2,6-Di[$\alpha\beta$ -Dibrom- β -Phenyläthyl]pyridin. Sm. 183° (B. 25, 2404).

- IV, 457. 1) Chlorhydrobenzamid? Sd. 186° (A. 111, 146; Bl. [3] 19, 10). — III, 21, Co, H, N, Cl

23, 1673). — II, *398*. C 80,3 — H 5,7 — O 5,1 — N 8,9 — M. G. 314.

 $\mathbf{C}_{21}\mathbf{H}_{18}\mathbf{ON}_{2}$

1) α -Oximido- β -[2-Methylphenyl]imido- $\alpha\beta$ -Diphenyläthan. Sm. 178 bis 180° (M. 16, 354). — III, 284.

2) α-Oximido-β-[4-Methylphenyl]imido-αβ-Diphenyläthan. Sm. 199 bis 200° (B. **25**, 2598). — III, 290.

3) α-Benzylimido-α-Benzoylamidophenylmethan (Phenylbenzoylbenzamidin). Sm. 147° (A. 296, 287, 293). — IV, 848.
4) β-Cinnamyl-αα-Diphenylhydrazin. Sm. 205° (B. 25, 1553). — IV, 671.

5) β -Benzylidenhydrazon- α -Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 133° (J. pr. [2]

52, 129). — III, 225. 6) γ-Phenylhydrazon-γ-Phenyl-α-[2-Oxyphenyl] propen. Sm. 136° (B.

29, 378). — IV, 778. 7) β -Methylphenylhydrazon- α -Keto- $\alpha\beta$ -Diphenyläthan. Sm. 55—56°

(A. 253, 16). — IV, 785.

8) α-Benzoylphenylhydrazon-α-Phenyläthan. Sm. 124° (B. 20, 1718). - IV, 771.

9) α -[4-Benzoylphenyl]hydrazon- α -Phenyläthan. Sm. 140—141° (Soc. 55, 615). — III, 187.

10) 1-Phenylhydrazon-2-Oxy-2-Phenyl-2,3-Dihydroinden? Sm. 1600 (B. **25**, 2099). — IV, 778.

11) 2-Phenylamido-4,5-Diphenyl-4,5-Dihydrooxazol. Sm. 162—163°.
 2 + (2HCl, PtCl₄ + 3H₂O) (B. 28, 1902).
 12) Methyloxydhydrat d. 2,3-Diphenyl-1,4-Benzdiazin. Zers. bei 70°.

Nitrat + 3 H₂O (B. 25, 1632). — IV, 1079.

13) Phenylamid d. β-Phenylamido-β-Phenylakrylsäure. Sm. 133° (A. 245, 372). — II, 1644.

14) Benzylidenamid d. α-Phenylamido-α-Phenylessigsäure. Sm. 249° (B. 31, 2700). 15) isom. Benzylidenamid d. α-Phenylamido-α-Phenylessigsäure. Sm.

208° (B. 31, 2700). C 73,7 — H 5,2 — O 4,7 — N 16,4 — M. G. 342.

1) 6-Acetylamido-2,3-Diphenyl-2,3-Dihydro-1,2,4-Benztriazin. Sm. 216° u. Zers. (B. 30, 2597). — IV, 1286.

2) Acetylmethylphenosafranin. HCl (B. 30, 402). — IV, 1284. C 78,1 — H 4,8 — O 4,3 — N 22,7 — M. G. 370. $\mathbf{C}_{21}\mathbf{H}_{18}\mathbf{ON}_{6}$

1) $\alpha\alpha$ -Diphenylazo- α -Acetylphenylhydrazonmethan (Acetylformazylazobenzol). Sm. 190° (B. **27**, 149). — IV, 1492. 1) Benzaldehydoxyjodid. Sm. 128° (A. 112, 22). — III, 11. C 76,4 — H 5,4 — O 9,7 — N 8,5 — M. G. 330.

1) 4-Nitro-2-[4-Benzylidenamidobenzyl]-1-Methylbenzol. Sm. 194° (B. 26, 1854). — II, 637.

 ${f C}_{21}{f H}_{18}{f O}_2{f N}_2$ 2) 2-[2-Oxybenzyliden]amido-1-[2-Oxybenzyliden]amidomethylbenzol.

Sm. $107-108^{\circ}$ (J. pr. [2] 53, 426). — IV, 638. 3) 2,4-Di[2-Oxybenzylidenamido]-l-Methylbenzol. Sm. 109° . Cu (A. 150, 198; 253, 330). — IV, 607.

4) 4-Benzoylamido-1-Methylbenzoylamidobenzol. Sin. 164,5° (B. 29, 1482). — IV, 594.

5) 2,4-Di[Benzoylamido]-1-Methylbenzol. Sm. 224° (B. 14, 2656). — IV, 606.

6) 3,4-Di[Benzoylamido]-1-Methylbenzol. Sm. 263—2640 (A. 208, 315; **254**, 255; **273**, 349; *B*. **24**, 631). — IV, 617.

7) $\alpha \beta$ -Dibenzoyl- β -Methyl- α -Phenylhydrazin. Sm. 145° (B. 18, 1741). **- IV**, 670.

8) $\beta\beta$ -Dibenzoyl- α -[4-Methylphenyl]hydrazin. Sm. 188° (B. 8, 592). — IV, 809.

9) Benzoat d. 6-Oxy-3,4'-Dimethylazobenzol. Sm. 95° (B. 17, 354). — IV, 1422

10) 2-Phtalyl-8-Methyl-5,6-Dihydro-peri-Chinolinazol. Sm. noch nicht bei 310° (B. 24, 2073). — IV, 863.

11) β -Phenylhydrazon- $\alpha\beta$ -Diphenylpropionsäure. Sm. 85—150° (?). Ag (J. pr. [2] **55**, 317). — **IV**, 698.

12) Benzylidenamid d. Benzolcarbonsäure. Sm. 225° (A. 154, 76; B. 25, 211). **— III**, *35*.

13) Di [Phenylamid] d. Phenylmethandicarbonsäure (D. d. Phenylmalonsäure). Sm. 201-202° (B. 29, 2603).

14) Dianilidoverb. d. α-Orcendialdehyd. Sm 281° (B. 12, 1004). — III, 109. 15) Verbindung (aus N-Benzyl-syn-Benzaldoxim u. Phenylcarbonimid). Sm.

121° (B. 23, 2748). — III, 44. C 70,4 — H 5,0 — O 8,9 — N 15,7 — M. G. 358. $C_{21}H_{18}O_{2}N_{4}$

1) α -Phenyl- β - $[\alpha$ -Phenylamidoformylimidobenzyl]harnstoff (Benzenyldiphenyldiureïd). Sm. 1720 (B. 22, 1608). — IV, 846.

2) Acetat d. 4-Phenylazo-2-[4-Methylphenyl]azo-1-Oxybenzol. Sm. 92° (B. 25, 1334). — IV, 1416. 3) Acetat d. 2-Phenylazo-4-[4-Methylphenyl]azo-1-Oxybenzol.

130° (B. **25**, 1338). — IV, 1416.

4) Acetat d. 3,5-Di[Phenylazo]-2-Oxy-1-Methylbenzol. Sm. 120—121° (B. 17, 364). — IV, 1424.

5) Acetat d. 4,6-Di[Phenylazo]-3-Oxy-1-Methylbenzol. Sm. 156-157°

(B. 17, 367). — IV, 1424. 6) Methenylbis-4,4'-[5-Keto-3-Methyl-1-Phenyl-4,5-Dihydropyrazol]. Sm. 180—181° (*J. pr.* [2] **55**, 170; *A.* **238**, 184; **255**, 235; **297**, 37). — IV, 1273.
7) **4**-[**2**-Oxnaphtyl]azo-**3**-Keto-**1**, **3**-Dimethyl-**2**-Phenyl-**2**, **3**-Dihydro-

pyrazol (Antipyrinazo-β-Naphtol) (A. 293, 57). — IV, 1489.

8) 6-Methyl-3-[2-Nitrophenyl]-2-[4-Methylphenyl]-2, 3-Dihydro-1,2,4-Benztriazin. Sm. 230° (B. 30, 2603). — IV, 1184.

9) 6-Methyl-3-[3-Nitrophenyl]-2-[4-Methylphenyl]-2, 3-Dihydro-1,2,4-Benztriazin. Sm. 228° (B. 30, 2603). — IV, 1184.

10) 6 - Methyl - 3 - [4 - Nitrophenyl] - 2 - [4 - Methylphenyl] - 2, 3 - Dihydro-

1, 2, 4-Benztriazin. Sm. 264° (B. 30, 2603). — IV, 1184.
 Di[Phenylamid] d. Phenylhydrazonmethan-αα-Dicarbonsäure. Sm. 163° u. Zers. (A. 270, 290). — IV, 720.
 Verbindung (aus d. Diäthylester d. 3,5-Diketo-1-Methylhexahydrobenzol-1417.

2,6-Dicarbonsäure). Sm. 315° (B. 27, 2344). — IV, 725. C 65,3 — H 4,7 — O 8,3 — N 21,7 — M. G. 386. $\mathbf{C}_{21}\mathbf{H}_{18}\mathbf{O}_{2}\mathbf{N}_{6}$

1) Phenylhydrazon d. Formazylglyoxalsäure (B. 27, 152). — IV, 1228.

 $\mathbf{C}_{21}\mathbf{H}_{18}\mathbf{O}_{2}\mathbf{Br}_{2}$ 1) ?-Dibrom-?-Dioxy-?-Dimethyltriphenylmethan. Sm. 130° (A. 257, 72). — II, 1004. / C 72,8 — H 5,2 — O 13,9 — N 8,1 — M. G. 346. $\mathbf{C}_{21}\mathbf{H}_{18}\mathbf{O}_{3}\mathbf{N}_{2}$

1) 4-Nitro-2-[4-Benzoylamidobenzyl]-1-Methylbenzol. Sm. 185° (B. 26, 1853). **— IÌ**, *63*7.

2) β -[?-Nitro-4-Methylphenyl]amido- α -Keto- $\alpha\beta$ -Diphenyläthan? Sm. 153° (J. pr. [2] **34**, 18). — III, 220.

3) Benzoat d. α-Oxy-β-Phenyl-α-Benzylharnstoff. Sm. 120° (J. pr. [2] **56**, 78).

 $C_{21}H_{18}O_3N_2$ 4) Benzoat d. 4'-Nitroso-2,3'-Dimethyldiphenylhydroxylamin. Sm. 181—182° (B. 31, 1518).

5) 2-Oxybenzoat d. α-Phenylhydrazon-β-Oxy-α-Phenyläthan. Sm. 1330 (C. 1896 [1] 765). 6) 4'-Benzoat d. 2,4'-Dioxyazobenzol-2-Aethyläther. Sm. 99° (B. 31,

2118; C. 1897 [2] 549). — IV, 1407. 7) 4'-Benzoat d. 4,4'-Dioxyazobenzol-4-Aethyläther. Sm. 127° (B. 31,

2120; C. 1897 [2] 549). — IV, 1406. 8) Hydrosalicylamid. Sm. 156° (145°). Fe + NH₃, Cu₃ + 2NH₃ (A. 35, 261; J. 1857, 317; B. 10, 1271; 27, 1801 Anm.). — III, 71.

Sm. 140°

9) Phenylamidoformiat d. Benzoylbenzylhydroxylamin.

(J. pr. [2] **56**, 79).

10) 2-Phenylamid d. Benzol-l-Carbonsäure-2-Benzylamidoameisensäure (J. pr. [2] 49, 319).
11) 2-Nitrodi[4-Methylphenyl]amid d. Benzolcarbonsäure. Sm. 167°

(B. 15, 831). — II, 1165.

C 67.4 - H 4.8 - O 12.8 - N 15.0 - M. G. 374. $C_{21}H_{18}O_3N_4$

1) Phenylhydrazinderivat d. Carbanilidoisatin. Sm. 1930 (J. pr. [2] 32, 291). — II, 1604.

1) β -Trithio-2-Oxybenzaldehyd. Sm. 210°. Na $_3$ (A. 277, 343). — III, 71. 2) β -Trithio-3-Oxybenzaldehyd. Sm. 212° (A. 277, 346). — III, 80. 3) β -Trithio-4-Oxybenzaldehyd. Sm. 215° u. Zers. + 3(2)C $_2$ H $_6$ O (B. 29, $C_{21}H_{18}O_3S_3$

140; A. 277, 349). — III, 83. C 69,6 — H 5,0 — O 17,7 — N 7,7 — M. G. 362. $\mathbf{C}_{21}\mathbf{H}_{18}\mathbf{O}_4\mathbf{N}_2$

1) Cotoin-2-Methylazobenzol. Sm. 203—204° (Soc. 71, 1150). — IV, 1479. 2) Cotoin-4-Methylazobenzol. Sm. 207—208° (Soc. 71, 1150). — IV, 1479.

3) Diphenylester d. 4-Methyl-1,3-Phenylendi[amidoameisensäure]. Sm. $147,5^{\circ}$ (Soc. 49, 257). — IV, 603.

4) Phenylamid d. Phenylimiddehydracetcarbonsäure. Sm. 156-1570 (A. **273**, 210). — II, 424.

C 64,6 - H 4,6 - O 16,4 - N 14,4 - M. G. 390. $\mathbf{C}_{21}\mathbf{H}_{18}\mathbf{O}_4\mathbf{N}_4$

1) α -Phenylhydrazondi[3-Nitro-4-Methylphenyl]methan. Sm. 169—170° (A. 271, 7). — IV, 777. 2) $\beta\beta$ -Di[5-Keto-l-Phenyl-4,5-Dihydropyrazolyl-4-]propionsäure (B.

28, 633). — IV, 1266. C 66,7 — H 4,8 — O 21,1 — N 7,4 — M. G. 378.

 $C_{21}H_{18}O_5N_2$

1) Verbindung (aus Diphenylketon-2,2'-Dicarbonsäure). Sm. 155° (A. 242, 252). — IV, 719.

 $C_{21}H_{18}O_5S$

 o-Kresolsulfonphtalein (Am. 20, 265).
 C 63,9 - H 4,6 - O 24,4 - N 7,1 - M. G. 394. $\mathbf{C}_{21}\mathbf{H}_{18}\mathbf{O}_{6}\mathbf{N}_{2}$

1) P-Dinitro-P-Dioxy-P-Dimethyltriphenylmethan. Sm. 1270 (A. 257, 73).

 $C_{21}H_{18}O_6N_4$

— II, 1004.

C 59,7 — H 4,3 — O 22,7 — N 13,3 — M. G. 422.

1) Tri[2-Nitrobenzyl]amin. Sm. 157° (B. 19, 1604). — II, 522.

2) Tri[4-Nitrobenzyl]amin. Sm. 163° (B. 6, 1058). — II, 522.

3) isom. Tri[7-Nitrobenzyl]amin. Sm. 159° (B. 19, 1030). — II, 522.

1) β-Trithio-2,5-Dioxybenzaldehyd (β-Trithiogentisinaldehyd). Sm. 190° $C_{21}H_{18}O_6S_3$ u. Zers. $+2C_2H_6O$ (B. 29, 148). — III, 99.

 $C_{21}H_{18}O_{7}S$ 1) Verbindung (aus Orcin u. Benzol-1-Carbonsäure-2-Sulfonsäure) (Am. **16**, 528).

 $\cdot \mathbf{C}_{21} \mathbf{H}_{18} \mathbf{O}_{10} \mathbf{N}_{2}$ $C_{55,0} - H_{3,9} - O_{34,9} - N_{6,1} - M_{6,1}$ G. 458.

1) Diäthylester d. $\alpha\gamma$ -Diketo- $\alpha\gamma$ -Di[2-Nitrophenyl]propan- $\beta\beta$ -Dicarbonsäure (D. d. Dinitrodibenzoylmalonsäure). Sm. 93° (B. 17, 2789). — II, 2029.

 $C_{21}H_{18}NCl_3$ 1) Tri[4-Chlorbenzyl]amin. Sm. 78,5° (88—89°). HCl + 2H₂O, (2HCl, PtCl₄) (A. 151, 139; Am. 2, 92). — II, 522.

C₂₁H₁₈NBr₃ 1) Tri[2-Brombenzyl]amin. Sm. 121,5—122°. (2HCl,PtCl₄) (Am. 2, 319). - II, 522.

2) Tri[4-Brombenzyl]amin. Sm. 76-780 (920). HBr (B. 10, 1211; Am. 3, 251). — II, 522

 $\mathbf{C}_{21}\mathbf{H}_{18}\mathbf{N}\mathbf{J}$ 1) Jodäthylat d. 3-Phenyl-β-Naphtochinolin. Sm. 2320 (A. 249, 134).

— IV, 467.
1) Tri[4-Jodbenzyl]amin. Sm. 114,5°. (2 HCl, PtCl₄) (B. 11, 57; Am. 2, $\mathbf{C}_{21}\mathbf{H}_{18}\mathbf{NJ}_{3}$ 250). — II, 522.

 $C_{21}H_{18}N_2Cl_2$ 1) Verbindung (aus Hydrobenzamid) (A. 111, 144). — III, 21.

 $C_{21}H_{18}N_2S$ 1) 2-Thiocarbonyl-1-Benzyl-3-Phenyl-1, 2, 3, 4-Tetrahydro-1, 3-Benz-

- diazin. Sm. 93°. HCl, HNO₃ (B. 27, 3245). IV, 635.

 1) 2-Chlormethylat d. 1, 3, 5-Triphenyl-1, 2, 4-Triazol.
 (J. pr. [2] 54, 158). IV, 1187. $\mathbf{C}_{21}\mathbf{H}_{18}\mathbf{N}_{3}\mathbf{C}\mathbf{1}$ $2 + PtCl_4$
- C21H18N4S 1) s-Di[2-Naphtylamido]thioharnstoff. Sm. 137—140° (B. 24, 4199). — IV, 929. C 73,7 — H 6,3 — O 5,3 — N 4,7 — M. G. 301. $C_{21}H_{19}ON$

- 1) α -Keto- γ -[4-Amidophenyl]- $\alpha\beta$ -Diphenylpropan. Sm. 140—141°. HCl (B. 23, 2077). - III, 259.
- 2) γ-Phenylamido-α-Keto-αγ-Diphenylpropan (Benzalacetophenonanilin). Sm. 175° (B. **31**, 353).
- 3) β -Benzylidenamido- α -Oxy- $\alpha\beta$ -Diphenyläthan (B. 28, 1866; 30, 1527, 2896). — III, *11*.
- 4) Methyläther d. 4-Oxybenzylidenamidodiphenylmethan. Sm. 110 bis 111° (B. 26, 2170). III, 85.
- 5) β -[2-Methylphenyl]amido- α -Keto- $\alpha\beta$ -Diphenyläthan (o-Desyltoluid). Sm. 141° (M. 9, 693). — III, 220.
- 6) β -[4-Methylphenyl]amido- α -Keto- $\alpha\beta$ -Diphenyläthan. Sm. 145°. HCl
- (M. 14, 288; B. 26, 1338; 29, 1737; J. pr. [2] 34, 16). III, 220. 7) α -Oximido- $\alpha\beta\gamma$ -Triphenylpropan. Sm. 208° (B. 21, 1300). III, 259. 8) Benzyläther d. anti-α-Oximido-4-Methyldiphenylmethan. Sm. 85°
- (B. 23, 2330). III, 215.9) Benzyläther d. syn-α-Oximido-4-Methyldiphenylmethan. Sm. 51° $(B. \ 23, \ 2777). - III, \ 215.$
- 10) 3-Acetylamidotriphenylmethan. Sm. 115° (B. 21, 190). II, 641.
 11) 4-Acetylamidotriphenylmethan. Sm. 176° (168—169°; 157°) (A. 241, 367; B. 23, 1624; 24, 728). — II, 641.
- Sm. 207-208° (B. 17, 744). 12) α -Acetylamidotriphenylmethan. II, 642.
- 13) α -Benzoylamido- α β -Diphenyläthan. Sm. 177—178° (B. 22, 1412). II, 1169.
- 14) Diphenylamid d. 1,2-Dimethylbenzol-4-Carbonsäure. Sm. 134 bis 136° (B. **20**, 2119). — II, 1375.
- 15) Diphenylamid d. 1,3-Dimethylbenzol-4-Carbonsäure. Sm. 141 bis
- 14\bar{2}^0 (B. 20, 2120). II, 1376. 16) Di[P-Methylphenyl]amid d. Benzolcarbonsäure. Sm. 125\(^0\) (B. 6, 446; J. 1880, 541). — II, 1165.
- 17) Benzyl-4-Methylphenylamid d. Benzolcarbonsäure. Sm. 87-88°; Sd. 275—285% (*Bl.* [3] **6**, 139). — II, 1166. C 76,6 — H 5,8 — O 4,8 — N 12,8 — M. G. 329.
 - 1) α -Methyl- α -Phenyl- β -[α -Benzoylamidobenzyliden]hydrazin. Sm. 1250 (A. 296, 291). — IV, 1137.
 - 2) $\alpha \alpha$ Diphenyl- β - $[\alpha$ -Acetylamidobenzyliden]hydrazin (Monacetyldiphenylbenzenylhydrazidin). Sm. 185° (*J. pr.* [2] **54**, 173). — **IV**, *1*137. 3) **6-Benzoylamido-3,4'-Dimethylazobenzol.** Sm. 135° (*B.* **17**, 80). —
- IV, 1378.
 4) 2-Methyloxydhydrat d. 1,3,5-Triphenyl-1,2,4-Triazol.
- $+ C_6H_6$, 2 Chlorid $+ PtCl_4$ (*J. pr.* [2] **54**, 157). **IV**, 1187. 5) **6-Dimethylamido-2-[2-Oxyphenyl]-1-Phenylbenzimidazol.** Sm. 239,5
- bis 241° (A. 303, 361).
- 6) 6-Methyl-3-[3-Oxyphenyl]-2-[4-Methylphenyl]-2,3-Dihydro-1,2,4-Benztriazin. Sm. 265° (B. 30, 2603). IV, 1184.
- 7) Phenylamid d. β-Benzyliden-α-Phenylhydrazidoessigsäure. Sm. 223° (A. 301, 60). C 79,5 — H 6,0 — O 10,1 — N 4,4 — M. G. 317.

 $\mathbf{C}_{21}\mathbf{H}_{19}\mathbf{ON_3}$

 $C_{21}H_{19}O_{2}N$

- 1) 3-Nitrophenyldi [?-Methylphenyl]methan. Sm. 85° (B. 21, 189). II, 290.
- 2) α-Oxy-3-Acetylamidotriphenylmethan. Sm. 164° (B. 21, 191). II, 1084.
- 3) α -Oxy-4-Acetylamidotriphenylmethan. Sm. 176° (B. 23, 1624). II, 1084.
- 4) 4-Benzyläther d. anti-α-Oximido-4-Oxydiphenylmethan. Sm. 59 bis 60,5° (A. **264**, 158). — III, 194.

- 5) 4-Benzyläther d. syn-α-Oximido-4-Oxydiphenylmethan. Sm. 73—740 $C_{21}H_{19}O_2N$ (A. 264, 159). — III, 194.
 - 6) Dibenzyläther d. 2-Oxybenzaldoxim. Sm. 34° (B. 26, 2625). III, 77. Methylester d. α-Phenylamidodiphenylessigsäure. Sm. 106—107°
 (B. 22, 1213). — II, 1465.
 - 8) Benzoat d. β -Amido - α -Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 236—237° (B. 29, 1215).
 - 9) Benzoat d. Dibenzylhydroxylamin. Sm. 96-97° (A. **257**, 221). II, 1209.

C73,1 - H5,5 - O9,2 - N12,2 - M.G. 345. $C_{21}H_{19}O_2N_3$

- α-[4-Methylphenyl]imido-α-[4-Methylphenyl]amido-α-[4-Nitrophenyl]methan. Sm. bei 300° u. Zers. (B. 25, 1085). IV, 845.
 β-Phenacetylamido-αβ-Diphenylharnstoff. Sm. 144° (B. 27, 1518). —
- IV, 675.
- 3) Diphenyl-4-Methylphenylbiuret. Sm. 214—216° (B. 21, 506).
- 4) 5-Methyl-2-[2-Nitrophenyl]-1-[4-Methylphenyl]-2,3-Dihydrobenzimidazol. Sm. 113° (B. 23, 3801). — IV, 995.
- 5) 5-Phenyloxydhydrat d. 3-Acetylamido-2-Methyl-5,10-Naphtdiazin. Chlorid, 2 Chlorid + PtCl₄, Nitrat + H_2O (B. 31, 969). - IV, 1182.
- 6) Diphenylamid d. Phenylamidomalonsäure. Sm. 1620 (246-2470) (A. **209**, 231; *B*, **31**, 554). — **II**, 436. C 69,8 — H 5,2 — O 13,3 — N 11,6 — M. G. 361.

 $C_{21}H_{19}O_3N_3$

1) α -Phenyl- β -[4-Methylphenyl]- β -[2-Nitrobenzyl]harnstoff. Sm. 1190 (B. 27, 45). — II, 526.

 \dot{C} 64,7 - \dot{H} 4,9 $\dot{-}$ O 12,3 - N 18,0 - M. G. 389. $C_{21}H_{19}O_{8}N_{5}$

 Phenylbenzoylamidokaffein. Sm. 225° (B. 27, 3091). — III, 960.
 C 72,2 — H 5,4 — O 18,3 — N 4,0 — M. G. 349. $C_{21}H_{19}O_4N$ 1) 3-Nitro-?-Dioxy-?-Dimethyltriphenylmethan (G. 21 [2] 344). II. 1004.

- Phloretinanilid (A. 156, 9). III, 230.
 Fumarin. Sm. 199°. (2 HCl, PtCl₄), (HCl, AuCl₃), (HJ, HgJ₂) (J. 1852, 550; 1889, 2010; Z. 1866, 414; Bl. [3] 15, 541). III, 883.
 2,6-Dimethyl-1,4-Diphenyl-1,4-Dihydropyridin-1,4-Dicarbonsäure.
- Sm. 165° (M. 17, 352). IV, 371. 5) Methylester d. 3,4-Dioxy-1-[2-Naphtyl]imidomethylbenzoldimethyläther-2-Carbonsäure. Sm. 1310 (B. 29, 182).
- 6) Aethylester d. β-Cyan-αγ-Dibenzoylpropan-β-Carbonsäure. Sm. 1420 (B. **27** [2] 665).
- 7) 3-Aethylester d. 2-Methyl-1, 5-Diphenylpyrazol-13, 3-Dicarbonsäure. Sm. 160° (B. 19, 3162). — \overrightarrow{IV} , 358. C 66,8 — H 5,0 — O 17,0 — N 11,1 — M. G. 377.

C21H19O4N3

- 1) 2-Methylphenyldi[2-Nitrobenzyl]amin. Sm. 205° (B. 26, 2588). II, 521.
- 2) 4-Methylphenyldi[2-Nitrobenzyl]amin. Sm. 160° (B. 25, 3581). II, 521.
- 3) 4-Methylphenyldi[4-Nitrobenzyl]amin. Sm. 189 (B. 25, 3581). II, 521.

4) 2,2'-Dinitrotribenzylamin. Sm. 82° (B. 26, 2587). — II, 522.

5) 2-[α-Phenylhydrazon-3,4-Dimethoxylbenzyl]pyridin-4-Carbonsäure. Sm. 223° u. Zers. HCl (M. 10, 698). — IV, 178. C 62,2 — H 4,7 — O 15,8 — N 17,2 — M. G. 405.

 $C_{21}H_{19}O_4N_5$

241° (G. 21, 169). — II, 1039.

- 1) β -Phenylhydrazon- α -[?-Dinitro-?-Phenylamidophenyl] propan. Sm. 140° (Am. 12, 180). IV, 773.
- $\mathbf{C}_{21}\mathbf{H}_{19}\mathbf{O}_{4}\mathbf{Br}$ 1) 4-Brombenzyläther d. Curcumin. Sm. 76-78° (Am. 4, 77). — III, 660. $C_{21}H_{19}O_5N$ C 69,1 - H 5,2 - O 21,9 - N 3,8 - M. G. 365.
 - 1) Verbindung (aus 3, 5-Dioxy-1-Methylbenzol) (M. 11, 231). II, 966. 2) Hydroxylaminverbindung (aus Curcumin). Sm. 1730 (B. 30, 194).
- C 64.1 H 4.8 O 20.3 N 10.7 M. G. 393. $C_{21}H_{19}O_5N_3$ 1) Methyläther d. 2-Oxyphenyldi[2-Nitrobenzyl]amin. Sm. 117° (J. pr.
- [2] **54**, 278). $C_{66,1} - H_{5,0} - O_{25,2} - N_{3,7} - M.G. 381.$ $C_{21}H_{19}O_6N$ 1) 3-Nitrophenyldi [3,5-Dioxy-1-Methylphenyl] methan. Erweicht bei

- $\mathbf{C}_{91}\mathbf{H}_{19}\mathbf{O}_{8}\mathbf{N}$ 2) Diacetat d. 7,8-Dioxy-2-[4-Dimethylamidophenyl]-1,4-Benzpyron. Sm. 182° (B. 29, 2434).
 - 3) Anhydronarceonsäure (Imid d. Narceonsäure). Sm. 177,5—178,5° (A. 286, 253). — II, 2082.
- C₂₁H₁₉O₆Br₈ 1) Monacetat d. Tribrombrasilintrimethyläther. Sm. 179—180° (B. 27, 527). — III, 654.
- C 63,5 H 4,8 O 28,2 N 3,5 M. G. 397. $C_{21}H_{19}O_7N$
 - 1) Oxim (aus Narceonsäure). Sm. 201-2020 (A. 286, 254). II, 2082. C 61,0 - H 4,6 - O 31,0 - N 3,4 - M. G. 413.
- $C_{21}H_{19}O_8N$ 1) Methylester d. Anhydroberberilsäure. Sm. 178-179° (Soc. 57, 1037). **- III**, 802.
- $\mathbf{C}_{21}\mathbf{H}_{19}\mathbf{O}_{8}\mathbf{Br}$ 1) Bromnarceonsäure. Sm. 171—172° (A. 286, 254). — II, 2082.
- 1) Thiobenzaldin. Sm. 125° (A. 38, 323). III, 28. $C_{21}H_{19}NS_{2}$
- 1) Dimethylcyaninchlorid + 5 H₂O. Sm. bei 300° u. Zers. (HCl, PtCl₄) $\mathbf{C}_{21}\mathbf{H}_{19}\mathbf{N}_{2}\mathbf{C}\mathbf{1}$ (R. 2, 318). - IV, 315.
- $\mathbf{C}_{21}\mathbf{H}_{19}\mathbf{N}_2\mathbf{Br}$ 1) Base (aus α -Benzylimido- α Methylphenylamido- α -Phenylmethan). Sm. 102°.
- HBr (A. 273, 26). IV, 843.

 1) Dimethyleyaninjodid. Sm. 291° (R. 2, 318). IV, 314. $\mathbf{C}_{21}\mathbf{H}_{19}\mathbf{N}_{2}\mathbf{J}$
 - 2) Jodmethylat d. 2-Phenyl-1-Benzylbenzimidazol (B. 11, 1654). IV, 563.
- $\mathbf{C}_{21}\mathbf{H}_{20}\mathbf{ON}_{2}$ C 79,7 - H 6,3 - O 5,1 - N 8,8 - M. G. 316.
 - 1) 4'-[2-Oxybenzyliden]amido-2, 3'-Dimethyldiphenylamin. Sm. 112° (B. **31**, 1519).
 - 2) Aethyläther d. 4-Benzylidenamido-4'-Oxydiphenylamin. Sm. 109 bis 110° (B. **26**, 694). — IV, 584. 3) Aethyltriphenylharnstoff. Sm. 80° (B. **9**, 712; **14**, 2185). — II, 381.

 - 4) α -Phenyl- β -[$\alpha\beta$ -Diphenyläthyl]harnstoff. Sm. 129° (B. 22, 1411). II, 636.
 - 5) α -Phenyl- $\beta\beta$ -Di[4-Methylphenyl]harnstoff. Sm. 135—136° (B. 25, 1821). **– II**, 495.
 - 6) α -Phenyl- $\alpha\beta$ -Dibenzylharnstoff. Sm. 102—103° (Soc. 59, 567). II, 526.
 - Sm. 126—128° (145—146°) (B. 25, 7) α -Phenyl- $\beta\beta$ -Dibenzylharnstoff.
 - 1820; Soc. 63, 539). II, 526. 8) α -Phenyl- β -Benzyl- β -[4-Methylphenyl] harnstoff. Sm. 111—113° (B.
 - **25**, 1823). **II**, 526. 9) α -Phenyl- β -[α -Phenyl-4-Methylbenzyl]harnstoff. Sm. 206° (B. 24, 2802). **— II**, *637.*
 - 10) Methyläther d. α -Phenyl- α -Benzyl- β -[4-Oxybenzyliden] hydrazin. Sm. 135—136° (G. 27 [2] 238). — IV, 812.
 - 11) β -Benzoyl- $\alpha \alpha$ -Di[2-Methylphenyl]hydrazin. Sm. 209° (B. 25, 1079). **- IV**, 802.
 - 12) β -Benzoyl- $\alpha\alpha$ -Di[4-Methylphenyl]hydrazin. Sm. 186,5° (B. 13, 1547). **- IV**, 809.
 - 13) α -Benzoyl- $\alpha\beta$ -Dibenzylhydrazin. Sm. 87° (B. 28, 2346; J. pr. [2] 58, 378). — IV, 811.
 - 14) 2-[2-Oxyphenyl]-1, 3-Diphenyltetrahydroimidazol (Salicylaläthylenanilin). Sm. 116° (B. 20, 733). III, 73.
 15) Aethyläther d. 6-Oxy-1, 2-Diphenyl-2, 3-Dihydroimidazol. Sm. 152°
 - (B. **25**, 1008). III, 32.
 - 16) 5-Methyl-2-[2-Oxyphenyl]-1-[4-Methylphenyl]-2,3-Dihydrobenzimidazol. Sm. 160° (B. 23, 3801). — IV, 995.
- $\mathbf{C}_{21}\mathbf{H}_{20}\mathbf{ON}_{4}$
- C 73.3 H 5.8 O 4.6 N 16.3 M. G. 344.1) β -Acetyl- β -Phenylamidophenylimidomethyl- α -Phenylhydrazin. Sm. 157° (J. pr. [2] 58, 463).
- 2) α -Phenylazo- $\alpha\beta$ -Di[4-Methylphenyl]harnstoff. Sm. 130° (B. 21, 2565). **– IV**, *1570*.
- 3) α -Phenyl- β -[4-Methylphenyl]azo- β -Benzylharnstoff. Sm. 115—116° (B. 21, 1023). - IV, 1569.
- 4) 6-Phenylureïdo-3,4'-Dimethylazobenzol. Sm. 219° (B. 23, 501). IV, 1378.
- 5) 2-Oxy-?-Di[2-Methylphenylazo]-1-Methylbenzol. Sm. 148,5° (B. 23, 3260). **— IV**, 1424.

6) 2-Oxy-?-Di[4-Methylphenylazo]-1-Methylbenzol. Sm. 164,5° (B. 23, $\mathbf{C}_{91}\mathbf{H}_{90}\mathbf{ON}_{4}$ 3261). **— IV**, *1424*.

Sm. 107° (A. 287. 7) 2-Oxy-?-Di[4-Methylphenylazo]-1-Methylbenzol. 189). **— IV**, 1424.

8) 3-Oxy-?-Di[2-Methylphenylazo]-1-Methylbenzol. Sm. 188° (A. 287,

187). — IV, 1424. 9) 3-Oxy-P-Di[3-Methylphenylazo]-1-Methylbenzol. Sm. 102—103° (A. 287, 188). — IV, 1424.

10) β -Phenylhydrazid d. α -Phenyl- β -Benzylidenhydrazidoessigsäure. Sm. 196° (B. 29, 623; A. 301, 74).

 $C_{21}H_{20}OBr_4$ 1) 2,7-Dibrom-2,7-Di $[\alpha$ -Brombenzyl]-1-Keto-R-Heptamethylen. Sm. 185° u. Zers. (B. 30, 2263).

C 75.9 - H 6.0 - O 9.6 - N 8.4 - M. G. 332. $\mathbf{C}_{21}\mathbf{H}_{20}\mathbf{O}_{2}\mathbf{N}_{2}$

1) 2-Nitro-1-Dibenzylamidomethylbenzol (2-Nitrotribenzylamin). Sm. 56°. HCl (J. pr. [2] 51, 257).

2) α -Phenyl- β - $[\beta$ -Oxy- $\alpha\beta$ -Diphenyläthyl]harnstoff. Sm. 176° (B. 28,

3) Benzyläther d. α-Oxy-β-Phenyl-α-Benzylharnstoff. Sm. 107° (J. pr. [2] **56**, 77).

4) 2-Acetylamido-1-[2-Naphtylacetylamido]methylbenzol. Sm. 116° (J. pr. [2] 52, 413). — IV, 628. 5) P-Acetyl-1-[P-Acetylamido-2-Methylphenyl]naphtalin. Sm. 261° u.

Zers. (B. 26, 145). — IV, 1034.

6) 12-Methyläther d. 2-[2-Oxybenzyliden]amido-1-[2-Oxyphenylamido]methylbenzol. Sm. 79° (*J. pr.* [2] **52**, 403). — IV, 629.

7) Dimethyläther d. α-Phenylhydrazon-3,4[^p]-Dioxydiphenylmethan.

Sm. 174° (J. pr. [2] 53, 253). — IV, 776.

8) Phenylhydrazon d. Lapachol. Sm. 108—109° (G. 19, 613). — IV, 795. 9) Phenylhydrazon d. Lapachon. Sm. 188—189° (G. 19, 616). — IV, 795.

10) 3,5 [oder 5,6]-Di[4-Methylphenylamido]-2-Methyl-1,4-Benzochinon. Sm. 178° (A. 262, 251). — III, 360.

11) 3,6-Di[4-Methylphenylamido]-2-Methyl-1,4-Benzochinon. Sm. 2410 (A. 256, 259). — III, 360.

12) Aethyläther d. ?-Phenylamido-?-Oxy-2-Methyl-1,4-Benzochinon-phenylimid. Sm. 115—116°. (2HCl, PtCl₄) (B. 16, 1561). — III, 361.

13) $\alpha\beta$ -Diacetyl- α -[2-Methylphenyl]- β -[1-Naphtyl]hydrazin. Sm. 2520 (B. 26, 145). — IV, 1504.

14) Phenylamidoformiat d. Dibenzylhydroxylamin. Sm. 117° (J. pr. [2] 56, 78).

15) Amid d. α -Phenylamido- β -Oxy- $\alpha\beta$ -Diphenylpropionsäure. Sm. 166° (B. **25**, 2069). — **II**, 1698.

16) Verbindung (aus Oenanthol u. 2-Amidobenzol-1-Carbonsäure). Sm. 2430 (B. 28, 2822).

 $\mathbf{C}_{21}\mathbf{H}_{20}\mathbf{O}_{2}\mathbf{N}_{4}$ C.70,0 - H.5,6 - O.8,9 - N.15,5 - M.G.360

1) 4-Methyl-1, 2-Phenylendi [β -Phenylharnstoff]. Sm. 208-209 (J. pr. [2] **41**, 326). — IV, 614.

2) 4-Methyl-1, 3-Phenylendi [β -Phenylharnstoff]. Sm. oberh. 300° (261°) (B. 18, 1477; C. 1898 [1] 945). — IV, 603. 3) Di-[5-Keto-3-Methyl-1-Phenyl-4,5-Dihydro-4-Pyrazolyl]methan

 $+1^{1}/_{2}H_{2}O$ (A. **255**, 249). — IV, 1264.

4) Di [β-Phenylhydrazid] d. Phenylmethandicarbonsäure. Sm. 254° (B. 29, 2603). — IV, 711.

5) Di [Cinnamylidenhydrazid] d. Methandicarbonsäure. Sm. 2170 (J. pr. [2] **51**, 189). — III, 62.

6) Verbindung (aus d. Verb. C₃₅H₂₆O₃N₄). Sm. 115-118° (A. 218, 191). — III, 74.

 $\mathbf{C}_{21}\mathbf{H}_{20}\mathbf{O}_{2}\mathbf{N}_{6}$ C 65,0 - H 5,2 - O 8,2 - N 21,6 - M. G. 388.

 $1) \ \ \mathbf{4-[4-Antipyryl]} \ hydrazon - \mathbf{5-Keto-3-Methyl-1-Phenyl-4,5-Dihydro-1} \\$ pyrazol. Zers. bei 200-205° (A. 293, 69). - IV, 1582.

C21 H20 O2 S3 1) Diphenyläther d. α -Phenylsulfon- $\beta\beta$ -Dimerkaptopropan. Sm. 103 bis 104° (J. pr. [2] 36, 409; B. 24, 237). — II, 790. Diphenyläther d. α-Phenylsulfon-βγ-Dimerkaptopropan. bis 77° (A. 283, 204, 206).

- C21 H20 O3 N2 C 72,4 - H 5,7 - O 13,8 - N 8,0 - M. G. 348.
 - Allylester d. αδ-Di[Phenylimido]-γ-Ketopentan-α-Carbonsäure. Sm. 136° (Bl. [3] 13, 483). C 69,2 H 5,5 O 17,6 N 7,7 M. G. 364.
- $\mathbf{C}_{21}\mathbf{H}_{20}\mathbf{O}_4\mathbf{N}_2$
 - 1) Alstonin (Chlorogenin). Sm. unter 100° (195° wasserfrei). (2 HCl, HgCl₂),
 - (2 HCl, PtCl₄ + 4 H₂O), H₂Cr₂O₇ (A. **205**, 363; A. Spl. **4**, 45). III, 776. 2) Aethylester d. **3**,**5**-Diketo-4-Phenylhydrazon-1-Phenylhexahydrobenzol-2-Carbonsäure. Sm. 163° u. Zers. (A. 294, 283). — IV, 1475.
- C 64.3 H 5.1 O 16.3 N 14.3 M.G. 392. $\mathbf{C}_{21}\mathbf{H}_{20}\mathbf{O}_{4}\mathbf{N}_{4}$
 - 1) 3,4-Di[2-Nitrobenzylamido]-1-Methylbenzol. Sm. 129° (B. 25, 3583).
- IV, 612.

 1) Benzylidendi[benzylsulfon]. Sm. 213° (B. 25, 360; 28, 1111). III, 9. $C_{21}H_{20}O_4S_2$
- 1) Phenyläther d. $\alpha\beta$ -Diphenylsulfon- β -Merkaptopropan. Sm. 156 bis $C_{21}H_{20}O_4S_3$ 157° (148—149°) (B. 24, 234, 1516). — II, 791. C 59,4 — H 4,7 — O 22,6 — N 13,2 — M. G. 424. 1) α-Dinitrostrychnin. Sm. 226°. HNO₃ (B. 14, 774). — III, 941. 2) β-Dinitrostrychnin. Zers. bei 205°. HCl (Bl. 41, 235). — III, 941.
- $C_{21}H_{20}O_6N_4$
- $\alpha \beta \gamma$ -Tri[Phenylsulfon] propan. Sm. 226° (A. 283, 197, 202, 204, 205; C21 H20 O6 S3 B. **23**, 1413). — II, 783
- $\mathbf{C}_{21}\mathbf{H}_{20}\mathbf{O}_{12}\mathbf{Br}_{2}1$) Dibromquercitrin (B. 12, 1184). III, 603.
- C, H, N, S 1) α -Phenyl- β -[$\alpha\beta$ -Diphenyläthyl] thioharnstoff. Sm. 170° (B. 22, 1412). — II, 636.
 - 2) α -Phenyl- $\alpha\beta$ -Dibenzylthioharnstoff. Sm. 102—103° (Soc. 59, 567). II, 529.
- C₂₁H₂₀N₃Cl 1) Chlorbenzylat d. 5-Methyl-1-Benzyl-1,2,3-Benztriazol. Sm. 192°. $2 + \text{PtCl}_{4}$ (A. **240**, 131). — IV, 1146.
- 1) 4-Methyl-1,2-Phenylendi [β -Phenylthioharnstoff] (A. 221, 19). $\mathbf{C}_{21}\mathbf{H}_{20}\mathbf{N}_{4}\mathbf{S}_{2}$ IV, 615.
 - 2) 4-Methyl-1,3-Phenylendi [β -Phenylthioharnstoff]. Sm. 173° (168°)
 - (B. 8, 670; 17, 3046; 18, 3293; 20, 228). IV, 604.
 - 3) 2-Methyl-1, 4-Phenylendi [β -Phenylthioharnstoff]. Sm. 181° (A. 228, 206). — IV, 609. C 83,2 — H 6,9 — O 5,3 — N 4,6 — M. G. 303.
- $\mathbf{C}_{21}\mathbf{H}_{21}\mathbf{ON}$
 - 1) β -[4-Methylphenyl]amido- α -Oxy- $\alpha\beta$ -Diphenyläthan (p-Hydrobenzoïn-
 - toluid). Sm. 140° (J. pr. [2] 34, 21). III, 221.
 2) Benzyläther d. Dibenzylhydroxylamin. Fl. HCl, (2HCl, PtCl₄), Pikrat (A. 257, 226; 266, 319). — II, 536.
 - 3) 3-Cinnamyl-1,2,4-Trimethyl-1,2-Dihydrochinolin? Sm. 152-1530 (G. **24** [2] 300). — IV, 243. C 76,1 — H 6,3 — O 4,8 — N 12,7 — M. G. 331.
- $\mathbf{C}_{21}\mathbf{H}_{21}\mathbf{ON}_{3}$
 - α-Phenyl-β-[4-Methylphenyl]-β-[2-Amidobenzyl]harnstoff. Sm. 129°.
 HCl, (2HCl, PtCl₄), Oxalat, Pikrat (B. 27, 46; J. pr. [2] 55, 244).
 - 2) 2-[2-Oxypheny1]-3-[2-Amidobenzy1]-1, 2, 3, 4-Tetrahydro-1, 3-Benzenzy1]diazin. Sm. 1660 (J. pr. [2] 55, 369). — IV, 638.
 - 3) 2[4-Oxyphenyl]-3-[2-Amidobenzyl]-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 90° (J. pr. [2] 55, 370). — IV, 639.
 - 4) Benzyloxydhydrat d. 5-Methyl-l-Benzyl-1, 2, 3-Benztriazol. Chlorid, 2 Chlorid + PtCl₄ (A. **249**, 131). - IV, 1146. C 70,2 - H 5,8 - O 4,5 - N 19,5 - M. G. 359.
- $\mathbf{C}_{21}\mathbf{H}_{21}\mathbf{ON}_{5}$

 $\mathbf{C}_{21}\mathbf{H}_{21}\mathbf{OP}$

- 1) 6 Dimethylamido 4 Oxy-3-Phenylazo 1 [2 Methylphenylazo] benzol. Sm. 139-140° (B. 31, 491). - IV, 1417.
- 2) 6 Dimethylamido 4 Oxy 3 Phenylazo 1 [4 Methylphenylazo] benzol. Sm. 149° (B. 31, 492). — IV, 1417.
- 3) 4 Dimethylamido 6 Oxy-3 Phenylazo 1 [2 Methylphenylazo] -
- benzol. Sm. 124° (B. 31, 491). IV, 1417. 4) 4 - Dimethylamido - 6 - Oxy - 3 - Phenylazo - 1 - [4 - Methylphenylazo] -
- benzol. Sm. 143—144° (B. 31, 493). IV, 1417. 5) 4-[4-Oxyphenylazo]-2-[4-Dimethylamidophenyl]-1-Methylbenzol.
- Sm. 159—160° (A. 234, 357). IV, 1417. 1) Tribenzylphosphinoxyd. Sm. 213° (216—216,5°). Salze siehe (B. 13,
- 1666; **21**, 405; **22**, 2147; Soc. **55**, 227). IV, 1665. 1) Tribenzylarsinoxyd. Sm. 219—220°. HCl, HBr, HJ + H₂O, HNO₃, $\mathbf{C}_{21}\mathbf{H}_{21}\mathbf{OAs}$ $+ J_{\circ}$ (A. 233, 69). - IV, 1690.

2000 -21 III. 1) Antimontri [2-Methylphenyl] oxyd. Sm. bei 220° (A. 242, 183). — $\mathbf{C}_{21}\mathbf{H}_{21}\mathbf{OSb}$ IV, 1696. 2) Antimontri [3-Methylphenyl] oxyd. Sm. 185° (A. 242, 187). — IV, 1697. 3) Antimontri [4-Methylphenyl] oxyd. Sm. bei 220° (A. 242, 174). — IV, 1697. C 79,0 — H 6,6 — O 10,0 — N 4,4 — M. G. 319. $C_{21}H_{21}O_{2}N$ 1) Acetylapocinchen. Sm. 118-119° (B. 20, 2677). - III, 838. 2) Aethylester d. 2-Methyl-5-Phenyl-1-[4-Methylphenyl]pyrrol-3-Carbonsäure. Sm. 115° (B. 18, 2597). — IV, 357. C 72,6 — H 6,1 — O 9,2 — N 12,1 — M. G. 347. $C_{21}H_{21}O_2N_3$ 1) 3'-Nitro-5², 5³-Diamido-2², 2³-Dimethyltriphenylmethan? Sm. 85 bis 86°. 2 HCl, (2 HCl, PtCl₄) (*B*. 21, 3209). — ÎV, 1047. 2) 4'-Nitro-5²,5³-Diamido-2²,2³-Dimethyltriphenylmethan. Sm. 126 bis 127°. 2 HCl, (2 HCl, PtCl₄) (B. 20, 3304). — IV, 1048. 3) 4'-Nitro-2²,2³-Diamido-3²,3³-Dimethyltriphenylmethan? (B. 15, 679).

IV, 1046. 4) 3'-Nitro-6²,6³-Diamido-3²,3³-Dimethyltriphenylmethan? Sm. 125 bis

128° (B. 21, 3212). — IV, 1047. 5) 4'-Nitro-6², 6³-Diamido-3², 3³-Dimethyltriphenylmethan. Sm. 170 bis

172°. $+ \frac{1}{3}$ H₂O, (2 HCl, PtCl₄) (B. **20**, 3302). — **IV**, 1048. 6) 2-Methylphenylamid d. α-Phenylhydrazonphenylessigsäure + H₂O

(A. **270**, 319). — **IV**, 694. $C_{21}H_{21}O_{2}P$ 1) Diphenyläther d. Dioxy-2,4,5-Trimethylphenylphosphin. Sm. 59°; Sd. 283°_{40} (A. 294, 34). — IV, 1678. C 75,2 — H 6,3 — O 14,3 — N 4,2 — M. G. 335. 1) Methylcusparin + $\frac{1}{2}$ H₂O. Sm. 190° . HCl + $2\frac{1}{2}$ H₂O, HBr + 10 H₂O $C_{21}H_{21}O_3N$

(B. 29 [2] 36; C. 1895 [2] 826). — III, 778. 2) Acetat d. Oxyapocinchen. Sm. 201—203° (B. 20, 2685). — III, 838.

3) Aethylester d. 6-Phenylamido-4-Keto-2-Phenyl-1,2,3,4-Tetrahydrobenzol-3-Carbonsäure. Sm. 144-145° (A. 294, 278).

4) Monopiperidid d. Diphenylmaleïnsäure. Piperidinsalz (Sm. 185—186°)

4) Monopheridia di Sapricia, de B. 26, 2480). — IV, 17.

1) Diphenylester d. 2,4,5-Trimethylphenylphosphinsäure. Sm. 62,5°; Sd. oberh. 360° (A. 294, 9). — IV, 1678.

2) Di [4-Methylphenylester] d. 4-Methylphenylphosphinsäure. Sd. oberh. 360° (A. 293, 264). — IV, 1668. $C_{21}H_{21}O_{8}P$

3) Phosphorigsäuretri-3-Methylphenylester. Sd. 240-243₁₀ (B. 31,

4) Phosphorigsäuretri-4-Methylphenylester. Sd. 250-255° (B. 31,

 $\mathbf{C}_{21}\mathbf{H}_{21}\mathbf{O}_3\mathbf{A}\mathbf{s}$ 1) Trimethyläther d. Tri[4-Oxyphenyl]arsin. Sm. 156° (B. 20, 49). — IV, 1689.

 2) Tribenzylester d. Arsenigensäure. Fl. (B. 28, 622).
 3) Tri [4-Methylphenylester] d. Arsenigensäure. Sd. 290°₂₀ (B. 28, 621).
 1) Trimethyläther d. Wismuthtri [4-Oxyphenyl]. Sm. 190° (B. 30, 2848). $\mathbf{C}_{21}\mathbf{H}_{21}\mathbf{O}_{3}\mathbf{Bi}$ **- IV**, 1698.

C₂₁H₂₁O₃Sb 1) Trimethyläther d. Antimontri[4-Oxyphenyl] (Trianisylstibin). Sm. $180,5-181^{\circ}$. + HgCl₂ (B. **30**, 2835). - **IV**, 1695. C 71,8 - H 6,0 - O 18,2 - N 4,0 - M. G. 351. $\mathbf{C}_{21}\mathbf{H}_{21}\mathbf{O}_{4}\mathbf{N}$

1) Diäthylester d. α -Cyan- $\alpha\beta$ -Diphenyläthan- $\alpha\beta$ -Dicarbonsäure.

 $\mathbf{C}_{21}\mathbf{H}_{21}\mathbf{O}_{4}\mathbf{N}_{3}$

105° (B. 23, 114). — II, 1891. C 66,5 — H 5,5 — O 16,9 — N 11,1 — M. G. 379. 1) Xanthostrychnol + 2H₂O (M. 6, 851; 7, 79). — III, 941. 2) Nitrostrychnin. Sm. 225° u. Zers. 2KOH, Ba(OH)₂, Ag₂, HCl, (2HCl, PtCl₄) (M. 6, 845). — III, 940.

3) Dimethyläther d. 4-Nitro-3',32-Diamido-1',12-Dioxytriphenylmethan. Sm. 189⁶ (B. **20**, 1565). — II, 1003. 4) Dimethyläther d. 4-Nitro-?-Diamido-?-Dioxytriphenylmethan.

+ C₆H₆ (Sm. 107—108°) (B. **15**, 680). — **II**, 1003. 1) Tri[2-Methylphenylester] d. Phosphorsäure (B. **16**, 1767; A. **224**,

 $\mathbf{C}_{21}\mathbf{H}_{21}\mathbf{O}_{4}\mathbf{P}$ Tri[4-Methylphenylester] d. Phosphorsäure. Sm. 77,5—78° (Z. 1870, 323; B. 15, 640; 16, 1766; 30, 2374; A. 224, 170). — II, 749.
 Tribenzylester d. Phosphorsäure. Sm. 64° (A. 262, 213). — II, 1051.

- C₂₁H₂₁O₄Sb 1) Trimethyläther d. Tri[4-Oxyphenyl]antimonoxyd. Sm. 191° (B. 30, 2838). — IV, *1696*. C 68,6 — H 5,7 — O 21,8 — N 3,8 — M. G. 367.
- $C_{21}H_{21}O_5N$
 - 1) α -Homochelidonin. Sm. 182°. $HCl + 2H_2O$, $(2HCl, PtCl_4 + 3H_2O)$, (HCl, AuCl₃). — III, 805.
 - 2) β -Homochelidonin, oder $C_{91}H_{29}O_5N$. Sm. 159°. HCl + H_2O , (2HCl, PtCl₄ + $4H_2O$), (HCl, AuCl₃), HBr + $1^{1}/_{2}H_2O$, HJ + H_2O , HNO₃ + $1^{1}/_{2}H_2O$ (M. 19, 199). III, 805.
 - 3) γ-Homochelidonin. Sm. 169°. (2HCl, PtCl₄), (HCl, AuCl₃). III, 806. C 65,7 - H 5,5 - O 25,1 - N 3,7 - M. G. 383.
- $C_{21}H_{21}O_6N$
- C 55,7 H 5,5 O 25,1 N 5,7 M. G. 383.

 1) Hydrastin. Sm. 132°. HCl, (HCl, SnCl₂), (2HCl, PtCl₄), (HCl, AuCl₃), HBr, HJ, H₂SO₄, 3 + 2Ca(H₂PO₄)₂, Pikrat (J. 1862, 381; 1863, 455; 1884, 1396; R. 5, 290; B. 19, 2798; 20, 94; Fr. 24, 60; 26, 645; 31, 594; C. 1897 [2] 1186). II, 2050.

 2) Rhoeadin. Sm. 232° u. Zers. (2HCl, PtCl₄ + 2H₂O), HJ + 2H₂O (A. 140, 145; 149, 35). III, 931.

 3) Rhoeagenin. Sm. 223°. (2HCl, PtCl₄), HJ (A. 140, 149; 149, 35). III. 637
- III, 931.
- $C_{21}H_{21}O_6P$ $\mathbf{C}_{21}\mathbf{H}_{21}\mathbf{O}_7\mathbf{N}$
 - 1) Tri[2-Methoxylphenylester] d. Phosphorigensäure (C. 1897 [2] 49). C 63,1 — H 5,3 — O 28,1 — N 3,5 — M G 399.
 - 1) Methylnorisonarkotin. Sm. 209° u. Zers. + ½ C₈H₈ (Sm. 149—151°). Na, HCl, (2HCl, PtCl₄) (B. **29**, 2042; **30**, 694). III, 922.
 - 2) Dimethylnornarkotin (A. 159, 390; A. Spl. 7, 62, 67). III, 915.
 - 3) Diäthylester d. α -Keto- α -[2-Nitrophenyl]- γ -Phenylpropan- $\beta\beta$ -Dicarbonsäure (D. d. 2-Nitrobenzoylbenzylmalonsäure). Sm. 94° (A. 239, 105; **251**, 384). — II, 1978.
 - 4) Verbindung (aus 3,5-Dioxy-1-Methylbenzol) (B. 17, 1879). II, 965. C 59,0 — H 4,9 — O 26,2 — N 9,8 — M. G. 427.
- $C_{21}H_{21}O_7N_3$ 1) Diäthylester d. Bis-o-Aldehydophenylkohlensäuresemicarbazon. Sm. 111° (B. 31, 2806).
- 1) Tri[2-Methoxylphenylester] d. Phosphorsäure. Sm. 98° (91°) (C. 1895) $\mathbf{C}_{21}\mathbf{H}_{21}\mathbf{O}_7\mathbf{P}$ 17 209; **1897** [2] 481).
- $C_{21}H_{21}NBr_{2}$ 1) Tribenzylamindibromid. Sm. 157—159° (A. 259, 306). II, 522.
- 1) α -Phenylamido- $\beta\beta$ -Dibenzylthioharnstoff. Sm. 139° (B. 30, 848). - $C_{21}H_{21}N_3S$ IV, 681.
- $\mathbf{C}_{21}\mathbf{H}_{21}\mathbf{Cl}_{2}\mathbf{As}$ 1) $\mathbf{Tri}[\mathbf{4}\text{-}\mathbf{Methylphenyl}]$ arsindichlorid. Sm. 214° (A. 208, 27). IV, 1692.
- C₂₁H₂₁Cl₂Bi 1) Wismuthtri [2-Methylphenyl] dichlorid. Sm. 160° (B. 30, 2846). -IV, 1698.
 - 2) Wismuthtri [4-Methylphenyl] dichlorid. Sm. 147° (A. 251, 331). IV, 1699.
- $\mathbf{C}_{21}\mathbf{H}_{21}\mathbf{Cl}_{2}\mathbf{Sb}$ 1) Antimontri [2-Methylphenyl] dichlorid. Sm. 178—179° (A. 242, 182). **– IV**, 1696.
 - 2) Antimontri [3-Methylphenyl] dichlorid. Sm. 137—138° (A. 242, 186). **– IV**, 1696.
 - 3) Antimontri [4-Methylphenyl] dichlorid. Sm. 156-1570 (A. 242, 172). **— IV**, 1697.
- $\mathbf{C}_{21}\mathbf{H}_{21}\mathbf{Br}_{2}\mathbf{P}$ 1) γ -Brompropyltriphenylphosphoniumbromid. Sm. 226 228°. 2 + PtCl₄ (B. **27**, 277). — **IV**, 1661.
- $\mathbf{C}_{21}\mathbf{H}_{21}\mathbf{Br}_{2}\mathbf{Bi}$ 1) Wismuthtri 2-Methylphenyl dibromid. Sm. 125° (B. 30, 2847). IV, 1698.
 - 2) Wismuthtri [4-Methylphenyl] dibromid. Sm. 111-112° (A. 251, 331). IV, 1699.
- $C_{21}H_{21}Br_2Sb1$) Antimontri[2-Methylphenyl]dibromid. Sm. 209—210° (A. 242, 183). **— IV**, 1696.
 - 2) Antimontri [3-Methylphenyl] dibromid. Sm. 1130 (A. 242, 186). IV, 1696.
 - 3) Antimontri [4-Methylphenyl] dibromid. Sm. 233—234° (A. 242, 172). **– IV**, 1697.
 - 4) Antimontri[o-p-Methylphenyl]dibromid. Sm. 185-186° (A. 242, 178). — IV, 1697.
- $\mathbf{C}_{21}\mathbf{H}_{21}\mathbf{J}_{2}\mathbf{A}\mathbf{s}$ 1) Tribenzylarsindijodid. Sm. 95° (A. 233, 72). IV, 1690.
- 1) Antimontri[2-Methylphenyl]dijodid. Sm. 174-175° u. Zers. (A. 242, $\mathbf{C}_{21}\mathbf{H}_{21}\mathbf{J}_{2}\mathbf{S}\mathbf{b}$ 183). — IV, 1696.

2) Antimontri [3-Methylphenyl]dijodid. Sm. 138—139° u. Zers. (A. 242, $\mathbf{C}_{21}\mathbf{H}_{21}\mathbf{J}_{2}\mathbf{S}\mathbf{b}$ 186). — IV, 1697.
3) Antimontri[4-Methylphenyl]dijodid. Sm. 182—183° (A. 242, 173).

- IV, 1697.

1) Tribenzylphosphinsulfid. Sm. 205-206°. - IV, 1665. $C_{21}H_{21}SP$

1) Tribenzylarsinsulfid. Sm. 212-214° (A. 233, 73). - IV, 1690. $\mathbf{C}_{21}^{11}\mathbf{H}_{21}\mathbf{SAs}$

1) Antimontri[3-Methylphenyl]sulfid. Sm. 162-1630 (A. 242, 188). — $\mathbf{C}_{21}^{11}\mathbf{H}_{21}^{11}\mathbf{SSb}$ IV, 1697.

1) Tetrabenzylphosphinselenid. Sm. 236,5°. — IV, 1666. C 79,2 — H 6,9 — O 5,0 — N 8,8 — M. G. 318. $\mathbf{C}_{21}\mathbf{H}_{21}\mathbf{PSe}$ $\mathbf{C}_{21}\mathbf{H}_{22}\mathbf{ON}_{2}$

 $C_{21}H_{22}O_2N_2$

1) Abrotin. (2HCl, PtCl₄), H₂SO₄ + 6H₂O (J. 1883, 1356). — III, 772.
2) Verbindung (aus Strychnin). Fl. (M. 7, 610). — III, 944.
C 75,4 — H 6,6 — O 9,6 — N 8,4 — M. G. 334.
1) Strychnin. Sm. 268; Sd. 270°₅. Salze meist bek. Lit. bedeutend. — III, 934. 2) Verbindung (aus Benzolcarbonsäurealdehyd u. Aethylencyanid). Sm.

214° (J. pr. [2] **50**, 4). — II, 1867. C 64,6 — H 5,6 — O 8,2 — N 21,5 — M. G. 390. $\mathbf{C}_{21}\mathbf{H}_{22}\mathbf{O}_{2}\mathbf{N}_{6}$

Di[Phenylhydrazid] d. Phenylhydrazidomethan-αα-Dicarbonsäure. Sm. 256—257° (B. 31, 553).
 Di[Phenylhydrazid] d.1-Methylphenylen-2,4-Diamidoameisensäure.

Sm. 203° (*C.* **1898** [$\mathring{1}$] 945). C 72,0 — H 6,3 — O 13,7 — N 8,0 — M. G. 350. $C_{21}H_{22}O_3N_2$

1) Aethylester d. 5-Phenylhydrazon-3-Keto-1-Phenylhexahydrobenzol-2-Carbonsäure. Sm. 130° (B. 27, 2127, 2343; A. 294, 281).

— IV, 711. C 66,7 — H 5,8 — O 12,7 — N 14,8 — M. G. 378. $C_{21}H_{22}O_{3}N_{4}$

1) Di[Phenylhydrazid] d. δ -Keto- $\beta \varepsilon$ -Heptadiën- $\beta \zeta$ -Dicarbonsäure. Sm. 206° (B. **31**, 683).

C 66,0 - H 5,8 - O 20,9 - N 7,3 - M. G. 382. $C_{21}H_{22}O_5N_2$

1) ?-Dinitro-2-Acetyl-?-Benzyliden-5-Pseudobutyl-1, 3 - Dimethylbenzol. Sm. 140° (B. 31, 1346).

 $C_{21}H_{22}O_6Cl_2$ 1) Dichlorphillygenin (A. 118, 128). — III, 600. $C_{21}H_{22}O_6Br_2$ 1) Dibromphillygenin (A. 118, 128). — III, 600. $C_{21}H_{22}O_7N_2$

C 60,9 — H 5,3 — O 27,0 — N 6,8 — M. G. 414.

1) Nitrocryptopin. Sm. 185°. HCl + 3H₂O, (2HCl, PtCl₄ + 10H₂O), HNO₃, Oxalat + 12H₂O, Dioxalat + 3H₂O (A. Spl. 8, 312). — III, 913. C 47,0 — H 5,0 — O 25,3 — N 12,7 — M. G. 442.

 $C_{21}H_{22}O_7N_4$

1) Dinitrostrychninsäure + H₂O (Dinitrostrychninhydrat). HNO₃ (A. 301,

2) Dinitroisostrychninsäure. HNO₃ (A. 301, 334). C 58,6 — H 5,1 — O 29,8 — N 6,5 — M. G. 430. $C_{21}H_{22}O_8N_2$

1) Diäthylester d. $\alpha \gamma$ -Di[2-Nitrophenyl]propan- $\beta \beta$ -Dicarbonsäure.

Sm. 97° (B. 20, 436). — II, 1893.
2) Diäthylester d. αγ-Di[4-Nitrophenyl]propan-ββ-Dicarbonsäure.

Sm. 170° (B. 20, 434). — II, 1893.

3) Diäthylester d. α -[2-Nitrophenyl]- γ -[4-Nitrophenyl]propan- $\beta\beta$ -Di-

 $C_{21}H_{22}O_9N_4$

5) Diathylester d. u-[2-Miropheny] 7-[2-Miropheny] 17-[2-Miropheny] 17-[2-

 $\mathbf{C}_{21}\mathbf{H}_{22}\mathbf{O}_{10}\mathbf{N}_{2}$ 1) Dinitrophillygenin (A. 118, 128). — III, 600.

1) Kakostrychnin? (2 HCl, PtCl₄) (B. 14, 777). — III, 941. $\mathbf{C}_{21}\mathbf{H}_{22}\mathbf{O}_{10}\mathbf{N}_{5}$

C, H, NJ 1) Jodäthylat d. 3,5-Dibenzylpyridin. Sm. 127° (A. 280, 46). IV, 456.

 $\mathbf{C}_{21}\mathbf{H}_{22}\mathbf{N}_2\mathbf{S}$ 1) s-Isobutylphenyl-2-Naphtylthioharnstoff. Sm. 152° (B. 16, 2022). - II, 619.

 $\mathbf{C}_{21}\mathbf{H}_{22}\mathbf{JP}$ 1) Propyltriphenylphosphoniumjodid. Sm. 201,5° (A. 229, 312). IV, 1661. 2) Isopropyltriphenylphosphoniumjodid $+ 2 H_2 O$. Sm. 191° (wasserfrei)

(A. 229, 313). — IV, 1661. C 82,6 — H 7,5 — O 5,2 — N 4,6 — M. G. 305.

 $\mathbf{C}_{21}\mathbf{H}_{23}\mathbf{ON}$ 1) Aethyläther d. Apocinchen. Sm. 70-71° (B. 18, 2381). - III, 838. $\mathbf{C}_{21}\mathbf{H}_{23}\mathbf{ON}_{3}$ C 75,7 - H 6,9 - O 4,8 - N 12,6 - M. G. 333.

1) ?-Triamido-α-Oxy-?-Dimethyltriphenylmethan (B. 15, 679). —II, 1094. 2) ?-Triamido- α -Oxy-?-Dimethyltriphenylmethan (A. ch. [6] 2, 348). — II, 1094.

3) 6-Oxy-2,4-Di[4-Isopropylphenyl]-1,3,5-Triazin. Sm. 253° (B. 30,

2009). — IV, 1198. C 78,5 — H 7,1 — O 10,0 — N 4,4 — M. G. 321. $\mathbf{C}_{21}\mathbf{H}_{23}\mathbf{O}_{2}\mathbf{N}$

1) 2-Naphtylester d. Cyancampholsäure. Sm. 117° (A. ch. [7] 2, 392). — П, 877. С 72,2 — Н 6,6 — О 9,2 — N 12,0 — М. G. 349.

 $C_{21}H_{23}O_2N_3$

1) Amidostrychnin. Sm. 275°; Sd. 280°₅. 2HCl, (2HCl, PtCl₄) (M. 6, 848). — III, *941*.

2) Dimethyläther d. ?-Triamido-?-Dioxytriphenylmethan. Sm. 182 bis 183° (B. **15**, 681). — **II**, 1003.

1) Wismuthtri[2-Methylphenyl]dioxydhydrat. Chlorid, Bromid, Nitrat $\mathbf{C}_{21}\mathbf{H}_{23}\mathbf{O}_{2}\mathbf{B}\mathbf{i}$ (B. 30, 2847). — IV, 1698.
2) Wismuthtri[4-Methylphenyl]dioxydhydrat. Chlorid, Bromid, Jodid

(A. 251, 331). — IV, 1699. C 74,8 — H 6,8 — O 14,2 — N 4,2 — M. G. 337.

 $C_{21}H_{23}O_3N$

1) 6-[4-Aethoxylphenyl] amido-4-Keto-2-[4-Methoxylphenyl]-1, 2, 3, 4-Tetrahydrobenzol. Sm. 226° (A. 294, 311).

 $C_{21}H_{23}O_4N$

C 71,4 — H 6,5 — O 18,1 — N 4,0 — M. G. 353. 1) Artarin. Sm. 240° u. Zers. $HCl + 4H_2O$, (2HCl, PtCl₄), $H_2SO_4 + 2H_2O$ (G. 19, 315). — III, 780. 2) Mekonidin. Sm. 58°. (2HCl, PtCl₄) (A. 153, 47). — III, 912. 3) Methylhydroberberin + 2H₂O. Sm. 224—226°. Salze siehe III, 801.

4) Diäthylester d. α -[2-Methylphenyl]imido- α -Phenyläthan- $\beta\beta$ -Dicarbonsäure. Sm. 95° (B. 19, 985). — II, 1850.

5) Diäthylester d. α -[4-Methylphenyl]imido- α -Phenyläthan- $\beta\beta$ -Dicarbonsäure. Fl. (B. 19, 985). — II, 1850.

6) Diäthylester d. 2,6-Dimethyl-4- $[\beta$ -Phenyläthenyl] pyridin - 3,5 - Dib) Distriptester d. 2,0-Dimetriy1-1-1-1 herystecheny1-1-1-1 pyridin 3, carbonsäure. Sm. 39°. (2HCl, PtCl₄) (A. 231, 6). — IV, 404. C. 66,1 — H 6,0 — O 16,8 — N 11,0 — M. G. 381.
1) Nitrosostrychninsäure. HCl + H₂O (A. 264, 54). — III, 942.
2) C-Nitrosoisostrychninsäure. HCl (A. 264, 73). — III, 943.
3) N-Nitrosoisostrychninsäure. HCl (A. 264, 73). — III, 943. C. 68,3 — H 6,2 — O 21,7 — N 3,8 — M. G. 369.
4) J. Harachelidania. ich. C. H. O. H. O. 111, 205.

 $\mathbf{C}_{21}\mathbf{H}_{23}\mathbf{O}_{4}\mathbf{N}_{3}$

 $C_{21}H_{23}O_5N$

C 08,5 — H 0,2 — O 21,7 — N 3,8 — M. G. 369.

1) β-Homochelidonin, siehe C₂₁H₂₁O₅N. — III, 805.

2) Cryptopin. Sm. 217° u. Zers. HCl + 6H₂O, (HCl, HgCl₂ + H₂O), (2HCl, PtCl₄ + 6H₂O), H₂Cr₂O₇, Dioxalat, Ditartrat + 4H₂O, Pikrat + H₂O, Mekonat (A. Spl. 8, 299; J. 1867, 523; 1887, 2185; A. 176, 200; 222, 221; B. 13, 1075; 25 [2] 748). — III, 913.

3) Diacetylmorphin (Heroïn). Sm. 169° (173°). HCl, (2HCl, PtCl₄), (HCl, AuCl₃) (Soc. 27, 1038; A. 222, 205; C. 1899 [1] 123, 705). — III, 899.

4) $\alpha\beta$ -Diäthylester d. $\alpha\beta$ -Diphenyläthan- $\alpha\alpha\beta$ -Tricarbonsäure- α -Monamid. Sm. 157° (B. **23**, 116). — II, 2025. C 63,5 — H 5,8 — O 20,1 — N 10,6 — M. G. 397.

 $C_{21}H_{23}O_5N_3$

1) Diäthylester d. α -Phenylhydrazon- β -Benzoylamidoäthan- $\alpha\beta$ -Dicarbonsäure. Sm. 133—1340 (B. 24, 1260). — IV, 713.

C₂₁H₂₂O₅Sb 1) Trimethyläther d. Tri[4-Oxyphenyl]antimonhydroxyd. Chlorid, Bromid, Jodid, Nitrat (B. 30, 2836). — IV, 1695. C 65, 4 — H 6, 0 — O 24, 9 — N 3, 6 — M. G. 385. 1) Colchiceïn (Acetotrimethylcolchicinsäure) + $\frac{1}{2}$ H₂O. Sm. 172^{0} . (HCl, AuCl₃), Ba, Cu + 5H₂O (J. 1856, 548; 1864, 451; M. 4, 162; 7, 585; 9, 6, 873; B. 14, 1412). — III, 874. 2) Succinylmorphin + 4H₂O. (2HCl, PtCl₄) (Soc. 28, 692). — III, 900. 3) Methyloxydhydrat d. Protopin. Jodid, Nitrat + 4H₄O (M. 19, 194).

C 58,7 — H 5,4 — O 26,1 — N 9,8 — M G. 429.

 $C_{21}H_{23}O_7N_3$ 1) Bidesmethylnitrobrucinhydrat +2 H₂O. HCl, HNO₃+H₂O (A. 304, 45). C 50,4 - H 5,5 - O 30,7 - N 3,4 - M. G. 417.
1) Nitrophillygenin (A. 118, 128). - III, 600. C 56,6 - H 5,2 - O 28,8 - N 9,4 - M. G. 445. $C_{21}H_{23}O_8N$

 $\mathbf{C}_{21}\mathbf{H}_{23}\mathbf{O}_{8}\mathbf{N}_{3}$

1) Trinitrocannabinol. Sm. 160°. NH₄, Na + 4H₂O, K, Ag (Soc. 75, 23). **— III**, 621.

 $\mathbf{C}_{21}\mathbf{H}_{24}\mathbf{O}_{6}\mathbf{N}_{4}$

 $\mathbf{C}_{21}\mathbf{H}_{24}\mathbf{O}_7\mathbf{N}_2$

C21 H23 N5S 1) α -[β -Phenylthiouramidophenyl]amido- β -[α -Phenylhydrazido]äthan (Aethylentriphenylthiosemicarbazid). Sm. 164,5° (A. **254**, 125). — IV, 679. C 78,7 — H 7,5 — O 5,0 — N 8,7 — M. G. 320. $\mathbf{C}_{21}\mathbf{H}_{24}\mathbf{ON}_{2}$ 1) Benzoyloktohydrodimethylphenanthrolin. Sm. 167—168° (B. 24. 1743). - IV, 889. 2) Paytamin (A. 154, 293; 211, 280; B. 10, 2161). — III, 782. 2) Paytin H (A. 104, 253, 211, 250, B. 10, 2151). — 111, 152.

3) Paytin + H₂O. Sm. 156°. HCl, (2HCl, PtCl₄), HJ (A. 154, 289; 166, 272; 178, 252 Anm.; 211, 280). — III, 782.

4) Strychnidin. Sm. 252° (i. V.). Sd. 290—295°₁₄. HCl, 2HCl + ½H₂O (A. 301, 303). 5) Verbindung (aus Furfurol u. Dimethylanilin). Sm. 83°. (2HCl, PtCl, Pikrat (A. 206, 141). — III, 723. C 75,0 — H 7,1 — O 9,5 — N 8,3 — M. G. 336. $\mathbf{C}_{21}\mathbf{H}_{24}\mathbf{O}_{2}\mathbf{N}_{2}$ 1) a-1,4-Dibenzoyl-2,3,5-Trimethylhexahydro-1,4-Diazin. Sm. 190° u. Zers. (J. pr. [2] 55, 65). — IV, 484. 2) Phenylhydrazonsantonin. Sm. 220-221° u. Zers. (2HCl, PtCl₄) (G. 19, 383). — II, 1787. 3) Acetylapochinamin. (2HCl, PtCl₄ + 2H₂O) (A. **207**, 294). — III, 857. 4) Acetylcinchonin. (2HCl, PtCl₄ + 2H₂O), (2HCl, 2AuCl₃ + H₂O) (A. 205, 321). — III, 834. 5) Acetylapocinchonin. (2HCl, PtCl₄ + 2H₂O) (A. 205, 338). — III, 845. 6) Acetyldiapocinchonin. $(2\text{HCl}, \text{PtCl}_4 + 2\text{H}_2\text{O}), 2(\text{HCl}, \text{AuCl}_3) + \text{H}_2\text{O}$ (A. **205**, 339). — III, 845. 7) Acetylcinchonidin. Sm. 42°. (2HCl, PtCl₄ + 2H₂O), 2(HCl, AuCl₃)+ H_2O (A. **205**, 319). — III, 852.

8) Acetylapocinehonidin. (2HCl, PtCl₄ + 2H₂O), 2(HCl, AuCl₃) + H₂O (A. 205, 338). - III, 853.

9) Acetylhomocinchonidin. (2HCl, $PtCl_4 + 2H_2O$), (2HCl, $2AuCl_8 + H_2O$) (A. 205, 320). — III, 854.

10) Di [Phenylamid] d. Heptan-αε-Dicarbonsäure. Sm. 145° (Soc. 65, 992). $C_{21}H_{24}O_{2}N_{4}$ C.69,2 - H.6,5 - O.8,8 - N.15,4 - M.G.3641) Diamidostrychnin. Sm. 263° u. Zers. 2HCl (*Bl.* 41, 236). — III, 941. C 71,6 — H 6,8 — O 13,6 — N 7,9 — M. G. 352. $\mathbf{C}_{21}\mathbf{H}_{24}\mathbf{O_{3}N}_{2}$

1) α -Acetyl- α -Phenyl- β -[6-Acetoxyl-3-tert. Butylbenzyliden] hydrazin.

Sm. 128° (Am. 16, 637). — IV, 761. 2) Phenylhydrazon d. α-Oxysantonin. Sm. 264-265° (G. 27 [2] 91). -IV, 797.

3) Strychninsäure + 4H₂O (M. 7, 83; A. 264, 50; 301, 330). — III, 942, 4) Isostrychninsäure + H₂O (Dihydrostrychnin) (A. 264, 69; 268, 236; 301, 331; Bl. 31, 98). — III, 942.

5) 6-Acetat d. 6-Oxy-3-tert. Butyl-1-Acetylphenylhydrazonmethylbenzol. Sm. 128° (*Am.* 16, 637). C 68,5 — H 6,5 — O 17,4 — N 7,6 — M. G. 368.

 $\mathbf{C}_{21}\mathbf{H}_{24}\mathbf{O}_{4}\mathbf{N}_{2}$ 1) Diäthylester d. γ -Phenylhydrazon- α -Phenylpropan- $\beta\gamma$ -Dicarbonsäure. Sm. 64—66° (B. 31, 556). C 63,6 — H 6,1 — O 16,2 — N 14,1 — M. G. 396. $\mathbf{C}_{21}\mathbf{H}_{24}\mathbf{O}_{4}\mathbf{N}_{4}$

1) P-Tetra[Acetylamido]diphenylmethan (A. 218, 343). — IV, 1277. $\mathbf{C}_{21}\mathbf{H}_{24}\mathbf{O}_{5}\mathbf{N}_{2}$ C 65,6 — H 6,2 — O 20,8 — N 7,3 — M. G. 384.

1) Acetylchitenin. (2 HCl, PtCl₄) (M. 10, 41). — III, 820.

2) Diäthylester d. 2,6-Dimethyl-4-[3-Acetylamidophenyl]pyridin-3,5-

Dicarbonsäure. Sm. 131° (G. 17, 464). — II, 387. 3) Amid d. Acetotrimethylcolchicinsäure. $+ {}^{1}/_{2} C_{2}H_{6}O$ (M. 9, 25). — III, 874.

C 63,0 - H 6,0 - O 24,0 - N 7,0 - M. G. 400. $\mathbf{C}_{21}\mathbf{H}_{24}\mathbf{O}_{6}\mathbf{N}_{2}$ 1) Phenylhydrazon d. Glyko-o-Cumarsäurealdehyd. Sm. 130—132° (B. 18, 1960). — IV, 761. 2) Tolazinderivat (aus o-Toluylendiamin u. 1,2-Diketo-R-Pentamethylen-

3,4,5-Tricarbonsäuretriäthylester). Sm. 141—142° (A. **297**, 110). — IV, 991. C 58,9 — H 5,6 — O 22,4 — N 13,1 — M. G. 428. 1) Oenanthylidenamid d. 3-Nitrobenzol-1-Carbonsäure. Sm. 170° (A.

157, 47). — II, 1234. C 60,6 — H 5,8 — O 26,9 — N 6,7 — M. G. 416.

1) s-Di[5-Carboxyl-2-(a)-Oxyisopropylphenyl]harnstoff (B. 17, 1307). - II, 1587.

- $\mathbf{C}_{21}\mathbf{H}_{24}\mathbf{O}_7\mathbf{N}_2$ 2) Carbonat d. 4-Oxyphenylamidoameisensäurepropylester. Sm. 1550 (C. 1897 [1] 469).
- $C_{21}H_{24}N_2S$ 1) Di[4-Dimethylamidophenyl]thiënylmethan (Leukothiophengrün). Sm. 92—93°. (2 HCl, PtCl₄), Pikrat (B. 20, 514). — III, 749°. 2) s-Di[5, 6, 7, 8-Tetrahydro-1-Naphtyl]thioharnstoff. Sm. 170° (B. 21,

1795). — II, 587.

3) s-Di[1,2,3,4-Tetrahydro-2-Naphtyl]thioharnstoff. Sm. 166,5° (B. 21, 858). – II, 588.

C 78,0 — H 7,7 — O 9,9 — N 4,3 — M. G. 323.

1) Benzoat d. 3-Diäthylamido-2-Oxy-1,2,3,4-Tetrahydronaphtalin. (2 HCl, PtCl₄), Pikrat (A. **288**, 122). C 71,8 — H 7,1 — O 9,1 — N 12,0 — M. G. 351.

 $\mathbf{C}_{21}\mathbf{H}_{25}\mathbf{O}_2\mathbf{N}_3$

1) Porphyrin. Sm. 97°. (2 HCl, PtCl₄ + 4 H₂O) (A. Spl. 4, 42; A. 205, 366). — III, 777. C 74,3 — H 7,4 — O 14,2 — N 4,1 — M. G. 339.

 $\mathbf{C}_{21}\mathbf{H}_{25}\mathbf{O_3N}$

1) Propyläther d. Thebenin (Prothebenin). Sm. 172-173°. HCl, HJ (B. **32**, 185).

2) Phenylamidopipitzahoïnsäure (Phenylamidoperezon). Sm. 138-139° (133°) (B. 18, $\overline{7}1\overline{4}$, 941; A. 237, 103). — II, 1673. C 68,7 — H 6,8 — O 13,1 — N 11,4 — M. G. 367.

C21H25O2N8 C21 H25 O4 N

 $\mathbf{C}_{21}\mathbf{H}_{25}\mathbf{O}_2\mathbf{N}$

1) Nitrosotetrahydrostrychnin. HCl (A. 301, 322). C 71,0 — H 7,0 — O 18,0 — N 3,9 — M. G. 355. 1) Corybulbin. Sm. 238—240°. HCl, (2HCl, PtCl₄ + 3H₂O), H₂SO₄ (Soc. 67, 25; C. 1896 [2] 794). — III, 877. 2) Butyrylmorphin. 2 Modif. HCl, (2HCl, PtCl₄) (Soc. 28, 16, 322). —

III, 899.

3) Propionylcodein. $HCl + 2H_2O$, $(2HCl, PtCl_4)$, $HJ + H_2O$, Oxalat + $3 H_2 O (A. 222, 212). - III, 905.$

4) α-Acetylmethylmorphimethin (Acetylmethocodeïn). Sm. 66°. HCl+ $^{1}/_{2}$ H₂O, (2 HCl, PtCl₄ + 4 H₂O), HNO₈ + 3 H₂O, H₂SO₄ + 8 H₂O (A. **222**, 222; B. **27**, 1146). — III, 905.

5) β -Acetylmethylmorphimethin (B. 27, 1146). — III, 905.

6) Diäthylester d. α -[2-Methylphenyl]amido- α -Phenyläthan- $\beta\beta$ -Dicarbonsäure. Sm. 67,5° (B. 28, 1454). — II, 1850.

7) Diäthylester d. α -[4-Methylphenyl]amido- α -Phenyläthan- $\beta\beta$ -Dicar-

bonsäure. Sm. 80-82° (B. 28, 1454). - II, 1850.

8) Diäthylester d. 2,6-Dimethyl-4-[β-Phenyläthenyl]-1,4-Dihydropyridin-3,5-Dicarbonsäure. Sm. 151-1520 (148-1490) (A. 231, 3; G.

 $C_{21}H_{25}O_5N$

23 [1] 386). — IV, 387. C 67,9 — H 6,7 — O 21,6 — N 3,8 — M. G. 371. 1) Methyloxydhydrat d. Papaverin. Sm. 215°. Chlorid, Jodid, Bichromat, Sulfat + xH₂O, Pikrat (M. 6, 692; 9, 758; 10, 682; B. 18, 1577; J. pr. [2] 38, 496; [2] 56, 338; J. 1886, 1717). — IV, 440.

2) Hydroberberinmethyloxydhydrat + 4H₂O. Sm. 162-164°. Salze siehe III, 801.

3) Trimethylcolchidimethinsäure $+ \frac{1}{2} H_2 O$. Sm. 126° (M. 9, 876). -III, 874.

C 68.8 - H 6.8 - O 21.9 - N 11.5 - M. G. 399. $C_{21}H_{25}O_5N_3$

1) Verbindung (aus Kakothelin). Sm. 231—232°. (2 HCl, PtCl₄) (B. 20, 453). — III, 948.

C₂₁H₂₅O₁₁Cl 1) Tetracetat d. m-Chlorsalicin. Sm. 142° (A. 154, 13; C. 1896 [2] 738;

1897 [2] 1075). — III, 609. C₂₁H₂₅O₁₁Br 1) Tetracetat d. m-Bromsalicin. Sm. 148° (C. 1896 [2] 738; 1897 [2]

C₂₁H₂₅O₁₁J 1) Tetracetat d. m-Jodsalicin. Sm. 119° (C. 1896 [2] 738; 1897 [2] 1075). C₂₁H₂₅N₈Cl₃ 1) Verbindung (aus Cyananilin u. Phenylhydrazin). Sm. 200-212° u. Zers.

 $\mathbf{C}_{21}\mathbf{H}_{26}\mathbf{ON}_{2}$

(J. pr. [2] 35, 533). — IV, 743. C 78,2 — H 8,1 — O 5,0 — N 8,7 — M. G. 322. 1) Desoxystrychnin + 3H₂O. Sm. 75° (172° wasserfrei). (2 HCl, PtCl₄), HJ + H₂O, H₂CrO₄ (A. 268, 245; 301, 311). — III, 943. 2) Aethylcinchonin. Sm. 49—50°. (2 HCl, PtCl₄ + 2 H₂O) (B. 13, 2286).

- III, 833.

3) Dimethyleinchonin. Fl. HCl, (HCl, ZnCl₂), (HCl, HgCl₂), (2HCl, PtCl₄ + 2H₂O), HBr, HJ, Pikrat (B. 13, 2293; A. 277, 280). — III, 832.

4) Aethylcinchonidin. Sm. 90-91°. Salze siehe (B. 11, 1821; 14, 47, Co, Hog ONo 1922; 16, 2746; Soc. 26, 1181; J. 1882, 1109; A. 269, 257; M. 15, 46). III, 851.

> 5) Phenylhydrazid d. Säure C₁₅H₂₀O₂ (aus Camphersäureanhydrid). Sm. 156° (C. **1895** [2] 1082).

C 72,0 - H 7,4 - O 4,6 - N 16,0 - M. G. 350.C21 H26 ON4

1) s-Di[1-Amido-1, 2, 3, 4-Tetrahydro-5-Naphtyl]harnstoff. Zers. bei 135° (B. **22**, 957). — **IV**, 862. C 64,5 — H 7,7 — O 9,5 — N 8,3 — M. G. 338.

 $C_{21}H_{26}O_{2}N_{2}$

1) Di[Acetylamidodimethylphenyl]methan (aus 2-Amido-1,3-Dimethylbenzol). Sm. noch nicht bei 280° (M. 19, 640).

2) $\alpha \beta$ -Di[Acetyl-2-Methylphenylamido] propan. Sm. 101—102 (B. 25. 3276). — II, 461.

3) αβ-Di[Acetyl-4-Methylphenylamido] propan. Sm. 113,5—114° (B. 25, 3277). — II, 491.

- 4) $\alpha\iota$ -Dioximido- $\alpha\iota$ -Diphenylnonan. Fl. (C. 1896 [2] 1091). 5) Tetrahydrostrychnin. Sm. 202° (i. V.). $+ C_2H_6O$, HCl, $2HJ+2H_2O$ (A. 301, 315).
- (A. 363, 513).

 (B. Methylchinin. Fl. Salze meist bek. (B. 14, 76, 79; 28, 1248; A. 91, 164; M. 12, 513; J. pr. [2] 3, 145; [2] 14, 261; [2] 15, 76). III, 813.

 (Chinoathylin. Sm. 160°. H₂SO₄ + H₂O (Bl. [3] 7, 308). III, 821.

 (Acthyläther d. Apochinin. Sm. 182°. (2 HCl, PtCl₄ + 2 H₂O) (M. 16, 10).

43). — III, 818.

- 10) Acetyleinchonamin. Sm. 80-90° (A. 225, 226; A. ch. [6] 19, 118). -III, 929.
- 11) Acetylcinchotin (Acetylhydrocinchonin). (2HCl, PtCl₄ + 1[2]H₂O) (A. 300, 53),
- 12) Acetylhydrocinchonidin. Sm. bei 42°. (2HCl, PtCl₄ + 2H₂O) (A. 214, 12). — III, 858.
- 13) Hypoquebrachin. Sm. bei 80°. (2HCl, $PtCl_4 + 4H_2O$) (A. 211, 263). **– III**, 781.
- 14) Oenanthylidenamid d. Benzolcarbonsäure. Sm. 1280 (A. 157, 46). II, 1194.
- 15) $\overrightarrow{Di}[Phenylamid]$ d. Heptan- $\beta\zeta$ -Dicarbonsäure. α -Modif. Sm. 154 bis 155° ; β-Modif. Sm. $183-184^{\circ}$ (Soc. **67**, 147). C 68,9 — H 7,1 — O 8,7 — N 15,3 — M. G. 366.
- $\mathbf{C}_{21}\mathbf{H}_{26}\mathbf{O}_{2}\mathbf{N}_{4}$

1) s-Phenyl - a - Phenylamidoformylimidoheptylharnstoff (Heptenyldiphenyldiureïd). Sm. 170° (B. 28, 476).

- C21 H26 O2S 1) Di[5-Methyl-2-Isopropylphenylester] d. Thiokohlensäure. Sm. 1100
- $C_{21}H_{26}O_3N_2$

1) Di[5-Methyl-2-isopropy] phenylester] d. Thioxenfellstate (iii. 1) (B. 27, 3411). C 71,2 — H 7,3 — O 13,6 — N 7,9 — M. G. 354.

1) Quebrachin. Sm. 214—216° u. Zers. HCl, (2HCl, PtCl₄ + 5H₂O), H₂SO₄ + 8H₂O, Oxalat, Tartrat + 6H₂O, Citrat (A. 211, 265; B. 15, 2633; Fr. 22, 151). — III, 782. C 68,1 — H 7,0 — O 17,3 — N 7,6 — M. G. 370.

1) Aethylchitenidin + 3(4)H₂O. Sm. 287°. (2HCl, PtCl₄ + 2H₂O), H₂SO₄

 $\mathbf{C}_{21}\mathbf{H}_{26}\mathbf{O}_4\mathbf{N}_2$

(A. 269, 239). - III, 827.

- 2) Aethyläther d. Chitenin. Sm. 198° (M. 14, 601). III, 819.
- 3) Diäthylester d. $\alpha \gamma$ -Di[4-Amidophenyl]propan- $\beta \beta$ -Dicarbonsäure. Sm. 60°. 2 HCl, (2 HCl, PtCl₄), H₂SO₄, Oxalat (B. **20**, 436). — II, 1893. 4) Diäthylester d. αγ-Trimethylendi[Phenylamidoameisensäure]. Sm. 56° (B. **20**, 783). — II, 374.
- 5) Diäthylester d. α -[β -Methyl- β -Phenylhydrazido]- α -Phenyläthan- $\beta\beta$ -
- Dicarbonsäure. HCl (B. 29, 813). IV, 742. C 58,1 H 6,0 O 29,5 N 6,4 M. G. 434. $\mathbf{C}_{21}\mathbf{H}_{26}\mathbf{O}_{8}\mathbf{N}_{2}$
- 1) Verbindung (aus Pepton) (B. 13, 2134). IV, 1641. 1) s-Di[1-Amido-1, 2, 3, 4-Tetrahydro-5-Naphtyl]thioharnstoff. Sm. 120 $\mathbf{C}_{21}\mathbf{H}_{26}\mathbf{N}_4\mathbf{S}$
- bis 155° (B. 22, 956). IV, 862.

 2) Allylsenfölauramin. Sm. 160—161° (J. pr. [2] 50, 444). IV, 1175. C 81,6 H 8,7 O 5,2 N 4,5 M. G. 309.

 1) α-Oximido-4-Oktyldiphenylmethan. Sm. 106—107° (B. 31, 939). $\mathbf{C}_{21}\mathbf{H}_{27}\mathbf{ON}$
 - 2) 4-norm. Oktylphenylamid d. Benzolcarbonsäure. Sm. 117,6° (B. 18, 136). — II, 1167.

- $\mathbf{C}_{21}\mathbf{H}_{27}\mathbf{ON}$ 3) 4-Isooktylphenylamid d. Benzolcarbonsäure. Sm. 1090 (B. 18, 142). **- II**, 1167. C 70,6 — H 7,5 — O 17,9 — N 3,9 — M. G. 357. $\mathbf{C}_{21}\mathbf{H}_{27}\mathbf{O}_4\mathbf{N}$
- 1) Laudanosin. Sm. 89°. (2HCl, PtCl₄ + 3 H₂O), HJ + $\frac{1}{2}$ H₂O, Dioxalat + $\frac{3}{4}$ H₂O (A. Spl. 8, 321; A. 176, 202; 282, 213). III, 912.
 - 2) 1-Benzoat d. 1-Oximido-3-Isobutyl-5-Methyl-1, 2, 3, 4-Tetrahydrobenzol-4-Carbonsäure. Sm. 146—148° (A. 288, 336). C 64,8 — H 6,9 — O 24,7 — N 3,6 — M. G. 389.
- $C_{21}H_{27}O_6N$ 1) Diäthylester d. α-Phtalylamidoheptan-δδ-Dicarbonsäure. Sm. 57° (B. **23**, 3698). — II, 1813.
- C 62,2' H'6,7 O 27,6' N 3,5 M. G. 405. $\mathbf{C}_{21}\mathbf{H}_{27}\mathbf{O}_7\mathbf{N}$
- 1) Moschatin (A. 155, 159). III, 772. $\mathbf{C}_{21}\mathbf{H}_{27}\mathbf{N}_{2}\mathbf{J}$ 1) Jodmethylat d. Methyldesoxycinchonidin. Zers. bei 251° (B. 31,
- C 77,8 H 8,6 O 4,9 N 8,6 M. G. 324 $\mathbf{C}_{21}\mathbf{H}_{28}\mathbf{ON}_{2}$ 1) s-Di[4-Isobutylphenyl]harnstoff. Sm. 283-2840 (B. 17, 1240).
 - II, 558. 2) s-Di[4-Isopropylbenzyl]harnstoff. Sm. 118° (122°) (B. 10, 52; 22, 932). - IÌ, 561.
 - 3) s-Di[2-Isopropyl-4-Methylphenyl]harnstoff (A. 221, 172). II, 559.
 - 4) 4,4'-Di[Diäthylamido] diphenylketon. Sm. 95-96°. (2HCl, PtCl₄) (B. 9, 1914; 31, 1002). — III, 186.
 - 5) Aethylcinchonamin + H₂O. Sm. 75—78° (140° wasserfrei). (2 HCl, PtCl,
- + 3 H₂O) (A. 225, 233; A. ch. [6] 19, 116). III, 928. C 74,1 H 8,2 O 9,4 N 8,2 M. G. 340. 1) Desoxystrychninsäure + 2 H₂O (A. 268, 253). III, 944. $\mathbf{C}_{21}\mathbf{H}_{28}\mathbf{O}_2\mathbf{N}_2$
- C 70.8 H 7.8 O 13.5 N 7.8 M. G. 356. $\mathbf{C}_{21}\mathbf{H}_{28}\mathbf{O}_{3}\mathbf{N}_{2}$ 1) Di[3-Diäthylamidophenylester] d. Kohlensäure. Sm. 67°; Sd. 292°s.
- 2 HCl, (2 HCl, PtCl₄), 2 HJ (B. **29**, 506). C 65,6 — H 7,3 — O 12,5 — N 14,6 — M. G. 384. $\mathbf{C}_{21}\mathbf{H}_{28}\mathbf{O}_{3}\mathbf{N}_{4}$
- 1) Chininharnstoff. $2 \text{HCl} + 5 \text{H}_2 \text{O}$ (\vec{J} . r. 13, 32). III, 813. C 62.4 - H 6.9 - O 23.8 - N 6.9 - M. G. 404. $\mathbf{C}_{21}\mathbf{H}_{28}\mathbf{O}_{6}\mathbf{N}_{2}$
- 1) Tetroxystrychnin. (2HCl, PtCl₄) (A. 108, 350). III, 941. C 60,0 - H 6,6 - O 26,7 - N 6,6 - M. G. 420. $\mathbf{C}_{21}\mathbf{H}_{28}\mathbf{O}_7\mathbf{N}_2$
- 1) Pentoxystrychnin. (2HCl, PtCl₄) (A. 108, 350). III, 941.
- C 56.2 H 6.2 O 25.0 N 12.5 M. G. 448. $\mathbf{C}_{21}\mathbf{H}_{28}\mathbf{O}_7\mathbf{N}_4$ 1) Di[Phenylhydrazon] d. Glykononose. Sm. 220—223° u. Zers. (A. 270,
- 106). IV, 793. 1) Triäthylester d. Thiorufinsäure. Sm. 105°. Na, Ca, Ba + 2H₂O (B. $C_{21}H_{28}O_8S_6$ **10**, 702; **28**, 2882). — **I**, 900.
- $\mathbf{C}_{21}\mathbf{H}_{28}\mathbf{N}_2\mathbf{S}$ 1) s-Di[4-Isobutylphenyl]thioharnstoff. Sm. 192,5° (B. 17, 1235). —
 - 2) s-Di[4-Isopropylbenzyl]thioharnstoff. Sm. 1280 (B. 10, 53). II, 561. 3) s-Di[2-Isopropyl-4-Methylphenyl]thioharnstoff. Sm. 160° (A. 221,
 - 173). II, 559. 4) s-Di[P-Tetramethylphenyl]thioharnstoff. Sm. 278° (B. 17, 1916). —
- H, 563. C 74,3 H 8,6 O 4,7 N 12,4 M. G. 339. $\mathbf{C}_{21}\mathbf{H}_{29}\mathbf{ON}_3$
- 1) β -Isoamylphenylamido- α -[2,4,5-Trimethylphenyl|harnstoff. Sm.215°. • IV, 674. C 77,1 — H 8,9 — O 9,8 — N 4,2 — M. G. 327. $\mathbf{C}_{21}\mathbf{H}_{29}\mathbf{O}_2\mathbf{N}$
- 1) 3-Amyl-2-Hexylchinolin-8-Carbonsäure. Sm. 69°. HCl (B. 28, 2818). - IV, 359. C 65,8 - H 7,6 - O 8,3 - N 18,3 - M. G. 383.
- $\mathbf{C}_{21}\mathbf{H}_{29}\mathbf{O}_{2}\mathbf{N}_{5}$ 1) Hydrocyanid d. Diäthylnitrosamidobenzol. Sm. 169-171 (M. 6, 544). — II, 333.
- C 63,1 H 7,3 O 12,0 N 17,5 M. G. 399. $\mathbf{C}_{21}\mathbf{H}_{29}\mathbf{O}_{3}\mathbf{N}_{5}$ 1) Verbindung (aus Butyrylcyanessigsäureäthylester u. Phenylhydrazin). Sm. 85° (C. 1895 [2] 83).
 - 2) Verbindung (aus Isobutyrylcyanessigsäureäthylester u. Phenylhydrazin). Sm. 67° (C. 1895 [2] 83).
- C 70.2 H 8.1 O 17.8 N 3.9 M. G. 359. $\mathbf{C}_{21}\mathbf{H}_{29}\mathbf{O_4N}$ 1) Isoamylester d. d-Benzoylecgonin. HCl (B. 23, 987). — III, 867.

21 III. 2008 C 59.6 - H 6.8 - O 30.3 - N 3.3 - M. G. 423. $C_{21}H_{29}O_8N$ 1) Tetraäthylester d. β -Phenylamidopropan- $\alpha\alpha\gamma\gamma$ -Tetracarbonsäure. Sm. 46-47° (B. 30, 1757). 1) Jodpropylat d. 1,4-Dibenzylhexahydro-1,4-Diazin. Zers. bei 260° $C_{21}H_{29}N_2J$ (C. 1898 [1] 381). C 77,3 — H 9,2 — O 4,9 — N 8,6 — M. G. 326. C21 H80 ON α-Oxydi [4-Diathylamidophenyl] methan. Sm. 78° (B. 31, 1002).
 C 73,7 — H 8,7 — O 9,3 — N 8,3 — M. G. 342. $\mathbf{C}_{21}\mathbf{H}_{30}\mathbf{O}_{2}\mathbf{N}_{2}$ 1) Di[4-Diäthylamido-2-Oxyphenyl]methan. Sm. 168°. H₂SO₄ (J. pr. [2] **54**, 226). $C^{4}44,2 - H 5,3 - O 11,2 - N 39,3 - M. G. 570,$ $\mathbf{C}_{21}\overline{\mathbf{H}}_{30}\mathbf{O}_{4}\mathbf{N}_{16}$ 1) Cytosin + $4 H_2 O$. Pikrat (B. 27, 2219). — IV, 1623. C 59.7 - H 7,1 — O 26.5 - N 6,6 — M. G. 422. $\mathbf{C}_{21}\mathbf{H}_{30}\mathbf{O}_7\mathbf{N}_2$ 1) Di[Phenylhydrazon] d. d-Mannononose. Sm. bei 217° u. Zers. (B. 23, 2237). — IV, 794. C 57,5 — H 6,8 — O 29,2 — N 6,4 — M. G. 438. $\mathbf{C}_{21}\mathbf{H}_{30}\mathbf{O}_{8}\mathbf{N}_{2}$ $\begin{array}{c} \textbf{C}_{21}\textbf{H}_{30}\textbf{O}_{8}\textbf{N}_{2} & \textbf{C} \text{ 51,5} - \textbf{H} \text{ 0,8} - \textbf{O} \text{ 29,2} - \textbf{N} \text{ 0,4} - \textbf{M}. \text{ G. 458.} \\ 1) & \textbf{Tetraäthylester} \text{ d. } \beta\zeta-\textbf{Dicyanheptan} - \alpha\beta\zeta\eta-\textbf{Tetracarbonsäure.} & \textbf{Sm.} \\ & 69^{\circ}; & \textbf{Sd. } 215^{\circ}_{75} \text{ } (Bl. [3] \text{ 17, } 1037). \\ \textbf{C}_{21}\textbf{H}_{30}\textbf{O}_{13}\textbf{N}_{2} & \textbf{C} \text{ 48,6} - \textbf{H} \text{ 5,7} - \textbf{O} \text{ 40,2} - \textbf{N} \text{ 5,4} - \textbf{M}. \text{ G. 518.} \\ 1) & \textbf{Phloridzein.} & \textbf{NH}_{4}, \textbf{Pb}, \textbf{Ag}_{2} \text{ } (A. \textbf{30, } 210). - \textbf{III, } 601. \\ \textbf{C}_{21}\textbf{H}_{31}\textbf{N}_{2}\textbf{Cl.} & \textbf{1)} & \textbf{Chlormethylat.} & \textbf{d.} & \textbf{Dicamphanhexanazin.} & + \textbf{AuCl}_{3} \text{ } (G. \textbf{27, } [1] \text{ 178).} \\ \textbf{C}_{11}\textbf{M}_{11}\textbf{N}_{12}\textbf{Cl.} & \textbf{Dicamphanhexanazin.} & \textbf{Sm.} & \textbf{Colligious of the colligious f the colligious of the colligious of the colligious of the collision of the colligious of the collision of the coll$ $\mathbf{C}_{21}\mathbf{H}_{31}\mathbf{N}_{2}\mathbf{J}$ 1) Jodmethylat d. Dicamphanhexanazin. Sm. 201—2020 (G. 27 [1] 177). C 76,8 — H 9,8 — O 4,8 — N 8,5 — M. G. 328.

1) Methyloxydhydrat d. Dicamphanhexanazin. Salze, siehe diese (G. $C_{21}H_{32}ON_{2}$ 27 [1] 177). $\mathbf{C}_{21}\mathbf{H}_{33}\mathbf{N}_{2}\mathbf{J}$ 1) Jodmethylat d. Dicamphandihydropyridazin. Sm. 207-208° (G. **27** [1] 166). 1) s-Dibornylthioharnstoff. Sm. 223—224° (A. 269, 350). — IV, 57. $C_{21}H_{36}N_2S$ s-l-Difenchylthioharnstoff. Sm. 210° (A. 269, 360). — IV, 58.
 Verbindung (aus Isopiperideïn u. CS₂) (A. 260, 247). — IV, 533.
 C 75,4 — H 11,4 — O 4,8 — N 8,4 — M. G. 334. $\mathbf{C}_{21}\mathbf{H}_{36}\mathbf{N}_{4}\mathbf{S}_{2}$ C21H38ON2 1) Anhydrolupinin. Fl. (2HCl, PtCl₄) (B. 14, 1882; 15, 634; A. 214, 364). - III, 892. $C_{21}H_{38}N_2Cl_2$ 1) Diehlorlupinid (C. 1897 [2] 361). 1) Verbindung (aus I-Fenchylamin u. CS₂) (A. **269**, 360). — IV, 58.
1) Verbindung (aus CS₂ u. Bornylamin) (A. **269**, 350). — IV, 57.
C 74,8 — H 11,6 — O 9,5 — N 4,1 — M. G. 337. $\mathbf{C}_{21}\mathbf{H}_{38}\mathbf{N}_{2}\mathbf{S}$ $\mathbf{C}_{21}\mathbf{H}_{38}\mathbf{N}_{2}\mathbf{S}_{2}$ $\mathbf{C}_{21}\mathbf{H}_{39}\mathbf{O}_2\mathbf{N}$ C 74,8 — H 11,6 — O 9,5 — N 4,1 — M. G. 337.

1) α-Cyanarachinsäure. Sm. 88° (M. 17, 542).

C 71,6 — H 11,4 — O 9,1 — N 7,9 — M. G. 352.

1) Lupinin. Sm. 67—68°; Sd. 255—257° (i. H-Strom). 2 HCl, (2 HCl, PtCl, + H₂O), (2 HCl, AuCl₃), 2 HBr, 2 HNO₃, H₂SO₄ (J. 1872, 804; B. 14, 1150, 1321, 1880, 2701; 15, 631, 1951; A. 214, 361; C. 1896 [2] 668; 1897 [2] 361, 554, 767). — III, 891.

C 63,0 — H 19,0 — O 20,0 — N 7,0 — M. G. 400. $\mathbf{C}_{21}\mathbf{H}_{40}\mathbf{O}_{2}\mathbf{N}_{2}$ $C_{21}H_{40}O_5N_{2}$ 1) Oxylupinin. Sd. 215° u. Zers. (2HCl, PtCl₄) (B. 14, 1882; A. 214, 362).

— III, 892. C 78,0 — H 12,7 — O 4,9 — N 4,3 — M. G. 323. $\mathbf{C}_{21}\mathbf{H}_{41}\mathbf{ON}$ 1) Triönanthoxaldin. Fl. (A. Spl. 6, 24). — I, 955.

 $\mathbf{C}_{21}\mathbf{H}_{41}\mathbf{O}_{2}\mathbf{Br}$ Methylester d. α-Bromarachinsäure. Sm. 33—35° (M. 17, 531).
 C 71,0 — H 11,6 — O 13,5 — N 3,9 — M. G. 355. $C_{21}H_{41}O_3N$

1) Monamid d. Nonadekan-αα-Dicarbonsäure. Sm. 126°. Ca (M. 17, 543).
1) Glycerinstearochlorhydrin. Sm. 28° (A. ch. [3] 41, 225). — I, 445.
1) Hexapropyltrimethylentrisulfon. Sm. 133° (B. 25, 245). — I, 1000.
1) Oenanthothialdin. HCl (A. Spl. 6, 33). — I, 955.
C 74,1 — H 12,9 — O 4,7 — N 8,2 — M. G. 340.
1) Tetraisoamylharnstoff. Sd. 240—241° (B. 12, 1332). — I, 1300. $\mathbf{C}_{21}\mathbf{H}_{41}\mathbf{O}_{3}\mathbf{C}\mathbf{I}$ $\mathbf{C}_{21}\mathbf{H}_{42}\mathbf{O}_{6}\mathbf{S}_{3}$ $\mathbf{C}_{21}\mathbf{H}_{43}\mathbf{NS}_{2}$

 $\mathbf{C}_{21}\mathbf{H}_{44}\mathbf{ON}_{2}$

 $\mathbf{C}_{21}\mathbf{H}_{44}\mathbf{O}_{2}\mathbf{N}_{4}$ C 65,6 — H 11,5 — O 8,3 — N 14,6 — M. G. 384. 1) $\alpha \alpha^1$ -Oenanthylidendi [$\beta \beta$ -Dipropylharnstoff]. Sm. 113° (R. 8, 242). — I, 1314.

C₂₁-Gruppe mit vier Elementen.

1) Di[?-Brom-2-Naphtylester] d. Thiokohlensäure. Sm. 171° (B. $\mathbf{C}_{21}\mathbf{H}_{12}\mathbf{O}_{2}\mathbf{Br}_{2}\mathbf{S}$ 1) Hydrocyantetrabromrosolsäure (A. 179, 203). — II, 1122. Co, H, O, NBr Chlorid d. Di[2-Naphtyl]amidoameisensäure. Sm. 151° (172 bis 173°) (J. pr. [2] 56, 12; B. 23, 428, 811, 2162). — II, 615.
 Thio-β-Dinaphtylharnstoff. Zers. bei 215° (B. 24, 2917). — $\mathbf{C}_{21}\mathbf{H}_{14}\mathbf{ONCl}$ C21H14ON2S II, 870. 1) 7-Chlor-8-Phenylimido-6-Phenylamido-5-Keto-5, 6-Dihydro-C21H14ON3Cl chinolin. Sm. 180° u. Zers. (A. 264, 225; 290, 334). — IV, 278. 1) Phtalylpseudodiphenylthiocarbazon. Sm. 182° (B. 26, 2496). — $\mathbf{C}_{21}\mathbf{H}_{14}\mathbf{O}_{2}\mathbf{N}_{4}\mathbf{S}$ 1) Trichlorhydrosalicylamid (A. 30, 174). - III, 72 $\mathbf{C}_{21}\mathbf{H}_{15}\mathbf{O}_{3}\mathbf{N}_{2}\mathbf{Cl}_{3}$ 1) Tribromhydrosalicylamid (A. 30, 175). — III, 72.
1) Thiobenzoylarsen. Sm. 178—179° (Bl. 47, 896). — II, 1291. $\mathbf{C}_{21}\mathbf{H}_{15}\mathbf{O}_{3}\mathbf{N}_{2}\mathbf{Br}_{3}^{3}$ $\mathbf{C}_{21}\mathbf{H}_{15}\mathbf{O}_{8}\mathbf{S}_{3}\mathbf{A}\mathbf{s}_{3}$ $\mathbf{C}_{21}\mathbf{H}_{15}\mathbf{O}_{4}\mathbf{Cl}_{6}\mathbf{P}$ 1) Tri-2-Dichlormethylphenylester d. Phosphorsäure. Sm. 78° (Soc. 53, 403). — II, 738. 1) 2-Benzoylphenylamido-5-Phenylamido-1, 3, 4-Thiodiazol. Sm. $\mathbf{C}_{21}\mathbf{H}_{16}\mathbf{ON}_{4}\mathbf{S}$ 238° (B. 22, 1179). — IV, 1236. 1) Benzoat d. 4-Brom-5-Benzoylamido-2-Oxy-1-Methylbenzol. Sm. $\mathbf{C}_{21}\mathbf{H}_{16}\mathbf{O}_{3}\mathbf{NBr}$ 200° (B. 27, 1931). — II, 1179. 2) Benzoat d. 4-Brom-6-Benzoylamido-2-Oxy-1-Methylbenzol. Sm. 229° (B. 27, 1931). — II, 1179. 1) Monodiphenylthioureïd d. Benzol-1, 2-Dicarbonsäure (Diphenyl- $C_{21}H_{16}O_3N_2S$ thiophtalursäure) (Am. 18, 337). 1) Dibrom-o-Kresolsulfonphtalein (Am. 20, 266). $\mathbf{C}_{21}\mathbf{H}_{16}\mathbf{O}_{5}\mathbf{Br}_{2}\mathbf{S}$ 1) Lophindisulfonsäure. Na + $2H_2O$ (B. 13, 709). $\mathbf{C}_{21}\mathbf{H}_{16}\mathbf{O}_{6}\mathbf{N}_{2}\mathbf{S}_{2}$ **– III**, 27. $\mathbf{C}_{21}\mathbf{H}_{17}\mathbf{ON}_{3}\mathbf{S}_{2}$ 1) Thiocarbanilidothiooxanilid. Sm. 213° (J. pr [2] 32, 3). — II 412. P-Tribrom-β-Acetyl-β-Phenylamidophenylimidomethyl-α-Phenylhydrazin. Sm. 227° (J. pr. [2] 58, 463).
 4-[2-Chlorbenzoyl] amido-3-Benzoylamido-1-Methylbenzol. $\mathbf{C}_{21}\mathbf{H}_{17}\mathbf{ON}_{4}\mathbf{Br}_{8}$ C, H, O, N, Cl Sm. 178° (B. 13, 467). — IV, 617 2) Verbindung (aus Benzoylchlorid u. 3-Phenylimido-3,4-Dihydro-2,4-Benzoxazin). Sm. 117° (B. 27, 2424). — IV, 874. 1) ?-Brom-2,4-Di[Benzoylamido]-1-Methylbenzol. Sm. 2140 (B. 14, $\mathbf{C}_{21}\mathbf{H}_{17}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{Br}$ 2658). — IV, 606. 2) 5-Brom-3,4-Di[Benzoylamido]-1-Methylbenzol. Sm. 244° (B. 23, 1050). — IV, 617. 1) β -Phenylhydrazon- β -Phenyläthylimid d. Benzol-l-Carbonsäure- $C_{21}H_{17}O_3N_3S$ 2-Sulfonsäure. Sm. 168° (B. 29, 332). — IV, 771. 1) Jodmethylat d. $\alpha\beta$ -Dibrom- α -[2-Chinolyl]- β -[7-Chinolyl]äthan. $\mathbf{C}_{21}\mathbf{H}_{17}\mathbf{N}_{2}\mathbf{Br}_{2}\mathbf{J}$ Sm. 210° u. Zers. (B. 23, 3651). — IV, 1079. 1) Dijodmethylat d. Cinchonifin $+1\frac{1}{2}H_2O$. Sm. 223° u. Zers. (wasser- $\mathbf{C}_{21}\mathbf{H}_{18}\mathbf{ON}_{2}\mathbf{J}_{2}$ frei) (B. **27** [2] 257). 1) 5-Chlorphenylat d. 3-Acetylamido-2-Methyl-5,10-Naphtdiazin. $\mathbf{C}_{21}\mathbf{H}_{18}\mathbf{ON}_{3}\mathbf{Cl}$ $2 + \text{PtCl}_4$ (B. 31, 969). — IV, 1182. Verbindung (aus Hydrosalicylamid) (J. 1857, 318). — III, 71.
 Trimethyläther d. Tri[P-Chlor-4-Oxyphenyl] wismuthdichlorid. Sm. 133° (B. 30, 2850). — IV, 1698.
 β-Phtalylamidoäthyl-γ-Phtalylamidopropylsulfid. Sm. 123—124° $\mathbf{C}_{21}\mathbf{H}_{18}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{S}$ $\mathbf{C}_{21}\mathbf{H}_{18}\mathbf{O}_{3}\mathbf{Cl}_{5}\mathbf{Bi}$ $\mathbf{C}_{21}\mathbf{H}_{18}\mathbf{O}_4\mathbf{N}_2\mathbf{S}$ (B. **27**, 2176). — **II**, 1803. 1) Methylenäther d. Benzol-1,2-Dicarbonsäure-β-Merkaptoäthyl- $C_{21}H_{18}O_4N_2S_2$ imid. Sm. 133—134° (B. **25**, 3055). — II, 1801. 1) Tri[4-Nitrobenzyl]phosphinoxyd. Sm. bei 100° (Soc. 55, 225). $\mathbf{C}_{21}\mathbf{H}_{18}\mathbf{O}_7\mathbf{N}_3\mathbf{P}$ — ĬV, 1665. 1) α -Phenylacetylamido- $\alpha\beta$ -Diphenylthioharnstoff. Sm. $125-126^\circ$ $\mathbf{C}_{21}\mathbf{H}_{19}\mathbf{ON}_{3}\mathbf{S}$ (B. 27, 1518). — IV, 681. 1) α -[4-Methylphenyl]- β -[4-Methylphenyl]azo- β -[4-Bromphenyl]-harnstoff. Sm. 129° (B. 21, 2599). — IV, 1571. $\mathbf{C}_{21}\mathbf{H}_{19}\mathbf{ON}_4\mathbf{Br}$

α-Trichlorstrychnin (J. 1880, 997). — III, 940.
 β-Trichlorstrychnin. HCl (J. pr. [2] 42, 412). — III, 940.

 $\mathbf{C}_{21}\mathbf{H}_{19}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{Cl}_{3}$

- 1) Phenylthioharnstoff d. 4-Nitro-2-[4-Amidobenzyl]-1-Methyl- $C_{21}H_{19}O_2N_3S$ benzol. Sm. 167° (B. 26, 1853). — II, 637
- 1) 6-Methyl-3-Phenyl-2-[4-Methylphenyl]-2,3-Dihydro-1,2,4-Benz- $C_{21}H_{19}O_8N_8S$ triazin-3°-Sulfonsäure (B. 30, 2603). — IV, 1184.
- 1) $\alpha [4 Methylphenyl] sulfon \gamma [2 Naphtyl] sulfon \beta Imidopropan.$ $C_{21}H_{19}O_4NS_{2}$ Sm. 126° (J. pr. [2] 55, 411). 1) α -Phenyl- β -[β -Oxy- $\alpha\beta$ -Diphenyläthyl]thioharnstoff. Sm. 171° (B.
- $\mathbf{C}_{21}\mathbf{H}_{20}\mathbf{ON}_{2}\mathbf{S}$ 28, 1902).
- $\mathbf{C}_{21}\mathbf{H}_{20}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{Cl}_{2}$
- Dichlorstrychnin (J. 1880, 997). III, 940.
 Dibromstrychnin. Zers. bei 250°. HCl (B. 18, 1237). III, 940. $\mathbf{C}_{21}\mathbf{H}_{20}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{Br}_{2}$ C, H, O, N, S 1) Di[2-Methylphenylamid] d. Benzol-1-Carbonsäure-2-Sulfonsäure. $+2C_2H_6O$ (Am. 17, 328).

 - Di[3-Methylphenylamid] d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm. 161,5—162,5° (Am. 17, 327).
 isom.-Di[3-Methylphenylamid] d. Benzol-1-Carbonsäure-2-Sulfonsäure. Sm. noch nicht bei 250°. + C₂H₆O (Am. 17, 326).
 Di[4-Methylphenylamid] d. Benzol-1-Carbonsäure-2-Sulfonsä
 - säure. Sm. noch nicht bei 250° (Am. 17, 324).

 1) Jodmethylat d. Berberin (G. 13, 345; C. 1895 [2] 138). III, 800.
- $\mathbf{C}_{21}\mathbf{H}_{20}\mathbf{O}_4\mathbf{NJ}$ 1) β -Phenylhydrazon- $\alpha\gamma$ -Diphenylsulfonpropant (J, pr. [2] 36, 421). — IV, 768. $\mathbf{C}_{21}\mathbf{H}_{20}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{S}_{2}$ Sm. 171° u. Zers.
- (a) pr. [2] 36, 421. 1V, 765.
 2) 1,2-[ay-Trimethylen]diphenylsulfondiamidobenzol. Sm. 204 bis 205° (A. 287, 227). IV, 560.
 1) Jodäthylat d. 3,5-Di[4-Nitrobenzyl]pyridin. Sm. 167—173° u. Zers. (A. 280, 56). IV, 456.
 1) Anilinfuronaphtionat (A. 239, 362). III, 724.
 1) Anilinfuronaphtionat (A. 200, 302). III, 724. $\mathbf{C}_{21}\mathbf{H}_{20}\mathbf{O}_4\mathbf{N}_3\mathbf{J}$
- $C_{21}H_{20}O_5N_2S$
- Verbindung (aus d. Verb. C₁₄H₁₈O₅N₂S₂ aus 1-Methylbenzol-4-Sulfinsüre). Sm. 209,5° u. Zers. (J. pr. [2] 56, 224, 226).
 Chlor-α-Oreindichroïn (B. 13, 811; 21, 2483). II, 965.
 Brom-α-Oreindichroïn (B. 21, 2484). II, 966. $C_{21}H_{20}O_5N_2S_2$
- C21H20O8NCl
- $\mathbf{C}_{21}\mathbf{H}_{20}\mathbf{O}_{6}\mathbf{NBr}$
- $\mathbf{C}_{21}\mathbf{H}_{21}\mathbf{ONBr}_{2}$ 1) Aethyläther d. Dibromapocinchen. Sm. 116-118° (B. 20, 2679). · III, 838.
- 1) Chlorstrychnin. $H_2SO_4 + 7H_2O$ (A. 69, 14; J. 1880, 996; C. r. 91, 990). III, 939. $\mathbf{C}_{21}\mathbf{H}_{21}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{C}\mathbf{I}$
- 1) a-Bromstrychnin. Sm. 222°. HCl, HBr, HNO₈, $H_2SO_4 + 7H_2O_3$ (B. 18, 1236; Soc. 47, 140). III, 940. $\mathbf{C}_{21}\mathbf{H}_{21}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{Br}$
- 2) β-Bromstrychnin. (2 HCl, PtCl,) (M. 6, 855). III, 940.
 1) Jodid d. Chininjodmethylat (J. pr. [2] 3, 145). III, 813. $\mathbf{C}_{21}\mathbf{H}_{21}\mathbf{O}_2\mathbf{N}_2\mathbf{J}_3$
- $\mathbf{C}_{21}\mathbf{H}_{21}\mathbf{O}_{3}\mathbf{Cl}_{2}\mathbf{Sb}$ 1) Trimethyläther d. Tri[4-Oxyphenyl]antimondichlorid. Sm. 116
- bis 117°. + C₆H₆ (B. 30, 2836). IV, 1695.

 1) Trimethyläther d. Tri[4-0xyphenyl] antimondibromid. Sm. 123°. + C₆H₆ (B. 30, 2837). IV, 1695.

 1) Trimethyläther d. Tri[4-0xyphenyl] wismuthdibromid. Sm. 103° Co, Ho, O, Br, Sb
- C21 H21 O3 Br2 Bi
- (B. 30, 2849). IV, 1698. 1) Trimethyläther d. Tri[4-Oxyphenyl]antimondijodid. Sm. 116° $\mathbf{C}_{21}\mathbf{H}_{21}\mathbf{O}_{3}\mathbf{J}_{2}\mathbf{S}\mathbf{b}$ (B. 30, 2838). — IV, 1695.
- $\mathbf{C}_{21}\mathbf{H}_{21}\mathbf{O}_{4}\mathbf{NS}$ 1) Verbindung (aus 1-Methylbenzol-4-Sulfinsäure u. Benzaldoxim). Sm. 124° (J. pr. [2] **56**, 236).
- $C_{21}H_{21}O_6N_3S_3$ 1) Tribenzolsulfontrimethylentriimid. Sm. 217° (B. 26, 2149). — II, 116.
- $\mathbf{C}_{21}\mathbf{H}_{21}\mathbf{O}_7\mathbf{N}_6\mathbf{P}$ 1) ?-Nitro-4-Methylphenylamid d. Orthophosphorsäure. Sm. 2470 (B. **26**, 571). — **II**, 490.
- 1) Tribenzylamintrisulfonsäure? (A. 144, 311). II, 582. $C_{21}H_{21}O_{9}NS_{3}$
- 2) Verbindung (aus 1-Methylbenzol-4-Sulfinsäure). Sm. 190° (A. 145, 19). $C_{21}H_{21}O_{10}S_3P$ 1) Tribenzylphosphinoxydtrisulfonsäure. Ba (Soc. 55, 226). IV, 1665.
- $\mathbf{C}_{21}\mathbf{H}_{21}\mathbf{OJSb}$ 1) Tri[4-Methylphenyl]jodantimoniumoxydhydrat. Sm. 218—219° (A. 242, 173). - IV, 1697.
- $\mathbf{C}_{21}\mathbf{H}_{22}\mathbf{O}_{3}\mathbf{NCI}$ 1) Chlormethylat d. Cusparin. Sm. 190°. 2 + PtCl₄, + AuCl₈ (B.
- 29 [2] 777; C. 1895 [2] 826). III, 777. 1) Jodmethylat d. Cusparin. Sm. 186° (B. 29 [2] 36; C. 1895 [2] $C_{21}H_{22}O_3NJ$ 826). — III, 777
- $\mathbf{C}_{21}\mathbf{H}_{22}\mathbf{O}_{3}\mathbf{NP}$ 1) 2-Methylphenylamid d. Phosphorsäuredi [4-Methylphenylester]. Sm. 161° (B. 27, 2578).

- $C_{21}H_{22}O_{3}NP$ 2) 4-Methylphenylamid d. Phosphorsäuredi [4-Methylphenylester]. Sm. 161° (B. 27, 2577). $\mathbf{C}_{21}\mathbf{H}_{22}\mathbf{O}_5\mathbf{NBr}$ 1) Diacetylbrommorphin. Sm. 2080 (A. 297, 208). 1) Jodnethylat d. Papaveraldin $+ 3 H_2 O$. Sm. 136° (M. 7, 489). - $C_{21}H_{22}O_5NJ$ IV, 442. 2) Jodnethylat d. Protopin (M. 19, 193). $C_{21}H_{22}O_5N_2S$ 1) Strychninsulfonsäure. Ba + 7H₂O (M. 6, 858; B. 18, 3429; G. 17, 109). — **III**, *941*. 1) Verbindung (aus 1-Methylbenzol-4-Sulfinsäure u. salpetriger Säure). Sm. 190° (A. 145, 19). — II, 110. $C_{21}H_{22}O_6N_2S_3$ $\mathbf{C}_{21}\mathbf{H}_{22}\mathbf{O}_{8}\mathbf{NCl}$ 1) Chlornitrophillygenin (A. 118, 128). — III, 600. $\mathbf{C}_{21}\mathbf{H}_{22}\mathbf{O}_8\mathbf{NBr}$ 1) Bromnitrophillygenin (A. 118, 128). — III, 600. 1) Strychnindisulfonsäure. $Na_2 + 6H_2O$, K_2 , Ba (B. 18, 3430; G. 17, $C_{21}H_{22}O_8N_2S_2$ 113). — III, 942. 1) Di[Phenylamid] d. 2,4,5-Trimethylphenylphosphinsäure. Sm. C21 H28 ON2 P 197⁵ (A. 294, 10). — IV, 1678.
 2) Di[4-Methylphenylamid] d. 4-Methylphenylphosphinsäure. Sm. 237° (A. 293, 269). — IV, 1669. 1) 5-Benzoat d. 3,6-Dibrom-5-Oxy-2-Piperidylmethyl-1,4-Di-C21 H23 O2 NBr2 methylbenzol. Sm. 136,5—137,5° (B. 28, 2908). — IV, 20.

 1) Phenylamid d. Phosphortrihydrobrenztraubensäure. Sm. 158° $C_{21}H_{23}O_6N_2P$ (B. 21, 2923) - II, 405.C21 H23 O10 N3S 1) Alloxan-Morphindisulfit (A. 248, 151). — III, 898. 1) Methyl-4-Dimethylamidotriphenylphosphoniumchlorid (A. 260, $\mathbf{C}_{21}\mathbf{H}_{23}\mathbf{NClP}$ 31). — IV, 1660.

 1) Methyl-4-Dimethylamidotriphenylphosphoniumjodid. Fl. (A. $\mathbf{C}_{21}\mathbf{H}_{28}\mathbf{NJP}$ 260, 31). — IV, 1660. 1) Bromderivat d. Verb. C₂₁H₂₄ON₂ (aus Furfurol) (A. 206, 144). — C₂₁H₂₄ON₂Br₂ III, 723. C21 H24 ON2S 1) Thiophengrün. Fl. H₂SO₄, Oxalat, Pikrat (B. 20, 516). — III, 753. $\mathbf{C}_{21}\mathbf{H}_{24}\mathbf{ON}_3\mathbf{P}$
- C₂₁H₂₄ON₂S 1) Thiophengrun. Fl. H₂SO₄, Oxalat, Pikrat (B. 20, 516). III, 733.
 1) 2-Methylphenylamid d. Orthophosphorsäure. Sm. 225° (B. 26, 565). II, 460.
 2) 4-Methylphenylamid d. Orthophosphorsäure. Sm. 192° (B. 26, 569). II, 490.
 1) Jodmethylat d. Galipeïn. Sm. 146° (B. 25 [2] 201). III, 778.
- 2) Chlormethylat d. Hydroberberin + 3H₂O. 2 + PtCl₄, + AuCl₃.

 III, 801.
 3) Chlormethylat d. Papaverin. Sm. 75°. 2 + PtCl₄ (M. 9, 758; 10, 682). IV, 440.
- C₂₁H₂₄O₄NJ 1) Jodmethylat d. Canadin. Sm. 228-232° (B. 27 [2] 313). III, 804. 2) Jodmethylat d. Hydroberberin. Sm. 228-235° (G. 13, 343). —
 - III, 801.
 3) Jodmethylat d. Papaverin + 4(7)H₂O. Sm. 55-60° (195° wasserfrei) (B. 18, 1577; M. 6, 692; 9, 758; J. pr. [2] 38, 496; J. 1886,
- 1717). IV, 440. C₂₁H₂₄N₃SP 1) 2-Methylphenylamid d. Orthothiophosphorsäure. Sm. 134,5° (B. 26, 569). — II, 460.
 - 2) 4-Methylphenylamid d. Orthothiophosphorsäure. Sm. 185° (B. 26, 572). II, 490.
- C₂₁H₂₅ON₄P
 1) Di [Phenylhydrazid] d. 2,4,5-Trimethylphenylphosphinsäure. Sm. 208° (A. 294, 14). IV, 1678.
 C₂₁H₂₅O₂N₂Cl
 1) Acetylhydrochloreinehonin. (2 HCl, PtCl₄ + 2 H₂O) (A. 205, 354).
- III, 832.

 2) Acetylhydrochlorapocinchonidin. Sm. 150°. (2HCl, PtCl₄ + 2H₂O) (A. 205, 353). III, 853.
- C₂₁H₂₆O₃NJ 1) Jodmethylat d. Methylthebeninmethyläther. Sm. 215° (B. 32, 181). 2) Jodäthylat d. Thebaïn (B. 17, 532). III, 910.
- C₂₁H₂₆O₄NCl 1) Chlormethylat d. Acetylcodeïn + 2H₂O. $2 + \text{PtCl}_4$ (A. 222, 217). III, 905.

2012 21 IV. 1) Jodäthylat d. Acetylmorphin. α -Modif. $+ \frac{1}{2} H_2O$. β -Modif. amorph $\mathbf{C}_{21}\mathbf{H}_{26}\mathbf{O}_4\mathbf{NJ}$ (Soc. 28, 315). — III, 899. 2) Jodmethylat d. Acetylcodein. Sm. 250-252° u. Zers. (A. 297, 219). 1) Chlorathylat d. Cinchonin + H₂O. (HCl, PtCl₄) (Soc. 26, 1183; $\mathbf{C}_{21}\mathbf{H}_{27}\mathbf{ON}_{2}\mathbf{Cl}$ J. pr. [2] 3, 152). — III, 833. 2) Chloräthylat d. Cinchonidin + 3 H₂O (B. 14, 1922). — III, 851. C₂₁H₂₇ON₂Br 1) Bromathylat d. Cinchonin. + Hg(CN)₂, + AgCN (Soc. 26, 1183; A. **269**, 262). — III, 833. 2) Bromäthylat d. β -Isocinchonin + H_2O . Sm. 217° (J. 1888, 2287). - III, 847. 3) Bromäthylat d. Cinchonicin. Sm. 1530 (Bl. [3] 13, 1007). — III, 846. 4) Bromäthylat d. Cinchonidin + H₂O (B. 14, 1922; J. 1882, 1109). - III, 851. 5) Bromäthylat d. Cinchonilin (J. 1888, 2287). — III, 848. 1) Jodmethylat d. Methylcinchonin. Sm. 2016 u. Zers. (B. 13, 2293). $\mathbf{C}_{21}\mathbf{H}_{27}\mathbf{ON}_{2}\mathbf{J}$ **– III**, 832. 2) Jodnethylat d. Methylcinchonidin $+ 2H_2O$ (B. 13, 2192). -III, 851. 3) α -Jodäthylat d. Cinchonin. Zers. bei 260°. HJ + H₂O₂ + Ag(CN)₂) + AgCN (B. 13, 2286; J. pr. [2] 3, 152; M. 15, 43; A. 269, 261). - III, 833. 4) β -Jodäthylat d. Cinchonin. Sm. 1840 u. Zers. (M. 15, 41). III. 833. 5) Jodäthylat d. β -Isocinchonin + H_2O . Sm. bei 232° (J. 1888, 2287). **– III**, 847. 6) Jodäthylat d. Cinchonibin + H₂O. Sm. 245° (J. 1888, 2288). -III, 848. 7) Jodäthylat d. Cinchonicin (Bl. [3] 13, 1007). — III, 846. 8) a-Jodäthylat d. Cinchonidin + H₂O. Sm. 261°. HJ + H₂O (B. 11, 1821; **14**, 47, 1922; A. **269**, 257; M. **15**, 46). — III, 851.
9) β-Jodäthylat d. Cinchonidin. Sm. 175° u. Zers. (M. **15**, 44). — III, 852. 10) Jodäthylat d. Cinchonifin. Sm. 251° u. Zers. (B. 27 [2] 257). 11) Jodäthylat d. Cinchonilin + $^{1}/_{2}$ H_{2} O (J. 1888, 2287). — III, 848. $\mathbf{C}_{21}\mathbf{H}_{27}\mathbf{ON}_{2}\mathbf{J}_{3}$ 1) Jodid d. Cinchoninjodathylat. Sm. 141-1420 (J. pr. [2] 3, 152). III, 833. 1) 3,4-Dichlor-2-Dipiperidyl-5-Keto-1-[4-Methylphenyl]-2,5-Di- $\mathbf{C}_{21}\mathbf{H}_{27}\mathbf{ON}_{3}\mathbf{Cl}_{2}$ hydropyrrol (Dichlormalein-p-Toluildipiperidid). Sm. 1070 (B. 28, 58; A. 295, 52). 1) Chlormethylat d. Chinin $+ H_2O$. Sm. $181-182^{\circ}$. (HCl, PtCl₄) $\mathbf{C}_{21}\mathbf{H}_{27}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{C}\mathbf{I}$ (B. 14, 77). — III, 813. $\mathbf{C}_{21}\mathbf{H}_{27}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{Br}$ 1) Brommethylat d. Chinin + H₂O. Sm. 124-126° (B. 14, 76). -III, *813*. 2) Bromäthylat d. α-Oxycinchonin. Sm. 243° (J. 1889, 2019). — III, 840. 1) Jodmethylat d. Chinin + H₂O. Sm. 233—236° u. Zers. HCl, (2 + H₂SO₄ + J₂), (2 + H₂SO₄ + J₄), (2 + H₂SO₄ + J₆), (4 + 2 H₂SO₄ + J₁₄), (4 + 2 H₂SO₄ + J₁₆) (A. **91**, 164; B. **14**, 76; J. pr. [2] **3**, 145; [2] **14**, 261; [2] **15**, 76). — III, 813. $C_{21}H_{27}O_{2}N_{2}J$ 2) Jodmethylat d. Conchinin + H₂O. Sm. 248° u. Zers. HCl (A. 90, 221). **— III**, 825. 3) Jodäthylat d. α -Oxycinchonin + H_2O . Sm. 251° (wasserfrei) (J. 1889, 2019). — III, *840*. $\mathbf{C}_{21}\mathbf{H}_{27}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{J}_{3}$ 1) Dijodid d. Conchininjodmethylat. Sm. 164-165° (J. pr. [2] 3, 153).

Di[Brommethylat] d. Cinchonin (B. 13, 2293).
 Di[Brommethylat] d. Cinchonifin. Sm. 218° u. Zers. (B. 27 [2] 257).

1) Di Jodmethylat d. Cinchonin. Sm. 235° u. Zers. (B. 13, 2293).

2) Di[Jodmethylat] d. Cinchonibin $+ 1^{1}/_{2}H_{2}O$. Sm. 223° (J. 1888,

3) Di[Jodmethylat] d. Cinchonidin $+ 2H_2O$ (B. 13, 2192; J. 1882,

- III, 825.

– III, 832.

2288). — III, *848*.

1109; A. 269, 256). — III, 851.

C₂₁H₂₈ON₂Br₂ $\mathbf{C}_{21}\mathbf{H}_{28}\mathbf{ON}_{2}\mathbf{J}_{2}$

- $\mathbf{C}_{21}\mathbf{H}_{28}\mathbf{ON}_{2}\mathbf{J}_{2}$ 4) Jodäthylat d. Hydrojodcinchonin. Sm. 245° u. Zers. (M. 15, 40). **— III**, 833.
 - 5) Jodäthylat d. Hydrojodeinchonidin. Sm. 243° (M. 15, 44). —
- 1) Di[Chlormethylat] d. Cupreïn. + PtCl₄ (A. 266, 243). III, 822. 1) Di[Jodgethylat] d. Cupreïn + 3(5)H₂O. Sm. 230° u. Zers. (A. 230, $\mathbf{C}_{21}\mathbf{H}_{28}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{Cl}_{2}$
- $\mathbf{C}_{21}\mathbf{H}_{28}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{J}_{2}$ 69; 266, 243). — III, 822. 2) Di[Jodmethylat] d. α-Oxycinchonin. Sm. 241° u. Zers. (J. 1889,
 - 2019). III, 840.
- $\mathbf{C}_{21}\mathbf{H}_{28}\mathbf{O}_{3}\mathbf{NJ}$ 1) Jodmethylat d. Aethocodeïn (B. 15, 1486). — III, 904.
- 1) Aethobromcodeïnmethyloxydhydrat (B. 15, 1484). III, 904. $\mathbf{C}_{21}\mathbf{H}_{28}\mathbf{O_4NBr}$
- Jodäthylat d. Laurotetanin (C. 1899 [1] 122).
 αι-Di [Phenylsulfonnitramido] nonan. Sm. 86—87° (C. 1897 [2] 849). $\mathbf{C}_{21}\mathbf{H}_{28}\mathbf{O}_5\mathbf{NJ}$ $C_{21}H_{28}O_8N_4S_2$
- $\mathbf{C}_{21}\mathbf{H}_{29}\mathbf{ON}_{2}\mathbf{Cl}$ 1) Chloräthylat d. Cinchonamin. $2 + PtCl_4 + 2H_9O$ (A. 225, 231). **- III**, 928.
- $\mathbf{C}_{21}\mathbf{H}_{29}\mathbf{ON}_{2}\mathbf{J}$ 1) Jodäthylat d. Cinchonamin. Sm. 196° (A. 225, 231; A. ch. [6] **19**, 116). — **III**, *928*.
- C., H20, O. N., J 1) Jodnethylat d. Hydrochinin. Sm. 218°. $+ C_0H_6O$ (A. 241, 275). **– III**, 860.
- 1) Chlormethylat (aus d. Verb. $C_{19}H_{24}O_7N_2$) (B. 20, 458). III, 948. 1) Jodmethylat (aus d. Verb. $C_{19}H_{24}O_7N_2$) (B. 20, 458). III, 948. 1) $\alpha\iota$ -Di[Phenylsulfonamido]nonan. Sm. 74° (C. 1897 [2] 849). $\mathbf{C}_{21}\mathbf{H}_{29}\mathbf{O}_7\mathbf{N}_2\mathbf{Cl}$ $\mathbf{C}_{21}\mathbf{H}_{29}\mathbf{O}_7\mathbf{N}_2\mathbf{J}$
- $\mathbf{C}_{21}\mathbf{H}_{30}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{S}_{2}$ 1) Chloräthylat d. 2,6-Dimethyl-4-Phenylhexahydropyridin-3,5- $\mathbf{C}_{21}\mathbf{H}_{32}\mathbf{O}_{4}\mathbf{NCl}$
- Dicarbonsäurédiäthylester. 2 + PtCl₄ (B. 25, 2791). IV, 215. $\mathbf{C}_{21}\mathbf{H}_{32}\mathbf{O_4NJ}$ 1) Jodäthylat d. 2, 6-Dimethyl-4-Phenylhexahydropyridin-3,5-
- Dicarbonsäurediäthylester (B. 25, 2791). IV, 215.

 1) Isobutyl-4-Methylphenyldi[1-Piperidyl]phosphoniumjodid. Sm. $\mathbf{C}_{21}\mathbf{H}_{36}\mathbf{N}_{2}\mathbf{JP}$ 204° (B. 31, 1046). — IV, 1682.

C₂₁-Gruppe mit fünf Elementen.

- $C_{21}H_{12}ONCIS$ 1) Chlorid d. Thio-β-Dinaphtylamidoameisensäure. Sm. 254-255° (B. **24**, 2915). — II, 870.
- C21H15ON2Br2P 1) ?-Tribrom-4-Methylphenylamid d. Orthophosphorsäure. Sm. 180° u. Zers. (B. 26, 570). — II, 490.
- C₂₁H₁₇O₄N₃ClBr1) Anilid d. Bromgallocyaninhydrochlorid (Bl. [3] 15, 408). III, 677.
- C₂₁H₁₈O₇N₃ClS 1) Verbindung (aus Gallussäureanilid u. Nitrosodimethylanilin) (Bl. [3] 11, 86). — III, 677.
- C₂₁H₂₁ON₃Br₃P 1) Tri[?-Brom-2-Methylphenylamid] d. Phosphorsäure. Sm. 253° (B. **26**, 566). II, 460.
 - 2) Tri[2-Brom-4-Methylphenylamid] d. Phosphorsäure. Sm. 268° (B. **29**, 726).
 - 3) Tri[?-Brom-4-Methylphenylamid] d. Phosphorsäure. Sm. 2210 (B. 26, 571). - II, 490.
- C₂₁H₂₅O₄NClBr 1) Chlormethylat d. Acetylbromcodein (A. 297, 219).

C₂₁H₂₇O₃NBrJ 1) Jodmethylat d. Aethobromcodein (B. 15, 1484). — III, 904.

C₂₂-Gruppe mit einem Element.

- $C_{22}H_{12}$ C 95,6 — H 4,4 — M. G. 276.
- 1) 2,2-Dinaphtylanthrylen. Sm. 270°. Pikrat (B. 11, 302). II, 302. $\mathbf{C}_{22}\mathbf{H}_{14}$ C 95,0 — H 5,0 — M. G. 278.
 - 1) Picen. Sm. 350° (364° cor.); Sd. 518-520° (B. 13, 1834; 14, 175; 26, 1751; A. 284, 52; Bl. [3] 6, 238; J. 1889, 744). II, 299.
 2) 1,1-Dinaphtyläthin. Sm. 225° (B. 11, 301). II, 299.
 C 94,3 H 5,7 M. G. 280.
- $C_{22}H_{16}$ 1) $\alpha \beta$ -Di[1-Naphtyl]äthen. Sm. 161°. Pikrat (J. pr. [2] 47, 56). — II, 299. $C_{22}H_{18}$
 - C 93.6 H 6.4 M. G. 282.1) αα-Di[1-Naphtyl]äthan. Sm. 136° (J. pr. [2] 47, 59). — II, 297.

 $\mathbf{C}_{22}\mathbf{H}_{28}$

 $C_{22}H_{30}$

 $C_{22}H_{40}$

 $\mathbf{C}_{22}\mathbf{H}_{46}$

 $C_{22}H_{14}O$

C22H18

2) $\alpha\beta$ -Di[1-Naphtyl]äthan. Sm. 160° (B. 21, 54). — II, 298. 3) $\alpha\beta$ -Di[2-Naphtyl]äthan. Sm. 253° (B. 21, 55). — II, 298. 4) 3-Methyl-9-[4-Methylphenyl]anthracen. Sm. 191° (A. 299, 291). C 92.3 — H 7.7 — M. G. 286. $\mathbf{C}_{22}\mathbf{H}_{22}$ 1) Tri[P-Methylphenyl]methan. Sm. 73°; Sd. 376-377,3°, (A. ch. [6] 2,

353). — II, 290.

2) Tri[?-Methylphenyl]methan (B. 18, 347). — II, 290. 3) Di[1,3-Dimethylphenyl] benzol. Sd. 392—396° (A. 220, 234). — II, 290.

C 90,4 — H 9,6 — M. G. 292. 1) Diamenylbenzol. Sd. 208—212° (M. 4, 623). — II, 172.

Kohlenwasserstoff (aus Picenchinon). Sm. 285° (A. 284, 63).
 C 89,8 — H 10,2 — M. G. 294.

1) Kohlenwasserstoff (aus Benzylidenchlorid). Sd. oberh. 360° (M. 4, 618). C 88,6 — H 11,4 — M. G. 298.

C22H34

Piceneikosinydrür. Sd. oberh. 360° (B. 22, 780). — II, 299.
 C 88,0 — H 12,0 — M. G. 300.

 $\mathbf{C}_{22}\mathbf{H}_{36}$

1) Picenperhydrür. Sm. 175°; Sd. oberh. 360° (B. 22, 780). — II, 299. C 87.4 - H 12.6 - M. G. 302. $\mathbf{C}_{22}\mathbf{H}_{38}$

1) Hexadekylbenzol (Cetylbenzol). Sm. 27°; Sd. 230°₁₅ (136—137°₀) (B. 19, 2983; **21**, 3181; **29**, 1326). — **11**, 39. C 86,8 — H 13,2 — M. G. 304. 1) Kohlenwasserstoff (aus Hendekanaphten). Sd. oberh. 340° (J. r. 15,

335). — II, 16.

C 85,2 - H 14,8 - M. G. 310.

1) norm. Dokosan. Sm. 44,4°; Sd. 224,5°₁₅ (136,5°₀) (B. 15, 1718; 16, 391; 21, 2261; 29, 1323; J. 1886, 1823). — I, 107.

C₂₂-Gruppe mit zwei Elementen.

 $\mathbf{C}_{22}\mathbf{H}_2\mathbf{O}_4$ C 80,0 - H 0,6 - O 19,4 - M. G. 330.

1) Verbindung (aus Graphit) (A. 114, 18). — II, 2021. C 54,8 — H 2,0 — O 43,2 — M. G. 482.

 $\mathbf{C}_{22}\mathbf{H}_{10}\mathbf{O}_{13}$

1) Verbindung (aus d. Säure $C_{11}H_0O_7$) (G. 15, 468). — II, 2107. C 90,4 — H 4,1 — O 5,5 — M. G. 292. $\mathbf{C}_{22}\mathbf{H}_{12}\mathbf{O}$

1) Verbindung (aus 2, 2-Binaphtylenglykol). Sm. 198,5° (A. ch. [5] 28, 179).

 $C_{22}H_{12}O_2$

 $\mathbf{C}_{22}\mathbf{H}_{12}\mathbf{O}_4$

- II, 1104. C 85,7 — H 3,9 — O 10,4 — M. G. 308. 1) Picenchinon (B. 13, 1836; A. 284, 64). — III, 463. 2) Dicarbonylbinaphtylen (M. 1, 254; B. 4, 725). — II, 1729. C 77,6 — H 3,5 — O 18,8 — M. G. 340. 1) Phtalaconcarbonsäure. Sm. 280—281,5°. Na + H₂O, K + H₂O (B. 17, 1200).

1389). — II, 1915. C 74,2 -- H 3,4 — O 22,4 — M. G. 356. $C_{22}H_{12}O_5$

1) Anhydroverb. d. $\alpha \alpha$ -Di[3-Oxy-1,4-Naphtochinonyl-2-]äthan (Soc. **65**, 83). — III, 464. C 70,9 — H 3,2 — O 25,8 — M. G. 372.

 $C_{22}H_{12}O_6$

 Acetat d. α-Oxydixanthon. Sm. 213° (B. 25, 1656). — III, 306.
 C 79,5 — H 3,6 — N 16,9 — M. G. 332.
 Naphtodiphenazin. Sm. noch nicht bei 275° (A. 286, 80). — IV, 1058. $C_{22}H_{12}N_4$

 $\mathbf{C}_{22}\mathbf{H}_{12}\mathbf{Cl}_{2}$ 1) Dichlorid d. Alkohols $C_{22}H_{14}O_{2}$ (B. 15, 733).
1) Dibrompicen. Sm. $294-296^{\circ}$ (B. 13, 1837; 14, 176; A. 284, 62).

 $\mathbf{C}_{22}\mathbf{H}_{12}\mathbf{Br}_{2}$ II, 299.

 $C_{22}H_{13}N_{5}$

Dibromid d. Alkohols C₂₂H₁₄O₂ (B. 15, 733).
C 76,1 — H 3,7 — N 20,2 — M. G. 347.
Verbindung (aus 3,4-Diamido-1-Phenyl-1,2,5-Triazol u. Phenanthrenchinon). Sm. 289° (A. 295, 145). — IV, 1314.
C 89,8 — H 4,8 — O 5,4 — M. G. 294.
Alkohol (aus 2,0xypaphtalin). Zers bei 260° (B. 16 [2] 967; A, ch. [5]

1) Alkohol (aus 2-Oxynaphtalin). Zers. bei 260° (B. 16 [2] 967; A. ch. [5] **28**, 188). — **II**, *1095*. C 85,2 — H 4,5 — O 10,3 — M. G. 310. $\mathbf{C}_{22}\mathbf{H}_{14}\mathbf{O}_{2}$

1) 2,2-Binaphtylenglykol (A. ch. [5] 28, 151). — II, 1104.

- C22H14O3
- C 81.0 H 4.3 O 14.7 M. G. 326.
- 1) 1,3-Diketo-2-Benzoyl-2-Phenyl-2,3-Dihydroinden. Sm. 168° (B. 28, 1390). — III, *322*.
- 2) Säure (aus Dicarbonylbinaphtylen) (M. 1, 256). II, 1730.
- 3) Anhydrid d. Naphtalin-1-Carbonsäure. Sm. 145° (B. 1, 42). — II, 1445.
- 4) Anhydrid d. Naphtalin-2-Carbonsäure. Sm. 133-1340 (B. 9, 1515). - II, 1453.
- 5) Anhydrid (aus Naphtalin-1-Carbonsäure u. Naphtalin-2-Carbonsäure). Sm. 126° (B. 9, 1515). — II, 1453.
- 6) Di-2-Oxynaphtalin-1-Carbonsäurealdehyd. Sm. 241° (Am. 14, 298). - III, 96.
- 7) Verbindung (aus $\beta\beta$ -Di[2-Oxynaphtyl]- $\alpha\alpha\alpha$ -Trichloräthan). Sm. 210° u. Zers. (J. r. 23, 220). — II, 1007. C 73.8 — H 3.9 — O 22.3 — M. G. 358.
- C22H14O5
 - Dibenzoat d. Verb. C₈H₃O₃. Sm. 165° (Am. 5, 350). II, 919.
 C 70,6 H 3,7 O 25,7 M. G. 374.
- $C_{22}H_{14}O_6$ 1) αα-Di[3-Oxy-1, 4-Naphtochinolyl(2)] äthan. Sm. bei 190° (Soc. 65, 82). - III, 464.
 - 2) Gem. Anhydrid d. Benzolcarbonsäure u. Benzol-1,2-Dicarbonsäure. Sm. 123—124° (B. 28, 1577). — II, 1795.
 - 3) α , 2-Lakton d. α -Oxytriphenylmethan- α^2 , α^4 , α^4 -Tricarbonsäure (A. 299, 296).
 - 4) Diacetat d. 6,11-Dioxy-5,12-Diketo-5,12-Dihydronaphtacen. Sm. 220-235° (B. 31, 1281). C 65,0 — H 3,4 — O 31,5 — M. G. 406.
- C22H14O8
- 1) Disalicylsäurephtalid. Sm. 276°. Ba (A. 303, 283). C22H14O9 C 62,6 - H 3,3 - O 34,1 - M. G. 422.
- $\mathbf{C}_{22}\mathbf{H}_{14}\mathbf{O}_{10}$
- Aurintricarbonsäure. Ca₃, Ca₅ (B. 25, 941). II, 2100. C 60,3 H 3,2 O 36,5 M. G. 438.
 Oxyaurintricarbonsäure. Ca₆ (B. 25, 942). II, 2103. C 58,1 H 3,1 O 38,8 M. G. 454.
 Dioxyaurintricarbonsäure. Ca₇ (B. 25, 943). II, 2107. $C_{22}H_{14}O_{11}$
- 2) isom. Dioxyaurintricarbonsäure. Ca₇ (B. 25, 944). II, 2107. C 56,2 H 3,0 O 40,8 M. G. 470. $C_{22}H_{14}O_{12}$
- 1) Tetracetylellagsäure (A. 170, 80; B. 12, 1241; M. 13, 51). II, 2084.
- 2) Trioxyaurintricarbonsäure. Ca₈ (B. 25, 945). II, 2108. C 54,3 H 2,9 O 42,8 M. G. 486. C22H14O18
- 1) Tetraoxyaurintricarbonsäure. Ca₉ (B. 25, 945). II, 2108. C22 H14 O15 C 51,0 - H 2,7 - O 46,3 - M. G. 518.
- 1) Hexaoxyaurintricarbonsäure. Ca₁₁ (B. **25**, 946). II, 2109. C 86,3 - H 4,6 - N 9,1 - M. G. 306. $\mathbf{C_{92}H_{14}N_2}$
- Sm. 190° (B. 28, 3174). IV, 1090. 2-Phénylphenanthrendiazin. Sm. 190°
 79,0 — H 4,2 — N 16,8 — M. G. 334. $\mathbf{C}_{22}\mathbf{H}_{14}\mathbf{N}_{4}$
 - 1) 3,6-Di[2-Naphtyl]-1,2,4,5-Tetrazin. Sm. 246° (B. 30, 1885; A. 298, 45). — IV, 1305.
- 1) $\beta\beta$ -Dichlor- $\alpha\alpha$ -Di[1-Naphtyl]äthan. Sm. 149–150° (B. 11, 299). $\mathbf{C}_{22}\mathbf{H}_{14}\mathbf{Cl}_{2}$ II, 298.
 - 2) isom. $\beta\beta$ -Dichlor- $\alpha\alpha$ -Di[1-Naphtyl]äthan. Sm. 219°; Sd. oberh. 360° (B. 11, 300). — II, 299. C 82,2 — H 4,7 — N 13,1 — M. G. 321.
- $C_{22}H_{15}N_3$ 1) 2,5-Di[2-Naphtyl]-1,3,4-Triazol. Sm. 222°. + AgNO₃ (B. 30, 1884;
 - 1) 2,5-Di[2-Naphty]-1,5,4-Triazdi. Sdi. 222. [Ag. 43]. A. 298, 42). IV, 1217.
 2) Rosindulin. Sm. 198—199°. HCl + 3½,4,0, H₂CO₃ + 4H₂O (A. 256, 236; 286, 227; 290, 268; B. 24, 587; 29, 2760; 30, 2627). IV, 1205.
 3) Isorosindulin. HCl, (2HCl, PtCl₄), HNO₃ (A. 290, 276). IV, 1208.
 4) isom. Isorosindulin. HNO₃ (B. 21, 1601; 29, 2753). IV, 1202.

 - 5) Nitril d. 1,3,5-Triphenylpyrazol-4-Carbonsäure. Sm. 1890 (J. pr. [2]
- **58**, 152). C 75,6 - H 4,3 — N 20,0 — M. G. 349. $C_{22}H_{15}N_{5}$ 1) 2,5,6-Triphenyl-1,2,3,4,7-Benzpentazol. Sm. 2170 (A. 295, 145). —
- IV, 1314.
 βββ-Trichlor-αα-Di[1-Naphtyl] äthan. Sm. 156° (B. 11, 298; J. pr. [2] $\mathbf{C}_{22}\mathbf{H}_{15}\mathbf{Cl}_3$ **47**, 55). — II, 298.

 $C_{22}H_{16}O_{3}$

 $C_{22}H_{16}O_4$

C22H16O7

2) isom. $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di [1-Naphtyl] äthan (B. 11, 298; J. pr. [2] 47, C23 H15 Cl3 55). — II, 298. C 89,2 — H 5,4 - O 5,4 - M. G. 296. C22H16O 1) 2,3,5-Triphenylfuran. Sm. 95-96° (Soc. 51, 430; 57, 645, 674; 71, 1141). - III, 695. 2) Anhydro-αα-Di[2-Oxynaphtyl]äthan. Sm. 173° (A. 237, 270; J. pr.

[2] **47**, 79). — **II**, 1007. C 84,6 — H 5,1 — O 10,3 — M. G. 312. $C_{22}H_{16}O_2$

1) Aethylenäther d. 2,2'-Dioxy-1,1'-Binaphtyl. Sm. 196-197° (Bl. [3] **19**, 611).

2) 1, 3-Diketo-2-Phenyl-2-Benzyl-2, 3-Dihydroinden. Sm. 105-1060 (B. 28, 1392). — III, 309.

3) α δ-Diketo-αβ δ-Triphenyl-β-Buten (αβ-Dibenzoylstyrol). Sm. 129° (Soc. 57, 673, 715; 71, 1140; B. 18, 188; A. 302, 196). — III, 308.
 4) Isodibenzoylstyrol. Sm. 197—198° (Soc. 57, 706; 71, 1142). —

III, 309.

5) Acetat d. 10-0xy-9-Phenylanthracen. Sm. 165—166° (A. 202, 57). - II, 1094.

11, 1094.
6) Lakton d. α-Oxy-αγγ-Triphenylpropen-γ-Carbonsäure. Sm. 117 bis 118° (Soc. 57, 677, 716). — II, 1726.
C 80,5 — H 4,9 — O 14,6 — M. G. 328.
1) Tribenzoylmethan. Sm. 223—226° (B. 16, 2135; Soc. 47, 253; A. 282, 178; 291, 92, 95; Am. 19, 886). — III, 321.
2) isom. ?-Tribenzoylmethan. Sm. 210—220° (A. 291, 93). — III, 321.
2) isom. ?-Tribenzoylmethan. Sm. 210—220° (A. 291, 93). — III, 321.

3) Acetat d. 10-Oxy-9-Keto-10-Phenyl-9,10-Dihydroanthracen. Sm.

 $194-196^{\circ}$ (A. **202**, 61). — III, 260. 4) Benzoat d. γ -Keto- γ -Phenyl- α -[2-Oxyphenyl]propen. Sm. 102° (B.

29, 379). — **III**, 247. 5) Anhydrid d. p-Kresolphtaleïnsäure. Sm. 246° (A. 212, 340). — II, 1987.

C 76,8 — H 4,6 — O 18,6 — M. G. 344.

 polym. Phenylcumalin, siehe C₁₁H₈O₂.
 Hydrophtalaconcarbonsäure. Sm. oberh. 280°. Ag (B. 17, 1395). — II, 1914.

3) Dioxyessigdi[1-Naphtyläther]säure. Sm. 174°. Na (B. 27, 2798). 4) Dioxyessigdi[2-Naphtyläther]säure. Sm. 134°. Na (B. 27, 2799). 5) Dibenzoylphenylessigsäure? Sm. 200° u. Zers. Ag (Soc. 69, 741).

6) α, 2-Lakton d. α-Oxy-?-Acetoxyltriphenylmethan-2-Carbonsäure.

Sm. 135—136° (B. 13, 1615). — II, 1910. 7) Aethylester d. Säure $C_{20}H_{12}O_4$ (aus 2-Oxynaphtalin). Sm. 123—124°

(M. 10, 119). — II, 1914.

8) P - Acetat d. 10 - Oxy - 9 - Keto - 10 - [P - Oxyphenyl] - 9,10 - Dihydroanthracen. Sm. 207° (B. 13, 1617). — III, 260. C 73,3 — H 4,4 — O 22,2 — M. G. 360.

C22H16O5 1) Kresorcinphtalein (B. 15, 1069; A. 215, 95). — II, 2066.

2) α-Orcinphtaleïn. Zers. bei 230°. HCl (A. 183, 63; B. 29, 2631). — II. 2066.

3) β -Orcinphtaleïn + $\frac{1}{3}$ H₂O (A. 183, 67; B. 29, 2635). 4) γ -Orcinphtaleïn (B. 29, 2638).

5) Dimethyläther d. Fluorescein. Sm. 198° (B. 27, 2790). — II, 2061. 6) Aethyläther d. Fluorescein. Sm. 251° (B. 28, 47). — II, 2061. 7) Methylester d. Methylätherfluorescein. Sm. 208° (B. 28, 396). —

II, 2061.

8) Aethylester d. Fluorescein. Sm. 247° (B. 28, 46). — II, 2061.

9) 3,4-Methylenäther-1-Acetat d. γ -Keto- γ -[1-Oxy-2-Naphtyl]- α -[3,4-Dioxyphenyl]propen. Sm. 129—130° (B. 31, 708).

10) Dibenzoat d. Methyl-2,5-Dioxyphenylketon. Sm. 113° (B. **31**,

11) Dibenzoylbernsteinsäureanhydrid. Sm. 198—200° u. Zers. (A. 293, 119).

12) Farbstoff (aus Corallin) + H₂O (*M.* **16**, 380). C 67,3 — H 4,1 — O 28,6 — M. G. 392.

1) α -Oxytriphenylmethan- α^2 , α^4 , α^4 -Tricarbonsäure. Sm. 165° u. Zers. Na_2 , Ag_2 (A. **299**, 295).

2) Dizimmtweinsäureanhydrid. Sm. 147-148° u. Zers. (A. ch. [7] 3, 486). - II, 1407.

2017 — C 64,7 - H 3,9 - O 31,4 - M. G. 408. $C_{22}H_{16}O_{8}$ 1) ?-Dioxytriphenylmethan-?-Tricarbonsäure (Disalicylsäure-o-Toluylsäure). Zers. bei 145° (A. 303, 287). C 60,0 — H 3,6 — O 36,4 — M. G. 440. $\mathbf{C}_{22}\mathbf{H}_{16}\mathbf{O}_{10}$ 1) Tetracetylphlorotanninroth (A. 252, 90). — II, 1919. 2) Tetracetat d. 1,2,5,8-Tetraoxy-9,10-Anthrachinon. Sm. 201° (A. **240**, 302). — III, 438. 3) Tetracetat d. 1, 3, 5, 7-Tetraoxy-9, 10-Anthrachinon. Sm. 2530 (B. 19, 755). **— III**, *437*. 4) Tetracetat d. α-Oxyanthragallol. Sm. 207-209° (B. 19, 2339; A. 240, 272). — III, 437. 5) Tetracetat d. β-Oxanthragallol. Sm. 189° (B. 19, 2340; A. 240, 273). C 85,7 — H 5,2 — N 9,1 — M. G. 308. $C_{22}H_{16}N_2$ 1) 1,4-Di[Phenylimido]-1,4-Dihydronaphtalin. Sm. 1870 (A. 256, 255). 2) Di[2-Naphtyliden]hydrazin (2-Naphtalazin). Sm. 162° (B. 30, 1886; A. 298, 47). — IV, 1088. 3) 3,4,6-Triphenyl-1,2-Diazin. Sm. 171° (A. 289, 319). — IV, 1088.
4) Azobenzoyl (Berx. J. 18, 353; A. 111, 138; 136, 175). — III, 37.
5) Base (aus Formaldehyd u. β-Naphtylamin). Sm. 186—187°. HCl, HNO₂ (Soc. 73, 542, 553). — IV, 1088.
C 78,5 — H 4,8 — N 16,7 — M. G. 336. $C_{22}H_{16}N_4$ 1) α-Naphtalindisazobenzol. Sm. 143° (B. 21, 2146). — IV, 1401. 2) 3,6-Di[2-Naphtyl]-1,2-Dihydro-1,2,4,5-Tetrazin. Sm. 246° (B. 30, 1884; A. 298, 43). — IV, 1304. 1) ?-Dibrom- $\alpha\alpha$ -Di[1-Naphtyl]äthan. Sm. 215° (J. pr. [2] 47, 59). — $\mathbf{C}_{22}\mathbf{H}_{16}\mathbf{Br}_{2}$ II, 298. 2) $\alpha \beta$ -Dibrom- $\alpha \alpha$ -Di[1-Naphtyl]äthan. Sm. 211° (J. pr. [2] 47, 58). п, 298. С 89,5 — Н 5,8 — N 4,7 — М. G. 295. $C_{22}H_{17}N$ 1) 1-Diphenylamidonaphtalin. Sm. 142°; Sd. 335—340°_{80—85} (B. 23, 2541). - II, 600. 2) 1,2,5-Triphenylpyrrol. Sm. 231° (B. 20, 1491, 3062). — IV, 438. 3) 2,3,5-Triphenylpyrrol. Sm. 140—141° (Soc. 57, 645; 71, 1146). — IV, 474. 4) isom. Triphenylpyrrol. Sm. 140-142° (B. 21, 3062). — IV, 438. 5) 3-Phenyl-2-Benzylchinolin. Fl. $(2HCl, PtCl_4 + 2H_2O)$ (J. pr. [2] **57**, 470). 6) Chinolyldiphenylmethan. Sm. 103-104°. (2 HCl, PtCl₄) (B. 19, 749; A. 241, 364). — IV, 475. 7) Nitril d. αβγ-Triphenylpropen-α-Carbonsäure. Sm. 212° (J. pr. [2] $C \pm 61,7 - H \pm 5,3 - N \pm 13,0 - M. G. \pm 323.$ $\mathbf{C}_{22}\mathbf{H}_{17}\mathbf{N}_{3}$ 1) 2-Phenylamido-1-Phenylazonaphtalin. Sm. 141-1420 (B. 17, 2671; **20**, 1168). — IV, *1397*. 2) 4-Phenylamido-1-Phenylazonaphtalin. Sm. 151° (A. 256, 256). — IV, 1397. 3) 2,5-Di[2-Naphtyl]-2,3-Dihydro-1,3,4-Triazol. Sm. 240° u. Zers. (B. **30**, 1886; A. **298**, 46). — IV, 1216. 4) 6-Amido-2,4,5-Triphenyl-1,3-Diazin. Sm. 157°. HCl (J. pr. [2] 39, 253). — IV, 1216. 5) ms-Aethyldinaphtoaposafranin. HCl, HNO₃ (B. 31, 2488). 6) Verbindung (aus Tetraphenylcarbazon). HCl (A. 258, 241). — IV, 1191. $C_{22}H_{17}N_5$ C 75,2 - H 4,8 - N 19,9 - M. G. 351.1) 4-Amido-1,3-Di[Phenylazo]naphtalin. Sm. 1890 (B. 21, 3241). — IV, 1401. 2) α -Amidonaphtalindisazobenzol. Sm. 170° (B. 21, 2146). — IV, 1401. 3) β -Amidonaphtalindisazobenzol. Sm. 164° (B. 21, 2146). — IV, 1401. 4) 3,4-Di[Benzylidenamido]-1-Phenyl-1,2,5-Triazol. Sm. 162° (A. 295, 146). — IV, 1314. C 88,6 — H 6,0 — O 5,4 — M. G. 298.

1) 10 - Oxy - 3 - Methyl - 9-[4 - Methylphenyl]anthracen (Tolylmethylanthranol). Sm. 117° (A. 299, 290; Bl. [3] 17, 975).

127

 $C_{22}H_{18}O$

RICHTER, Lex. d. Kohlenstoffverb.

C22H18O $C_{22}H_{18}O_{2}$ 2) Masopin. Sm. 155° (A. 46, 124). — III, 637.
C 84,1 — H 5,7 — O 10,2 — M. G. 314.
1) Dinaphtyläther d. ?-Dioxy-1,1'-Binaphtyl. Sm. 251° (B. 17, 2453). —

- II, 1004.
- 2) Dimethyläther d. β -Dioxybinaphtyl. Sm. 190° (B. 17, 2454). II, 1005. 3) 2,2-Dinaphtyläther d. αα-Dioxyäthan. Sm. 200-201° (A. 237, 27;
- B. **19**, 3010). **II**, 886.
- 4) 1,1-Dinaphthyläther d. $\alpha\beta$ -Dioxyäthan. Sm. 125—126° (B. 13, 1956). **— II**, 857.
- 5) 2,2-Dinaphtyläther d. αβ-Dioxyäthan. Sm. 217° (B. 13, 1954). —
- 6) $\alpha \delta$ -Diketo- $\alpha \beta \delta$ -Triphenylbutan (Desylacetophenon). Sm. 126° (Soc. 57, 644; B. 26, 61). — III, 306. 7) 10 - Oxy - 9 - Keto - 3 - Methyl-9-[4-Methylphenyl]-9,10-Dihydro-
- anthracen (Tolylmethyloxanthranol). Sm. 207° (A. 299, 290; Bl. [3] 17, 975).
- 8) Lakton d. γ-Oxy-ααγ-Triphenylbuttersäure. Sm. 153° (Soc. 57, 679). **– II**, 1725.
- 9) Lakton d. α-Oxy-α'-Phenyl-α², α³-Di[4-Methylphenyl] methan-α', 2-Carbonsäure (Ditolylphtalid). Sm. 116° (Bl. 35, 405; 42, 168; [3] 17, 967; B. 14, 1867; A. 299, 287). II, 1725.
 10) Methylester d. Triphenylakrylsäure. Sm. 136° (B. 29, 2842).
- 11) Methylester d. ααβ-Triphenyläthen-α²-Carbonsäure. Sm. 101—102° (B. 30, 1283).
- 12) Acetat d. α-Oxytriphenyläthen. Sm. 104,5—105,5° (A. 296, 245). C 80,0 - H 5,4 - 0.14,5 - M. G. 330.
- 1) β -Oxy- $\alpha\delta$ -Diketo- $\alpha\beta\delta$ -Triphenylbutan. $^{\circ}$ Sm. 102° (B. 18, 187). -III. 307.
- 2) $\alpha \alpha$ -Diphenyl- β -Benzoylpropionsäure. Sm. 182—183°. Ag (Soc. 57, 680). — II, 1726.
- 3) Anhydrodi [4-Oxy-1-Methylphenyl]-Phenylmethan-2-Carbonsäure (p-Kresolphtalinsäureanhydrid). Sm. 210° (A. 212, 342). — II, 1912.
- 4) Aethylester d. Hydrofluoransäure. Sm. 99-1010 (B. 28, 432). II, 1911.
- 5) Acetat d. α -Oxy- β -Keto- $\alpha \alpha \beta$ -Triphenyläthan. Sm. 145—146° (Bl. [3] 13, 860). — III, 258.
- 6) Acetat d. β -Keto- $\alpha\beta$ -Diphenyl- α -[4-Oxyphenyl]äthan. Sm. $106-107^{\circ}$; Sd. $325-330^{\circ}_{40}$ (Soc. 57, 965). — III, 258. C 76,3 — H 5,2 — O 18,5 — M. G. 346.

 $C_{22}H_{18}O_4$

C22 H18 O5

C,2H18O3

- 1) Dimethyläther d. Phenolphtalein. Sm. 97-990 (101-1020) (M. 17, 430; G. **26** [1] 223).
- 2) Benzol-1,2[?]-Di[Phenylmethylcarbonsäure]. Sm. 1100 (A. 171, 124). - II, 1913.
- 3) α , 2-Lakton d. α -Oxy- α '-Phenyl- α ² α ³-Di[?-Oxy-4-Methylphenyl]methan- α' , 2-Carbonsäure (A. 299, 294).
- 4) α , 2^2 -Lakton d. $\alpha \alpha$ -Di[?-Oxy-2-Methylphenyl]- α -Phenylmethan-2²-Carbonsäure (o-Kresolphtaleïn). Sm. 213-214^o (A. 202, 153). II, 1987.
- 5) Dibenzylester d. Benzol-1,2-Dicarbonsäure. Sm. 42-44° (B. 28, 1577; **30**, 780). — II, *1794*.
- 6) Di[4-Methylphenylester] d. Benzol-1,2-Dicarbonsäure. Sm. 83-84° (B. 26, 209). — II, 1794.
- 7) 4-Benzoat d. 3,4-Dioxy-?-Benzoyl-1-Methylbenzol-3-Methyläther. Sm. 95—96° (G. 28 [2] 284).
- 8) Dibenzoat d. $\alpha\beta$ -Dioxy- α -Phenyläthan. Sm. 96-97° (A. 216, 295; B. 10, 1006). — II, 1144.
- 9) Dibenzoat d. 2,5-Dioxy-1,4-Dimethylbenzol. Sm. 160° (B. 18, 2923). **– II**, 1150.
- 10) Verbindung (aus Corallin) + H₂O (M. 16, 391). C 72.9 - H 5.0 - O 22.1 - M. G. 362.
 - 1) Oreinaurin. Na + Na₂ + 6H₂O, Ba + 3H₂O, Ag₂ (J. pr. [2] **25**, 277; Bl. [3] 5, 465; B. 13, 546). — II, 1124.
 - 2) α-Orcinphtalin. Sm. 256° (A. 183, 72; B. 29, 2633). II, 1913.

C. H18O5 .

C22H18O6

- 3) Aethylester d. Acetylisophenanthroxylenacetessigsäure. Sm. 165 bis 170° (Soc. 59, 7). II, 1909.
- 4) Aethylester d. Fluorescin. Sm. 195-196° (M. 13, 425; B. 28, 45). · II, 2037.
- 5) Benzoat d. 2,3,4 [oder 3,4,5]-Trioxydiphenylketondimethyläther. Sm, 111° (G. 27 [2] 21).
- 6) 6-Benzoat d. Hydrocotoïn (6-B. d. 2,4,6-Trioxydiphenylketondimethyläther). Sm. 113° (117-118°) (A. 282, 195; M. 18, 740). - III, 203.
- 7) Dibenzoat d. 1,3,5-Trioxybenzolmonoäthyläther. Sm. 75-77° (M. 18, 748).
- 8) Leukoverbindung d. Farbstoffs C₂₂H₁₆O₅ (aus Corallin) (M. 16, 381). C 69.8 - H 4.8 - 0 25.4 - M. G. 378.
- 1) Dimethyläther d. Brenzkatechinphtaleïn (B. 22, 2199). II, 2065.
- 2) αβ-Di[1-Naphtyläther] d. Hexaoxyäthan. Sm. 163° u. Zers. (B. 17, 1742). — II, 858.
- 3) αβ-Di[2-Naphtyläther] d. Hexaoxyäthan. Sm. 167° u. Zers. (B. 17. 1742). — II, 878. 4) Diacetat d. Triresorcin. Sm. 260—270° u. Zers. (A. 289, 65).
- 5) 2,5-Dibenzoat d. 1,2,3,5-Tetraoxybenzol-1,3-Dimethyläther. Sm. 245° (B. 11, 333). — II, 1031.
- 6) Diacetylpolyporsäure. Sm. 205° (A. 187, 194). II, 1907.
- 7) Monäthylester d. Acetylpulvinsäure. Sm. 143-144° (A. 284, 116, 124).
- 8) Aethylester (aus. d. Hydrochinonphtaleïn). Zers. bei 110° (B. 6, 507). - II, 2066.
- $C_{22}H_{18}O_7$ C 67,0 - H 4,5 - O 28,4 - M. G. 394.
 - 1) Tetramethyläther d. Anhydrobis-4,5-Dioxydiketodihydroinden. Sm. 205° u. Zers. (B. 31, 2093).
 - 2) 4-[3-Acetoxylphenyl] äther d. 4-Oxy-1, 2-Diacetoxylnaphtalin. Sm.
 - 169—170° (B. 30, 2568). 3) Triacetat d. Resaceteïn. Sm. 229° (J. pr. [2] 26, 59). III, 137. C 64,4 - H 4,4 - O 31,2 - M. G. 410.
- $C_{22}H_{18}O_8$ 1) Alonigrin (C. 1898 [2] 118).
 - 2) Triacetat d. Brasileïn. Sm. 203—207°. + 2 C₂H₄O₂ (B. 23, 1434; M. 19, 742). III, 654.
 - 3) Tetracetyltrioxyanthranol (aus Anthraflavinsäure). Sm. 274° (B. 21, 1173). — III, 244.
 - 4) Tetracetyltrioxyanthranol (aus Isoanthraflavinsäure). Sm. 235 240° (B. **21**, 1173). — III, 244.
 - 5) Tetracetyltrioxyanthranol (aus Flavopurpurin). Sm. 250-260° (B. 21, 1174). — III, 244.
 - 6) Tetracetat d. Anthragallolhydranthron. Sm. 203-205° (B. 21, 444). - III, 433.
 - 7) Tetracetat d. 2,3,9,10-Tetraoxyanthracen. Sm. 217-219° (B. 22, 684). — II, 1119.
- $C_{22}H_{18}N_2$
- C 85,2 H 5,8 N 9,0 M. G. 310.
 1) 1,4-Di[Phenylamido]naphtalin. Sm. 144° (A. 256, 255). IV, 922.
 2) 2,7-Di[Phenylamido]naphtalin. Sm. 168° (163—164°) (B. 20, 1372; 23, 538). — IV, 925.
 - 3) 1,1-Dinaphtyläthanamidin (J. 1865, 415). II, 604.
 - 4) 2,2-Dinaphtyläthanamidin. Sm. 168° (J. 1886, 868). II, 604.
 - 5) γ-Diphenylmethylenhydrazido-α-Phenylpropen (Diphenylmethylencinnamalazin). Sm. 98° (J. pr. [2] 44, 204). — III, 187.
 - 6) 3,4,6-Triphenyl-1,2-Dihydro-1,2-Diazin. Sm. 178-186° (186-188°) (A. 289, 316). - IV, 1082.
 - 7) 2,5,6-Triphenyl-2,3-Dihydro-1,4-Diazin. Sm. 149° (B. 28, 3173). IV, 641.
- C22H18N4
- C 78,1 H 5,3 N 16,6 M. G. 338.

 1) 1-Cyannaphtalin? Sm. 198° u. Zers. 2 HCl. II, 624.

 2) 2-Cyannaphtalin? Sm. 222° u. Zers. 2 HCl, H₂SO₄, Dioxalat. II, 624.
- 3) 2,2-Dinaphtenylhydrazidin. Sm. 246° u. Zers. 2 HCl, 2 HNO₃ (B. 30, 1882; A. **298**, 40). — IV, 1304.
- 4) 1-Phenyl-4-[α -Phenylhydrazonbenzyl]pyrazol. Sm. 138—140° u. Zers. (G. 19, 140). — IV, 550.

 $C_{22}H_{19}N$

 $C_{22}H_{20}O_{2}$

C 88.9 - H 6.4 - N 4.7 - M. G. 297.

1) γ-Diphenylmethylimido-α-Phenylpropen. Sm. 128° (B. 26, 2170). **– III**, 61.

2) Aethyl-2, 2-Dinaphtylamin. Sm. 231° (B. 20, 2619). — II, 604.

3) 3-[4-Isopropylphenyl]-β-Naphtochinolin. Sm. 150°. (2 HCl, PtCl₄) (B. 27, 2030). — IV, 470.

4) Nitril d. $\alpha\beta$ -Diphenyl- α -[4-Methylphenyl]propionsäure. Sm. 121° (A. **250**, 150). — II, 1483. C 81,2 — H 5,9 — N 12,9 — M. G. 325.

 $C_{22}H_{19}N_3$

1) 1-Phenyl-3,5-Di[2-Methylphenyl]-1,2,4-Triazol. Sm. 860 (J. pr. [2] 54, 159. — IV, 1188. 2) 1-Phenyl-3,5-Di[4-Methylphenyl]-1,2,4-Triazol. Sm. 115°. HCl

(J. pr. [2] 54, 160). — IV, 1188.
 3) Nitril d. β-Phenylhydrazon-αγ-Diphenylpropan-α-Carbonsäure. Sm. 119—1206 (J. pr. [2] 55, 352). — IV, 698.
 C 83,6 — H 6,3 — O 10,1 — M. G. 316.

1) Methyläther d. α -Keto- β -[4-Oxyphenyl]- $\alpha \gamma$ -Diphenyl propan. Sm. 99 bis 100° (B. 21, 2451). — III, 260.

- 2) Aethyläther d. α-Oxy-β-Ketotriphenyläthan (B. 29, 2080; A. 296, 249).
- 3) α' -Phenyl- $\alpha^2\alpha^3$ -Di[4-Methylphenyl]methan- α' 2-Carbonsäure (Phenylditolylmethancarbonsäure). Sm. 1680 (A. 299, 289).

4) Phenyldi [P-Methylphenyl] methan -α-Carbonsäure. Sm. 78-83° (A. 189, 124). — II, *1483*.

5) Benzoat d. β -Oxy- $\alpha\gamma$ -Diphenylpropan. Sm. 50-51° (B. 25, 1273). -II, 1144.

6) Verbindung (aus Phenylessigsäurepropylester). Sd. 335% (Soc. 37, 483). - II, 1310.

7) Verbindung (aus Phenylessigsäurebenzylester). Sd. 230% (Soc. 37, 483). **- II**, 1310.

8) Verbindung (aus d. Benzylester d. 1-Methylbenzol-2-Carbonsäure). Sd. 350° (B. 25 [2] 748). — II, 1329.

C 79,5 — H 6,0 — O 14,5 — M. G. 332.

1) Kresolaurin (J. pr. [2] 25, 275). — II, 1122.

2) α-Oxy-α-Phenyl-α-α-Di[4-Methylphenyl]methan-α-2-Carbonsäure

C, H, O,

(Bl. [3] 17, 970).

3) Monacetat d. ?-Di[α -Oxybenzyl]benzol. Sm. 94-97° (B. 9, 311). -П, 1103. С 75,8 — Н 5,7 — О 18,4 — М. G. 348.

 $C_{22}H_{20}O_4$

1) β -Benzoat d. $\alpha\beta\gamma$ -Trioxypropan- $\alpha\gamma$ -Diphenyläther. Sm. 66–67° (B.

19, 66). — II, 1146. 2) Di [2-Oxy-1-Methylphenyl]-Phenylmethan-2-Carbonsäure (o-Kresolphtalinsäure). Sm. 217—218° (A. 202, 168). — II, 1911.

3) 4',42-Dioxytriphenylmethandimethyläther-23-Carbonsäure. Sm. 144

bis 146° (149—150°). Ba + 3 H₂O (*M.* 17, 431; *G.* 26 [1] 228). 4) Aethylester d. 4',4'-Dioxytriphenylmethan-2'-Carbonsäure. Sm. 150—152° (156—158°) (M. 13, 424; B. 30, 175). — II, 1911.

5) Aethylester d. 3,5-Diketo-4-Benzyliden-1-Phenylhexahydrobenzol-2-Carbonsäure. Sm. 98° (A. 294, 282).

6) Aethylderivat d. Phenanthroxylenacetessigsäureäthylester. Sm. 143 bis 144° (Soc. 59, 18). — II, 1908.

C 72,5 — H 5,5 — O 22,0 — M. G. 364. $C_{22}H_{20}O_5$

1) $\alpha, 4', 4^2$ -Dioxytriphenylmethan- 2^3 -Carbonsäure. K (G. 26 [1] 227). 2) Methyl-norm. Propylester d. Pulvinsäure. Sm. 95-96^o (A. 282, 42). - II, 2030.

3) isom. Methyl-norm. Propylester d. Pulvinsäure. Sm. 121-1220 (A. **282**, 42). — II, 2030. C 69,5 — H 5,2 — O 25,3 — M. G. 380.

 $C_{22}H_{20}O_6$ 1) Danaidin (J. 1885, 1815). — III, 579.

2) 2,5-Diäthyläther-3,6-Diphenyläther d. 2,3,5,6-Tetraoxy-1,4-Benzochinon. Sm. 128° (Am. 17, 649). — III, 355.
3) Diacetat d. Nepodin. Sm. 198° u. Zers. (A. 291, 311). — III, 453.

4) Säure (aus β -Phenylpropan- $\alpha \gamma$ -Dicarbonsäureanhydrid). Sm. 153°. Ag₂ (Am. 20, 515).

5) Diäthylester d. $\alpha \delta$ -Diketo- $\alpha \delta$ -Diphenyl- β -Buten- $\beta \gamma$ -Dicarbonsäure C . H 20 O6 (D. d. Dibenzoylfumarsäure). Sm. 75° (B. 30, 1997).

6) Diäthylester d. Oxypulvinsäure. Sm. 100° (*J. pr.* [2] **57**, 315). 7) Verbindung (aus Methylaurin) (*A.* **202**, 211). — **II**, *1121*. C 66,7 — H 5,0 — O 28,3 — M. G. 396. $C_{22}H_{20}O_7$

1) Anhydrobenzoylpikrotin. Sm. 245° (A. 222, 349; B. 31, 2972). —

2) Monacetat d. $\alpha\beta\beta$ - Tri[1,3-Dioxyphenyl] äthan (A. 243, 176). II, 1045.

3) Acetat d. Dehydrohämatoxylintetramethyläther. Sm. 190-1920 (M. **16**, 912). — III, 665. C 64,1 — H 4,8 — O 31,1 — M. G. 412.

 $C_{22}H_{20}O_8$

 $C_{22}H_{20}O_{9}$

 $C_{22}H_{20}N_6$

 $C_{22}H_{21}N_3$

C,2H,2O

 $C_{22}H_{22}O_4$

1) Triacetat d. Brasilin. Sm. 105-106° (B. 18, 1139). - III, 653.

2) Triacetat d. Di[4,6-Dioxy-2-Methylphenyl]essigsäurelakton. Sm. 189° (Soc. **73**, 40¹; Am. **9**, 135). C 61,7 - H 4,7 - O 33,6 - M. G. 428.

 $\mathbf{C}_{22}\mathbf{H}_{20}\mathbf{O}_{10}$

Triacetat d. Hesperitin. Sm. 127—129° (Soc. 73, 1034).
 C 59,5 — H 4,5 — O 36,0 — M. G. 444.
 Diacetat d. Irigenin. Sm. 122° (B. 26, 2013). — III, 596.
 Triacetat d. Verb. C₁₆H₁₄O₄. α-Derivat Zers. bei 200—210°; β-Derivat Sm. 227—229° (Soc. 65, 936, 937). — III, 454.
 Partice extet d. Phenochysid. Sep. 105, 1079 (M. 19, 280).

Pentaacetat d. Phloroglucid. Sm. 105-107° (M. 19, 380).
 C 84,6 — H 6,4 — N 9,0 — M. G. 312.

 $\mathbf{C}_{22}\mathbf{H}_{20}\mathbf{N}_{2}$ 1) Methylamarin. Sm. 184°. Ag, HJ (B. 13, 1418; 18, 3077). — III, 23. αβ-Di[1-Naphtylamido] äthan. Sm. 127°. HBr, 2HBr, H₂SO₄ (B. 8, 23; 23, 2039; 25, 3265). — II, 601.

3) $\alpha \beta$ -Di[2-Naphtylamido] athan. Sm. 149—150° (B. 23, 1985). — II, 604.

4) Dypnonphenylhydrazon. Sm. 176°. - IV, 778.

5) 1,4,5-Triphenyl-1,2,3,4-Tetrahydro-1,4-Diazin. Sm. 130-1310 (G. 21 [2] 500; 23 [1] 12). — IV, 887.

6) 1,5,6-Triphenyl-1,2,3,6-Tetrahydro-1,4-Diazin. Sm. bei 150°. 2HCl $+ H_2O$ (B. 31, 1581). - IV, 994.

7) 1,6-Dimethyl-2,3-Diphenyl-1,2-Dihydro-1,4-Benzdiazin. Sm. 1350 (B. 26, 198). — IV, 1076.

8) 2,4,2',4'-Tetramethyl-6,6'-Bichinolyl. Sm. 232°. 2 HCl, (2 HCl, PtCl₄),

(2HCl, ClJ), H₂SO₄, H₂Cr₂O₇ (B. 20, 2506). — IV, 1076.

9) Verbindung (aus Brommethylphenylketon) (G. 21 [2] 500). — III, 126. C 71,7 - H 5,4 - N 22,8 - M. G. 368.

1) α-Benzylidendibenzyltetrazylhydrazin. Sm. 98° (A. 287, 260). —

IV, 1328. 2) β -Benzylidendibenzyltetrazylhydrazin. Sm. 132—133° (A. 287, 261). IV, 1328. C 80,7 — H 6,4 — N 12,8 — M. G. 327.

1) 5-[4-Methylphenyl]amido-6-Methyl-1-[4-Methylphenyl]benzimidazol. Sm. 119-120°. (2 HCl, PtCl₄) (B. 26, 2778). - IV, 1150.

2) Trimethylchrysanilin. (2 HCl, PtCl₄), HJ, 2 HJ (B. 2, 379). — IV, 1211. C 87,4 - H 7,3 - O 5,3 - M. G. 302.

1) β -Oxy- $\alpha\alpha\alpha$ -Triphenyl- β -Methylpropan. Sd. bei 260° (J. pr. [2] 37, 368). — II, 1094.

2) Propyläther d. α-Oxytriphenylmethan. Sm. 50° (56°) (C. 1896 [1] 416; 1897 [2] 408).
 C 75,4 — H 6,3 — O 18,3 — M. G. 350.

1) Diäthylester d. Polyporsäure. Sm. 134° (A. 187, 193). — II, 1907. C 72,1 — H 6,0 — O 21,9 — M. G. 366.

 $C_{22}H_{22}O_5$ 1) Campherfluorescein (Soc. 63, 963). — II, 2055.

2) Anhydrid d. β -Benzoylisobuttersäure. Fl. (Bl. [3] 19, 395). 3) Dimethylester d. Säure $C_{20}H_{18}O_5$. Sm. 125° (Soc. 59, 20). — II, 1981. 4) Aethylester d. γ-Acetyl-αε-Diketo-αε-Diphenylpentan-γ-Carbon-säure (Ae. d. Diphenacylacetessigsäure). Sm. 82—83° (B. 22, 3225). II, 1981.

C 69,1 - H 5,8 - O 25,1 - M. G. 382.C22H22O6 1) Dimethyläther d. Hydromethylumbelliferon. Sm. 243-2440 (B. 17, 2135). — II, 1780.

 Diäthylester d. αδ-Dioxy-αδ-Diphenylbutan-βγ-Dicarbonsäure (α-D. d. Dibenzoylbernsteinsäure). Fl. Na₂ + 2C₂H₆O (Soc. 47, 265; A. 293, 79). $\mathbf{C}_{22}\mathbf{H}_{22}\mathbf{O}_6$

3) Diäthylester d. $\alpha \delta$ -Diketo- $\alpha \delta$ -Diphenylbutan- $\beta \gamma$ -Dicarbonsäure (β-D. d. Dibenzoylbernsteinsäure). Sm. 128—130°. Na₂ (Soc. 47, 264; B. 27, 1167; A. 282, 167; 293, 74, 107). — II, 2032.

4) Diäthylester d. isom. $\alpha \delta$ -Diketo- $\alpha \delta$ -Diphenylbutan- $\beta \gamma$ -Dicarbonsäure (γ-D. d. Dibenzoylbernsteinsäure). Sm. 75° (A. 293, 77, 107).

C 66,3 - H 5,5 - O 28,1 - M. G. 398. $\mathbf{C}_{22}\mathbf{H}_{22}\mathbf{O}_7$

1) Diacetat d. Brasilindimethyläther. Sm. 90-91° (B. 27, 526). -III, 653.

C 63.8 - H 5.3 - O 30.9 - M. G. 414.

1) $\alpha \zeta$ -Diphenylhexan- $\beta \beta \varepsilon \varepsilon$ -Tetracarbonsäure. Sm. 166—167°. Ca+2H₂O, Ag₂ (Soc. 65, 1019). — II, 2085.
2) Dimethylester d. Diphenylessigweinsäure. Fl. (A. ch. [7] 3, 475).

- II, 1310.

3) Dimethylester d. Di[2-Methylbenzoyl] weinsäure. Sm. 56° (Soc. 69, 1312, 1589).

4) Dimethylester d. Di[3-Methylbenzoyl] weinsäure. Sm. 83° (Soc. 69, 1318, 1590).

5) Dimethylester d. Di[4-Methylbenzoyl]weinsäure. Sm. 86-87° (88,5°) (A. ch. [7] 3, 479; Soc. 69, 1315, 1590). — II, 1340.

6) Diäthylester d. Dibenzoylweinsäure. Sm. 56-58° (62,5°) (B. 15, 2243; J. 1882, 857; Bl. [3] 13, 202; Soc. 69, 1585). — II, 1155.

7) Tetracetat d. $\alpha\beta$ -Di[2,4-Dioxyphenyl]äthan. Sm. 105—112° (J. pr. [2])

8) Tetracetat d. 1,3,1',3'-Tetraoxy-?-Aethylbiphenyl. Sm. 135—138°

(M. 11, 418). — II, 1038. 9) Tetracetat d. s-Di[2,5-Dioxy-1-Methyl]-P-Biphenyl. Sm. 135° (M. 10, 176). — II, 956.

10) Monobenzoat d. Pikrotin. Sm. 230° (236°) (B. 12, 685; 31, 2972). — III, 644.

11) Dibenzoat d. Dulcitdimethylenäther. Sm. 228-231° (A. 299, 319). C 61.4 - H 5.1 - O 33.5 - M. G. 430.

1) Acetaldehydphloroglucid (C. 1896 [2] 486).

C 59.2 - H 4.9 - O 35.9 - M. G. 446.

1) Triacetat d. Aloin $+ \frac{1}{2} H_2 O$. Sm. 92^0 (B. 23 [2] 207). — III, 618. C 84,1 - H 7,0 - N 8,9 - M. G. 314.

1) 4-[4-Isopropylbenzyliden]amido-1-Phenylamidobenzol. Sm. 1320 (A. 255, 191). — IV, 597.

2) α -Phenylimido- α -[Aethyl-4-Methylphenyl]amido- α -Phenylmethan. Sm. 102°. HJ (B. 28, 871). — IV, 844.

3) $\alpha - [4 - Methylphenyl] imido - \alpha - Aethylphenylamido - \alpha - Phenylmethan.$ Sm. 117°. HJ (B. 28, 872). — IV, 844.

4) β -Phenylhydrazon - $\alpha \gamma$ -Diphenylbutan (Phenylhydrazon d. Methyldibenzylketon). Sm. 92-93° (A. 284, 268). - IV, 777.

5) α -Phenylhydrazon- β -Phenyl- α -[2,5-Dimethylphenyl]methan. Sm. 96° (B. 24, 3542). - IV, 777.

6) 1-Methyl-2, 3, 5-Triphenyltetrahydropyrazol. Sm. 109-110° (B. 21, 1207). — IV, 995.

7) 1,2,4-Triphenylhexahydro-1,4-Diazin. Sm. 101-102°. (2HCl, PtCl₄) (G. 23 [1] 17). - IV, 860.

8) Verbindung (aus 4-Amido-1-Dimethylamidobenzol u. Desoxybenzoïn). Sm. 138—139° (B. 25, 639). — IV, 598.

9) Verbindung (aus Benzyleyanid u. Benzylchlorid). Sm. 1820 (B. 21, 1310). - II, 1467.

C 77,2 - H 6,4 - N 16,4 - M. G. 342.1) $\beta \gamma$ -Di[Phenylhydrazon]- α -Phenylbutan. Sm. 172—173° (B. 22, 2133).

 $\frac{1}{2}$ TV, 783. 2) $\alpha \beta$ -Di [Methylphenylhydrazon]- α -Phenyläthan. Sm. 151° (B. 21, 2597).

3) III-4-Isopropylformazylbenzol. Sm. 173—174° (B. 31, 1756). 4) α -Diäthylphenosafranin. (2 HCl, PtCl₄) (B. 16, 470). — IV, 1283. 5) β -Diäthylphenosafranin. (2 HCl, PtCl₄) (B. 16, 471). — IV, 1283.

 $C_{22}H_{22}O_8$

54, 417).

C., H., O. $C_{22}H_{22}O_{10}$

 $\mathbf{C}_{2}, \mathbf{H}_{22} \mathbf{N}_{2}$

 $\mathbf{C}_{22}\mathbf{H}_{22}\mathbf{N}_{4}$

- C22H22N4 6) Tetramethylphenylensafranin. HCl, (2HCl, PtCl₄), HNO₃ + H₂O (B. **16**, 867). — **IV**, *1299*. C 71,3 — H 5,9 — N **22**,7 — M. G. 370. $\mathbf{C}_{22}\mathbf{H}_{22}\mathbf{N}_{6}$ α-Tribenzyltetrazylhydrazin.
 Sm. 153° (A. 287, 264).
 — IV, 1328.
 β-Tribenzyltetrazylhydrazin.
 Sm. 121° (A. 287, 264).
 — IV, 1328.
 - 3) αγ-Di[Phenylhydrazon]-β-[Methylphenylhydrazon]propan. Sm. 192
- bis 193° (B. 27, 221). IV, 762. 1) Tribenzyläther d. Trimerkaptomethan. Sm. 98°. + 3PtCl₄ (B. 11, $C_{22}H_{22}S_3$ 2265; **13**, 238). — П, *1052*. С 80,2 — Н 7,0 — N 12,8 — М. G. 329. $C_{22}H_{23}N_3$
 - 1) Tri[2-Methylphenyl]guanidin. Sm. 130-131°. HCl, (2HCl, PtCl₄),
 - This is a state of the state o
 - 1) 1-Oxy-3-Keto-2-Amyl-1,5-Diphenyl-2,3-Dihydro-R-Penten, Sm. $150,5^{\circ}$ (Soc. **51**, 433). — III, 253.
 - 2) Verbindung (aus Camphersäure u. Benzol) (B. 27 [2] 670).
 C 78,6 H 7,1 O 14,3 M. G. 336.
- $C_{22}H_{24}O_3$ 1) Benzyläther d. Desmotroposantonin. Sm. 1820 (G. 25 [1] 475; 25 [2] 352). — II, *1790*.
 - 2) Benzyläther d. Iso-Desmotroposantonin. Sm. 82° (G. 25 [1] 484; **25** [2] 354). — II, 1791. C 75,0 — H 6,8 — O 18,2 — M. G. 352.
- $\mathbf{C}_{22}\mathbf{H}_{24}\mathbf{O}_{4}$

C2, H24O2

- 1) Phenothymochinon. Fl. (C. 1898 [1] 887). 2) Thymophenochinon. Sm. bei 127° (C. 1898 [1] 887).
- 3) Benzoylhydrosantonid. Sm. 156,5-157° (J. 1878, 827). II, 1770. Aethylester d. αη-Diketo-αη-Diphenylheptan-β-Carbonsäure (Ae. d. αs-Dibenzoylcapronsäure). Fl. (Soc. 55, 348). — II, 1904.
- 5) Diäthylester d. βδ-Diphenyl-α-Buten-αγ-Dicarbonsäure. Sd. 240 bis 241°₁₀ (Soc. 75, 250).
 6) Diäthylester d. α-Isoatropasäure. Sm. 78—79°(B. 28, 139). II, 1403.

- 7) Diäthylester d. β-Isoatropasäure. Fl. (B. 28, 142). II, 1404.
 8) Diäthylester d. α-Truxillsäure. Sm. 146° (B. 21, 2347). II, 1901.
 9) Diäthylester d. β-Truxillsäure. Sm. 47—48° (B. 25, 91; 26, 837). —
- II. 1902. 10) Diäthylester d. γ-Truxillsäure. Sm. 98° (B. 22, 2260). — II, 1903.
- 11) Verbindung (aus Orcin u. Benzaldehyd) (Am. 9, 133). III, 11.
- C 68,8 H 6,2 O 25,0 M. G. 384. 1) Sesamin. Sm. 123° (C. 1897 [2] 773). $C_{22}H_{24}O_6$
 - 2) 1-β-Methylbutylester d. d-αβ-Dibenzoxylpropionsäure. Sd. 255 bis
 - 270% (Soc. 71, 262). 3) i- β -Methylbutylester d. d- $\alpha\beta$ -Dibenzoxylpropionsäure. Fl. (Soc. 71, 266).
 - 4) $1-\beta$ -Methylbutylester d. $i-\alpha\beta$ -Dibenzoxylpropionsäure. Sm. $36-36,5^{\circ}$; Sd. 262—268°, (Soc. 71, 258). C 66,0 — H 6,0 — O 28,0 — M. G. 400.
- $C_{22}H_{24}O_7$ 1) Acetat d. Hämatoxylintetramethyläther. Sm. 178-180° (M. 15, 143; **16**, 909). — **III**, 664. C 63,5 — H 5,8 — O 30,7 — M. G. 416.
- $C_{22}H_{24}O_8$ 1) Tetraäthyläther d. 1,2,3,5,6,7-Hexaoxy-9,10-Anthrachinon. Sm. bei 180° (B. 10, 885). — III, 439.
 - 2) Barbatinsäure oder $C_{19}H_{20}O_7$. Sm. 186°. $K+1^{1}/_{2}H_{2}O$, Ba $+3H_{2}O$, Cu $(A.\ 203,\ 302;\ B.\ 30,\ 358;\ J.\ pr.\ [2]\ 57,\ 237)$. $II,\ 2054$. C 61,6 H 5,6 O 33,3 M. G. 432.
- C22H24O9 1) Polystichumsäure (Polystichin). Sm. 123—123,2°. Anilinsalz (C. 1895) [1] 887; **1898** [2] 1103).
 - 2) Tetraäthylester d. Phtaloxydimalonsäure. Sm. 106° (A. 242, 61). II, 2102.
- C 58,9 H 5,3 O 35,7 M. G. 448.

 1) Aethyläther d. Scoparin. Sm. 272° u. Zers. (M. 14, 216; 15, 328). $\mathbf{C}_{22}\mathbf{H}_{24}\mathbf{O}_{10}$ III, 648.
- $\mathbf{C}_{22}\mathbf{H}_{24}\mathbf{N}_{2}$ H 7.6 - N 8.8 - M. G. 316.1) 1,2-Di[Methylphenylamidomethyl] benzol. Sm. 110° (B. 31, 429).

22 II. 2) 1,2-Di 2-Methylphenylamidomethyl benzol. Sm. 148° (B. 31, 421). C22 H24 N2 3) 1,3-Di Methyl-4-Methylphenylamido benzol. Sd. bei 400° (J. pr. [2] 33, 223). — IV, 573. 4) 1,4-Di[Methyl-2-Methylphenylamido]benzol. Sd. 385-390°(i. H-Strom) (J. pr. [2] 34, 67). - IV, 586.5) 1,4-Di Methyl-4-Methylphenylamido benzol. Sm. 1530 (J. pr. [2] 33, 235). — IV, 586. 6) Leukobase (aus Malachitgrün). Sm. 155—156° (B. 28, 214). C 76,7 — H 7,0 — N 16,3 — M. G. 344. $C_{22}H_{24}N_4$ 1) 2,2-Di[4-Methylphenylamido]-5-Methyl-2,3-Dihydrobenzimidazol (Carbotoluylendi-4-Tolyltetramin). Sm. 196°. 3HCl (B. 19, 3059). — IV, 623. 2) Base (aus Methylphenylpyridazon). Sm. 200° (A. 253, 49). — IV, 821. C 71,0 — H 6,4 — N 22,6 — M. G. 372. $\mathbf{C}_{22}\mathbf{H}_{24}\mathbf{N}_{6}$

1) 5,5'-Dipropyl-1,1'-Diphenyl-3,3'-Bi-1,2,4-Triazol. Sm. 193-194°.

- IV, 1831. 2) 5,5'-Diisopropyl-1,1'-Diphenyl-3,3'-Bi-1,2,4-Triazol. Sm. 192—193,5°. **– IV**, 1331.

3) 5,5'-Diäthyl-1, 1'-Di[4-Methylphenyl]-3, 3'-Bi-1, 2, 4-Triazol. Sm. 202 bis 203° (B. **22**, 3116). — **IV**, *1331*. C 87,1 — H 8,2 — N 4,6 — M. G. 303.

C22H25N

1) 3-Citronellal-β-Naphtochinolin. Sm. 53°. (2HCl, PtCl₄) (B. 27, 2025). - IV, 445. C 79,7 - H 7,6 - N 12,7 - M. G. 331.

 $C_{22}H_{25}N_3$

1) 4',42'-Diamido-43-Dimethylamido-2'-Methyltriphenylmethan (B. 24,

555). — IV, 1197. 2) 4',5²-Diamido-4³-Dimethylamido-2²-Methyltriphenylmethan. Sm. 154° (B. **24**, 3138). — **IV**, 1197.

3) Tri[4-Amido-3-Methylphenyl]methan. Sm. 155-160° (B. 27, 1815).

4) Tri[?-Amido-?-Methylphenyl]methan (A. ch. [5] 2, 352). — IV, 1198. 5) 2-Heptyl-4, 6-Diphenyl-1, 3, 5-Triazin. Sm. 28°; Sd. 274—275°₁₅ (B.

23, 2384). — IV, 1199. 6) 2-Methyl-4,6-Di[4-Isopropylphenyl]-1,3,5-Triazin. Sm. 68° (B. 30, 2009). — IV, 1199. C 82,0 — H 8,1 — O 9,9 — M. G. 322.

 $C_{22}H_{26}O_2$

1) $\alpha\beta$ -Dioxy- $\alpha\beta$ -Diphenyl- $\alpha\beta$ -Di-R-Tetramethylenyläthan. Sm. 153 bis 154° (Soc. 61, 66). — II, 1103.

2) az-Diketo-az-Diphenyldekan (Dibenzoyloktan). Sm. 88-89° (A. ch. [6] 22, 363). — III, 302.

3) $\alpha \delta$ -Diketo- $\alpha \delta$ -Di[2,4,5-Trimethylphenyl] butan. Sm. 120° (B. 20, 1378). - III, 302.

4) Dithymoläthylenchinon. Sm. 215° (B. 7, 1199; Soc. 31, 263). — II, 999.
5) Diisobutylearbobenzonsäure. Sm. 148° (A. 184, 169). — II, 1477. C 78,1 — H 7,7 — O 14,2 — M. G. 338.

 $C_{22}H_{26}O_3$

1) d-Benzyläthersantonige Säure. Fl. (G. 25 [2] 358).

2) 1-Benzyläthersantonige Säure (G. 25 [2] 359).

3) Benzylätherdesmotroposantonige Säure. Sm. 120-1210 (121-1230) (G. 25 [1] 536; 25 [2] 356). 4) Acetat d. β -Oxy- α -Keto- $\alpha\beta$ -Di[4-Isopropylphenyl]äthan. (A. d.

Cuminoïn). Sm. 75° (B. 14, 610). — III, 239.

5) Verbindung (aus 4-Oxy-1-tert. Butylbenzol-3-Carbonsäurealdehyd). Sm. 158° (Am. 16, 642). C 74,6 — H 7,3 — O 18,1 — M. G. 354.

 $C_{22}H_{26}O_4$

1) Eugenol-Aethylenäther (Di[3-Methoxyl-1-Allylphenyl]äther d. Aethylenglykol) (J. 1877, 581). — II, 974.

2) Benzyldesmotroposantoninsäure. K. (G. 25 [2] 354).

3) Benzylisodesmotroposantoninsäure. K. (G. 25 [2] 356). 4) Diäthylester d. Hydropolyporsäure. Fl. (A. 195, 368). — II, 1907. 5) Benzylester d. Santonsäure. Sm. 84,3° (B. 11, 2032). — II, 1789.

6) Diäthylester d. $\alpha\delta$ -Diphenylbutan- $\beta\gamma$ -Dicarbonsäure (C. 1897 [2] 797).

7) Isobutyrat d. Ostruthin. Sm. 81°. — III, 639. C 71,3 — H 7,0 — O 21,6 — M. G. 370. $C_{22}H_{26}O_5$

1) Acetat d. Bidurochinon. Sm. 133-134°. + C_2H_6O (Sm. 128-132°), + C_6H_6 (Sm. 297-100°) (B. 29, 2183).

- $\mathbf{C}_{22}\mathbf{H}_{26}\mathbf{O}_{6}$ C 68.4 - H 6.7 - O 24.9 - M. G. 386.
- 1) Aloresinotannol (C. 1898 [2] 118). C22H26O7

 - 1) Kosin (siehe auch C₃₁H₈₈O₁₀). Sm. 161° (C. 1897 [2] 1076).
 2) Limonin. Sm. 275° (A. 40, 317; 51, 338; B. 12, 685). III, 636.
 3) Divaricatsäure. Sm. 129°. Ba + 2H₂O (B. 30, 364; A. 300, 356; J. pr. [2] **57**, 245). C 60,8 — H 6,0 — O 33,2 — M. G. 434.
- $\mathbf{C}_{22}\mathbf{H}_{26}\mathbf{O}_{9}$
 - 1) Dihydropolystichumsäure (Polystichalbin). Sm. 150-150,5°. Anilinsalz, Phenylhydrazinsalz (C. 1895 [1] 887; 1898 [2] 1103). C 58,7 — H 5,8 — O 35,5 — M. G. 450.
- $\mathbf{C}_{22}\mathbf{H}_{26}\mathbf{O}_{10}$ 1) β , 2-Lakton d. β -Oxy- β -Phenylpropan- $\alpha \alpha \gamma \gamma$ 2-Pentacarbonsäure-
 - παγγ-Tetraäthylester (Tetraäthylester d. Phtalyldimalonsäure). Sm. 48,5°. Na₂ + 2H₂O, K, K₂ + 2H₂O (A. 242, 80). II, 2101.
 Tetraäthylester d. 1,4-Phtalyldi[methandicarbonsäure]. Sm. 110° (B. 27, 2526). II, 2099.
 C 56,6 H 5,6 O 37,8 M. G. 466.
- $C_{22}H_{26}O_{11}$
- 1) Tetracetylpiceïn. Sm. 170° (Bl. [3] 11, 947). III, 601. C 54,8 H 5,4 O 39,8 M. G. 482.
- $\mathbf{C}_{22}\mathbf{H}_{26}\mathbf{O}_{12}$ 1) Hesperidin. Sm. 251° u. Zers. (B. 9, 26, 250, 690; 14, 946; Bl. 46, 502; 49, 23). — III, 593.
 - 2) Isohesperidin + 2H₂O (Bl. 46, 501; 49, 21), III, 594.
 3) Pentacetylarbutin (A. 154, 240). III, 571.

 - 4) Tetraäthylester d. 3,6-Diacetoxylbenzol-1,2,4,5-Tetracarbonsäure. Sm. 120° (Am. 11, 13). — II, 2095. C 53,0 — H 5,2 — O 41,8 — M. G. 498.
- C22H26O13 1) Tetracetylglykovanillinsäure. Sm. 181—182° (B. 8, 1141). — III, 578. $C_{22}H_{26}O_{25}$
 - C 38,3 H 3,7 O 58,0 M. G. 690.1) Glykosetetraweinsäure. $Ca_2 + 2H_2O$, $(Mg_2, 2MgO + 5H_2O)$, Pb_2 (A. ch. [3] **54**, 78). — **I**, *1049*. C 76,3 — H 7,5 — N 16,2 — M. G. 346.
- $\mathbf{C}_{22}\mathbf{H}_{26}\mathbf{N}_4$ 1) Verbindung (aus β -Dibromcampher u. Phenylhydrazin). Sm. 68,5° (G. 23)
- [1] 333). \overrightarrow{IV} , 796. C 70,6 H 6,9 N 22,5 M. G. 374. $\mathbf{C}_{22}\mathbf{H}_{26}\mathbf{N}_{6}$ 1) 5-Phenylazo-4,4'-Diamido-2,2'-Di[Dimethylamido] biphenyl. Sm.
- 220—221° (B. 30, 2944). IV, 1403. C 85,7 H 9,1 O 5,2 M. G. 308. $\mathbf{C}_{22}\mathbf{H}_{28}\mathbf{O}$ 1) α -Keto- $\alpha\beta$ -Diphenyldekan. Sm. 61°; Sd. 350-355° (B. 22, 348). —
- III, 239. C 81,5 - H 8,6 - O 9,9 - M. G. 324. $\mathbf{C}_{22}\mathbf{H}_{28}\mathbf{O}_{2}$
 - 1) Dithymoläthylen. Sm. 170-171° (B. 7, 1198; Soc. 31, 263). II, 999. 2) Verbindung (aus R-Tetramethylenphenylketon). Sd. 320° (Soc. 61, 64). **- II**, 1071.
- C 77,6 H 8,2 O 14,1 M. G. 340. $\mathbf{C}_{22}\mathbf{H}_{28}\mathbf{O}_{3}$
- 1) Phenolhemicampher. Fl. (Bl. [3] 4, 726). III, 487. C 74,2 - H 7,8 - O 18,0 - M. G. 356. $C_{22}H_{28}O_4$
- - Aethyläther d. Bidurochinon. Sm. 128-130° (B. 29, 2182).
 Anhydrid d. Camphocarbonsäure. Sm. 195-196° (M. 2, 242; A. 281,
 - 392). I, 628. 3) polym. Aldehyd d. 4-Oxy-1-tert. Butylbenzol-3-Carbonsäure. Sm. 158° (Am. 16, 642). — III, 91. C 71,0 — H 7,5 — O 21,5 — M. G. 372.
- $\mathbf{C}_{22}\mathbf{H}_{28}\mathbf{O}_{5}$
 - 1) Monacetat d. Dihydrobidurochinon. Sm. 153° (B. 29, 2184).
 2) Diäthylester d. 1-Keto-5-Methyl-3-[4-Isopropylphenyl]-1, 2, 3, 4-Tetrahydrobenzol-2, 4-Dicarbonsäure. Sm. 112° (A. 303, 242).
- C 65,3 H 6,9 + O 27,7 M. G. 404. 1) Albaspidin. Sm. 148—149° (C. 1896 [2] 1037). $\mathbf{C}_{22}\mathbf{H}_{28}\mathbf{O}_7$
- 2) Hesperinsäure. Ca (Bl. 46, 500). II, 2049. C 62,8 H 6,7 O 30,5 M. G. 420. $C_{22}H_{28}O_8$ 1) Dibenzylidenverbindung d. Oktit C₈H₁₈O₈ (aus Rosaceen). Sm. 230° (Bl. [3] 21, 89).
 - 2) Tetraäthylester d. δ-Phenyl-αButen-ααγγ-Tetracarbonsäure (T. d. Benzyldicarboxylglutakonsäure). Sm. 78°; Sd. 240°₁₁₋₁₂ (A. 222, 260; B. 23, 3183; Soc. 59, 748; J. pr. [2] 54, 368). II, 2077.

C 54.5 — H 5.8 — O 69.7 — M. G. 484. $C_{22}H_{28}O_{12}$

1) Tetraäthylester d. 2,5-Diacetoxyl-?-Dihydrobenzol-1,3,4,6-Tetracarbonsäure. Sm. 142° (Am. 11, 14). — II, 2094. C 49,6 — H 5,3 — O 45,1 — M. G. 532.

 $C_{22}H_{28}O_{15}$

 Verbindung (aus d. Rosskastanie) (J. 1863, 591). — III, 583.
 C 82,5 — H 8,7 — N 8,7 — M. G. 320. $\mathbf{C}_{22}\mathbf{H}_{28}\mathbf{N}_2$

1) $\alpha\beta$ -Di[4-Isopropylbenzylidenamido]äthan. Sm. 63-64° (B. 20, 270). - III, 56

2) Base (aus 1-Oxy-1,3,3-Trimethyl-1,1-Dihydropseudoindol). Sm. 1290 (M. 17, 269). — IV, 225. C 75,8 — H 8,0 — N 16,1 — M. G. 348.

 $\mathbf{C}_{22}\mathbf{H}_{28}\mathbf{N}_4$

1) Campherosazon. Sm. 55° (G. 16, 137; 17, 97). — IV, 796. C 70,2 — H 7,4 — N 22,3 — M. G. 376. $C_{22}H_{28}N_6$

1) α-Diäthylentriphenylhydrazin (B. 26, 1865). — IV, 660.

β-Diathylentriphenylhydrazin (B. 26, 1869). — IV, 660.
 β-Diäthylentriphenylhydrazin. Sm. 167-168° (B. 26, 1866). — IV, 660.
 4,4'-Di[1-Piperidylazo] biphenyl. Sm. 17° (A. 235, 271). — IV, 1581.
 Chlorid d. Camphocarbonsäure. Sm. 45—45,5° (M. 2, 249). — I, 628. C 81,0 — H 9,2 — 0 9,8 — M. G. 326.
 Dithymoläthan. Sm. 185° (B. 7, 1197; 11, 287). — II, 997.
 Di[3-Methyl-6-Isopropylphenyläther] d. αβ-Dioxyäthan. Sm. 99°

C22H28Cl8 $C_{22}H_{30}O_{2}$

(Bl. 25, 32). — II, 770.

3) Benzoat d. Isocedrol. Sd. 221—223° (Bl. [3] 17, 487).

 $C_{22}H_{30}O_3$ C 77,2 — H 8,8 — O 14,0 — M. G. 342. 1) Anhydrodigitoxigenin. Sm. 215—220° (B. 31, 2458).

2) Digitaligenin, oder $C_{28}H_{82}O_{3}$. Sm. $210-212^{\circ}$ (B. 25 [2] 680; 31, 2460).

3) Lorbeercampher (Laurin) (Berz. J. 5, 263; A. 41, 329; 88, 354). III, 636.

4) Anhydrid d. Oxymethylencampher. Sm. 188—189° (A. 281, 364). — III, 116.

 $C_{22}H_{30}O_4$ C 73.7 - H 8.4 - O 17.9 - M. G. 358.

1) Tetraäthyläther d. 1, 3, 1', 3'-Tetraoxy-?-Aethylbiphenyl. Sm. 90 bis 92° (M. 11, 417). — II, 1038.

2) Verbindung (aus Campheroxalsäure). Sm. 190-191° (Am. 20, 324, 328; 21, 252). C 70,6 — H 8,0 — O 21,4 — M. G. 374.

 $C_{22}H_{30}O_5$

1) Anhydrid d. Camphocarbonsäure. Sm. 265° u. Zers. (M. 2, 245). — I, 628. C 67,7 — H 7,7 — O 24,6 — M. G. 390.

 $C_{22}H_{30}O_{6}$

1) Diäthylester d. $\beta\zeta$ -Diketo- δ -[4-Isopropylphenyl]heptan- $\gamma\varepsilon$ -Dicarbonsäure (D. d. Cuminylidenbisacetessigsäure). Sm. 1370 (B. 31, 2774; A. 303, 240).

 $C_{22}H_{30}O_{7}$ C 65,7 - H 7,4 - O 27,6 - M. G. 406.

1) Triäthylester d. Aethylmalonsäurebenzylidenacetessigsäure. Sm. 154° (B. 27, 2342). — II, 2049. C 62,6 — H 7,1 — O 30,3 — M. G. 422. 1) 1,1'-Dimethyläther d. 2,4,6,2',4',6'-Hexaketo-1,1'-Dioxy-3,3,5,5,-

 $C_{22}H_{30}O_{8}$

3', 3', 5', 5'-Oktomethyl-Dodekahydrobiphenyl. Sm. 133° (B. 26, 2034). - II, 1031.

2) Tetraäthylester d. Benzoldi-1,2-[Aethyl- $\beta\beta$ -Dicarbonsäure] (T. d. o-Xylylendimalonsäure). Fl. Na, (B. 17, 452; Soc. 53, 16). — II, 2075. 3) Tetraäthylester d. Benzoldi-1,3-[Aethyl- $\beta\beta$ -Dicarbonsäure]. Fl. Na,

(B. **21**, 31). — **II**, 2075.

4) Tetraäthylester d. Benzoldi-1,4-[Aethyl- $\beta\beta$ -Dicarbonsäure]. Sm. 51°.

 $\mathbf{C}_{22}\mathbf{H}_{30}\mathbf{O}_{15}$

 $\mathbf{C}_{22}\mathbf{H}_{30}\mathbf{N}_{2}$

Na₂ (B. 21, 34). — II, 2076. C 49,4 — H 5,6 — O 44,9 — M. G. 534. 1) Inulinpentacetat (A. 160, 84). — I, 1096. C 82,0 — H 9,3 — N 8,7 — M. G. 322. 1) polym. Isoamylidenphenylamin. Sm. 97° u. Zers.; Sd. 227°. 2 HCl, (2 HCl, PtCl₄) (B. 12, 74; 25, 2041). — II, 444.

2) Diisoamylidendiphenyldiamin (A. Spl. 3, 350; B. 12, 298). — II, 444. $C_{22}H_{30}N_4$ C 75,4 — H 8,6 — N 16,0 — M. G. 350.

1) $\delta \varepsilon$ -Di[Phenylhydrazon]- $\beta \eta$ -Dimethyloktan. Sm. 163° (B. 31, 1222). $\mathbf{C}_{22}\mathbf{H}_{30}\mathbf{Hg}$ 1) Quecksilberdi[pentamethylphenyl]. Sm. 266° (B. 22, 1220). — IV, 1712.

- C 85.4 H 10.0 N 4.5 M. G. 309. $C_{22}H_{31}N$ 1) Di | ?-Isoamylphenyl amin. Sd. 319-321°. (2 HCl, PtCl₄) (B. 20, 1258). - II, 563. C 80,4 - H 9,8 - O 9,8 - M. G. 328. $C_{22}H_{32}O_{2}$ Verbindung (aus d. Aethylester d. Säure C₂₀H₈₀O₃ aus Colophonium).
 Fl. (J. r. 20, 477). — II, 1674.
 C 76,7 — H 9,3 — O 14,0 — M. G. 344. $C_{22}H_{32}O_3$ 1) Anacardsäure. Sm. 26°. Mg + H_2O , Ca + H_2O , Ba + H_2O , Pb, Fe₂ + $3H_2O$, Ag (A. 63, 141; B. 20, 1861). — II, 1686. C 73,3 — H 8,9 — 0 17,8 — M. G. 360.
- $C_{22}H_{32}O_4$ 1) Digitoxigenin. Sm. 230° (C. 1896 [2] 791; B. 31, 2455). — III, 582. C 67,3 — H 8,1 — O 24,5 — M. G. 392. $C_{22}H_{32}O_6$
- 1) Triacetat d. 1, 2, 3-Trioxy-?-Diisoamylbenzol. Sm. 145° (B. 25, 2656). **- II**, 1026. C22 H32 O7 C 64.7 - H 7.8 - O 27.5 - M. G. 408.
- 1) Quercitweinsäure. Ca₃ + 2H₂O (Berthelot, Chim. org. synth. 2, 220). C 54,1 - H 6,5 - O 39,3 - M. G. 440. $C_{22}H_{32}O_{12}$
- 1) Hexaäthylester d. β -Buten- $\alpha \alpha \beta \gamma \delta \delta$ -Hexacarbonsäure. Sm. 175°; Sd. 210—212°₁₅ (*M.* 9, 452). — I, 872. C 81,5 — H 9,9 — N 8,6 — M. G. 324. $C_{22}H_{32}N_2$
- 1) Base (aus Isoamylidenphenylamin), Sd. 300-315°. 2HCl (B. 25, 2044). - II, 444. C 75,0 — H 9,1 — N 15,9 — M. G. 352. $C_{22}H_{32}N_4$
- Diisoamyldiphenyltetrazon. Sm. 86,5° (A. 252, 286). IV, 1308.
 C 84,9 H 10,6 N 4,5 M. G. 311.
 2-Tridekylchinolin. Sm. 31—32°. (2HCl, PtCl₄) (B. 23, 2363). $C_{22}H_{33}N$
- IV, 344. C 80,0 H 10,3 O 9,7 M. G. 330. $C_{22}H_{34}O_{2}$
 - 1) Aethylester d. Dextropimarsäure. Sm. 52° (B. 19, 2171). II, 1437. 2) α-Acetat d. Oxycampherpinakonan. Sm. 74° (B. 27, 2349; A. 292, 15).
- 3) β-Acetat d. Oxycampherpinakonan. Sm. 1090 (B. 27, 2349; A. 292, 17). C 76,3 — H 9,8 — O 13,9 — M. G. 346.

 1) Caïncetin (J. 1862, 488). — III, 573.

 2) Acetat d. Vitin. Sm. 239° u. Zers. (M. 14, 728). — III, 650.

 3) Aethylester d. Camphanoncamphersäure. Sm. 79° (G. 27 [1] 187). $C_{22}H_{34}O_{3}$

 - 4) Aethylester d. Säure C₂₀H₃₀O₃ (aus Colophonium). Fl. (J. r. 20, 477). - II, 1674.
- C 72.9 H 9,4 O 17,7 M. G. 362. 1) Gurjunsäure. Sm. 220°. Ca, Ba, Ag₂ (J. 1862, 462). II, 1860. 2) Metacopaivasäure. Sm. 205-206°. Cu + H₂O, Ag₂ + H₂O (A. 148, $C_{22}H_{34}O_4$ 153). — II, 1860.
- C 64,4 H 8,3 O 27,3 M. G. 410. $C_{22}H_{34}O_{7}$
- Verbindung (aus a. α-Monomethylester d. d-Camphersäure u. Phenylcarbonimid). Sm. 62° (B. 25 [2] 725). I, 724.
 Verbindung (aus d. β-Monomethylester d. d-Camphersäure u. Phenylcarbonimid). Sm. 78—79° (B. 25 [2] 725). I, 724.
 C 57,6 H 7,4 O 34,9 M. G. 458.
 Dulcamarin. Pb + 3(5) H₂O (J. 1875, 828). III, 582.
 Weströthylester d. β's Fillette A. Isopropullation and Market acarbon. $\mathbf{C}_{22}\mathbf{H}_{34}\mathbf{O}_{10}$
- 2) Tetraäthylester d. $\beta\zeta$ -Diketo- δ -Isopropylheptan- $\alpha\gamma\varepsilon\eta$ -Tetracarbonsäure (T. d. Isobutylidenbisacetondicarbonsäure). Sm. 1040 (A. 288, 357). C 53.9 - H 6.9 - O 39.2 - M. G. 490.
- $\mathbf{C}_{22}\mathbf{H}_{34}\mathbf{O}_{12}$ 1) Diäthylester d. Tetrapropionylschleimsäure. Sm. 118-120° (M. 15, 200).
 - 2) Hexaäthylester d. Butan- $\alpha\beta\beta\gamma\gamma\delta$ -Hexacarbonsäure. Sm. 56° (B. 16, 1046; 17, 2786). — I, 872. C 83,6 — H 11,4 — O 5,0 — M. G. 316.
- 1) Masopin. Sm. 155° (A. 46, 124). III, 560. 2) Pentadekylphenylketon. Sm. 59°; Sd. 250,5—251°₁₅ (155°₀) (B. 19, 2982; **21**, 2266; **29**, 1327). — III, 157.

 $C_{22}H_{36}O$

- 3) α-Aethyläther d. Oxycampherpinakonan. Sm. 58° (B. 27, 2348; A. **292**, 12).
- 4) β-Aethyläther d. Oxycampherpinakonan. Sm. 73° (B. 27, 2349; A. **292**, 13).

- 5) Verbindung (aus Dichloräthyläther). Sd. oberh. 300° (A. 178, 10).
 C 79,5 H 10,8 O 9,6 M. G. 332. $C_{22}H_{36}O$ $\mathbf{C}_{22}\mathbf{H}_{36}\mathbf{O}_{2}$
- 1) Acetat d. Cinchol. Sm. 124° (A. 228, 295). II, 1069. 2) Acetat d. Cupreol. Sm. 126° (A. 228, 293). II, 1068. 3) Acetat d. Quebrachol. Sm. 115° (unc.) (A. 211, 274). II, 1068.
 - 4) Phenylester d. Palmitinsäure. Sm. 45°; Sd. 249,5°, (B. 17, 1380). -
- II, 662. C 64,1 H 8,7 O 27,2 M. G. 412. $C_{22}H_{36}O_{7}$
- 1) Caperatid. Sm. 47° (J. pr. [2] 57, 429). C 59,5 H 8,1 O 32,3 M. G. 444. $C_{22}H_{36}O_{9}$
- 1) Mannitantetrabutyrat (A. ch. [3] 47, 321). I, 424. $C_{22}H_{36}O_{11}$ C 55.5 - H 7.6 - O 36.9 - M. G. 476.
- 1) Pinipikrin. Sm. 80° (*J.* **1853**, 572; **1854**, 658). III, 601. C 83,0 H 11,9 O 5,0 M. G. 318.
- $C_{22}H_{38}O$ 1) Cholestol (oder C₂₀H₃₄O?). Sm. 139^o (B. 17, 871; 18, 1803; A. 234, 377) **— II**, 1069.
 - 2) Hicylalkohol (oder C₂₅H₄₄O). Sm. 172° (Soc. 53, 676; Bl. 42, 150). II, 1069.
 - 3) 4-Oxy-1-Hexadekylbenzol. Sm. 77,5°; Sd. 260-261°₁₆ (B. 19, 2984). - II, 777.
 - 4) Cetylphenyläther. Sm. 41,8°; Sd. 200° $_{10}$ (R. 12, 182). II, 654. C 79,0 H 11,4 O 9,6 M. G. 334.
- $C_{22}H_{38}O_{2}$ 1) Diisoamyläther d. 3,5-Dioxy-?-Isoamyl-l-Methylbenzol (Z. 1867,
- 561). II, 961. C22H38O8 C 75,4 - H 10,9 - O 13,7 - M. G. 350.
- 1) Acetat d. Alkohol C₂₀H₈₆O₂ (aus Dicampholyl). Sm. 54° (Bl. [3] 11, 618). $\mathbf{C}_{22}\mathbf{H}_{38}\mathbf{O}_{4}$ C 72,1 — H 10,4 — \tilde{O} 17,5 — M. G. 366.
 - 1) Diäthylester d. Allocamphothetischen Säure. Sm. 67-680 (Soc. 67, 344).
- C 61,4 H 8,8 O 29,8 M. G. 430. 1) Caperatsäure. Sm. 132°. Ba, Ag₂ (B. 30, 365; J. pr. [2] 57, 427). 2) Dipropylester d. norm. Dicaproylweinsäure. Sd. 242—243°₄₀ (B. 26 $C_{22}H_{38}O_{8}$
 - [2] 923; Bl. [3] **9**, 683; [3] **11**, 314). 3) Dibutylester d. Divalerylweinsäure. Sd. 340—350° (Bl. [3] **11**, 313).
 - 4) Diisobutylester d. Divalerylweinsäure. Fl. (Bl. [3] 11, 368).
- C22H38O9 C 59.2 - H 8.5 - O 32.3 - M. G. 446.1) Digitalein (J. 1851, 567; 1858, 528; 1872, 763; 1873, 816; 1875, 840; Fr. 23, 22). — III, 580.
- C 83,3 H 12,3 N 4,4 M. G. 317. 1) Cetylamidobenzol. Sm. 42°. (2HCl, PtCl₄) (A. 83, 29). II, 336. 2) isom. Cetylbenzol. Sm. 53°; Sd. 254—255°₁₄. (2HCl, PtCl₄) (B. 19, $\mathbf{C}_{22}\mathbf{H}_{39}\mathbf{N}$
- 2984). II, *566*. C 78,5 H 11,9 O 9,5 M. G. 336. $\mathbf{C}_{22}\mathbf{H}_{40}\mathbf{O}_{2}$
- 1) Behenolsäure. Sm. 57,5°. Mg, Ba, Ag (A. 143, 42; J. pr. [2] 42, 380; B. 25, 964, 2668; 26, 640, 1867; 27, 3397). I, 536. C 71,7 H 10,9 O 17,4 M. G. 368. $\mathbf{C}_{22}\mathbf{H}_{40}\mathbf{O}_4$
- 1) uv-Diketobehensäure (Dioxybehenolsäure). Sm. 95°. Ag (A. 143, 46;
 - B. 26, 644; 28, 276; 29, 810, 812). I, 696. Diundekylensäure. Sm. 29—30°; Sd. 275°₁₅. Ca, Ba, Ag (B. 17, 2986; 2) Diundekylensäure. 19, 2226). — I, 523. C 68,7 — H 10,4 — O 20,8 — M. G. 384.
- $\mathbf{C}_{22}\mathbf{H}_{40}\mathbf{O}_{5}$ Monacetat d. Verb. C₂₀H₃₈O₄ (aus Isobutyraldehyd). Sd. 240—242° (Soc. 43, 95). — I, 947.
 C 66,0 — H 10,0 — O 24,0 — M. G. 400.
- $C_{22}H_{40}O_6$ 1) Diacetoxylstearinsäure (*J. pr.* [2] **40**, 240). — **I**, 636. C 78,1 — H 12,4 — O 9,5 — M. G. 338. $\mathbf{C}_{22}\mathbf{H}_{42}\mathbf{O}_{2}$
 - C 78,1 H 12,4 O 9,5 M. G. 338.

 1) Brassidinsäure. Sm. 60° (65°); Sd. 282°₃₀ (180°₀). Na, Mg, Ba, Pb, Ag (A. 143, 54; B. 4, 444; 19, 3321; 25, 962; 29, 1325; J. 1853, 444; 1877, 728—729; J. pr. [2] 42, 369; [2] 50, 65, 68, 79, 81). I, 528.

 2) Erucasäure. Sm. 33—34°; Sd. 281°₃₀ (179°₀). Na, Ba, Pb, Ag (A. 69, 4; 127, 182; 143, 40; B. 4, 442; 19, 3320; 22, 819; 29, 1325; J. pr. [2] 42, 368; [2] 50, 78, 81; J. 1853, 445; 1876, 579). I, 527.

 3) Isoerucasäure. Sm. 54—56°. Na, Ca, Ba, Ag (J. pr. [2] 45, 301; [2] 49, 58; [2] 50, 66, 81)

 - **49**, 58; [2] **50**, 66, 81).

- $C_{22}H_{42}O_3$ C 74.6 - H 11.9 - O 13.5 - M. G. 354.
 - 1) Oxybehensäure (Ketobehensäure). Sm. 83—84° (80°). Na, Ag (B. 25, 963, 2669; 26, 839, 1867, 27, 176; J. pr. [2] 48, 336; [2] 49, 200; [2] 50, 378). I, 614.

 - 2) Oxyerucasäure. Ba (A. 143, 52). I, 614.
 3) Phellonsäure. Sm. 96° (J. 1884, 1461). III, 627.
 4) Acetylarachinsäureanhydrid. Sm. 60° (B. 11, 2031). I, 464.
 - 5) Aethylester d. β-Keto-γ-Oktylundekan-γ-Carbonsäure (Aethylester d. Dioktylacetessigsäure). Sd. 340-342° (A. 204, 9). I, 614.
 C 71,3 H 11,3 O 17,3 M. G. 370.
- C22H42O4 1) Diäthylester d. Hexadekan-απ-Dicarbonsäure. Sm. 43° (A. 261, 126). **- I**, 690.
- C22H42O5 C 68,4 - H 10,9 - O 20,7 - M. G. 386.
- 1) Cetylid. Sm. 62-65° (H. 3, 334). C 35,0 H 5,6 O 59,4 M. G. 754.
- $C_{22}H_{42}O_{28}$
- Milchzuckerweinsäure. Ca₃ + 4H₂O (A. ch. [3] 54, 82). I, 1064.
 C 81,5 H 13,6 O 4,9 M. G. 324. $C_{22}H_{44}O$
 - 1) η-Ketodokosan (Hexylpentadekylketon). Sm. 56-57°; Sd. 231°₁₀ (B. 15, 1718; Soc. **63**, 463). — **I**, 1006. C 77,6 — H 12,9 — O 9,4 — M. G. 340.
- C,2H44O2
- C 77,6 H 12,9 O 9,4 M. G. 340.

 1) Behensäure. Sm. 83° (80—82°). Na, Ba, Pb, Zn, Ag (A. 64, 271, 343, 346; J. pr. [2] 42, 379; [2] 49, 61, 111; [2] 50, 71). I, 447.

 2) Säure (aus μr-Diketobehensäure). Sm. 74—75° (B. 28, 278).

 3) Aethylester d. Arachinsäure. Sm. 50°; Sd. 284—286°₁₀₀ (A. 89, 1; 97, 261; 101, 97; J. 1884, 1193; J. pr. [2] 48, 488). I, 447.

 C 74,1 H 12,4 O 13,5 M. G. 356.

 1) α-Oxybehensäure. Sm. 96—97° (G. 27 [2] 299).

 2) α-Oxyarachinäthyläthersäure. Sm. 53—56°. Na, Ba, Pb (M. 17, 537).

 3) Aethylester d. α-Oxyarachinsäure. Sm. 62—66° (M. 17, 535). $C_{22}H_{44}O_{3}$
- C 70,9 H 11,8 O 17,2 M. G. 372. Coo.HAAOA
 - 1) Dioxybehensäure (aus Brassidinsäure). Sm. 98-990 (99-1000). Na, Ag (M. 10, 196; J. pr. [2] 50, 70, 80). - 1, 636.
 - 2) Dioxybehensäure (aus Erucasäure). Sm. 132-133° (127°; 130°). Ca, Ba, Zn, Cu, Ag (A. 143, 53; J. pr. [2] 39, 336; [2] 42, 382; [2] 50, 67; M. 9, 948). — I, 636.
 - 3) Dioxybehensäure (aus Isoerucasäure). Sm. 86-88°. Na, Ag (J. pr. [2] **49**, 63; [2] **50**, 67). **C** 68,0 — H 11,3 — O 20,6 — M. G. 388.
- C22H44O5
- 1) Isoamylester d. Trioxyessigtriisoamyläthersäure. Sd. 190% (A. 254, 34). — I, 737.
 - 2) Erythritmonostearat (Berthelot, Chim. org. synth. 2, 224). I, 446.

C₂₂-Gruppe mit drei Elementen.

- $\begin{array}{c} \mathbf{C_{22}H_{10}O_2Cl_2} & 1) & \mathbf{Dichlordicarbonylbinaphtylen} & (M.~1,~256). & -\mathbf{II},~1730. \\ \mathbf{C_{22}H_{10}O_2Br_2} & 1) & \mathbf{Dibromdicarbonylbinaphtylen} & (M.~1,~257). & -\mathbf{II},~1730. \\ \mathbf{C_{22}H_{10}O_4N_4} & \mathbf{C} & 67,0 & -\mathbf{H} & 2,5 & -0 & 16,2 & -\mathbf{N} & 14,2 & -\mathbf{M}. & \mathbf{G}. & 394. \\ 1) & \mathbf{Indophan}. & \mathbf{Na} + \mathbf{H_2O}, & \mathbf{K} + \mathbf{H_2O} & (A.~157,~342). & -\mathbf{II},~863. \\ \mathbf{C_{22}H_{10}O_8N_2} & \mathbf{C} & 66,3 & -\mathbf{H} & 2,5 & -0 & 24,1 & -\mathbf{N} & 7,0 & -\mathbf{M}. & \mathbf{G}. & 398. \\ \end{array}$
- 1) 2,6-Di[1,2-Phtalylamido]-1,4-Benzochinon. Sm. 277° (G. 16, 254). - III, 340.
- $\mathbf{C}_{22}\mathbf{H}_{10}\mathbf{O}_{18}\mathbf{N}_{8}$ C 39.2 - H 1.5 - O 42.7 - N 16.6 - M. G. 674.
 - 1) Lakton d. α -Oxy- α' -Phenyl- $\alpha^2\alpha^3$ -Di[2,3,5,6-Tetranitro-4-Methyl-
- $\begin{array}{c} \textbf{C}_{22}\textbf{H}_{11}\textbf{O}_{5}\textbf{Br}_{5} & \textbf{1} & \textbf{Particle N} & \textbf{1} & \textbf{1} & \textbf{2} & \textbf{2} & \textbf{2} & \textbf{3}$
- $C_{22}H_{12}O_5Br_4$ 1) Tetrabrom- β -Orcinphtaleïn (A. 183, 69; B. 29, 2637). II, 2066. 2) Tetrabrom - γ - Orcinphtalein (B. 29, 2639).

- $C_{22}H_{12}O_5Br_4$ 3) Aethyläther d. Tetrabromfluorescein (roth). $K_2 + H_2O$ (A. 183, 46).
 - II, 2063. 4) isom. Aethyläther d. Tetrabromfluoresceïn (farblos) (A. 183, 50). - II, 2064.
- $C_{22}H_{12}O_5Br_6$ 1) Hexabromoreinaurin? (B. 13, 554). II, 1125. $C_{22}H_{12}O_6N_2$ C 66,0 H 3,0 O 24,0 N 7,0 M. G. 400.
 - 1) 2,6-Di[Phtalylamido]-1,4-Dioxybenzol. Sm. noch nicht bei 310° (G. 16, 254). — II, 1809.
 - 2) Dinitrat d. 2,2'-Binaphtylenglykol. Sm. 190° u. Zers. (A. ch. [5] 28, 175). — II, 1105. C 41,8 — H 1,9 — O 43,0 — N 13,3 — M. G. 632. 1) Hexanitroorcinaurin + H₂O. HNO₃, Na, Ag (B. 13, 560). — II, 1125.
- $C_{22}H_{12}O_{17}N_6$
- C22H12N2S2
- $\mathbf{C}_{22}\mathbf{H}_{12}\mathbf{N}_{2}\mathbf{S}_{4}$
- 1) Hexantrooreinaurin + H₂O. HNO₃, Na, Ag (B. 13, 560). II, 1125. 1) Bi- α -Naphtthiazol (B. 20, 1804). II, 870. 2) Bi- β -Naphtthiazol. Zers. bei 300° (B. 20, 1801; 25, 1903). II, 888. 1) Bi- α -Naphtthiazol-1,1-Disulfid. Sm. 180° (B. 24, 1409). II, 871. 2) Bi- β -Naphtthiazoldisulfid. Sm. 194° (B. 21, 2626; 24, 1408). II, 889. 1) Chlorhydrin d. 2,2'-Binaphtylenglykol. HCl + 3H₂O, + C₂H₄O₂ $C_{22}H_{13}OCl$ (A. ch. [5] 28, 170). — II, 1104.
- 1) Anhydro- $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[1-Oxynaphtyl]äthan. Sm. 238—239° $\mathbf{C}_{22}\mathbf{H}_{13}\mathbf{OCl}_{3}$
 - u. Zers. (J. pr. [2] 47, 68). II, 1007. 2) Anhydro- $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[2-Oxynaphtyl]äthan. Sm. 241° (236°) u. Zers. (J. r. 23, 221; J. pr. [2] 47, 66). II, 1007. 1) Bromhydrin d. 2,2'-Binaphtylenglykol. HBr + 3H₂O, + C₂H₄O₂
- $C_{99}H_{18}OBr$
- (A. ch. [5] 28, 161). II, 1104.

 1) Dibromid d. 2,2'-Binaphtylenglykolbromhydrin. Zers. bei 280° $\mathbf{C}_{22}\mathbf{H}_{18}\mathbf{OBr}_{3}$
- 1) Jodid d. 2,2'-Binaphtylenjodhydrin (A. ch. [5] 28, 172). II, 1104.

 1) Jodid d. 2,2'-Binaphtylenjodhydrin (A. ch. [5] 28, 172). II, 1104.

 C 81,7 H 4,0 O 9,9 N 4,3 M. G. 323.

 1) 1,8-Anhydrid d. 8-[1-Naphtoyl]amidonaphtalin-1-Carbonsäure. $\mathbf{C}_{22}\mathbf{H}_{13}\mathbf{OJ}_{3}$ C22H13O, N
 - 1) 1,8-Annydrid d. 8-[1-Naphtoyr]amidonaphtalin-1-Carbonsaure. Sm. 150° (J. pr. [2] 38, 168). II, 1450.
 2) 1,8-Anhydrid d. 8-[2-Naphtoyl]amidonaphtalin-1-Carbonsaure. Sm. 197—198° (J. pr. [2] 38, 169). II, 1450. C 71,9 H 3,5 O 13,1 N 11,4 M. G. 367.
 1) Nitrorosindon (A. 286, 215). IV, 1056.
 2) isom. Nitrorosindon (B. 31, 3083).
- $C_{22}H_{13}O_3N_3$
- C 74.3 H 3.7 O 18.0 N 3.9 M. G. 355. $\mathbf{C}_{22}\mathbf{H}_{13}\mathbf{O}_{4}\mathbf{N}$
 - 1) Nitrat d. 2,2'-Binaphtylenglykol. + C₂H₄O₂ (A. ch. [5] 28, 176). -II, 1105.
 - 2) Acetat d. Dinaphtoresorufin (A. d. Oxyketodinaphtoxazin). Sm. bei 200° (B. 28, 358). — IV, 476. C 60,7 — H 3,9 — O 25,7 — N 9,6 — M. G. 435.
- $C_{22}H_{13}O_7N_3$
- $\mathbf{C}_{22}\mathbf{H}_{14}\mathbf{ON}_{2}$
- 1) Pyrenpikrat. Sm. 222° (B. 10, 2143). II, 284. C 82,0 H 4,3 0 5,0 N 8,7 M. G. 322. 1) 3,5-Di[2-Naphtyl]-1, 2,4-Oxdiazol. Sm. 175° (B. 20, 226). II, 1455. 2) Oxyphenylnaphtophenazin. Sm. 229—231°. Na, Ag (A. 296, 23). — IV, 1090.

 - 3) Rosindon (Rosindulon). Sm. 261—262° (259°) (B. 24, 586; 28, 349; 30, 2627; 31, 305, 2429; A. 256, 238; 262, 243). IV, 1055.
 4) Isorosindon[9]. Sm. 223—224°. HCl (B. 29, 2755). IV, 1056.
 5) 10,12-Anhydrid d. 10-Oxy-αβ-Naphtophenazin-12-Phenyloxydhydrat (Isorosindon-10). Sm. 267° (B. 31, 3104).
- $\mathbf{C}_{22}\mathbf{H}_{14}\mathbf{O}_{2}\mathbf{N}_{2}$ C 78,1 - H 4,1 - O 9,5 - N 8,3 - M G. 338.

 - 1) 2-Oxyrosindon [5] (A. 286, 218). IV, 1058. 2) 3-Oxyrosindon [5] (A. 286, 217). IV, 1058. 3) 9-Oxyrosindon [5] (Naphtosafranol) (A. 272, 322; B. 29, 2756; 31, 2482, 2484). IV, 1058, 1059. 4) 2-Oxyisorosindon [9]. HCl (A. 272, 319, 322; 286, 221; B. 31, 307). **- IV**, 1059.
 - 5) N-l-Naphtylsafranol. Na (B. 31, 1185). 6) N-2-Naphtylsafranol. Na (B. 31, 1185).
 - Verbindung (aus?-Nitro-1,8-Naphtochinon). Zers. unterh. 80° (B. 21, 1462). III, 398.
 - 8) Verbindung (aus 1,2-Naphtochinon-4-Sulfonsäure u. 2-Amido-1-Phenylamidobenzol). Sm. 212° (B. 31, 2436).

- C 72,1 H 3,8 O 8,7 N 15,3 M. G. 366. C22H14O2N4
 - 5,7-Anhydrid d. 10-Nitro-5-Amido-αβ-Naphtophenazin-7-Phenyloxydhydrat. Zers. bei 242° (B. 31, 3079).
- 1) Thiosuperoxyd d. 1-Oxynaphtalin-2-Dithiocarbonsäure. Sm. 242 C22H14O2S4 bis 245° (*J. pr.* [2] **54**, 418). C 74,6 — H 3,9 — O 13,6 — N 7,9 — M. G. 354.
- $\mathbf{C}_{22}\mathbf{H}_{14}\mathbf{O}_{3}\mathbf{N}_{2}$
- 1) Rosindonsaure. Sm. 209°. Ag (A. 262, 244). IV, 1056. C 71,3 H 3,8 O 17,3 N 7,6 M. G. 370. $\mathbf{C}_{22}\mathbf{H}_{14}\mathbf{O}_{4}\mathbf{N}_{2}$
 - 1) ?-Azonaphtalin-2,2'-Dicarbonsäure (B. 5, 1022). -- IV, 1466.
 - 2) Dioximidophtalaconcarbonsäure. Sm. 272-273° (B. 17, 1395). -II, 1915.
 - 3) Acetat d. Oxychinakridon. Sm. noch nicht bei 360° (B. 29, 80). IV, 1087.
- C₂₂H₁₄O₄Cl₄ 1) Dibenzylester d. 3, 4, 5, 6-Tetrachlorbenzol-1, 2-Dicarbonsäure. Sm. 92—93° (B. 30, 784).
- C₂₂H₁₄O₄Br₂ 1) α, 2-Lakton d. ?-Dibrom-α-Oxy-?-Acetoxyltriphenylmethan-2-Carbonsäure. Sm. 170—172° (B. 13, 1616). — II, 1910.
- C₂₉H₁₄O₄Br₄ 1) α, 2³-Lakton d. ?-Tetrabrom-α, 4', 4²-Trioxytriphenylmethan-4'-Aethyläther-23-Carbonsäure (Aethyläther d. laktoïden Tetrabromphenolphtaleïn). Sm. 237° (B. 30, 178).
 - 2) Aethylester d. chinoiden Tetrabromphenolphtalein. Sm. 210-215°. K (B. 30, 177). C 63,8 — H 3,4 — O 19,3 — N 13,5 — M. G. 414.
- $\mathbf{C}_{22}\mathbf{H}_{14}\mathbf{O}_{5}\mathbf{N}_{4}$
 - 1) 2-[4-Nitrophenyl] amido -4-[4-Nitrophenyl] imido -1-K eto -1,4-Di-1hydronaphtalin. Sm. 143° (B. 21, 394). — III, 376.
 - 2) Verbindung (aus d. Nitril d. αβ-Di[2-Nitrophenyl]propionsäure). Sm. $189,5^{\circ}$ (B. **19**, 2641). — **II**, 1318.
- $C_{22}H_{14}O_5Br_4$ 1) Tetrabromorcinaurin. Na + 4H₂O (B. 13, 555). II, 1125.
- $C_{22}H_{14}O_5S$ 1) Sulfat d. 2,2-Binaphtylenglykol. $+ H_2SO_4 + H_2O_7 + C_2H_4O_2$ (A. ch. [5] 28, 174). — II, 1105. C 65,7 — H 3,5 — O 23,9 — N 6,9 — M. G. 402. 1) Dimethylester d. Triphendioxazincarbonsäure (B. 30, 995). —
- $C_{22}H_{14}O_6N_2$
 - IV, 1083.
 - 2) s-Di[1-Nitro-2-Naphtylamid] d. Oxalsäure. Sm. oberh. 270° (Soc. 61, 466). — II, 620.
- C 61,4 H 3,3 O 22,3 N 13,0 M. G. 430. $\mathbf{C}_{22}\mathbf{H}_{14}\mathbf{O}_{6}\mathbf{N}_{4}$
 - 1) 1,4-Dioxybenzol-2,3,5,6-Tetracarbonsäureanhydrodiphenylhydrazid (A. 258, 277). — IV, 733. C 54,8 — H 2,9 — O 36,5 — N 5,8 — M. G. 482.
- $\mathbf{C}_{22}\mathbf{H}_{14}\mathbf{O}_{11}\mathbf{N}_{2}$
 - 1) α Oxy α Phenyl $\alpha\alpha$ Di[?-Nitrophenyl] methan - α^2 , α^4 , α^4 Tricarbon-
- säure (A. 299, 299). C 41,9 H 12,2 O 38,1 N 17,8 M. G. 630. $C_{22}H_{14}O_{15}N_8$
 - 1) Säure (aus Hexanitroorcinaurin) (NH₄)₂, K₂, K₃, Ag (B. 13, 563). II, 1125.
- $\mathbf{C}_{22}\mathbf{H}_{14}\mathbf{N}_{2}\mathbf{Cl}_{2}$ 1) 7-Chlorphenylat d. 5-Chlor- $\alpha\beta$ -Naphtophenazin. $2+\mathrm{PtCl}_{41}+\mathrm{AuCl}_{22}$
 - (B. 30, 1828). IV, 1052. 2) 7-Chlorphenylat d. 9-Chlor- $\alpha\beta$ -Naphtophenazin + H₂O. 2 + PtCl₄, $-\text{AuCl}_3$ (B. 31, 303). — IV, 1052.
- 1) Thiocarbonyl- β -Dinaphtylpseudothioharnstoff. Sm. 152° u. Zers. $C_{22}H_{14}N_2S_2$ (B. **25**, 1466). — II, 620. C 85,4 — H 4,8 — O 5,2 — N 4,5 — M. G. 309.
- $\mathbf{C}_{22}\mathbf{H}_{15}\mathbf{ON}$
 - 1) Acetyl- $\beta\beta$ -Dinaphtylenamin. Sm. 144° (B. 15, 2175). IV, 473. 2) Acetyl- $\beta\beta$ -Dinaphtylcarbazol. Sm. 143° (B. 19, 2243). IV, 473.
 - 2) Keetyl-p-Dinaphtylearbazol. Sin. 143° (B. 18, 2243). 1V, 473.
 3) Verbindung (aus 2,2-Binaphtylenglykolbromhydrin). Zers. oberh. 200°. 2HCl, (2HCl, PtCl₄), 2HBr (A. ch. [5] 28, 184). II, 1105. C 78,3 H 4,4 O 4,7 N 12,5 M. G. 337.
 1) Oxyrosindulin. Sm. 270° u. Zers. (A. 272, 321). IV, 1202.
 2) Amidorosindon (A. 286, 215). IV, 1207.
 3) 4,7-Anhydrid d. 4-Oxyamido-αβ-Naphtophenazin-7-Phenyloxyd-bi-latah (200). (B. 12, 243).
- $C_{22}H_{15}ON_{3}$
 - - hydrat. Zers. bei 233° (B. 31, 2433).
 - 4) 10,12-Anhydrid d.9-Amido-10-Oxy-αβ-Naphtophenazin-12-Phenyloxydhydrat (9-Amidoisorosindon-10). Sm. oberh. 300° (B. 31, 3103). 5) Base (aus d. Chlorid $C_{22}H_{16}N_3Cl)$. Sm. 215-217° (B. 23, 1322). —
 - IV, 1397.

C 72.3 - H 4.1 - O 4.4 - N 19.2 - M. G. 365. $\mathbf{C}_{22}\mathbf{H}_{15}\mathbf{ON}_{5}$ 1) 5-Phenyl-3-[1,5-Diphenyl-1,2,4-Triazolyl-3-]-1,2,4-Oxdiazol. 1) 5-Phenyi-3-[1,5-Diphenyi-1,2,4-Thazolyi-3-]-1,2,4-Oxdiazol. Sm. 205,5-206° (B. 22, 1754). — IV, 1164.

1) 4-Chlor-2,3,5-Triphenylfuran. Sm. 115° (Soc. 51, 430). — III, 695.

2) Verbindung (aus 2-Oxynaphtalin). Sm. 174° (A. 243, 169). — II, 1029.

C 81,2 — H 4,6 — O 9,8 — N 4,3 — M. G. 325.

1) Oxy-2-Dinaphtylacetylamin. Sm. 235° (B. 19, 2245). — II, 886. $C_{22}H_{15}OCl$

 $C_{22}H_{15}O_{2}N$

2) Methyläther d. 1-[2-Oxyphenyl]phenanthrenoxazol. Sm. 144-145,50

(Soc. 41, 146). — III, 447.

3) P-Oxy-P-Phenyl-1, 4-Naphtochinonphenylimid. Sm. 158-158,5° (A. 226, 40). — III, 460.

4) 2,3-Diphenylchinolin-4-Carbonsäure. Sm. 295° u. Zers. (191°). $+8 H_2 O$, Ca $+9 H_2 O$, Ag $+H_2 O$, Pikrat (J. pr. [2] 38, 583; [2] 56, 299). – IV, 475.

5) 2-[β -Phenyläthenyl]- α -Naphtochinolin-4-Carbonsäure. Sm. 256° u.

Zers. Ba + 2H₂O, Cu + H₂O, Ag (B. 23, 1231). — IV, 475. 6) 3-[β -Phenyläthenyl]- β -Naphtochinolin-1-Carbonsäure. Sm. 305°. Ag (B. 23, 1238). — IV, 476.

7) Phenylimid d. $\alpha\beta$ -Diphenyläthen- $\alpha\beta$ -Dicarbonsäure. Sm. 174 bis 175°; Sd. 293°₁₄ (A. **259**, 65). — II, 1897.

 $C_{22}H_{15}O_2N_3$ C 74.8 - H 4.2 - O 9.1 - N 11.9 - M. G. 353.

1) 4-[4-Azobenzol]imido-2-Oxy-1-Ketonaphtalin. Sm. 250° u. Zers. (B. 27, 26).

 $C_{22}H_{15}O_2Cl_3$ 1) $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[1-Oxynaphtyl]äthan. Zers. bei 200° (J. r. 23, 219).

C₂₂H₁₅O₂O₃ 1) ppp — II, 1007. C₂₂H₁₅O₂Br 1) Lakton d. β -Brom- α -Oxy- $\alpha\gamma\gamma$ -Triphenylpropen- γ -Carbonsäure. Sm. 109° (Soc. 57, 678). — II, 1726.

1) 1,1-Dinaphtylhydroxamsäure. Sm. 150° K (B. 20, 1358). — II, 1446. 2) 1,2-Dinaphtylhydroxamsäure. Sm. 160° (B. 20, 1360). — II, 1454. 3) 2,2-Dinaphtylhydroxamsäure. Sm. 171° (B. 20, 1360). — II, 1454.

4) 2-Benzoyl-4-Methylphenylimid d. Benzol-1, 2-Dicarbonsäure. Sm. 202° (B. 17, 2680). — III, 216.

5) 3-Benzoyl-4-Methylphenylimid d. Benzol-1,2-Dicarbonsäure. Sm. 160° (B. 17, 2680). — III, 216.

6) Benzoylphenylmethylimid d. Benzol-1,2-Dicarbonsäure (Desylphtalimid). Sm. 157—158° (B. **23**, 995). — III, 221. C 71,5 — H 4,1 — O 13,0 — N 11,4 — M. G. 369.

C22H15O2N3

1) 3-Nitro-2-Phenylamido-4-Phenylimido-1-Keto-1,4-Dihydronaphta-lin. Sm. 249—250° (B. 21, 3389). — III, 379.
 2) 12-Phenyloxydhydrat d. 9-Nitro-αβ-Naphtophenazin. Chlorid +

FeCl₃, 2 Chlorid + PtCl₄, Nitrat (B. 31, 3099).

3) 7-Phenyloxydhydrat d. 10-Nitro-αβ-Naphtophenazin. Chlorid, Nitrat, Bichromat (B. 30, 2638). — IV, 1052.

C 66,5 — H 3,8 — O 12,1 — N 17,6 — M. G. 397.

1) 4-[3-Nitrophenylazo]-1-[2-Oxy-1-Naphtylazo] benzol. Sm. 217—218°

 $C_{22}H_{15}O_{3}N_{5}$

(Soc. 45, 113). — IV, 1434.

 $C_{22}H_{15}O_{3}Br$ 1) 4-Bromtribenzoylmethan. α -Modif. Sm. 186—189°; β -Modif. Sm. 206 bis 208° (A. 291, 96). — III, 321. C 74,0 - H 4,2 - O 17,9 - N 3,9 - M. G. 357. $\mathbf{C}_{22}\mathbf{H}_{15}\mathbf{O}_4\mathbf{N}$

1) P-Nitro- $\alpha\delta$ -Diketo- $\alpha\beta\delta$ -Triphenyl- β -Buten. Sm. 155° (Soc. 57, 675). **- III**, 308.

C 63.9 - H 3.6 - O 15.5 - N 17.0 - M. G. 413. $\mathbf{C}_{22}\mathbf{H}_{15}\mathbf{O_4N}_5$

1) 3-Nitrobenzolazo-α-Naphtalinazoresorcin (Soc. 45, 116). — IV, 1445.

 Trijodoreinaurin. Na (B. 13, 556). — II, 1125.
 C 62,7 — H 3,6 — O 30,4 — N 3,3 — M. G. 421. $C_{22}H_{15}O_5J_3$ $C_{22}H_{15}O_8N$

 Triacetat d. Verb. C₁₈H₉O₅N. Sm. 227° (B. 29, 1752). $C_{22}H_{15}O_8N_8$ C 58.8 - H 3.3 - O 28.5 - N 9.4 - M. G. 449

1) Monäthyläther d. Dinitrofluoresceingelb (B. 30, 333).

 $\mathbf{C}_{22}\mathbf{H}_{15}\mathbf{N}_{2}\mathbf{Cl}$ 1) 7-Chlorphenylat d. lphaeta-Naphtophenazin. + FeCl $_{8}$, 2 + PtCl $_{4}$, + AuCl $_{8}$ (B. 29, 2317, 2968; J. r. 29, 559). — IV, 1051.
 2) 12-Chlorphenylat d. αβ-Naphtophenazin. $+ \text{ FeCl}_3, 2 + \text{ PtCl}_4,$

+ AuCl₈ (B. 29, 2318; 30, 2629). - IV, 1051.

 $\mathbf{C}_{22}\mathbf{H}_{16}\mathbf{ON}_{2}$

 $C_{22}H_{16}ON_4$

 $C_{22}H_{16}O_2N_2$

C 81,5 - H 4,9 - O 4,9 - N 8,6 - M. G. 324.

1) 2-Phenylamido-4-Phenylimido-1-Keto-1,4-Dihydronaphtalin. 187°. HCl, (2 HCl, ZnCl₃), (2 HCl, PtCl₄), HJ, H₂SO₄ (B, 8, 1024; 13, 124; 14, 1493, 1900; 15, 283, 481; 21, 679, 1039; 25, 3607; 27, 243; A. 256, 234). — III, *374.*

2) 2-Naphtyliden-2-[α-Oxynaphtyliden]hydrazin. Sm. 230° (B. 30, 1885; A. 298, 45). — IV, 956.

3) 5-Keto-4-Benzyliden-1, 3-Dimethyl-4, 5-Dihydropyrazol. Sm. 1470 (146°) (B. **20**, 2548; **27**, 784). — IV, 1040.

4) 6-Oxy-2,4,5-Triphenyl-1,3-Diazin. Sm. oberh. 340° (J. pr. [2] 39, 255). — IV, 1088.

5) ms-Aethyldinaphtoaposafranon. Sm. 247° (B. 31, 2488).

- 6) 7-Phenyloxydhydrat d. $\alpha\beta$ -Naphtophenazin. Chlorid, Jodid, Nitrat, Bichromat (B. 29, 2317, 2968; J. r. 29, 559). — IV, 1051.
- 7) 12-Phenyloxydhydrat d. αβ-Naphtophenazin. Chlorid, Jodid, Nitrat, Bichromat (B. 29, 2318; 30, 2629). — IV, 1051.
- 8) Aethyläther d. Oxyphenanthrophenazin. Sm. 210° (B. 25, 497). IV, 1086.
- 9) Methyläther d. 2-[2-Oxyphenyl]phenanthrenimidazol. Sm. 207 bis 208,5° (Soc. 41, 146). — III, 447.
- 10) N-Acetyldihydrophenanthrophenazin. Sm. 252° (A. 292, 265). IV, 1080.
- Nitril d. β-Phenylamido-α-Benzoyl-β-Phenylakrylsäure. Sm. 165° (J. pr. [2] 58, 156).
 C 75,0 H 4,5 O 4,5 N 15,9 M. G. 352.

1) 2,4-Di[Phenylazo]-1-Oxynaphtalin. Sm. 1930 (190—1910) (B. 21, 3240;

- 24, 1594, 1604; 28, 1895). IV, 1433. 2) 4-[2-Oxy-l-Naphtyl]azobenzol. Sm. 195° (B. 13, 1838). IV, 1433. 3) 3-Keto-1, 2-Benzyliden-4-Phenylazo-5-Phenyl-2, 3-Dihydropyrazol.
- Sm. 131° (J. pr. [2] 50, 229; [2] 52, 34). IV, 1490. 4) Monacetylderivat d. Base $C_{20}H_{16}N_4$ (aus Aposafranin u. $\alpha\beta$ -Diamidoäthan) (B. **30**, 2492). — **IV**, 1279. C 77,6 — H 4,7 — O 9,4 — N 8,2 — M. G. 340.

- 1) 2 [4 Nitrobenzyliden] amidodiphenylmethan. Sm. 105° (B. 27,
- 2) **2,4'-Di**[Furalamido] biphenyl. Sm. 137° (B. **22**, 2013). IV, 3) **4,4**'-**D**i[Furalamido]biphenyl. Sm. 231-232°. 2HCl, (2HCl,PtCl₄) (B. **30**, 2014, 2302; A. **201**, 361). — IV, 967.
- 4) 1-Naphtoyl-1-Naphtenylamidoxim. Sm. 228° (B. 20, 224). II, 1446. 5) Monophenylhydrazon d. 3-Oxy-2-Phenyl-1,4-Naphtochinon. Sm. 200° u. Zers. (A. **296**, 21). — IV, 795.
- 6) Di[2-Oxy-1-Naphtyliden]hydrazin. Sm. noch nicht bei 290° (B. 32, 286).

- 7) Veratrylphenanthrazin. Sm. 255° (Bl. [3] 17, 818). 8) Oxazoniumbase (aus Isorosindulin). Sm. 164° u. Zers. Chlorid, 2 Chlorid $+ \text{ PtCl}_4 \text{ (A. 290, 282).} - \text{IV, } 1056.$
- 9) isom. Oxazoniumbase (aus Isorosindulin). Sm. 164° u. Zers. (A. 290, 284). — IV, 1057.
- 10) 1,3,5-Triphenylpyrazol-4-Carbonsäure. Sm. 238° (J. pr. [2] 58, 153).
- 11) 1,4,5-Triphenylpyrazol-3-Carbonsäure. Sm. 245° u. Zers. (B. 26, 1888). — IV, 1036.
- 12) Anhydrid d. ?-Amidonaphtalin-2-Carbonsäure. Sm. 174° (B. 5, 1020). — II, 1459. 13) Acetat d. 2-Oxy-1,2'-Azonaphtalin. Sm. 117° (Soc. 65, 836). —
- 14) 1,1-Dinaphtylamid d. Oxalsäure. Sm. 2340 (A. 108, 228; B. 30, 771).
- 15) **2,2-Dinaphtylamid d. Oxalsäure.** Sm. 276° (B. **25**, 3267; **30**, 771). — II, 620. C 71,7 — H 4,3 — O 8,7 — N 15,2 — M. G. 368.

 $C_{22}H_{16}O_2N_4$

- 1) 2,4-Di[Phenylazo]-1,3-Dioxynaphtalin. Sm. 225° u. Zers. (B. 22, 3166). **— IV**, 1450.
- 2) Benzolazoresorcinazonaphtalin. Sm. 156° (B. 15, 28). IV, 1445. 3) Dihydrodiphenyldioxyantetrazin. Na₂ + 4H₂O (Pinner, Imidoäther 295).

— IV, 1305.

C₂,H₁₆O₂N₄ 4) Phenylimid d. 2-Phenylimido-5-Methyl-2,3-Dihydrobenzimidazol-1,3-Dicarbonsäure. Sm. 234° (B. 24, 2517). — IV, 623.

5) Phenylimid d. 2-[4-Methylphenyl]imido-2,3-Dihydrobenzimidazol-1,3-Dicarbonsäure. Sm. 254° (B. 24, 2513). — IV, 567. C 66,7 — H 4,0 — O 8,1 — N 21,2 — M. G. 396.

 $\mathbf{C}_{22}\mathbf{H}_{16}\mathbf{O}_{2}\mathbf{N}_{6}$

1) P-Di[6-Cyan-3-Methylphenylazo]-1, 3-Dioxyazobenzol. Sm. 287° u. Zers. (B. 26, 55). — IV, 1466.

2) 1,4-Di[3-Oxy-1-Phenyl-1,2,4-Triazolyl-5-] benzol. Sm. noch nicht bei

340°. Ag₂ + ${}^{3}/{}_{4}$ H₂O (Soc. 71, 217). — IV, 1331. C₂₂H₁₆O₂Br₅ 1) Verbindung (aus $\alpha\beta$ -Dibenzoylstyrol) = (C₂₂H₁₆O₂Br₅)₂? (B. 18, 189; Soc. **57**, 711). — III, 308. C 74,1 — H 4,5 — O 13,5 — N 7,9 —

 $C_{22}H_{16}O_3N_2$ - M. G. 356.

1) Gelbes Hydrocyansalid. Sm. 165,5° (A. 136, 170; J. pr. [2] 58, 125). - III, 75.

2) Braunes Hydrocyansalid (A. 136, 172). — III, 75.

C 71.0 - H 4.3 - O 17.2 - N 7.5 - M. G. 372. $C_{22}H_{16}O_4N_2$

1) Diacetat d. α-Dioxy-2, 3'-Bichinolyl. Sm. 169—170° (M. 7, 322). — IV, 1068.

2) Diacetat d. β -Dioxy-2,3'-Bichinolyl. Sm. 216° (M. 7, 325). IV, 1068.

3) Diacetylderivat d. Base $C_{18}H_{12}O_2N_2$ (aus Triphendioxazin). Sm. 295° (B. 23, 187). — IV, 1078. 4) Nitril d. Diacetyl-s-Phenylketipinsäure. Sm. 177—179°. + C₂H₆O

(A. 282, 52). - II, 2032.

C 66,0 - H 4,0 - O 16,0 - N 14,0 - M. G. 400. $\mathbf{C}_{22}\mathbf{H}_{16}\mathbf{O_4N_4}$

1) Phenylhydrazinderivat (d. Säure C₁₁H₄O₈ aus Malonsäure). Sm. 180°

u. Zers. (B. 19, 2031). — I, 649.

 $C_{22}H_{16}O_4Br_2$ 1) α , 2'-Lakton d. α -Oxy- 3^2 , 3^3 -Dibrom- 4^2 , 4^3 -Dimethoxyltriphenylmethan-2'-Carbonsäure (Dimethyläther d. Dibromphenolphtaleïn). Sm. 160—161° (G. 26 [1] 230; 27 [2] 68).
2) α,2²-Lakton d. αα-Di[β-Brom-2-Oxyphenyl]-α-Phenylmethan-2²-Car-

bonsäure (Dibrom-o-Kresolphtalein). Sn. 255° (A. 202, 158). — II, 1987. $C_{22}H_{16}O_4Br_4$ 1) Aethylester d. ?-Tetrabrom-4',4'2-Dioxytriphenylmethan-2'3-Carbonsäure. Sm. 163° (B. 30, 176). C 68,0 — H 4,1 — O 20,6 — N 7,2 — M. G. 388.

 $\mathbf{C}_{22}\mathbf{H}_{16}\mathbf{O}_{5}\mathbf{N}_{2}$

1) Verbindung (aus Acetessigester u. Anthranilsäure). Sm. 335° u. Zers. Na₂ + 6 H₂O (B. 27, 1398). — II, 1252.

 $C_{22}H_{16}O_5Br_2$ 1) 3,4-Methylenäther-1-Acetat d. $\alpha\beta$ -Dibrom- γ -Keto- γ -[1-Oxy-2-Naphtyl]- α -[3,4-Dioxyphenyl]propan. Sm. 160° u. Zers. (B. 31, 708). C 65,3 — H 4,0 — O 23,7 — N 6,9 — M. G. 404. $\mathbf{C}_{22}\mathbf{H}_{16}\mathbf{O}_{6}\mathbf{N}_{2}$

Lakton d. α-Oxy-α'-Phenyl-α²α³-Di[P-Nitro-4-Methylphenyl]methan-α', 2-Carbonsäure. Sm. 132° (A. 299, 292).

2) Dibenzoat d. 1,3-Phtalhydroxamsäure. Sm. 162°. K₂ (A. 281, 227).

– II, 1827. 3) Dibenzoat d. 1,4-Phtalhydroxamsäure. Sm. 198°. K₂ (A. 281, 229). **– II**, 1833.

 $C_{22}H_{16}O_6Cl_2$ 1) Verbindung (aus d. Oxyd $C_{24}H_{20}O_7Cl_2$). Sm. 164° (Am. 17, 642). — III, 351.

 $\mathbf{C}_{22}\mathbf{H}_{18}\mathbf{O}_{7}\mathbf{Cl}_{2} \ 1) \ \mathbf{Verbindung} \ (aus \ d. \ Dibenzoat \ d. \ 3,6-Dichlor-2,5-Dimethoxyl-1,4-Benzo-1,4-Benz-1,4-Ben$ chinondimethylhemiacetal). Sm. 205-2060 (Am. 17, 645; 20, 404; B. 30, 527). — III, 350. C 60,6 — H 3,7 —

 $\mathbf{C}_{22}\mathbf{H}_{16}\mathbf{O}_{8}\mathbf{N}_{2}$

C 60,6 — H 3,7 — O 29,3 — N 6,4 — M. G. 436.

1) Dinitro-o-Kresolphtaleïn. Sm. 250° (A. 202, 163). — II, 1987.

2) Dimethyläther d. Dinitrophenolphtaleïn. Sm. 130—132° (G. 26 [1] 271).

3) Di[4-Nitrobenzylester] d. Benzol-1,2-Dicarbonsäure. Sm. 154—155° (B. 30, 782).

 $C_{22}H_{16}O_8Br_2$ 1) Triacetat d. Dibrombrasileïn + $^3/_4H_2O$ (B. 23, 1429). — III, 655. $C_{22}H_{16}O_{10}N_2$ C 56,4 — H 3,4 — O 34,2 — N 6,0 — M. G. 468.

1) Verbindung (aus Diamidophenolphtaleïndimethyläther) (G. 26 [1] 274). 1) Jodmethylat d. Iso- β -Naphtoakridin. Zers. bei 262—264° (Soc. 73, $\mathbf{C}_{22}\mathbf{H}_{16}\mathbf{NJ}$

 $C_{22}H_{16}N_3Cl$ 1) 12-Chlorphenylat d. 9-Amido- $\alpha\beta$ -Naphtophenazin. 2 + PtCl₄ (B. 31,

- $C_{22}H_{16}N_3Cl$ 2) 7-Chlorphenylat d. 10-Amido- $\alpha\beta$ -Naphtophenazin. 2+PtCl₄ (B. 30, 2640). — IV, 1201.
 - 3) 12-Chlorphenylat d. 10-Amido- $\alpha\beta$ -Naphtophenazin (Isorosindulinchlorid). $2 + PtCl_4$ (B. 30, 2632). — IV, 1201.
- $C_{99}H_{16}N_{3}Br$ 1) 12-Bromphenylat d. 9-Amido- $\alpha\beta$ -Naphtophenazin (B. 31, 3100).
- 1) 2,5-Di[1-Naphtylamido]-1,3,4-Thiodiazol. Sm. 136°. + C₂H₆O (Sm. 104°). (2HCl,PtCl₄), Pikrat, + AgNO₃ (B. 23, 359). IV, 1237. (2) 2,5-Di[2-Naphtylamido]-1,3,4-Thiodiazol. Sm. 110—117°. (2HCl, CooH16N4S
 - PtCl₄), Pikrat, + AgNO₃ (B. 23, 362). IV, 1237. C 84,9 H 5,5 O 5,1 N 4,5 M. G. 311.
- $C_{22}H_{17}ON$
 - 1) $\alpha\beta$ -Dibenzoylstyrolimid. Sm. bei 180° (Soc. 57, 719; 71, 1140). III, 308.
 - 2) 3-[4-Methylphenyl]imido-1-Keto-2-Phenyl-2, 3-Dihydroinden. Sm. 244° (B. 30, 3142).
 - 3) 2,5-Diphenyl-1-[2-Oxyphenyl]pyrrol. Sm. 175—176° (B. 22, 3094). - IV, 438.
 - 4) 2-Keto-1,4,5-Triphenyl-2,3-Dihydropyrrol. Sm. 189-190° (A. 269,
 - 141). IV, 443. 5) 2-Keto-3, 3, 5-Triphenyl-2, 3-Dihydropyrrol. Sm. 221° (Soc. 57, 693). - IV, 474.
 - 6) 1,1-Dinaphtylamid d. Essigsäure. Sm. 217° (B. 16, 20). II, 607.
 - 7) 1,2-Dinaphtylamid d. Essigsäure. Sm. 124-125° (B. 16, 19). II, 616.
 - 8) 2,2-Dinaphtylamid d. Essigsäure. Sm. 114—115° (B. 16, 20). II. 616.
 - 9). Verbindung (aus $\alpha\alpha$ -Diphenyl- β -Benzoylpropionsäure). Sm. 142—143° (Soc. **57**, 684). — II, 1727. C 77,9 — H 5,0 — O 4,7 — N 12,4 — M. G. 339.
- $\mathbf{C}_{22}\mathbf{H}_{17}\mathbf{ON}_{3}$
 - 1) 4-[2-Oxy-1-Naphtyl]azo-1-Phenylamidobenzol. Sm. 164—165° (B. 31, 1516). — IV, 1431.
 - 2) Acetylamido-β-Azonaphtalin. Sm. 218° (B. 18, 2422). IV, 1391.
 - 3) $\alpha\beta$ -Diphenyl- α -[2-Chinolyl]harnstoff. Sm. 150° (B. 23, 276). IV, 909.
 - 4) 6-Acetylamido-2, 3-Diphenyl-1, 4-Benzdiazin. Sm. 252° (A. 292, 255). - IV, *1213*.
 - 5) 5-Phenylamido-6-Oxy-5, 6-Dihydro-αβ-Naphtophenazin. Sm. 204
 - bis 205° (B. 26, 621). \overrightarrow{IV} , 1053. 6) 7-Phenyloxydhydrat d. 10-Amido- $\alpha\beta$ -Naphtophenazin. Chlorid,
 - Jodid, Nitrat + H₂O (B. 30, 2640). IV, 1201. 7) Rosindulinhydrat. Sm. 185—187°. Carbonat (A. 290, 268). IV, 1205.
 - 8) Isorosindulinhydrat. Chlorid, 2 Chlorid + PtCl₄, Nitrat (A. 290, 275).
 9) Base (aus Benzolazo-β-Phenylnaphtylamin). Chlorid, (2 Chlorid + PtCl₄), Nitrat, Sulfat, Bichromat, Pikrat (B. 20, 1174). IV, 1397.

 - Verbindung (aus Benzenylamidin u. 2-0xy-1-Methylbenzol-3-Carbonsäure-äthylester). Sm. 214° (B. 23, 2939). IV, 848.
 Verbindung (aus Benzenylamidin u. 4-0xy-1-Methylbenzol-3-Carbonsäure-äthylester). Sm. 202° (B. 23, 2939). IV, 848.
 Verbindung (aus Benzenylamidin u. 3-0xy-1-Methylbenzol-4-Carbonsäure-athylester).
 - äthylester). Sm. 235° (*B*. 23, 2939). **IV**, *848*. C 80,7 H 5,2 O 9,8 N 4,3 M. G. 327.
- $C_{22}H_{17}O_{2}N$ 1) 2-Phenylamido-1,3-Diketo-5-Methyl-2-Phenyl-2,3-Dihydroinden.
 - Sm. 169° (B. **29**, 2380).
 - 2) 2-Phenylamido-1,3-Diketo-2-[3-Methylphenyl]-2,3-Dihydroinden. Sm. 171° (B. 28, 1390). — III, 303.
 - 3) 2-Diphenylamido-1,4-Naphtochinon. Sm. 164° (Soc. 37, 642). III, 376.
 - 4) Diacetylamidochrysen. Sm. 206-208° (B. 24, 951). II, 643.
 - 5) 4-Oxy-2-Keto-3,3,5-Triphenyl-2,3-Dihydropyrrol. Sm. 168° (Soc. 71, 1147).
 - 6) 2,5-Dicinnamylpyrrol. Sm. 238-240° (B. 17, 2954). IV, 102.
 - 7) γ-Oximido-ααγ-Triphenylbuttersäure. Sm. 150-152° u. Zers. (Soc. **57**, 683). — II, 1726.
 - 8) 2-Methyl-5-Phenyl-1-[1-Naphtyl]pyrrol-3-Carbonsäure. Sm. 2440 (B. 18, 2598). — IV, 357.

 $\mathbf{C}_{22}\mathbf{H}_{17}\mathbf{O}_{2}\mathbf{N}$ 9) 2-Methyl-5-Phenyl-1-[2-Naphtyl] pyrrol-3-Carbonsäure. Sm. 249°

(B. 18, 2599). — IV, 357.

10) Methylester d. 2,2-Dinaphtylamidoameisensäure. Sm. 113—114° (B. 20, 2620). — II, 617.

11) Aethylester d. 2-Phenyl-α-Naphtochinolin-4-Carbonsäure. Sm. 1030

(A. 249, 114). — IV, 471. 12) Phenylimid d. $\alpha\beta$ -Diphenyläthan- $\alpha\beta$ -Dicarbonsäure. Sm. 230—231° (A. **259**, 93). — II, 1890.

 \dot{C} 74,4 - \dot{H} 4,8 - 0 9,0 - N 11,8 - M. G. 355. $C_{22}H_{17}O_2N_3$

1) 2-Benzoyl-7-Benzoylamido-5-Methylindazol. Sm. 186-1870 (B. 29, 308). **— IV**, 1151.

2) Oxim d. Oxazoniumbase $C_{22}H_{16}O_2N_2$ (aus Isorosindulin) (A. 290, 285). — IV, 1057.
3) Benzoat d. 3-Oxy-l-Phenyl-5-[3-Methylphenyl]-1,2,4-Triazol. Sm.

117° (Soc. 71, 214). — IV, 1161. 4) Benzoat d. 3-Oxy-5-Phenyl-1-[4-Methylphenyl]-1,2,4-Triazol. Sm.

132° (Soc. 73, 370). — IV, 1158.

5) β -Phenylhydrazon- β -Phenyläthylimid d. Benzol-1,2-Dicarbonsäure (Phenacylphtalimidphenylhydrazon). Sm. bei 155° u. Zers. (B. 21, 2686). - IV, 771. C 68,9 - H 4,4 - O 8,4 - N 18,3 - M. G. 383.

 $C_{22}H_{17}O_2N_5$

1) 3,4-Di[2-Oxybenzylidenamido]-1-Phenyl-1,2,5-Triazol. Sm. 210° (A 295, 146). — IV, 1314.

2) 3,4-Di[Benzoylamido]-l-Phenyl-1,2,5-Triazol. Sm. 242° (A. 295, 149). - IV, *1314*.

3) Benzoat d. 3-Amidooximidomethyl-1,5-Diphenyl-1,2,4-Triazol. Sm. 179—179,5° u. Zers. (B. **22**, 1754). — **IV**, 1164. C 76,9 — H 5,0 — O 14,0 — N 4,1 — M. G. 343.

 $C_{22}H_{17}O_3N$

1) Phenylamidoformiat d. α-Oxy-γ-Keto-αγ-Diphenylpropen. Sm. 181° (C. 1897 [2] 261). C 71,1 — H 4,6 — O 12,9 — N 11,3 — M. G. 371.

 $\mathbf{C}_{22}\mathbf{H}_{17}\mathbf{O}_{3}\mathbf{N}_{3}$

1) Acetat d. 6-Phenylazo-5-Oxy-3-Methyl-1-Phenylbenzoxazol. Sm. 182—183° (*M.* **19**, 502). — **IV**, *1448*. C 66,2 — H 4,3 — O 12,0 — N 17,5 — M. G. 399.

 $\mathbf{C}_{22}\mathbf{H}_{17}\mathbf{O}_{3}\mathbf{N}_{5}$

1) 7-[4-Amidophenyloxydhydrat] d. 10-Nitro-5-Amido- $\alpha\beta$ -Naphtophenazin (B. 31, 3085). C 73.5 - H 4.7 - O 17.8 - N 3.9 - M. G. 359.

 $C_{22}H_{17}O_4N$

1) 1-Acetyl-2-Keto-3,3-Di[?-Oxyphenyl]-2,3-Dihydroindol (Acetylphenolisatin). Sm. 185° (B. 18, 2642). — II, 1618.
 2) α-Benzoat d. 4-Methylbenzoylbenzhydroxamsäure. Sm. 131,5° (A.

281, 277). — II, 1345.

3) β -Benzoat d. 4-Methylbenzoylbenzhydroxamsäure. Sm. 104° (A. 281, 277). — II, 1345.

4) Benzoylphenylmethylmonamid d. Benzol-1, 2-Dicarbonsäure (Desylphtalamidsäure). Sm. 168°. HCl (B. **23**, 995). — III, 221. C 70,4 — H 4,5 — O 21,3 — N 3,7 — M. G. 375.

 $C_{22}H_{17}O_5N$

 Benzoat d. Benzoyl-4-Methoxylbenzhydroxamsäure. α-Modif. Sm. 137—137,5°; β-Modif. Sm. 109,5—110,5° (A. 186, 25). — Π, 1534.
2) Benzoat d. 4-Methoxylbenzoylbenzhydroxamsäure. α-Modif. Sm.

110—110,5°; β-Modif. Sm. 109—110° (A. 186, 21). — II, 1534.
3) 4-Methoxylbenzoat d. Benzoylbenzhydroxamsäure. α-Modif. Sm. 113—114°; β-Modif. Sm. 124—125°; γ-Modif. Sm. 110° (A. 186, 8). — II, 1534.

 $C_{22}H_{17}O_6N$ C'67,5 - H 4,3 - O 24,6 - N 3,6 - M. G. 391.

1) Aethylester d. Dibenzoylkomenaminsäure. Sm. 101-102° (J. pr. [2] **29**, 60). — **IV**, 158. C 60,7 — H 3,9 — O 25,7 — N 9,7 — M. G. 435.

 $\mathbf{C}_{22}\mathbf{H}_{17}\mathbf{O}_7\mathbf{N}_3$

 Aethylanthracenpikrat. Sm. 120° (B. 14, 803). — II, 274.
 C 55,1 — H 3,6 — O 26,7 — N 14,6 — M. G. 479. $C_{92}H_{17}O_8N_5$

1) ?-Trinitro-1- $[\alpha\beta$ -Di(Benzoylamido)äthyl] benzol. Sm. 117° (B. 28, 426). · I, 641.

1) Nitrographitoïnsäure (B. 8, 547). — II, 2021.

C22 H17 NS

1) Thio-β-Dinaphtyläthylamin. Sm, 212-213° (B, 23, 2462). — II. 869. $C_{22}H_{17}N_4Cl$ 1) 7-[4-Amidochlorphenylat] d. 5-Amido- $\alpha\beta$ -Naphtophenazin + 2H₂O (B. **31**, 3083).

2) 7-Chlorphenylat d. 5,9-Diamido- $\alpha\beta$ -Naphtophenazin + H_2O (Naphtophenosafranin). 2 + PtCl₄ (B. 30, 1566). - IV, 1296.

3) 12-Chlorphenylat d. 5,9-Diamido- $\alpha\beta$ -Naphtophenazin. 2 + PtCl₄ (B. **31**, 3105).

4) 7-Chlorphenylat d. 5,10-Diamido- $\alpha\beta$ -Naphtophenazin. $2 + \text{PtCl}_4$ (B. 31, 3079). $\dot{\mathbf{C}}$ 81,0 — $\dot{\mathbf{H}}$ 5,5 — $\dot{\mathbf{O}}$ 4,9 — $\dot{\mathbf{N}}$ 8,6 — $\dot{\mathbf{M}}$. G. 326.

 $C_{22}H_{18}ON_{2}$

1) Benzhydramid (Berz. J. 18, 352; J. 1850, 487). — III, 37.

2) δ -Phenylhydrazon- α -Keto- α δ -Diphenylbutan. Sm. 116° (A. 258, 237). - IV, 785.

3) 3-Phenylhydrazon-1-Keto-2-[3-Methylphenyl]-2, 3-Dihydroinden. Sm. 167—168° (B. 28, 1388). — IV, 786.

4) 1-Phenylamido-2-Keto-4,5-Diphenyl-2,3-Dihydropyrrol. Sm. 1100

(A. **269**, 136). — IV, 698 5) 3-Keto-2,4-Diphenyl-5-Benzyl-2,3-Dihydropyrazol. Sm. 231-2320

(A. **296**, 12). — IV, 1033. 6) 5-Keto-1, 4-Diphenyl-3-Benzyl-4, 5-Dihydropyrazol. Sm. 228° (J. pr.

[2] **55**, 355). — **IV**, 1033. 7) Aethyläther d. 6-Oxy-2,3-Diphenyl-1,4-Benzdiazin. Sm. 150° (B.

25, 494; C. 1895 [1] 854). — IV, 1079.

8) Phenylamid d. γ-Phenylimido-α-Phenylpropen-γ-Carbonsäure. Sm. 225° (A. 242, 290). — IV, 445.

9) 1-Naphtylamid d. 1-Naphtylamidoessigsäure. Sm. 160° (B. 25, 2295). **- II**, 613.

10) 2-Naphtylamid d. 2-Naphtylamidoessigsäure. Sm. 173° (170°) (B. 14, 60; 31, 251). — II, 621.

11) Phenylhydrazonderivat (aus β -Benzoyl- α -Phenylpropionsäure). Sm. 123,5° $(122-123^{\circ})$ (A. **284**, 6; B. **28**, 963). — IV, 698. C 74,6 — H 5,1 — O 4,5 — N 15,8 — M. G. 354.

 $\mathbf{C}_{22}\mathbf{H}_{18}\mathbf{ON}_{4}$

 $C_{22}H_{18}O_{2}N_{4}$

1) 5-Keto-4-[2-Methylphenyl]azo-1,3-Diphenyl-4,5-Dihydropyrazol. Sm. 226° (B. **27**, 785). — **IV**, 1490.

2) 5-Keto-4-[4-Methylphenyl]azo-1, 3-Diphenyl-4, 5-Dihydropyrazol. Sm. 242° (B. 27, 785). — IV, 1490. 3) 5-[2-Amidophenyl]amido-6-Oxy-5, 6-Dihydro- $\alpha\beta$ -Naphtophenazin.

Sm. 200° (B. **26**, 621). — IV, 1054. C 77,2 — H 5,3 — O 9,3 — N 8,2 — M. G. 342.

 $C_{22}H_{18}O_2N_2$

1) $\alpha\beta$ -Phtalyldiamido- $\alpha\beta$ -Diphenyläthan + $\frac{1}{2}$ H₂O. Sm. 213° u. Zers. (B. 22, 2300). - IV, 979.

2) 2,3-Dibenzoyl-1,2,3,4-Tetrahydro-2,3-Benzdiazin. Sm. 207-2080 (B. 26, 2214). - IV, 852.

3) 5-Methyl-2-Phenyl-1-[4-Methylphenyl] benzimidazol-2²-Carbonsäure. Sm. 173° (B. 27, 2780). — IV, 618.
 4) Acetat d. α-Oximido-β-Phenylimido-αβ-Diphenyläthan. Sm. 135 bis 136° (B. 25, 2597). — III, 290.

5) Verbindung (aus Phtalidmethylphenylketon). Sm. 118-1230 (M. 19, 443).

6) Verbindung (aus Phtalidmethylphenylketon). Sm. 170-200 (M. 19, 445). C 71.4 - H 4.9 - O 8.6 - N 15.1 - M. G. 370.

1) β -Phenylazo- β -Acetylphenylhydrazon- α -Keto- α -Phenyläthan (Acetylformazylphenylketon). Sm. 154° (B. 26, 2788). — IV, 1230. 2) 1,4-Di[2-Oxy-1-Naphtylazo]benzol. Sm. oberh. 275° (Soc. 47, 664). —

IV, 1434.

3) $\alpha\beta$ -Di[Phenylhydrazon]- $\alpha\beta$ -Di[2-Furanyl]äthan (Furilosazon). Sm. 184° A. **258**, 226). — IV, 788.

4) Difuraldiphenylhydrotetrazon. Sm. 135—136° u. Zers. (G. 27 [2] 234). **- IV.** 1307.

5) Dehydrofuralphenylhydrazon. Sm. 155-156° (159-161°) (G. 27 [2] 234). **— IV**, 1307.

6) Diacetylphenosafranin. HCl, HJ (B. 16, 468; 29, 1872). — IV, 1284.

7) Di[Benzylidenhydrazid] d. Benzol-1, 3-Dicarbonsäure. Sm. 241° (J. pr. [2] **54**, 76). 8) Di Benzylidenhydrazid d. Benzol-1,4-Dicarbonsäure (J. pr. [2] 54,83). $C_{22}H_{18}O_2N_4$ 9) Phenylhydrazon d. Verbindung $C_{10}H_8O_4N_2$. Sm. 168° (G. 22 [2] 190). **— II**, 978.

10) Acetylderivat d. Verbindung $C_{20}H_{16}ON_4$. Sm. 170° (B. 26, 1182). — IV, *1225*.

1) Dimethyläther d. Di[1-Oxynaphtyl]-?-Sulfid. Sm. 1350 (B. 27, 2545). C,,H18O,S - II, 985.

2) Dimethyläther d. Di[2-Oxynaphtyl]-?-Sulfid (B. 27, 2545). — II, 986.

 $\mathbf{C}_{22}\mathbf{H}_{18}\mathbf{O}_{2}\mathbf{S}\mathbf{e}$ 1) Dimethyläther d. Di[1-Oxynaphtyl]selenid. Sm. 138° (B. 30, 2823). 2) Dimethyläther d. Di[2-Oxynaphtyl]selenid. Sm. 162° (B. 30, 2823).

C 73,7 — H 5,0 — O 13,4 — N 7,8 — M. G. 358.

1) Diäthyläther d. 8,8'-Dioxy-6,6'-Bichinolyl-5,5'-Oxyd. Sm. 71,5°. $C_{22}H_{18}O_3N_9$

2 HCl, $(2 \text{ HCl}, \text{PtCl}_4 + \text{H}_2\text{O})$, $+ 2 \text{SnCl}_2$ (B. **22** [2] 104, 297; Bl. **51**, 169). — IV, 1078. C 70,6 — H 4,8 — O 17,1 — N 7,5 — M. G. 374. 1) Triacetylindileucin. Sm. 277—278° (B. 17, 980). — II, 1622.

 $\mathbf{C}_{22}\mathbf{H}_{18}\mathbf{O_4N}_2$

2) Dibenzoat d. 2-Oxy-3-Methylbenzenylamidoxim. Sm. 164° (B. 24, 3670). — II, 1546.

3) Dibenzoat d. 6-Oxy-3-Methylbenzenylamidoxim. Sm. 1430 (B. 24, 3664). — II, 1547.

4) Phenylhydrazinderivat d. Brasilein $+ 3 \text{H}_2 \text{O} (B. 23, 1436)$. — III, 655.

5) Verbindung (aus Salicylaldehyd). Sm. 143° (B. 6, 341). — III, 75. C 65,6 — H 4,5 — O 15,9 — N 13,9 — M. G. 402. $\mathbf{C}_{22}\mathbf{H}_{18}\mathbf{O}_{4}\mathbf{N}_{4}$

1) Diacetat d. 2,4-Di[Phenylazo]-1,3-Dioxybenzol. 17, 881; 25, 1341). — IV, 1444. Sm. 137—138° (B.

2) Diacetat d. 4,6-Di[Phenylazo]-1,3-Dioxybenzol. Sm. 183-1840 (B. 15, 2816). — IV, 1443.

3) Dibenzoat d. α-Phenylamido-β-Amido-αβ-Dioximidoäthan. Sm. 1890 (B. **22**, 2956). — **II**, 1210.

4) α - Phenylhydrazon - β - Diphenylhydrazonäthan - $\alpha\beta$ - Dicarbonsäure (Phenylizindioxyweinsäurediphenylhydrazon). Sm. bei 115° u. Zers. —

 $\mathbf{C}_{22}\mathbf{H}_{18}\mathbf{O}_4\mathbf{Br}_2$ 1) Dibrom-o-Kresolphtalinsäure. Sm. 236° (A. **202**, 170). — II, 1912. $\mathbf{C}_{22}\mathbf{H}_{18}\mathbf{O}_5\mathbf{N}_2 \qquad \mathbf{C} \ 67,7 \ - \ \mathbf{H} \ 4,6 \ - \ \mathbf{O} \ 20,5 \ - \ \mathbf{N} \ 7,2 \ - \ \mathbf{M} \ \mathbf{G} \ 390.$

1) 2-Nitrophenyläther d. β -Dibenzoylamido- α -Oxyäthan. Sm. 121 bis $122^{\circ} (J. pr. |2]$ **24**, 251). — II, 1160.

2) Methylencinchoxinsäure. Sm. 249°. subl. $Na_2 + 10 H_2 O$, $K_2 + 3 H_2 O$, Ag (A. 270, 351). — IV, 346.

 $\mathbf{C}_{22}\mathbf{H}_{18}\mathbf{O}_{6}\mathbf{N}_{2}$

 $C^{65,0} - H^{4,4} - O^{23,6} - N^{6,9} - M^{6,406}$. 1) Diäthylester d. Indigodicarbonsäure (B. 18, 951). — II, 1624.

2) Phenylmonamid d. 2-[3,4-Dimethoxylbenzoyl]pyridin-3,4-Dicarbonsäure (Anilpapaverinsäure). Anilinsalz (M. 13, 700). — IV, 177.

C22H18O6S 1) Verbindung (aus Orein u. 1-Methylbenzol-4-Carbonsäure-3-Sulfonsäure) (Am. 16, 524).

C 58,6 - H'4,0 - O 24,9 - N 12,4 - M. G. 450. $C_{22}H_{18}O_7N_4$

1) 3-Nitrobenzoat d. 4-[3-Nitrobenzoyl]amido-2-Dimethylamido-1-Oxybenzol. Sm. 1970 (B. 27, 1932). — II, 1232. C 55,2 — H 3,8 — O 23,4 — N 17,6 — M. G. 478.

 $\mathbf{C}_{22}\mathbf{H}_{18}\mathbf{O}_7\mathbf{N}_6$

1) Dialloxanyl-2-Amidodi[4-Methylphenyl]amin. Zers. bei 300° (B. **26**, 543). — IV, 616. C 56,7 — H 3,8 — O 27,5 — N 12,0 — M. G: 466.

 $C_{22}H_{18}O_8N_4$

1) Verbindung (aus d. Aethylester d. 3-Oxyindol-2-Carbonsäure). Sm. 173° u. Zers. (B. 15, 782). — II, 1440. C 56,2 — H 3,8 — O 34,0 — N 5,9 — M. G. 470.

 $\mathbf{C}_{22}\mathbf{H}_{18}\mathbf{O}_{10}\mathbf{N}_{2}$

1) Verbindung (aus Azoopiansäure) (B. 19, 353). — II, 1998. C 51,4 — H 3,5 — O 34,2 — N 10,9 — M. G. 514.

 $\mathbf{C}_{22}\mathbf{H}_{18}\mathbf{O}_{11}\mathbf{N}_{4}$

1) Verbindung (aus αδ-Diketo-α-Phenylpentan). Sm. 210° (G. 22 [2] 328). - III, 272.

 $C_{22}H_{18}O_{11}Br_3$ l) Verbindung (aus Sacculminsäure) (B. 16, 244; G. 12, 292). — I, 1109. 1) Chlormethylat d. 2, 3-Diphenylchinolin. 2 + PtCl₄ (J. pr. [2] $\mathbf{C}_{22}\mathbf{H}_{18}\mathbf{NCl}$ **56**, 308).

 $\mathbf{C}_{22}\mathbf{H}_{18}\mathbf{N}\mathbf{J}$ 1) Jodmethylat d. 2,3-Diphenylchinolin. Sm. 231° u. Zers. (J. pr. [2] 56, 307).

 $C_{22}H_{18}N_2Br_8$ 1) Oktobromdiäthyl-p-Tetrolditolyl (B. 14, 936). — IV, 1035.

 $C_{2}, H_{18}N_{2}S$

- 1) 1-Naphtylamido-1-Naphtylimidomethylsulfid. Sm. 136°. (2 HCl, PtCl₄), HJ (B. 21, 964). — II, 610.
- 2) 2-Naphtylamido-2-Naphtylimidomethylsulfid. Sm. 110°. $PtCl_4$) (B. 21, 967). — II, 619.
- 3) Methyläther d. 2-Merkapto-1, 4, 5-Triphenylimidazol. Sm. 177° (A. 284, 30). — III, 224.

 $\mathbf{C}_{22}\mathbf{H}_{18}\mathbf{N}_{5}\mathbf{Cl}$ 1) 7-[4-Amidochlorphenylat] d. 5,10-Diamido- $\alpha\beta$ -Naphtophenazin (B. **31**, 3086).

 $C_{22}H_{19}ON$

- C 84,4 H 6,1 O 5,1 N 4,5 M. G. 313.
- 1) ?-Dimethylamido-9-Oxy-10-Phenylanthracen (B. 27 [2] 664). 2) 5-Keto-2,4,4-Triphenyltetrahydropyrrol. Sm. 201° (Soc. 57, 695).
- 3) 2-Keto-3, 3-Di[?-Methylphenyl]-2, 3-Dihydroindol (Toluisatin). Sm.
- 200—201° (B. 18, 2638). II, 1618. 4) Benzyläther d. 3-Oxy-1-Benzylindol (B. d. Benzyloxindol). Sm. 166° (H. 23, 25).
- 5) 1-Benzoyl-4-Phenyl-1,2,3,4-Tetrahydrochinolin. Sm. 1470 (B. 28,
- 1043). IV, 400. 6) 1-Benzoyl-6-Phenyl-1,2,3,4-Tetrahydrochinolin. Sm. 137° (A. 230,
- 23). IV, 401.
 7) Aldehyd d. β-Phenylbenzylamido-α-Keto-α-Phenyläthan-β-Carbonsäure? Sm. 130° (B. 21, 1137). — III, 95. C 77,4 — H 5,6 — O 4,7 — N 12,3 — M. G. 341.

 $C_{22}H_{19}ON_{3}$

- 1) 5-Phenylacetylamido-2-Methyl-1-Phenylbenzimidazol. Sm. 180° (B. 25, 2721). - IV, 1150.
- 2) 6-Phenylacetylamido-2-Methyl-1-Phenylbenzimidazol. Sm. 1650 (A. **286**, 179). — IV, 1150.
- 3) 1-Keto-2-Phenyl-4-[4-Dimethylamidophenyl]-1, 2-Dihydro-2, 3-Benzdiazin. Sm. 158° (Bl. [3] 19, 830; C. 1898 [1] 1296).
 4) Nitril d. α-Benzylidenamido-β-Phenylamido-α-Oxy-β-Phenylpro-
- pionsäure. Sm. 259° u. Zers. (B. 31, 2701).
- 5) Verbindung (aus Benzolketocarbonsäurealdehyd). Sm. 192-1930 (B. 22, 2559). — III, *92*.

 $C_{22}H_{19}OCl$ $\mathbf{C}_{22}^{'2}\mathbf{H}_{19}^{'10}\mathbf{O}_{2}\mathbf{N}$

- 1) a-Chlor-y-Keto- $\alpha\beta\delta$ -Triphenylbutan. Sm. 143° (M. 19, 420). C 80,2 H 5,8 O 9,7 N 4,2 M. G. 329.
- 1) 2-Dimethylamido-1,4-Dibenzoylbenzol? Sm. 55°; Sd. oberh. 360° (B. 19, 1901). — III, 305.
- 2) β -Phenylacetylamido- α -Keto- $\alpha\beta$ -Diphenyläthan. Sm. 153° (155°) (J. pr. [2] 34, 9; B. 26, 1338). — III, 220.
- 3) α-Phenylbenzoylamidoäthylphenylketon. Sm. 103—104° (Bl. [3] 17, 73). 4) α [oder δ]-Oximido- δ [oder α]-Keto- $\alpha\beta\delta$ -Triphenylbutan. (Soc. 57, 650). — III, 307.
- 5) Lakton d. α-Oxy-?-Dimethylamidotriphenylmethan-2-Carbonsäure (Dimethylamidodiphenylphtalid). Sm. 119°. HCl (B. 27 [2] 664). C 73,9 — H 5,3 — O 9,0 — N 11,8 — M. G. 357.

 $C_{22}H_{19}O_2N_3$

- 1) α -Cinnamylamido- $\alpha\beta$ -Diphenylharnstoff. Sm. 218—219° (B. 27, 1519).
- IV, 676.
 β-Acetyl-α-[2-Benzylidenamidobenzoyl]-α-Phenylhydrazin. Sm. 175 bis 177° (A. 301, 90).
- 3) Acetat d. α -Oximido- β -Phenylhydrazon- $\alpha\beta$ -Diphenyläthan. Sm. 121 bis 122° (B. 26, 794). — IV, 785. C 76,6 — H 5,5 — O 13,9 — N 4,0 — M. G. 345.

 $C_{22}H_{19}O_3N$

- 1) 2-Keto-3,3-Di[?-Methoxylphenyl]-2,3-Dihydroindol (Anisolisatin).
- Sm. 65° (B. 18, 2642). II, 1618.

 2) Benzoylphenylmethylester d. 2-Methylphenylamidoameisensäure (o-Tolylcarbamat d. Benzoïn). Sm. 125° (B. 25, 1088). III, 223.
- 3) Phenylmonamid d. $\alpha\beta$ -Diphenyläthan- $\alpha\beta$ -Dicarbonsäure. Sm. 220° (A. **259**, 93). — II, 1890.

- $C_{22}H_{19}O_3N_3$
- (A. 236, 95). II, 1630.
 (A. 256, 95). II, 1630.
 (Base aus Harn) (B. 25 [2] 915).
 (C 70,8 H 5,1 O 12,9 N 11,2 M. G. 373.
 (D Verbindung (aus d. Amid u. d. Aethylester d. α-Cyan-β-Phenylakrylsäure). Sm. 187° (168°) (A. ch. [6] 29, 452; J. pr. [2] 45, 510). II, 1417.
 (D Verbindung (aus d. Acetat d. 6-Phenylazo-5-Oxy-3-Methyl-1-Phenylbenzoxazol). Sm. 184—185° (M. 19, 504). IV, 1448.

C 73,1 — H 5,3 — O 17,7 — N 3,9 — M. G. 361. $C_{22}H_{19}O_4N$

- 1) Benzoat d. Benzoyl-4-Methoxylbenzylharnstoff. Sm. 64° (J. pr. [2] **56**, 83).
- 2) Benzoat d. β-Lapachonoxim. Sm. 180—181° (G. 19, 615). III, 401. 3) 4-Aethoxylphenylamid d. 2-Benzoxylbenzol-1-Carbonsäure. Sm. 136—137° (G. **28** [2] **2**01).
- 4) Phenyl-3-Aethoxylphenylmonamid d. Benzol-1,2-Dicarbonsäure. Sm. 90°. Ag (B. 31, 1332).
- 5) Phenyl-4-Aethoxylphenylmonamid d. Benzol-1,2-Dicarbonsäure. Sm. 80—82°. Ag (B. 31, 1330).
- 6) Phenyl-3-Oxyphenylmonamid d. Benzol-1,2-Dicarbonsäuremonoäthylester. Sm. 155-157° (B. 31, 1332).
- 7) Phenyl-4-Oxyphenylmonamid d. Benzol-1, 2-Dicarbonsäuremonoäthylester. Sm. 166—168° (B. **31**, 1330). C 67,8 — H 4,9 — O 16,4 — N 10,8 — M. G. 389.

 $C_{22}H_{19}O_4N_3$

- 1) 2-Nitro-1,4-Di[Acetylphenylamido]benzol. Sm. 160° (B. 25, 2717). - IV, 589.
- 2) 2-Nitro-1,4-Di[Benzoylamidomethyl]benzol. Sm. 210,5—211° (B. 28, 2994). — IV, 644.
- 3) Triamid d. α-Oxytriphenylmethan-α², α⁴, α⁴-Tricarbonsäure. Sm. 309° (A. 299, 299).
- $C_{22}H_{19}O_4P$ 1) Aethylesterdi-1-Naphtylester d. Phosphorsäure. Sm. 31-32° (B. **27**, 2563).

 $\mathbf{C}_{22}\mathbf{H}_{19}\mathbf{O}_{5}\mathbf{N}_{3}$ C 65,2 - H 4,7 - O 19,7 - N 10,4 - M. G. 405.

- 1) Dibenzoat d. Dioximidotropinon. Sm. 172° u. Zers. (B. 30, 2704). $C_{22}H_{19}O_6N_8$ C 62,6 - H 4,5 - O 22,8 - N 10,0 - M. G. 421.
 - 1) Pyrocatechuglykophenyltriazin. Sm. 115° u. Zers. (B. 27, 1986). IV, 1579.
 - $2) \ \ \textbf{6-Nitro-3,4-Dimethoxyl-1-Diphenylhydrazonmethylbenzol-2-Car-dimethylbenzol-2-Car-d$
 - 2) 6-Miro-3, 4-Dimenioxyr-1-Diphenymyurazonmethylbenzol-2-Carbonsäure. Sm. 217°. Ca + xH₂O (B. 21, 2520). IV, 717.
 3) 2-[α-Phenylhydrazon-3, 4-Dimethoxylbenzyl]pyridin-3, 4-Dicarbonsäure. Sm. 190° (M. 6, 973; Ph. Ch. 5, 418). IV, 177. C 59,9 H 4,3 O 32,6 N 3,2 M. G. 441.
 1) Acetylanhydroberberilsäure. Sm. 139-140° (Soc. 57, 1041). III, 802.

 $C_{22}H_{19}O_{9}N$

- C₂₂H₁₉O₁₀Cl₃1) Triacetat d. Trichlorbarbaloin (C. 1898 [2] 582).
- $\mathbf{C}_{22}^{22}\mathbf{H}_{19}\mathbf{N}\mathbf{B}\mathbf{r}_{2}$ 1) $\alpha\beta$ -Dibrom- γ -[Diphenylmethyl]imido- α -Phenylpropan. Zers. bei 170 bis 180° (B. 26, 2170). III, 54. $\mathbf{C}_{22}\mathbf{H}_{10}\mathbf{N}_{2}\mathbf{J}$ 1) Jodmethylat d. 1, 3, 5 Triphenylpyrazol. Sm. 176° u. Zers. (B. 21, 1907)
- 1207). IV, 1028.
 1) 5-Phenylamido-2-[β-Phenyläthenyl]-3-Phenyl-2, 3-Dihydro-1, 3, 4-Thiodiazol. HCl (B. 30, 854). IV, 686.
 C 80,5 H 6,1 O 4,9 N 8,5 M. G. 328. $\mathbf{C}_{22}\mathbf{H}_{19}\mathbf{N}_{3}\mathbf{S}$

 $\mathbf{C}_{22}\mathbf{H}_{20}\mathbf{ON}_{2}$

- 1) α -[4-Dimethylamidophenyl]imido- β -Keto- $\alpha\beta$ -Diphenyläthan. Sm. 138 bis 139° (B. 25, 635). — IV, 598.
- 2) α -[4-Methylphenyl|benzoylamido- α -Phenylimidoäthan. Sm. 96-970 (B. 28, 874).
- 3) Desylacetophenonhydrazid. Sm. 168° (A. 289, 319). III, 307.
- 4) Amarinformaldehyd. Sm. 145° (Bl. [3] 17, 864).
- 5) 2-[2-Methylphenyl]amido-4,5-Diphenyl-4,5-Dihydrooxazol. Sm. 136 bis 138°. 2 + (2 HCl, PtCl₄) (B. **28**, 1903).
 6) Methyllapazin. Sm. bei 135° (Soc. **63**, 1381). — IV, 622.
 7) Methylapeurhodon (Soc. **63**, 1383). — IV, 622.

- 8) Tetrahydrophenanthromonoacetyldihydrochinoxalin. Sm. 163-165° (A. 295, 220). - IV, 482.
- 9) Benzylidenamid d. α-[4-Methylphenyl]amido-α-Phenylessigsäure. Sm. 197º (B. 29, 1734).
- 10) isom. ?-Benzylidenhydrazid d. α -[4-Methylphenyl]amido- α -Phenyl-
- essigsäure. Sm. 261° (B. **29**, 1734). C 74,1 H 5,6 O 4,5 N 15,7 M. G. 356. $\mathbf{C}_{22}\mathbf{H}_{20}\mathbf{ON}_4$
 - 1) ?-Di[Phenylazo]-5-Oxy-1,2,3,4-Tetrahydronaphtalin. Sm. 156° (B. 31, 898). — IV, 1426. C 76,7 — H 5,8 — O 9,3 — N 8,1 — M. G. 344.

 $\mathbf{C}_{22}\mathbf{H}_{20}\mathbf{O}_{2}\mathbf{N}_{2}$

1) 1,3-Di[Acetylphenylamido]benzol. Sm. 163° (B. 16, 2797). — IV, 572. 2) 1,4-Di Acetylphenylamido benzol. Sm. 191,7° (B. 16, 2807). — IV, 585.

- $\mathbf{C}_{22}\mathbf{H}_{20}\mathbf{O}_2\mathbf{N}_2$ 3) 1,4-Di[Formyl-2-Methylphenylamido] benzol. Sm. 165° (J. pr. [2] 34, 67). — IV, 588.
 - 4) $\alpha \beta$ -Di[Benzoylamido]äthylbenzol ($\alpha \beta$ -Dibenzoylamidophenyläthan). Sm.
 - 217° (\$3-84°?) (B. 28, 426; G. 24 [2] 431). IV, 641. 5) 1, 2 Di[Benzoylamidomethyl]benzol. Sm. 184° (B. 26, 2213). —
 - 6) 1,4-Di[Benzoylamidomethyl]benzol. Sm. 193—194° (B. 28, 2993).
 - IV, 644.
 7) 1,2-Di [4-Methylbenzoylamido] benzol. Sm. 228° (A. 205, 114; 210, 330). - IV, 562.
 - 8) β -Benzoylamido- α -Phenylbenzoylamido \ddot{a} than. Sm. 143,5° (147,5°) (B. **24**, 2193; **28**, 2935). — **II**, 1169.
 - 9) α-Benzoylamido-α-[2-Benzoylamidophenyl]äthan. Sm. 156-157° (B.
 - 26, 1901). IV, 640. 10) 2-Acetylamido-1-Benzoylphenylamidomethylbenzol. Sm. 164—165° (B. 23, 2194). - IV, 631.
 - 11) αδ-Dioximido αβδ-Triphenylbutan. Sm. 215° u. Zers. (Soc. 57, 651). - III, 307.
 - 12) $\alpha\beta$ -Diacetyl- α -Phenyl- β -[4-Biphenyl]hydrazin. Sm. 202—203° (B. 21. 912). **— IV**, 1504.
 - 13) Dimethyläther d. 5,6-Dioxy-2-Phenyl-1-Benzylbenzimidazol. HCl (Bl. [3] **17**, 819).
 - 14) Dimethyläther d. 1-[4-Oxybenzyl]-2-[4-Oxyphenyl]benzimidazol
 - (Phenylanisaldehydin). Sm. 128,5—129°. HCl (B. 11, 1660). IV, 564. 15) 2-Oxy-1-Methyl-4-Isopropyl-5-Phenylphenazon. Sm. 174—175° (B. 24, 590). — IV, 1018.
 - 16) Lakton d. α -Oxy- α' -Phenyl- $\alpha^2\alpha^3$ -Di[?-Amido-4-Methylphenyl]methan-α'2-Carbonsäure. Sm. 192°. 2HCl, H₂SO₄ (A. 299, 293).
 - 17) Acetat d. α-Phenyl-α-Benzyl-β-[4-Oxybenzyliden]hydrazin. Sm. 141,5 bis 142° (G. 27 [2] 240). — IV, 812.
 - 18) Di [Methylphenylamid] d. Benzol-1, 2-Dicarbonsäure. Sm. 177-177,5° (B. 30, 1443).
 - 19) Benzylidenamid d. α-[4-Methoxylphenyl]amido-α-Phenylessigsäure. Sm. 193° (B. 31, 2707).
 - 20) isom. Benzylidenamid d. α -[4-Methoxylphenyl]amido- α -Phenylessigsäure. Sm. 222° (B. 31, 2708).
- $C_{22}H_{20}O_2N_4$ C 71.0 - H 5.4 - O 8.6 - N 15.0 - M. G. 372.
 - 1) Acetat d. 2,4-Di[4-Methylphenylazo]-1-Oxybenzol. Sm. 128° (B. 25, 1334). **— IV**, *1416*.
 - 2) Dimethyldichinizinohydrobenzol (B. 17, 2056). IV, 724. C 73.3 - H 5.6 - O 13.3 - N 7.8 - M. G. 360.
 - 1) 3,5-Di[Phenylacetylamido]-1-Oxybenzol. Sm. 149-150° (G. 20, 347). **— II**, 724.
 - 2) Aethyläther d. 3,4-Di[Benzoylamido]-l-Oxybenzol. Sm. 191-192°. II, 1178.
 - 3) 3-Methyläther-4-Benzoylmethyläther d. 3,4-Dioxy-1-Phenylhydrazonmethylbenzol (Acetophenonvanillinphenylhydrazon). Sm. 161° (B. 27,
 - 2464). IV, 764. 4) Benzoat d. 4-Benzoylamido-2-Dimethylamido-1-Oxybenzol. Sm. 213—214° (B. **27**, 1932). — **II**, 1178.
 - 5) 2-[2,4-Dimethylphenyl]amido-5-Benzoylamidobenzol-1-Carbonsäure. Sm. 264—265° (A. 279, 283). — II, 1274.
 - 6) α -Benzylidenamido- β -Phenylamido- α -Oxy- β -Phenylpropionsäure. Sm. 194° (B. 31, 2700).
 - 7) Aethylester d. β -Acetyl- $\alpha\gamma$ -Di[2-Cyanphenyl]propan- β -Carbonsäure. Sm. 120° (B. 22, 2018). II, 1717.
 - 8) Aethylester d. 4-[2-Oxybenzyliden]amidobiphenyl-4'-Amidoameisensäure. Sm. 170° (A. 258, 373). IV, 968.
 - 9) 4-Methoxylbenzylidenamid d. Benzolcarbonsäure. Sm. 1920 (A. 154, 82). — III, 86.
- C 68.0 H 5.2 O 12.4 N 14.4 M. G. 388.C22H2002N4
 - 1) Diphenylamid d. Phenylnitrosoamidobernsteinsäure. Sm. 1900 u. Zers. (A. **252**, 168). — **II**, 437.

 $C_{22}H_{20}O_3N_2$

 $C_{22}H_{20}O_5N_2$

C 70,2 - H 5,3 - O 17,0 - N 7,5 - M. G. 376. $C_{22}H_{20}O_4N_2$

1) Dimethyläther d. Diamidophenolphtalein (G. 26 [1] 272). 2) Opianylhydrazobenzol. Sm. 186-188° (B. 21, 2520). - IV. 1496.

3) 3,4-Dimethoxyl-1-Diphenylhydrazonmethylbenzol-2-Carbonsäure (Opiansäurediphenylhydrazon). Sm. 171—172° (B. 21, 2519). — IV, 716. 4) 1,2-Di[Phenylamidomethyl]benzol-12,22-Dicarbonsaure. Sm. 259 bis

260° (B. 31, 631).

5) Diäthylester d. 2,5-Diphenyl-1,4-Diazin-3,6-Dicarbonsäure. 104° (A. 291, 279).

6) 1,3-Phenylenester d. 2-Methylphenylamidoameisensäure. Sm. 153

bis 154° (B. 25, 1088). — II, 918.
7) 1,4-Phenylenester d. 2-Methylphenylamidoameisensäure. Sm. 206,5° (B. **25**, 1088). — II, 941. 8) Acetat d. 4-Acetylamido-3-Oxy-1-[?-Acetylamidophenyl]naphtalin.

Sm. 252° (Soc. 55, 123). — II, 903.

9) Benzoat d. α-Oxy-β-Phenyl-α-[4-Methoxylbenzyl]harnstoff. Sm. 134° (J. pr. [2] 56, 83).

10) Phenylamidoformiat d. Benzoyl-4-Methoxylbenzylhydroxylamin.

Sm. 92° (J. pr. [2] 56, 84).

11) Verbindung (aus Di [4-Methylphenylamido] bernsteinsäure). Zers. bei 222º (B. 26, 1770). — II, 509. C 61,1 — H 4,6 — O 14,8 — N 19,4 — M. G. 432.

C22H20O4N6

Dimethylester d. 3,3'-Dimethyl-4,4'-Biphenylendi[Hydrazoncyanessigsäure]. Sm. 270° u. Zers. (Bl. [3] 19, 1034). — IV, 1277, 1457.
 Diäthylester d. 4,4'-Biphenylendi[Hydrazoncyanessigsäure]. Sm.

204—206° (Bl. [3] 19, 1033). — IV, 1276, 1457. 3) Diacetat d. αβ-Di[3,6-Dibrom-4-Oxy-2,5-Dimethylphenyl]äthen. Sm. 175° (A. 301, 273).

4) Diacetat d. $\alpha\beta$ -Di[2, 6-Dibrom-4-Oxy-3, 5-Dimethylphenyl] äthen. Sm. 244° (A. 302, 86),

5) Diacetat d. Verbindung $C_{18}H_{18}O_2Br_2$. Sm. 217—218° (A. 302, 92). C 67,3 — H 5,1 — O 20,4 — N 7,1 — M. G. 392.

1) 3,4-Methylenäther-?-Dimethyläther d. Phenylhydrazon-3,4,2',4',6'-Pentaoxydiphenylmethan. Sm. 211° (B. 24, 2985). — III, 209.

C22 H20 O6 N2 C 64.7 - H 4.9 - O 23.5 - N 6.9 - M. G. 408.

1) Diacetat d. ?-Diacetyldiamido-9,10-Dioxyphenanthren (B. 18, 2169). - II, 1001.

 $\mathbf{C}_{22}\mathbf{H}_{20}\mathbf{O}_{6}\mathbf{S}_{2}$ 1) Benzoat d. αγ-Di[Phenylsulfon]-β-Oxypropan. Sm. 149-150° (B. 23, 758; A. 283, 192). — II, 1146. C 62,3 — H 4,7 — O 26,4 — N 6,6 — M. G. 424.

 $C_{22}H_{20}O_7N_2$

1) Verbindung (aus Indoxanthinsäureäthylester (B. 15, 776). — II, 1440. $C_{22}H_{20}O_8N_2$ C 60.0 - H 4.5 - O 29.1 - N 6.4 - M. G. 440.

1) Phenylhydrazonketongerbsäure (M. 10, 654). — IV, 732.

 $C_{22}H_{20}O_8Br_2$ 1) Tetracetat d. $\alpha\beta$ -Di[?-Brom-2,4-Dioxyphenyl]äthan. Sm. 215—220° (J. pr. [2] **54**, 417). C 55,9 — H 4,2 — O 33,9 — N 5,9 — M. G. 472. $\mathbf{C}_{22}\mathbf{H}_{20}\mathbf{O}_{10}\mathbf{N}_{2}$

- 1) Diäthylester d. $\alpha \delta$ -Diketo- $\alpha \delta$ -Di[4-Nitrophenyl]butan- $\beta \gamma$ -Dicarbonsäure. Sm. 180° (Soc. 49, 452). II, 2033. C₂₂H₂₀O₁₆S₂ 1) Pentacetylanhydrid d. 1,2,3-Trioxybenzol-?-Sulfonsäure (A. 178,
- 185). II, 1016. 1) Piperidylthiuramdisulfid. Sm. 130° (J. pr. [2] 36, 129). - IV, 13. $C_{22}H_{20}N_2S_4$
- $C_{22}H_{20}N_3Cl$ 1) 2-Chloräthylat d. 1,3,5-Triphenyl-1,2,4-Triazol. 2 + PtCl₄ (J. pr.
- [2] 54, 157). IV, 1187. 1) 2-Jodäthylat d. 1,3,5-Triphenyl-1,2,4-Triazol. Sm. 145° (J. pr. [2] $\mathbf{C}_{22}\mathbf{H}_{20}\mathbf{N}_{3}\mathbf{J}$ **54**, 156). — IV, *1187*. C 83,8 — H 6,7 — O 5,1 — N 4,4 — M. G. 315.

 $\mathbf{C}_{22}\mathbf{H}_{21}\mathbf{ON}$

1) γ -[4-Methylphenyl]amido- α -Keto- $\alpha\gamma$ -Diphenylpropan. Sm. 166,50 (172°) (B. **28**, 964; **31**, 353). — III, 228.

2) α -[4-Oxybenzyliden]amidodi[4-Methylphenyl]methan. Sm. 187—188° (B. 31, 1773).

3) Dibenzylidentropinon. Sm. 152°. HCl, $H_2CrO_4 + \frac{1}{2}H_2O$ (B. 30, 734, 2717; 31, 1588, 1599 Anm.). — IV, 465.

4) Aethyläther d. 5-Phenylakridin-10-Methyloxydhydrat. Sm. 1110 (108°) (A. 224, 20; B. 19, 427; 25, 1747; J. pr. [2] 45, 199). — IV, 467. $\mathbf{C}_{22}\mathbf{H}_{21}\mathbf{ON}$ 5) Benzyl-2, 4-Dimethylphenylamid d. Benzolcarbonsäure. Sm. 85-86°; Sd. 240-245°₁₀ (Bl. [3] 7, 51). — II, 1166. C 77,0 — H 6,1 — O 4,7 — N 12,2 — M. G. 343. 1) Acetylrosanilin. HCl (J. 1870, 768). — II, 1093.

 $\mathbf{C}_{22}\mathbf{H}_{21}\mathbf{ON}_{3}$

Verbindung (aus d.4-Dimethylamido 6¹-[2-Oxybenzyliden]amido-3′-Methyldiphenylamin). Sm. 234—235° (Soc. 65, 885). — IV, 620. C 71,1 — H 5,7 — O 4,3 — N 18,9 — M. G. 371.

1) Phenylamid d. αβ-Di[Phenylhydrazon]buttersäure. Sm. 173-175° (B. 27, 1171). - IV, 706.

C 79.8 - H 6.3 - O 9.7 - N 4.2 - M. G. 331.C,,H,O,N

 $\mathbf{C}_{22}\mathbf{H}_{21}\mathbf{ON}_{5}$

 $\mathbf{C}_{22}\mathbf{H}_{21}\mathbf{O}_{4}\mathbf{N}$

- 1) ?-Dimethylamidotriphenylmethan-2-Carbonsäure. Sm. 1900 (B. 27 [2] 664).
- 2) Aethylester d. α-Phenylamido-αα-Diphenylessigsäure. Sm. 114 bis 115° (B. **22**, 1213). — II, 1465.
- 3) Verbindung (aus Isolauronolsäure, Brenztraubensäure u. β-Naphtylamin).
 Sm. 257-258° (C. 1897 [1] 763).
 C 73,5 H 5,8 O 8,9 N 11,7 M. G. 359.
- $C_{22}H_{21}O_2N_3$ 1) $\gamma \gamma$ -Di[Phenylamido]- β -Methyl- α -[3-Nitrophenyl]propen. Sm. 170°
 - B. 19, 531). III, 63. 2) Phenyldi [4-Methylphenyl] biuret. Sm. 140° (B. 21, 505). — II, 495.
 - 3) $\alpha\beta$ -Diphenyl- α -[2-Acetylamidobenzyl]harnstoff. Sm. 145° (J. pr. [2] 55, 241). — IV, 633.
 - 4) a-Phenylbenzylamido-a-Acetyl-\(\text{P-Phenylharnstoff.}\) Sm. 145\(^0\) (B. 27, 1519). **— IV**, 812.
 - 5) P-Di[Acetylamido]triphenylamin. Sm. 268-2690 u. Zers. (B. 23, 2539). - IV, 585.
 - 6) 5-Keto-4-Phenyl-3-Benzyl-4, 5-Dihydroisoxazol + Phenylhydrazin. Sm. 117-118° u. Zers. (A. 296, 8). - IV, 654.
 - 7) Diphenylamid d. Phenylamidobernsteinsäure. Sm. 204—206° (179°) (A. **252**, 168; G. **14**, 474). — II, 437.
 - 8) Diphenyldiamid d. Phenylimidodiessigsäure. Sm. 218° (B. 22, 1800). - II, 431.
 - 9) Phenylbenzyldiamidd. 4-Methylphenylimidodiameisensäure (Phenylbenzyl-p-Tolylbiuret). Sm. $95-104^\circ$ (B. 21, 505). — II, 526. C 72,7 — H 5,8 — O 17,6 — N 3,9 — M. G. 363.
 - 1) 2-Opianylmethyl-6,8-Dimethylchinolin. Sm. 132°. (2 HCl, PtCl₄)
 - (B. 29, 189). IV, 451. 2) Diäthylester d. 2,5-Diphenylpyrrol-3,4-Dicarbonsäure. Sm. 151 bis 152° (A. 293, 107; B. 30, 1998). — IV, 452. C 69,6 — H 5,5 — O 21,1 — N 3,7 — M. G. 379.
- $C_{22}H_{21}O_5N$ 1) 3-Nitrobenzylidensantonin. Sm. 138° (G. 21 [2] 337). — II, 1787.
- Benzoat d. Salicylscopoleïn (C. 1895 [1] 61).
 C 64,9 H 5,1 O 19,7 N 10,3 M. G. 407.
 Methyläther d. Gallocyanin + Anilin (B. 21, 1743). III, 677. $\mathbf{C}_{22}\mathbf{H}_{21}\mathbf{O}_{5}\mathbf{N}_{3}$
- 1) Chlormethylat d. 5 oder 6-Methyl-2-Phenyl-1-Benzylbenzimidazol. $\mathbf{C}_{22}\mathbf{H}_{21}\mathbf{N}_{2}\mathbf{C}\mathbf{l}$
- 2 + PtCl₄ (B. 11, 594). IV, 619. 1) Jodmethylat d. 5 oder 6-Methyl-2-Phenyl-1-Benzylbenzimidazol. $\mathbf{C}_{22}\mathbf{H}_{21}\mathbf{N}_{2}\mathbf{J}$ Sm. 209° u. Zers. (B. 11, 594). — IV, 619.
 - 2) Jodäthylat d. 2-Phenyl-1-Benzylbenzimidazol. Sm. 211—2130 (B. 11, 1654). — IV, 563.
 - 3) Dimethylmethylocyanin + H₂O. Sm. 275-277° (wasserfrei) (R. 3, 342). **— IV**, 319.
- - - 1) Tribenzylharnstoff. Sm. 119-120° (B. 25, 1820). II, 527. 2) Tri[4-Methylphenyl]harnstoff. Sm. 188--189° (B. 25, 1822). — II, 495.
 - 3) α -Benzyl- $\alpha\beta$ -Di[4-Methylphenyl]harnstoff. Sm. 115° (B. 25, 1823). **– II**, *527.*
 - 4) α -Benzyl- $\beta\beta$ -Di[4-Methylphenyl]harnstoff. Sm. 136—137° (B. 25, 1822). — II, 526.
 - 5) α -[4-Methylphenyl]- $\alpha\beta$ -Dibenzylharnstoff. Sm. 83-85° (B. 25, 1823). - II, 527.

- $\mathbf{C}_{22}\mathbf{H}_{22}\mathbf{ON}_{2}$ 6) α -[4-Methylphenyl]- $\beta\beta$ -Dibenzylharnstoff. Sm. 168—169° (B. 25, 1820). - II, 527.
 - 7) Methyläther d. α -[4-Dimethylamidophenyl]imido-4-Oxydiphenylmethan. Sm. 116° (B. 26, 927). — IV, 598.
 - 8) Methyläther d. 2-[4-Oxyphenyl]-1, 3-Diphenyltetrahydroimidazol.
 - Sm. 164° (B. 20, 733). III, 85.

 9) Aethyläther d. 2-Benzylidenamido-1-[4-Oxyphenylamido]methylbenzol. Sm. 137° (J. pr. [2] 52, 397). IV, 634.
 - 10) Aethyläther d. 2-Benzylidenamido-5-[4-Oxyphenyl]amido-1-Methyl-
 - benzol. Sm. 86-87° (A. 287, 167). III, 32. 11) Verbindung (aus 4-Amido-1-Dimethylamidobenzol u. Benzoïn). Sm. 126 bis 127° (B. 25, 639). — IV, 598.
- C 73.8 H 6.1 O 4.5 N 15.6 M. G. 358. $\mathbf{C}_{22}\mathbf{H}_{22}\mathbf{ON}_{4}$
 - 1) Aethyläther d. $\alpha\beta$ -Di[Phenylhydrazon]- α -[4-Oxyphenyl]äthan. Sm. 155°. — IV, 764.
 - 2) 3,5-Di[Phenylazo]-2-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 126°
 - (G. 15, 217). IV, 1426. 3) 2,6-Di[Phenylazo]-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 168° (G. 15, 55, 230). - IV, 1425.
 - Phenylhydrazid d. γ-Phenylhydrazon-γ-Phenylbuttersäure. Sm. 195° (A. 299, 51). IV, 697.
- $\mathbf{C}_{22}\mathbf{H}_{22}\mathbf{O}_{2}\mathbf{N}_{2}$ C 76,3 - H 6,3 - O 9,2 - N 8,1 - M. G. 346.
 - 1) 54-Aethyläther d. 2-[2-Oxybenzyliden]amido-5-[4-Oxyphenyl]amido-1-Methylbenzol. Sm. 124—125° (A. 287, 167). — III, 73.
 - 2) 14-Aethyläther d. 2-[2-Oxybenzyliden]amido-1-[4-Oxyphenyl-
 - amido] methylbenzol. Sm. 94° (J. pr. [2] 52, 397). IV, 635. 3) Isobutyläther d. 5-Phenylamido-2-Oxy-1,4-Benzochinonphenylimid. Sm. 138° (B. 18, 788). — III, 348.
 - 4) Oxymethyldihydrolapeurhodon. Sm. 183,5-184,5° (Soc. 63, 1384).
- IV, 622. C 70.6 H 5.9 O 8.5 N 15.0 M. G. 374. $C_{22}H_{22}O_2N_4$
 - 1) ?-Dioxy-1, 4-Di[α -Phenylhydrazonäthyl]benzol (Resodiacetophenonphenylhydrazon). Sm. 231° (Bl. [3] 6, 153). - IV, 783.
 - 2) $\alpha \beta$ -Di[5-Keto-3-Methyl-1-Phenyl-4,5-Dihydro-4-Pyrazolyl]äthan (Aethylendimethyloxychinizin). Sm. noch nicht bei 250° (Soc. 57, 222), -IV, 723.
 - 3) 5,5'-Dimethyläther d. 4,4'-Bi[5-Oxy-1-Phenyl-3-Methylpyrazol].
 - Sm. 186—187° (B. 28, 714). IV, 1262. 4) 3,3'-Diketo-1,5,1',5'-Tetramethyl-2,2'-Diphenyl-2,3,2',3'-Tetra-
 - hydro-4,4'-Bipyrazol (Bisantipyrin). Sm. 245°. 2HCl + 2H₂O, (2HCl, PtCl₄), Pikrat (B. 17, 2045; A. 238, 210). IV, 1263. 5) 5,5'-Diketo-3,4,3',4'-Tetramethyl-1,1'-Diphenyl-4,5,4',5'-Tetrahydro-4,4'-Bipyrazol. Sm. 164° (B. 17, 2050; A. 238, 163, 174).
 - IV, 1265. 6) 5,5'-Diketo-3,3'-Dimethyl-1,1'-Di[4-Methylphenyl]-4,5,4',5'-Tetrahydro-4, 4'-Bipyrazol (Soc. 59, 341). — IV, 807.
 - 7) Di[Phenylhydrazid] d. α -Phenyläthan- $\beta\beta$ -Dicarbonsäure. Sm. 242 bis 243° (Soc. 61, 796). — IV, 711.
 - 8) Di Cinnamylidenhydrazid d. Aethan-αβ-Dicarbonsäure. Sm. 239° (J. pr. [2] 51, 192). - III, 62.
- C, H, O, S, 1) Diphenyläther d. α -[2-Methylphenyl]sulfon- $\beta\gamma$ -Dimerkaptopropan. Fl. (J. pr. [2] **56**, 463).
 - 2) Diphenyläther d. α -[4-Methylphenyl]sulfon- $\beta\gamma$ -Dimerkaptopropan. Fl. (J. pr. [2] 56, 459).
- C29,H29,O,Se 1) Diäthyläther d. Di[1-Oxynaphtyl]selenid. Sm. 1490 (B. 30, 2824). $\mathbf{C}_{22}\mathbf{H}_{22}\mathbf{O}_{3}\mathbf{N}_{2}$ C 72,9 - H $6,1 - \tilde{O}$ 13,3 - N $7,\tilde{7} - M$. G. 362.
 - 1) 4-Methyläther- α -Benzyläther d. α -Oxy- β -Phenyl- α -[4-Oxybenzyl]harnstoff. Sm. 85° (J. pr. [2] 56, 82).
 - 2) Aethyläther d. 4-Acetylamido-3-Oxy-1-[?Acetylamidophenyl]naph-
- talin. Sm. oberh. 288° (Soc. 55, 604). II, 903. C 67,7 H 5,6 O 12,3 N 14,4 M. G. 390. $C_{22}H_{22}O_{3}N_{4}$
 - 1) ?-Trioxy-1,4-Di[α -Phenylhydrazonäthyl]benzol (Gallodiacetophenonphenylhydrazon). Sm. 246° (Bl. [3] 6, 157). — IV, 783.

C₂₂H₂₂O₃N₄ 2) Aethylester d. Phenylizinchinizinohydrobenzolcarbonsäure. Sm. 211-212° (B. 17, 2055). — IV, 723.
3) Amid d. 3-[2,4-Dimethylphenyl]imido-5-[2,4-Dimethylphenyl]-

amido-2-Keto-6-Oxy-2,3-Dihydropyridin-4-Carbonsäure (B. 27, 3450). — IV, 1140.

4) Verbindung (aus Diacetylfumarsäurediäthylester). Sm. 138° (B. 30, 1994).

- IV, 724. C 69,8 - H 5,8 - O 16,9 - N 7,4 - M. G. 378. $C_{22}H_{22}O_4N_2$

1) 4,5-Di[2,4,6-Trimethylbenzoyl]-1,2,3,6-Dioxdiazin (Dimesityldinitrosacyl). Sm. 141° (B. 28, 3211). — III, 302. 2) Dibenzoyldiepihydrinamid. Sm. 299° (J. pr. [2] 55, 92).

C22H22O4S3 1) Benzyläther d. Dibenzylsulfonmerkaptomethan. Sm. 2140 (B. 25. 356). — II, 1053.

C 67,0 H 5,6 - O 20,3 - N 7,1 - M. G. 394. $C_{22}H_{22}O_5N_2$

1) Anhydrid d. αβ-Di[4-Methylphenylacetylamido]bernsteinsäure. Sm. 232° u. Zers. (B. 26, 1770). — II, 509.

C₂₂H₂₂O₅Br₄ 1) Diacetat d. Di[3,6-Dibrom-4-Oxy-2,5-Dimethylbenzyl]äther. 216° (B. 28, 2918). Diacetat d. Di [2,6-Dibrom-4-Oxy-3,5-Dimethylbenzyl] äther. Sm. 228—229° (A. 302, 90).

1) $\beta \gamma$ - Diphenylsulfon - α - [4 - Methylphenyl]sulfonpropan. $C_{22}H_{22}O_6S_3$ (J. pr. [2] 56, 460).C 62,0 — H 5,1 — O 26,3 — N 6,6 — M. G. 426.

 $\mathbf{C}_{22}\mathbf{H}_{22}\mathbf{O}_7\mathbf{N}_2$

1) Acetyldiphenylamid d. Diacetylweinsäure. Sm. 216° (B. 24, 2960). — П, 422. С 59,7 — Н 5,0 — О 29,0 — N 6,3 — М. G. 447.

 $\mathbf{C}_{22}\mathbf{H}_{22}\mathbf{O}_{8}\mathbf{N}_{2}$

1) Diäthylester d. α-Dinitro-α-Truxillsäure. Sm. 138° (B. 24, 2590). — II, 1901.

 $\mathbf{C}_{22}\mathbf{H}_{22}\mathbf{O}_{9}\mathbf{N}_{2}$

C 57,6 — H 4,8 — O 31,4 — N 6,1 — M. G. 458.

1) Nitroisonarkotin. Sm. 205° u. Zers. (B. 29, 2042). — III, 922.

1) Dijodäthylat d. 6,6'-Bichinolyl. Sm. 270° (B. 17, 1819). — IV, 1069.

 $\mathbf{C}_{22}\mathbf{H}_{22}\mathbf{N}_{2}\mathbf{J}_{2}$ 1) α -Phenyl- β -[$\beta\gamma$ -Diphenyl-norm. Propyl]thioharnstoff. Sm. 129° (B. $\mathbf{C}_{22}\mathbf{H}_{22}\mathbf{N}_{2}\mathbf{S}$ 23, 2862). — II. 637.

2) α-Phenyl-β-Diphenylmethylthioharnstoff. Sm. 171° (B. 31, 1774). 3) Dibenzylamidobenzylimidomerkaptomethan. Sm. 114,5—115,5° (Soc.

4) Dibenzylamido-4-Methylphenylimidomerkaptomethan. Sm. 145 bis 146° (Soc. 67, 558).

1) **4,4'-Di**[**3,5-Dimethyl-1-Phenylpyrazolyl]sulfid.** Sm. 141° (G. **24** [1] C₂₂H₂₂N₄S

355). — IV, 781. 1) 4,4'-Di[3,5-Dimethyl-1-Phenylpyrazolyl]disulfid. Sm. 78—79° (G. 23) C, H, N,S, [2] 418). — IV, 781.

1) 4,4'-Di[3,5-Dimethyl-1-Phenylpyrazolyl]trisulfid. Sm. 141° (G. 24) $\mathbf{C}_{22}\mathbf{H}_{22}\mathbf{N}_{4}\mathbf{S}_{3}$ [1] 363). $\stackrel{-}{-}$ IV, 781. C 76,5 $\stackrel{-}{-}$ H 6,7 $\stackrel{-}{-}$ O 4,6 $\stackrel{-}{-}$ N 12,2 $\stackrel{-}{-}$ M. G. 345.

 $\mathbf{C}_{22}\mathbf{H}_{23}\mathbf{ON}_{3}$

1) 4-Dimethylamido-6'-[2-Oxybenzyliden]amido-3'-Methyldiphenyl**amin.** Sm. 134° (Soc. **65**, 883). — **IV**, 620. C 70,8 — H 6,1 — O 4,3 — N 18,8 — M. G. 373.

 $\mathbf{C}_{22}\mathbf{H}_{23}\mathbf{ON}_{5}$

1) 6-Dimethylamido-4-Oxy-3-Phenylazo-1-[2,4-Dimethylphenylazo]benzol. Sm. 142° (B. 31, 493). — IV, 1417.

2) 4-Dimethylamido-6-Oxy-3-Phenylazo-1-[2,4-Dimethylphenylazo]benzol. Sm. 161° (B. 31, 494). — IV, 1417. C 79,3 — H 6,9 — O 9,6 — N 4,2 — M. G. 333.

 $C_{22}H_{23}O_2N$ 1) Verbindung + 1/2 H2O (aus Tropinon u. Benzaldehyd). Sm. 1150 u. Zers. (B. 30, 2718).

 $\mathbf{C}_{22}\mathbf{H}_{23}\mathbf{O}_{2}\mathbf{N}_{3}$

C 73,1 — H 6,4 — O 8,9 — N 11,6 — M. G. 361. 1) 4'-Nitro- 4^2 -Dimethylamido- 4^3 -Amido- 2^3 -Methyltriphenylmethan. Sm. 169° (B. 24, 553). — IV, 1045. 2) 4'-Nitro-4²-Dimethylamido-5³-Amido-2³-Methyltriphenylmethan.

Sm. 202° (B. **24**, 3136). — IV, 1045. C 67,8 — H 5,9 — O 8,3 — N 18,0 — M. G. 389.

 $\mathbf{C}_{22}\mathbf{H}_{23}\mathbf{O}_{2}\mathbf{N}_{5}$

1) Dibenzylamidokaffein. Sm. 162° (B. 31, 1140). C 75,6 — H 6,6 — O 13,7 — N 4,0 — M. G. 349. $\mathbf{C}_{22}\mathbf{H}_{23}\mathbf{O}_3\mathbf{N}$ 1) Aethylcusparin. Sm. 190-191° (C. 1895 [2] 826; B. 29 [2] 36). C₂₂H₂₃O₃N 2) Aethylester d. 6-[4-Methylphenyl]amido-4-Keto-2-Phenyl-1, 2, 3, 4-Tetrahydrobenzol-3-Carbonsäure. Sm. 214° (A. 294, 278). C 70,0 — H 6,1 — O 12,7 — N 11,1 — M. G. 377. 1) Trimethyläther d. Tri[2-Oxyphenyl]guanidin. (2HCl, PtCl₄) (B. 21,

 $C_{22}H_{23}O_{3}N_{3}$

1862). — II, 705.

C 72,3 - H 6,3 - O 17,5 - N 3,8 - M. G. 365. $\mathbf{C}_{22}\mathbf{H}_{23}\mathbf{O}_{4}\mathbf{N}$

1) Gnoskopin. Sm. bei 228°. HCl + 3H₂O (J. 1878, 873; B. 26 [2] 593). **— III**, 922.

2) Dehydrocorydalin (oder C₂₂H₂₅O₄N) + CHCl₃ (Sm. 154°). HCl + 4H₂O, (2HCl, PtCl₄ + 6H₂O), (HCl, AuCl₃), HBr + 4H₂O, (HBr + Br₂), HJ + 2H₂O, HNO₃ + 2H₂O, H₂SO₄ + 3H₂O (C. 1896 [2] 792; 1898 [2] 115; Soc. 71, 658). — III, 876.

3) Diäthylester d. 2,5 - Dimethyl-1-[1-Naphtyl]pyrrol-3,4-Dicarbon-

säure. Sm. 91—92° (A. 236, 307). — IV, 92. 4) Diäthylester d. 2,5-Dimethyl-1-[2-Naphtyl]pyrrol-3,4-Dicarbonsäure. Sm. 124° (B. 18, 304; A. 236, 306). — IV, 92. C 69,3 — H 6,0 — O 21,0 — N 3,7 — M. G. 381.

 $\mathbf{C}_{22}\mathbf{H}_{23}\mathbf{O}_5\mathbf{N}$

1) Monoxim d. γ-Acetyl-αε-Diketo-αε-Diphenylpentan-γ-Carbonsäure-

 $C_{22}H_{23}O_6N$

1) Monoxim d. 7-Recyfens-Directo-as-Diplienty pentan-7-Carbon saure-sithylester. Sm. 61-63° (B. 22, 3228). — II, 1982.
C 66,5 — H 5,8 — O 24,2 — N 3,5 — M. G. 397.
1) Methylhydrastin. Sm. 156°. HCl + H₂O, (2 HCl, PtCl₄ + 2 H₂O), (HCl, AuCl₃), HNO₃, H₂SO₄ (B. 23, 406). — II, 2052.
C 63,9 — H 5,6 — O 27,1 — N 3,4 — M. G. 413.
1) Narkotin (Opianin). Sm. 176°. Salze meist bek. Lift bedeutend. —

 $\mathbf{C}_{22}\mathbf{H}_{23}\mathbf{O}_7\mathbf{N}$

III, 914.

2) Isonarkotin. Sm. 194°. HCl + 2H₂O, (2HCl, PtCl₄), (HCl, AuCl₃), HBr, HJ, HNO₃, Tartrat (B. **29**, 184, 2040; **30**, 1745; **31**, 2099). —

- III, 922. C 59,9 - H 5,2 - O 25,4 - N 9,5 - M. G. 441. $\mathbf{C}_{22}\mathbf{H}_{23}\mathbf{O}_7\mathbf{N}_3$

1) Methylnitrohydrastimid. Sm. 202 -203° . $+ C_2H_6O$. Sm. 95°. HCl, HNO₈, H₂SO₄ (A. **271**, 400). — II, 2052. C 61,5 — H 5,4 — O 29,8 — N 3,3 — M. G. 429.

 $C_{22}H_{23}O_8N$

1) Oxynarkotin. HCl + 2H₂O, (2HCl, PtCl₄). (Soc. **29**, 461). — III, 922. C 59,3 — H 5,2 — O 32,4 — N 3,1 — M. G. 445. $C_{22}H_{23}O_9N$

1) Dimethylester d. Berberilsäure. Sm. 173-174° (Soc. 57, 1048). -III, 801.

C₂₂H₂₃O₁₀Cl₄1) Verbindung (aus Esparto) (Soc. 38, 668). — I, 1080.

 $\mathbf{C}_{22}\mathbf{H}_{23}\mathbf{N}_{2}\mathbf{J}$ 1) Jodisoamylat d. 2-Phenyl- β -Naphtimidazol (A. 208, 329). — IV, 1061. $\mathbf{C}_{22}\mathbf{H}_{24}\mathbf{ON}_{2}$ C 79.5 - H 7.2 - O 4.8 - N 8.4 - M. G. 332.

1) Anhydrid d. 2-Methylchinolinmethyloxydhydrat (A. 242, 302). —

IV, 308. C 75.9 - H 6.9 - O 9.2 - N 8.0 - M. G. 348. $\mathbf{C}_{22}\mathbf{H}_{24}\mathbf{O}_{2}\mathbf{N}_{2}$

1) Dimethyläther d. 1, 2-Di [2-Oxyphenylamidomethyl] benzol. Sm. 105° B. 31, 1157).

 $\mathbf{C}_{22}\mathbf{H}_{24}\mathbf{O}_{2}\mathbf{N}_{6}$

2) Hydromethyllepidon. Sm. 268° (A. 236, 109; B. 19, 3301). — IV, 317. C 65,3 — H 5,9 — O 7,9 — N 20,8 — M. G. 404.
1) Di[Phenylhydrazid] d. Phenylhydrazidobernsteinsäure. Sm. 199 bis 200° (B. 26, 121). — IV, 741.

 $C_{22}H_{24}O_2Br_4$ 1) Diäthyläther d. $\alpha\beta$ -Di[3,6-Dibrom-4-Oxy-2,5-Dimethylphenyl]äthen. Sm. $171-172,5^{\circ}$ (*B*. **28**, 2909; **29**, 2338). C 72,5 — H 6,6 — O 13,2 — N 7,7 — M. G. 364.

 $C_{22}H_{24}O_3N_2$

1) Anhydrid d. 1-Methyl-1, 2, 3, 4-Tetrahydrochinolin-4-Carbonsäure. Sd. $297 - 299^{\circ}_{744,3}$ (*M.* 5, 643). — IV, 214.

2) Aethylester d. α δ -Di[4-Methylphenylimido]- γ -Ketopentan- α -Carbonsäure. Sm. 186° (*Bl.* [3] **13**, 480). C 69,5 — H 6,3 — O 16,8 — N 7,4 — M. G. 380.

 $\mathbf{C}_{22}\mathbf{H}_{24}\mathbf{O}_{4}\mathbf{N}_{2}$

1) 4,4'-Di[Diacetylamido]-3,3'-Dimethylbiphenyl. Sm. 211° (B. 21, 747). **- IV**, 981.

2) Diisobutyrat d. $\alpha \beta$ -Dioximido- $\alpha \beta$ -Diphenyläthan (D. d. α -Benzildioxim). Sm. 121—122° (B. 21, 802). — III, 294.

3) Diisobutyrat d. isom. $\alpha\beta$ -Dioximido- $\alpha\beta$ -Diphenyläthan (D. d. β -Benzil-

dioxim). Sm. 88-89° (B. 21, 802). — III, 294. 4) Diisobutyrat d. isom. $\alpha\beta$ -Dioximido- $\alpha\beta$ -Diphenyläthan (D. d. γ -Benzildioxim). Sm. 89—92° (B. 22, 715). — III, 294.

- $\mathbf{C}_{22}\mathbf{H}_{24}\mathbf{O}_{4}\mathbf{N}_{2}$ 5) $\mathbf{Di}[\mathbf{2},\mathbf{4},\mathbf{6}$ -Trimethylbenzyliden]hydrazin- $\alpha\alpha'$ -Dicarbonsäure $+\mathbf{H}_{0}\mathbf{O}_{0}$
- $\mathbf{C}_{22}\mathbf{H}_{24}\mathbf{O}_{5}\mathbf{N}_{2}$
- Sm. 200° (Bl. [3] 17, 371). C 66,7 H 6,0 O 20,2 N 7,1 M. G. 396. 1) Methylhydrastimid. Sm. 192°. HCl, (2HCl, PtCl₄), HJ, HNO₃ + H₂O, H₂SO₄ (B. 23, 2899). II, 2052.
 - 2) Dioxim d. γ-Acetyl-αε-Diketo-αε-Diphenylpentan-γ-Carbonsäure-äthylester. Sm. 61-63° (B. 22, 3228). II, 1982.
 C 58,4 H 5,3 O 17,7 N 18,6 M. G. 452.
 1) Hexaamidoorcinaurin. 6HCl + H₂O (B. 13, 566). II, 1125.
- $C_{22}H_{24}O_5N_6$
- $\mathbf{C}_{22}\mathbf{H}_{24}\mathbf{O}_{5}\mathbf{Br}_{2}$ 1) Diacetat d. Di[3-Brom-4-Oxy-2,5-Dimethylbenzyl]äther. Sm. 140° (A. 302, 124).
- $C_{22}H_{24}O_6N_2$
- C 64,1 $\stackrel{\checkmark}{-}$ H 5,8 $\stackrel{\frown}{-}$ O 23,3 $\stackrel{\frown}{-}$ N 6,8 $\stackrel{\frown}{-}$ M. G. 412. 1) Methylhydrastinoxim. Sm. 158°. HCl+3 H₂O, HNO₃ + xH₂O, H₂SO₄ $+ C_2 H_6 O (A. 271, 391). - II, 2053.$
 - 2) Diäthyläther d. Succinylbenzhydroxamsäure (Benzäthylsuccinhydroxylamin). Sm. 60° (A. 281, 265). — II, 1199.
 - 3) $\alpha \beta$ -Di[4-Methylphenylacetylamido]bernsteinsäure + H₂O. Zers. 204°. $Ca + H_2O$, $Ba + H_2O$ (B. 26, 1770). — II, 509.
 - 4) Diacetat d. $\alpha\beta$ -Di[Acetylamido] $\alpha\beta$ -Di[2-Oxyphenyl] äthan. $216 - 219^{\circ}$. $+ C_2H_6O$ (Soc. 45, 679; B. 17, 2406, 2409). - II, 994; III, 287.
 - 5) 2-Methylphenylamid d. Diacetylweinsäure. Sm. 221-222° u. Zers. (B. **23**, 2050). — **II**, 468.
 - 6) 4-Methylphenylamid d. Diacetylweinsäure. Sm. 202° (B. 23, 2050). - II, 503.
- C 61,6 H 5,6 O 26,2 N 6,5 M. G. 428. $\mathbf{C}_{22}\mathbf{H}_{24}\mathbf{O}_7\mathbf{N}_2$
 - 1) Dioxymethylhydrastimid. Sm. 151°. (2 HCl, PtCl₄) (A. 271, 406). II, 2053.
- $C_{22}H_{24}O_7N_6$
- C 54,6 H 5,0 O 23,1 N 17,3 M. G. 484. Verbindung (aus d. Methyläther d. 4-[2-Oxyphenyl]hydrazon-5-Keto-3-Methyl-4,5-Dihydroisoxazol). Zers. bei 170° (B. 30, 1164). IV, 814. C 59,4 H 5,4 O 28,8 N 6,3 M. G. 444.
- $\mathbf{C}_{22}\mathbf{H}_{24}\mathbf{O}_{8}\mathbf{N}_{2}$ 1) Diäthylester d. $\alpha\beta$ -Di[Phenylamidoformoxyl] äthan - $\alpha\beta$ -Dicarbonsäure. Sm. 164° (C. 1895 [2] 443).
- C 46.1 H 4.2 O 44.8 N 4.9 M. G. 572. $\mathbf{C}_{22}\mathbf{H}_{24}\mathbf{O}_{16}\mathbf{N}_{2}$
- 1) Pentacetyldinitroarbutin (A. 154, 242). III, 571. 1) Methyltribenzylammoniumchlorid. 2+PtCl₄ (B. 13, 703; 19, 1028). $C_{22}H_{24}NC1$
- **II**, 523. $\mathbf{C}_{22}\mathbf{H}_{24}\mathbf{NJ}$ 1) Methyltribenzylammoniumjodid. Sm. 1840 (B. 19, 1027). — II, 523.
 - 2) Jodmethylat d. 4-Dimethylamidotriphenylmethan. Sm. 184-1850 (A. **206**, 115, 157). — II, 641.
 - 3) Jodmethylat d. 3,5-Di[2-Methylbenzyl]pyridin. Sm. 152-153° (A. 280, 86). — IV, 457.
 - 4) Jodnethylat d. 3,5-Di[3-Methylbenzyl]pyridin. Sm. 105-107° (A.
 - 280, 81). IV, 457. 5 5) Jodmethylat d. 3,5-Di[4-Methylbenzyl]pyridin. Sm. 137° (A. 280, 76). — IV, 457.
- 1) Dithioharnstoff (aus 1,5-Diamido-1,2,3,4-Tetrahydronaphtalin). Sm. 175° C₂₂H₂₄N₄S₂ u. Zers. (B. 22, 958). — IV, 862.
- $\mathbf{C}_{92}\mathbf{H}_{24}\mathbf{ClAs}$ 1) Methyltribenzylarsoniumchlorid. Sm. 201°. 2 + PtCl₄ (A. 233, 76). **– IV**, 1691.
- 1) Isobutyltriphenylphosphoniumjodid. Sm. 176-177° (A. 229, 314). $\mathbf{C}_{22}\mathbf{H}_{24}\mathbf{JP}$ **- IV**, 1661.
- 1) Methyltribenzylarsoniumjodid. Sm. 143° (A. 233, 75). IV, 1691. $\mathbf{C}_{22}\mathbf{H}_{24}\mathbf{J}\mathbf{A}\mathbf{s}$ $\mathbf{C}_{22}\mathbf{H}_{25}\mathbf{ON}$ C 82.8 - H 7.8 - O 5.0 - N 4.4 - M. G. 319.
 - 1) Methyltribenzylammoniumhydrat. Chlorid, Jodid (B. 13, 703; 19, 1028). — II, 523. C 76,1 — H 7,2 — O 4,6 — N 12,1 — M. G. 347.
- $\mathbf{C}_{22}\mathbf{H}_{25}\mathbf{ON}_{3}$
- 1) α -Oxy- α -Tri[4-Amido-3-Methylphenyl]methan (B. 27, 1814). 1) Methyltribenzylarsoniumoxydhydrat. Chlorid, 2 Chlorid + PtCl₄, Jodid $C_{22}H_{25}OAs$
- (A. 233, 75). IV, 1691. C 75,2 H 7,1 O 13,7 N 4,0 M. G. 351. $C_{22}H_{25}O_{8}N$
 - Benziltropein (Bl. [3] 9, 1016). III, 788.
 Benzyläther d. Santoninoxim. Sm. 151—152° (B. 26, 413). II, 1786.

C 71,9 — H 6,8 — O 17,4 — N 3,8 — M. G. 367. 1) Aethylhydroberberin + $4\,\mathrm{H}_2\mathrm{O}$. Sm. 233—235° u. Zers. $\mathrm{HCl} + 2^{1}/_2\,\mathrm{H}_2\mathrm{O}$, (2 HCl, PtCl₄), (HCl, AuCl₈), HBr, HJ, HNO₈ + $2\,\mathrm{H}_2\mathrm{O}$. — III, 801. $C_{22}H_{25}O_4N$ C 64,2 - H 6,1 - O 19,5 - N 10,2 - M. G. 411. $C_{22}H_{25}O_5N_3$ 1) Trioxim d. γ -Acetyl- $\alpha \varepsilon$ -Diketo- $\alpha \varepsilon$ -Diphenylpentan- γ -Carbonsäure-äthylester. Sm. 66–68° (B. 22, 3228). — II, 1982. C 66,2 - H 6,3 - O 24,0 - N 3,5 - M. G. 399. $C_{22}H_{25}O_6N$ 1) Colchicin. Sm. 143—147°. + 2 CHCl₃, (HCl, AuCl)₈ (A. 7, 274; Fr. 18, 129; Bl. 42, 298; [3] 11, 155; J. 1856, 548, 550; 1864, 450; M. 4, 162; 7, 568; 9, 4, 868; B. 14, 1412). — III, 873. 2) Methylcolchicein (M. 9, 870). — III, 874. 3) Succinylcode in $+ 5 \, \text{H}_2\text{O}$. $HCl + H_2O$, $(2 \, \text{HCl}, PtCl_4)$ (Soc. 28, 689). — III, 906. 4) Aethylester d. Acetylmorphinkohlensäure. Sm. bei 150°. HCl. $(2 \text{HCl}, \text{PlCl}_4 + \text{H}_2\text{O}) (C. 1899 [1] 705).$

C 63,6 - H 6,0 - O 27,0 - N 3,4 - M. G. 415. $C_{22}H_{25}O_7N$

1) $Methylhydrastein + 2 H_2O$ (Methylhydrastinhydrat). Sm. $151 - 152^{\circ}$ (wasserfrei). HCl, $(2HCl, PtCl_4)$ (B. 23, 408). — II, 2051.

2) Hydrastinmethyloxydhydrat + H₂O. siehe diese (B. 23, 405). — II, 2051. Sm. 242° (214 — 215°). Salze,

C 61,2 - H 5,8 - O 29,7 - N 3,3 - M.G. 431.C22 H25 O8 N

1) Isonarkotinsäure. Ba (B. 29, 185).

 $\mathbf{C}_{22}\mathbf{H}_{26}\mathbf{O}_{2}\mathbf{N}_{2}$ C 75.4 - H 7.4 - O 9.1 - N 8.0 - M. G. 350.

 $1) \ \ 3,6 - Diketo-2, 5 - Di\ddot{a}thyl-l, 4 - Di[2-Methylphenyl] hexahydro-l, 4 - Di-lem (2-Methylphenyl) hexahydro-lem (3-Methylphenyl) hexahydro-lem (3$ azin. Sm. 218° (B. 25, 2924). — II, 472.

2) isom. 3,6-Diketo-2,5-Diäthyl-1,4-Di[2-Methylphenyl]hexahydro-1,4-Diazin. Sm. 178—180° (B. 25, 2924). — II, 472.

3) 3, 6-Diketo-2, 5-Diathyl-1, 4-Di[4-Methylphenyl]hexahydro-1, 4-Di-

azin. Sm. 256° (B. 25, 2322, 2925). — II, 508. 4) isom. 3,6-Diketo-2,5-Diäthyl-1,4-Di[4-Methylphenyl]hexahydro-1,4-Diazin. Sm. 207—217° (204—210°) (B. 25, 2322, 2925). — II, 508. 5) α -1,4-Dibenzoyl-2,5-Dimethyl-3-Aethylhexahydro-1,4-Diazin.

169° (J. pr. [2] 55, 71). — IV, 485.

6) α -1,4-Dibenzoyl-2,3,5,6-Tetramethylhexahydro-1,4-Diazin. Sm. 242° (245°) (J. pr. [2] 55, 75; B. 26, 724). — IV, 485.

7) β -1,4-Dibenzoyl-2,3,5,6-Tetramethylhexahydro-1,4-Diazin. 175° (173°) (J. pr. [2] **55**, 77; B. **26**, 724). — **IV**, 485. 8) Di[Phenylamid] d. d-Camphersäure. Sm. 226° (B. **28**, 531).

9) Di[Phenylamid] d. 1-Camphersaure. Sm. 226° (B. 28, 531).
10) Di[Phenylamid] d. i-Camphersaure. Sm. 196—197° (B. 28 [2] 923).
11) Di[Phenylamid] d. d-Isocamphersaure. Sm. 201° (B. 28, 531).
12) Di[Phenylamid] d. l-Isocamphersaure. Sm. 201° (B. 28, 531).
13) Di[Phenylamid] d. i-Isocamphersaure. Sm. 201° (B. 28, 531).
14) Di[Phenylamid] d. i-Isocamphersaure. Sm. 184° (B. 28 [2] 923).

 $C_{22}H_{26}O_2Br_4$ 1) Di[2,4-Dibrom-6-Isopropyl-3-Methylphenyläther] d. $\alpha\beta$ -Dioxyäthan. Sm. 151-153° (G. 22 [2] 583). - II, 772.

 $\mathbf{C}_{22}\mathbf{H}_{26}\mathbf{O_3N_2}$ C 72,1 - H 7,1 - O 13,1 - N 7,6 - M. G. 366.

1) Gelseminin (oder $C_{42}H_{47}O_{14}N_3$; $C_{24}H_{26}O_4N_2$). Sm. bei 120°. HCl, (HCl, PtCl₄), HNO₃, H₂SO₄ (B. 26, 1055, 1726; C. 1895 [1] 605; 1896 [1] 111). — III, 884.

2) Methylstrychnin (B. 23, 2732). — III, 937.

3) Isomethylstrychnin + 7H₂O (A. 264, 81). - III, 938.

4) Strychninmethyloxydhydrat + 4H₂O. Salze siehe (J. 1859, 395; 1868, 757; J. pr. [2] 3, 157; B. 23, 2732; A. 264, 62). — III, 937.

5) Methylisostrychninsäure $+2\frac{1}{2}H_2O$. Zers. oberh. 240° (A. 268, 240). - III, 943.

6) Acetylchinin. Sm. 108°. (2HCl,PtCl₄ + 2H₂O), (HCl,AuCl₃ + H₂O) (J. 1876, 813; A. 205, 317). — III, 815.

7) Acetyleonchinin. $(2 \text{HCl}, \text{PtCl}_4 + 3 \text{H}_2\text{O})$, $(2 \text{HCl}, \text{AuCl}_8 + 2 \text{H}_2\text{O})$ (A. 205, 318). — III, 825.

 $\mathbf{C}_{22}\mathbf{H}_{26}\mathbf{O}_{3}\mathbf{N}_{4}$ $C_{67,0} - H_{6,6} - O_{12,2} - N_{14,2} - M_{6,6}$

1) Verbindung (aus Oxybenzol u. 4-Nitroso-1-Dimethylamidobenzol) (B. 12, 1824). — II, 330.

- C 69,1 H 6,8 O 16,7 N 7,3 M. G. 382.C22 H26 O4 N2
 - 1) Chairamin + H₂O. Sm. 233° (wasserfrei). HCl + H₂O, (2HCl, PtCl₄ + 2H₂O), H₂SO₄ + 8H₂O (A. 225, 243). III, 929.

2) Chairamidin + H₂O. Sm. 126 - 128° (wasserfrei) (A. 225, 253). -III, 930.

3) Conchairamin + H₂O. Sm. 108—110° (120° wasserfrei). + C₂H₆O (Sm. 82 bis 86°), HCl + 2 H₂O, (2 HCl, PtCl₄ + 5 H₂O), HJ + H₂O, H₂SO₄ + 9 H₂O, CHNS + H₂O (A. **225**, 246). — III, 930.

4) Conchairamidin $+ \text{ H}_2\text{O}$. Sm. $114 - 115^\circ$ (wasserfrei). $\text{HCl} + 3 \text{ H}_2\text{O}$, $(2 \text{HCl}, \text{PtCl}_4 + 5 \text{H}_2 \text{O}), \text{ H}_2 \text{SO}_4 + 14 \text{H}_2 \text{O} (A. 225, 257).$ — III, 930.

5) Di[γ-Benzoylamidopropyl]essigsäure. Sm. 149,5°. Ag (B. 26, 2143). - II, 1192.

6) Dimethylester d. 2,2'-Diisopropylazobenzol-5,5'-Dicarbonsäure. Sm. 166° (J. r. 16, 167). — IV, 1466.
7) Diäthylester d. δ-Phenylhydrazon-α-Phenylbutan-αβ-Dicarbon-

säure. Sm. 149° (B. 18, 792). — IV, 718. 8) polym. 4-Methylphenylamid d. Propionylameisensäure. Sm. 192° (A. 279, 107).

 $\mathbf{C}_{22}\mathbf{H}_{26}\mathbf{O}_4\mathbf{N}_4$ C 64.4 - H 6.3 - O 15.6 - N 13.6 - M. G. 410.

- 1) αβ-Di 4-Acetylamidophenylacetylamido äthan. Sm. oberh. 290° (Soc. 71, 424). — IV, 587.
- 2) $\gamma \zeta$ -Diphenylhydrazonoktan- $\alpha \vartheta$ -Dicarbonsäure. Sm. 111—1120 (A. **294**, 172). — IV, 722.
- 3) Diäthylester d. βγ-Di[Phenylhydrazon]butan-αδ-Dicarbonsäure. Sm. 160-180° u. Zers. (A. 249, 199). IV, 722. C 63,7 H 6,3 O 23,2 N 6,8 M. G. 414.
 1) Methylhydrastamid. Sm. 180°. HCl + 2H₂O, Pikrat (B. 23, 2897).
- $\mathbf{C}_{22}\mathbf{H}_{26}\mathbf{O}_6\mathbf{N}_2$ - II, 2052.
 - 2) Verbindung (aus β -Amidocrotonsäureäthylester u. Benzylidenmalonsäurediäthylester). Sm. 179—180° (B. 31, 764). C 59,7 — H 5,9 — O 21,7 — N 12,7 — M. G. 442.
- $\mathbf{C}_{22}\mathbf{H}_{26}\mathbf{O}_{6}\mathbf{N}_{4}$ 1) Aethylenphenylhydrazidbernsteinsäure. Sm. 203°. Pb (A. 254, 122).
 - IV, 703. 2) Di[Nitrophenylamid] d. Sebacinsäure. Sm. 116° (J. 1887, 1839). II, 416.
- C'61,4 H'6,0 O'26,0 N'6,5 M.G. 430. $C_{22}H_{26}O_7N_2$
 - 1) Methylhydrastinoximhydrat. Sm. 202-203°. II, 2053. 2) Glykoferulaaldehydphenylhydrazon. Sm. 212° (B. 18, 3483). —
 - IV, 764.
- C 75,6 H 7,7 O 4,6 N 12,0 M. G. 349. $\mathbf{C}_{22}\mathbf{H}_{27}\mathbf{ON}_{3}$ 1) Cyanäthylat d. Cinchonin. Sm. 160—165° u. Zers. (A. 269, 260). — III, 833.
- C 67,2 H 6,9 O 8,1 N 17,8 M. G. 393. $C_{22}H_{27}O_2N_5$ Verbindung (aus Amidobenzol u. 4-Nitroso-1-Dimethylamidobenzol) (B. 12, 1824). — II, 329.
- - 1) 2-Methylphenylamidopipitzahoïnsäure (o-Toluidoperezon). Sm. 135 bis 136° (109—111°) (B. 18, 942; A. 237, 104). — II, 1673.
 - 2) 4-Methylphenylamidopipitzahoïnsäure (p-Toluidoperezon). Sm. 136°
- 2) 4-Methylphenylamidopipitzanoinsaure (p-Toludoperezon). Sm. 136° (133-135°) (A. 237, 104; B. 18, 942). II, 1674.
 C 71,5 H 7,3 O 17,3 N 3,8 M. G. 369.
 1) d-Corydalin. Sm. 134,5°. HCl + 2H₂O, (2HCl, PtCl₄), (2HCl, AuCl₃), HBr, HJ, HNO₃, H₂SO₄ + 4H₂O, CHNS (Berz. J. 7, 220; J. 1859, 570; A. 64, 369; 137, 274; 277, 6; Soc. 61, 244, 605; 67, 17; 71, 658; C. 1896 [2] 792; 1897 [1] 133; 1898 [2] 114; M. 18, 385). III, 875.
 2) i-Corydalin (Isocorydalin). Sm. 135°. HCl + 2H₂O, (2HCl, PtCl₄), (HCl, AuCl₃ + 4H₂O), HBr, HNO₃, H₂SO₄ + 2H₂O, CHNS (C. 1896 [2] 793; 1898 [2] 115). III, 877. $C_{22}H_{27}O_4N$

 - 1898 [2] 115). III, 877.

 3) Butyrylcodeïn. HCl + 3 H₂O, (2 HCl, PtCl₄) (Soc. 28, 15). III, 905. C 68,8 H 7,0 O 20,8 N 3,4 M. G. 385.

 1) Acetyllaudanidin. Sm. 98° (A. 282, 211). III, 912.

 - 2) Hydroberberinäthyloxydhydrat + 4H₂O. Sm. 163-165°. Salze, siehe diese (A. Spl. 2, 207). — III, 801.

 $C_{22}H_{27}O_5N$

3) Aethyloxydhydrat d. Papaverin. Chlorid + 4H₂O, Bromid, Jodid, Nitrat + 3H₂O, Bichromat, Pikrat (B. 18, 1577; M. 6, 695; 7, 516; 9, 752; 10, 688; J. pr. [2] 47, 525; [2] 56, 338). — IV, 441. C 75,0 — H 7,9 — O 9,1 — N 7,9 — M. G. 352. C, H, O, N

 $\mathbf{C}_{22}\mathbf{H}_{28}\mathbf{O}_2\mathbf{N}_2$

1) Aethylchinin. Salze siehe (A. 91, 163; B. 14, 78; 16, 2747; Soc. 26, 1180; J. 1882, 1109; M. 15, 47; J. pr. [2] 3, 146). — III, 814.
2) Aethylconchinin. Fl. (A. 129, 20; 269, 233; Soc. 26, 1183; J. pr. [2]

14, 364). — III, 825.

3) Aspidosamin. Sm. 100°. (2HCl, PtCl₄ + 3H₂O) (A. 211, 261). III, 781.

4) Aspidospermatin. Sm. 162°. (2HCl, PtCl₄ + 4H₂O) (A. 211, 259). III. 781.

5) Chinopropylin. Sm. 164°. H₂SO₄ + 1¹/₂H₂O (Bl. [3] 7, 310). — III, 821. 6) Chinoisopropylin. Sm. 154°. H₂SO₄ + H₂O (Bl. [3] 7, 311). — III, 821.

7) $\alpha\beta$ -Di[3-Oxy-1,2,3,4-Tetrahydro-2-Naphtylamido] athan. Sin. 201°.

Pikrat (A. 288, 128; B. 26, 1838). — II, 855.

8) Diphenylamid d. Sebacinsäure. Sm. 198°; Sd. oberh. 360° (J. 1887, 1839). — II, 415.

9) Di[4-Isopropylbenzylamid] d. Oxalsäure. Sm. 181—1820 (B. 22, 932). — II, 561. C 64,7 — H 6,9 — O 7,8 — N 20,6 — M. G. 408.

 $\mathbf{C}_{22}\mathbf{H}_{28}\mathbf{O}_2\mathbf{N}_6$

1) $\alpha\beta$ -Diamido - $\alpha\beta$ -Di [Isobutyrylphenylhydrazon] äthan. Sm. 217° (B.

27, 1965). — **IV**, 742. C 71,7 — H 7,6 — O 13,0 — **N** 7,6 — **M**. **G**. 368. $\mathbf{C}_{22}\mathbf{H}_{28}\mathbf{O}_{3}\mathbf{N}_{2}$

1) Acetylhydrochinin. Sm. bei 40° . $(2 \text{HCl}, \text{PtCl}_4 + 2 \text{H}_2 \text{O}), \text{H}_2 \text{SO}_4 + 9 \text{H}_2 \text{O})$ (A. 241, 278). - III, 860.

C 66,7 - H 7,1 - O 12,1 - N 14,1 - M. G. 396. $\mathbf{C}_{22}\mathbf{H}_{28}\mathbf{O}_{3}\mathbf{N}_{4}$

1) Verbindung (aus Acetessigsäureäthylester u. d. 4-Dimethylamidophenyl-

C22H28O4N2

1) Verbinding (aus Acciessigsaureathylester u. d. 4-Dimethylamidophenylamid d. α-Phenylhydrazidoessigsäure). Sm. 185° (A. 301, 77). C 68,7 — H 7,3 — O 16,7 — N 7,3 — M. G. 384.

1) Echitamin (Ditain) + 4 H₂O. Sm. 206° u. Zers. HCl, (2 HCl, PtCl₄ + 3 H₂O), HBr + 2 H₂O, HJ, H₂CO₃ + 1¹/₂ H₂O, Oxalat (A. 203, 150; B. 11, 2006; 13, 1648, 1841). — III, 880.

2) Diäthylester d. αβ-Di[4-Methylphenylamido|bernsteinsäure. Sm.

169° (B. **26**, 1767). — **II**, 509. C 66,0 — H 7,0 — O 20,0 — N 7,0 — M. G. 400. $C_{22}H_{28}O_5N_2$

1) Oxyechitamin (A. 203, 162). — III, 881. C 58.9 - H 6.2 - O 28.6 - N 6.2 - M. G. 448. $\mathbf{C}_{22}\mathbf{H}_{28}\mathbf{O}_{8}\mathbf{N}_{2}$

1) Tetraäthylester d.1,3-Phenylendi $[\beta$ -Amidoäthen- $\alpha \alpha$ -Dicarbonsäure]. Sm. 110° (B. 28, 824). — IV, 577.

2) Tetraäthylester d. 1,4-Phenylendi $[\beta$ -Amidoäthen- $\alpha \alpha$ -Dicarbonsäure].

Sm. 164—165° (B. 30, 2026). — IV, 593. C 52,4 — H 5,6 — O 25,4 — N 16,6 — M. G. 504. $\mathbf{C}_{22}\mathbf{H}_{28}\mathbf{O}_8\mathbf{N}_6$

1) αβ-Di[3,5-Dinitro-1-Pseudobutylphenylamido]äthan. Sm. 174-175°

(J.~pr.~[2] 48, 203). — II, 558. $C_{22}H_{28}O_8Cl_2$ 1) Tetraäthylester d. Benzoldi-1,2-[β -Chloräthyl- $\beta\beta$ -Dicarbonsäure] (T. d. o-Xylylendichlordimalonsäure) (B. 17, 452; Soc. 53, 14). — II, 2075. 2) Tetraäthylester d. Benzoldi-1, $3 - [\beta - \text{Chlorathyl} - \beta \beta - \text{Dicarbonsäure}]$.

Fl. (B. 21, 30). — II, 2075. 3) Tetraäthylester d. Benzoldi-1, 4- $[\beta$ -Chloräthyl- $\beta\beta$ -Dicarbonsäure].

Sm. 86—87° (B. **21**, 33). — **II**, 2076. $C_{22}H_{28}O_8Br_2$ 1) Tetraäthylester d. Benzoldi-1,4-[β -Bromäthyl- $\beta\beta$ -Dicarbonsäure].

Sm. 107—108° (B. **21**, 35). — II, 2076. C 55,0 — H 5,8 — O 33,3 — N 5,8 — M. G. 480. $\mathbf{C}_{22}\mathbf{H}_{28}\mathbf{O}_{10}\mathbf{N}_{2}$

C 35,6 — H 5,5 — O 55,3 — N 5,5 — M. G. 450.
Tetraäthylester d. 3, 6-Di [Acetylamido] benzol-1,2,4,5-Tetracarbonsäure. Sm. 149° (A. 237, 27). — H, 2074.
C 81,7 — H 9,0 — O 4,9 — N 4,3 — M. G. 323.
α-Oximido-αβ-Diphenyldekan. Sm. 101° (B. 22, 348). — III, 239.
P-Oktyl-2-Methylphenylamid d. Benzolcarbonsäure. Sm. 117° (B. 18, 14%).

 $\mathbf{C}_{22}\mathbf{H}_{29}\mathbf{ON}$

18, 147). — II, 1167.

3) Di[4-Isobutylphenyl]amid d. Essigsäure. Sm. 75° (B. 20, 1257). — II, 558.

4) Di[6-Isopropyl-3-Methylphenyl]amid d. Essigsäure. Sm. 78° (B. 20, 1261). — II, 560.

C 68,2 - H 7,5 - O 20,7 - N 3,6 - M. G. 387. $C_{22}H_{29}O_5N$ 1) Diathylester d. 1-Oximido-5-Methyl-3-[4-Isopropylphenyl]-1,2,3,4-Tetrahydrobenzol-2,4-Dicarbonsäure. Sm. 188-189° u. Zers. (A. 303, 241, 242).

 $\mathbf{C}_{22}\mathbf{H}_{30}\mathbf{ON}_{2}$ C 78,1 - H 8,9 - O 4,7 - N 8,3 - M. G. 338.

1) Phenylhydrazon d. bim. Dimethylcyklohexenon. Sm. 202-2040 (B. **32**, 424).

 $\mathbf{C}_{22}\mathbf{H}_{30}\mathbf{O}_{2}\mathbf{N}_{2}$

C 74,6 — H 8,5 — O 9,0 — N 7,9 — M. G. 354. 1) **A**spidospermin. Sm. $205-206^{\circ}$. 3+4 HCl, (2 HCl, $PtCl_4)$, H_2SO_4 (B. 11, 2189; 12, 1560; A. 211, 254; Fr. 22, 149). — III, 780.

 $\mathbf{C}_{22}\mathbf{H}_{30}\mathbf{O}_{2}\mathbf{N}_{4}$ C 69,1 - H 7,8 - O 8,4 - N 14,7 - M. G. 382.

1) N-Di[4-Diäthylamidophenyl]glyoxim. Sm. 204° (B. 31, 295). 2) Dinitrosoderivat d. Base $C_{18}H_{32}N_2$. Sm. 83-840 (B. 25, 2045). — II, 445.

 $C_{22}H_{30}O_2S$ 1) Di[Pentamethylphenyl]sulfon. Sm. 98,5° (B. 20, 900). — II, 828.

 $C_{22}H_{30}O_3N_2$ C 71.3 - H 8.1 - O 13.0 - N 7.6 - M. G. 370.

1) Diisoamyläther d. 4,4'-Dioxyazoxybenzol. Sm. 98° (B. 23, 1744). **- IV**, 1343.

2) Acetyltetrahydrochinin. Fl. (M. 16, 634). — III, 816.

3) Aethylconchininoxydhydrat. Fl. Salze siehe (A. 129, 20; 269, 233; Soc. 26, 1183; J. pr. [2] 14, 364). — III, 825. C 63,8 — H 7,2 — O 15,4 — N 13,5 — M. G. 414.

 $\mathbf{C}_{22}\mathbf{H}_{30}\mathbf{O}_{4}\mathbf{N}_{4}$

 $\mathbf{C}_{22}\mathbf{H}_{31}\mathbf{O}_{3}\mathbf{N}_{5}$

1) N-[4-Diäthylamido-3-Oxyphenyl]glyoxim. Sm. 1680 (B. 31, 296).

 $\mathbf{C}_{22}\mathbf{H}_{30}\mathbf{O}_{4}\mathbf{S}$ 1) Diisoamyläther d. s-?-Dioxydiphenylsulfon. Sm. 98° (A. 172, 55). C 59.2 - H 6.7 - O 21.5 - N 12.6 - M. G. 446. $C_{22}H_{30}O_6N_4$

1) Dipropylester d. $\alpha\beta$ -Di[Phenylhydrazido] - $\alpha\beta$ -Dioxyäthan - $\alpha\beta$ -Dicarbonsäure. Sm. 112° v. Zers. (B. 28, 66). — IV, 728.

1) Pentamethylenauraminchlorid (J. pr. [2] 47, 412). — IV, 1174. $\mathbf{C}_{22}\mathbf{H}_{30}\mathbf{N}_{3}\mathbf{C}\mathbf{1}$ $\mathbf{C}_{22}\mathbf{H}_{31}\mathbf{O}_2\mathbf{N}$

C 77,4 — H 9,1 — O 9,4 — N 4,1 — M. G. 341.

1) Atisin (oder $C_{46}H_{74}O_4N_2$). HCl, (2HCl, PtCl₄), (HCl, AuCl₃), HBr, HJ, HNO₃ (Soc. 69, 1519). — III, 782.

2) Imidodi[methylencampher]. Sm. 220—221° (A. 281, 356). — III, 116. 3) Caryophyllenester d. Phenylamidoameisensäure. Sm. 136-1370 (A.

279, 392). — III, 513. C 63,9 - H 7,5 - O 11,6 - N 16,9 - M. G. 413.

1) Verbindung (aus Isovalerylcyanessigsäureäthylester u. Phenylhydrazin). Sm. 65° (C. 1895 [2] 83).

C₂₂H₃₁N₂Br 1) Bromisobutylat d. 1,4-Dibenzylhexahydro-1,4-Diazin. Sm. 195 bis 196° (C. **1898** [1] 381).

1) Jodmethylat d. Dihydrostrychnolin. Sm. 265° (A. 301, 330). $\mathbf{C}_{22}\mathbf{H}_{31}\mathbf{N}_{2}\mathbf{J}$ $C_{22}H_{32}ON_{2}$

C 77,6 — H 9,4 — O 4,7 — N 8,2 — M. G. 340.

1) Caryophyllennitrolbenzylamin. Sm. 125—128° (C. 1899 [1] 108). 2) Humulennitrolbenzylamin. Sm. 136°. HCl (Soc. 67, 781). — III, 538.

C 74,1 - H 9,0 - O 9,0 - N 7,9 - M. G. 356. $\mathbf{C}_{22}\mathbf{H}_{32}\mathbf{O}_{2}\mathbf{N}_{2}$

1) Aethylester d. 1-Phenylhydrazon-3-Hexyl-5-Methyl-1, 2, 3, 4-Tetrahydrobenzol-2-Carbonsäure. Sm. 146—147° (A. 288, 343).

C 63.5 - H 7.7 - O 15.4 - N 13.4 - M. G. 416. $\mathbf{C}_{22}\mathbf{H}_{32}\mathbf{O}_4\mathbf{N}_4$

1) Jaborin. $+ PtCl_4$, $+ 2 PtCl_4$, $(2 HCl, PtCl_4)$ (A. 204, 79; Bl. 48, 224, 825). — III, *925*.

C 73.5 - H 9.2 - O 13.4 - N 3.9 - M. G. 359. $\mathbf{C}_{22}\mathbf{H}_{33}\mathbf{O}_{3}\mathbf{N}$

1) Atisinhydrat. (2HCl, PtCl₄), (HCl, AuCl₃) (Soc. 69, 1525). — III, 783.

C 67,5 — H 8,4 — O 20,5 — N 3,6 — M. G. 391. $C_{22}H_{33}O_5N$

1) Staphisagrin. HCl, (HCl, AuCl₃), HNO₃, H₂SO₄, Acetat, + HgJ₂ (A. 9, 104; J. 1864, 450; 1877, 897). — III, 880.

 $\mathbf{C}_{22}\mathbf{H}_{34}\mathbf{N}_{2}\mathbf{Cl}_{2}$ 1) Dichlormethylat d. $\mathbf{4},\mathbf{4}'$ -Di[Diäthylamido]biphenyl. $2+\mathrm{PtCl}_{4}$ (A. 115, 368). — IV, 963.

1) Dijodmethylat d. 4,4'-Di[Diäthylamido]biphenyl (A. 115, 367). - $\mathbf{C}_{22}\mathbf{H}_{34}\mathbf{N}_{2}\mathbf{J}_{2}$ IV, 963.

C 70,0 - H 9,3 - O 17,3 - N 3,7 - M. G. 377. $C_{22}H_{35}O_4N$

1) 2,6-Dimethyl-4-Tridekylpyridin-3,5-Dicarbonsäure. HCl (B. 22, 1758). — IV, 171.

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C 64,5 — H 8,6 — O 23,5 — N 3,4 — M. G. 409. Delphinin. 2 HCl, (HCl, AuCl₃), (HJ, HgJ₂), 2 HNO₃, H₂SO₄ (Berx. J. 1, 97; 4, 191; J. 1864, 450; 1877, 895; 1880, 955; 1881, 977; A. 9, CooHos OoN 1) Delphinin. 101). — III, 879. C 73,3 - H 10,0 - O 8,9 - N 7,8 - M. G. 360. $\mathbf{C}_{9}, \mathbf{H}_{96}\mathbf{O}_{9}\mathbf{N}_{9}$ 1) s-1-Difenchylamid d. Oxalsäure. Sm. 188° (A. 269, 365). — IV, 58. 1) 2,2'-Di[Jodmethylat] d. 2,4,2',4'-Tetra[Dimethylamido]biphenyl. Sm. 190° u. Zers. (B. 30, 2943). — IV, 1275. C 79,8 — H 11,2 — O 4,8 — N 4,2 — M. G. 331. $C_{22}H_{36}N_4J_2$ C₂,H₃₇ON 1) Phenylamid d. Palmitinsäure. Sm. 90,5°; Sd. 282—284°₁₇ (B. **24**, 943; J. pr. [2] 52, 60; Am. 18, 701). — II, 370.
2) Pentadekylamid d. Benzolcarbonsäure. Sm. 78° (B. 30, 901). 2) Pentadekylamid d. Benzolcarbonsaure. Sm. 78° (B. 30, 901). C .76,1 — H 10,7 — O 9,2 — N 4,0 — M. G. 347.

1) P-Nitro-1-Cetylbenzol. Sm. 35—36° (B. 19, 2984). — II, 107.

2) α-Phenylamidopalmitinsäure. Sm. 141—142° (B. 24, 942). — II, 436.

1) Cetylbenzolsulfonsäure. Na (B. 19, 2983). — II, 161.

C 67,0 — H 9,6 — O 16,2 — N 7,1 — M. G. 394. C, H, O, N C22 H38 O3 S $\mathbf{C}_{99}\mathbf{H}_{38}\mathbf{O}_{4}\mathbf{N}_{2}$ 1) Gelsemin (oder $C_{24}H_{28}O_4N_2$; $C_{49}H_{69}O_{14}N_5$; $C_{54}H_{69}O_{12}N_4$). Sm. 45%. HCl, (2HCl, PtCl₄), (HCl, 2AuCl₃), HBr (J. 1870, 885; 1882, 1173; 1883, 1354; 1887, 2218; E. 9, 1185; 16, 797; 26, 1715; Fr. 22, 153; 26, 743). III, *884*. C 36,4 - H 5,2 - O 19,8 - N 38,6 - M. G. 726. $\mathbf{C}_{22}\mathbf{H}_{38}\mathbf{O}_{9}\mathbf{N}_{20}$ Divicin, siehe C₃₁H₅₀O₁₈N₃₀. — III, 951.
 Stärkeschwefelsäure (A. 55, 13).
 C 75,9 — H 11,5 — O 4,6 — N 8,0 — M. G. 348. $C_{22}H_{38}O_{22}S$ $\mathbf{C}_{22}\mathbf{H}_{40}\mathbf{ON}_{2}$ 1) 6-Oxy-4-Methyl-2-Heptadekyl-1, 3-Diazin. Sm. 830 (Pinner, Imidoäther 232). — IV, 832. C 72,5 — H 11,0 — O 8,8 — N 7,7 — M. G. 364. $\mathbf{C}_{9},\mathbf{H}_{40}\mathbf{O}_{9}\mathbf{N}_{9}$ 1) Menthylamid d. Oxalsäure. Sm. 82-83° (A. 278, 314). $\mathbf{C}_{22}\mathbf{H}_{40}\mathbf{O}_{2}\mathbf{Cl}_{2}$ 1) Dichlorbrassidinsäure. Fl. (B. 25, 2668). $C_{22}^{*1}H_{40}^{*0}O_{2}^{*}Cl_{4}^{*}$ 1) Tetrachlorbehensäure. Sm. 41° (B. 25, 2668). $C_{22}^2H_{40}^{70}O_2^3Br_2$ 1) Dibromerucasäure. Sm. 46-470 (A. 143, 44). — I, 528. $C_{22}^{22} + \frac{40}{40} O_2 B r_4$ 1) Tetrabrombehensäure. Sm. 77—78° (A. 143, 45). — I, 489. $C_{22} + \frac{40}{40} O_2 J_2$ 1) Dijodbrassidinsäure (Behenolsäuredijodid). Sm. 47° (B. 24, 4117). -I, 529. $\begin{array}{c} \textbf{C}_{22}\textbf{H}_{40}\textbf{O}_{4}\textbf{Br}_{2} \ 1) \ \textbf{Bromderivat} \ \textbf{d. Diundekylensäure} \ (B.\ \textbf{19},\ 2225). \ -\textbf{I},\ 523. \\ \textbf{C}_{22}\textbf{H}_{41}\textbf{O}_{2}\textbf{Cl} \ 1) \ \textbf{Chlorerucasäure}. \ \textbf{Sm.}\ 37,5-38^{\circ} \ (B.\ \textbf{24},\ 4126). \ -\textbf{I},\ 528. \\ 2) \ \textbf{Chlorbrassidinsäure}. \ \textbf{Sm.}\ 42^{\circ} \ (B.\ \textbf{24},\ 4126). \ -\textbf{I},\ 529. \\ \textbf{C}_{22}\textbf{H}_{41}\textbf{O}_{2}\textbf{Br}\ 1) \ \textbf{Brombrassidinsäure}. \ \textbf{Sm.}\ 34^{\circ} \ (B.\ \textbf{25},\ 962,\ 4127). \ -\textbf{I},\ 529. \\ 2) \ \textbf{Bromerucasäure}. \ \textbf{Sm.}\ 33-34^{\circ} \ (A.\ \textbf{143},\ 50). \ -\textbf{I},\ 528. \\ 3) \ \textbf{isom.} \ \textbf{Bromerucasäure}. \ \textbf{Sm.}\ 41,5^{\circ} \ (B.\ \textbf{24},\ 4123). \ -\textbf{I},\ 528. \\ \textbf{C.H.} \ \textbf{O.Br.} \ \textbf{Maribreambehanging}. \ \textbf{Sm.}\ 21,23^{\circ} \ (A.\ \textbf{143},\ 50). \ -\textbf{I},\ 480. \\ \textbf{Maribreambehanging}. \ \textbf{Sm.}\ 21,23^{\circ} \ (A.\ \textbf{143},\ 50). \ -\textbf{I},\ 480. \\ \textbf{Maribreambehanging}. \ \textbf{Sm.}\ 41,5^{\circ} \ (B.\ \textbf{24},\ 4123). \ -\textbf{I},\ 480. \\ \textbf{Maribreambehanging}. \ \textbf{Sm.}\ 41,5^{\circ} \ (B.\ \textbf{24},\ 4123). \ -\textbf{I},\ 480. \\ \textbf{Maribreambehanging}. \ \textbf{Maribreambehangin$ $\mathbf{C}_{22}\mathbf{H}_{41}\mathbf{O}_{2}\mathbf{Br}_{3}\mathbf{1})$ Tribrombehensäure. Sm. $31-32^{\circ}$ (A. 143, 50). — I, 489. $\mathbf{C}_{22}\mathbf{H}_{41}\mathbf{O}_{4}\mathbf{N}$ C 68.9 — H 10.7 — O 16.7 — N 3.7 — M. G. 383. 1) α-Nonanoylamido-α-Ketododekan-μ-Carbonsäure (Pelargylamidobrassylsäure). Sm. 116° (B. 29, 810). 2) μ -Oximido- ν -Ketobehensäure. Sm. 83—88° (B. 28, 278; 29, 810). C₂₂H₄₂O₂Cl₂ 1) Dichlorid d. Brassidinsäure. Sm. 65° (B. 24, 4123). — I, 477. 2) Dichlorid d. Erucasäure. Sm. 46° (B. 24, 4123). — I, 476. $C_{22}H_{42}O_2Br_2$ 1) Dibrombehensäure (aus Brassidinsäure). Sm. 54° (A. 143, 57; J. pr. [2] **49**, 61). **— I**, 489. 2) Dibrombehensäure (aus Erucasäure). Sm. 42-43°. Ba, Pb (A. 135, 227; **143**, 40). — **I**, 489. 3) Dibrombehensäure (aus Isoerucasäure). Sm. 44-46° (J. pr. [2] 49, 61; C = 66.3 - H = 10.5 - O = 16.1 - N = 7.0 - M. G. 398. $\mathbf{C}_{22}\mathbf{H}_{42}\mathbf{O}_4\mathbf{N}_2$ 1) μν-Dioximidobehensäure. Sm. 144—145° (B. 28, 278). C 78,3 — H 12,8 — O 4,7 — N 4,2 — M. G. 337. $\mathbf{C}_{22}\mathbf{H}_{48}\mathbf{ON}$ 1) Amid d. Brassidinsäure. Sm. 90° (B. 19, 3326). — I, 1250. 2) Amid d. Brassidinsaure. Sm. 90° (B. 19, 3326). — 1, 1250. C₂₂H₄₃O₂N C 74,8 — H 12,2 — O 9,1 — N 3,9 — M. G. 353. 1) Oxim d. Oxybehensäure. Sm. 49—51° (J. pr. [2] 48, 339). C₂₂H₄₃O₂Br 1) α-Brombehensäure. Sm. 70° (G. 27 [2] 298). 2) Aethylester d. α-Bromarachinsäure. Sm. 37—39° (M. 17, 531). C₂₂H₄₃O₂J 1) Jodbehensäure (J. pr. [2] 39, 337). — I, 492.

- C 71,5 H 11,6 O 13,0 N 3,8 M. G. 369. $C_{22}H_{48}O_{8}N$
 - 1) μ-Pelargonylamidododekancarbonsäure. Sm. 84-85° (B. 26, 841,
- $\mathbf{C}_{22}\mathbf{H}_{44}\mathbf{O}_{10}\mathbf{N}_{2}$
- 2) Oxim d. Oxybrassidinsäure. Sm. 44—45° (B. 26, 841, 1867). C 53,2 H 8,9 O 32,3 N 5,6 M. G. 496. 1) Tetracetylpseudomorphin + 8H₂O. Sm. 276°. 2HCl + 4H₂O, (2HCl, PtCl₄ + 6H₂O) (A. 222, 245; 294, 207). — III, 911. C 77,9 — H 13,3 — O 4,7 — N 4,1 — M. G. 339. 1) Stearinimidoisobutyläther. HCl (Sm. 77—78°) (B. 26, 2841). 2) Oxim d. Hexylpentadekylketon. Sm. 35—36° (Søc. 63, 463).
- $\mathbf{C}_{22}\mathbf{H}_{45}\mathbf{ON}$
- 3) Amid d. Behensäure. Sm. 111° (*J. pr.* [2] 48, 330). 1) Cetyltriäthylammoniumjodid. Sm. 180—181° u. Zers. (*B.* 22, 815). $\mathbf{C}_{22}\mathbf{H}_{48}\mathbf{NJ}$ - I, 1139.
- $\mathbf{C}_{22}\mathbf{H}_{50}\mathbf{N}_{4}\mathbf{J}_{4}$ 1) Pentaäthylenhexaäthyltetrammoniumjodid (J. 1861, 522). — I, 1166. $\mathbf{C}_{22}\mathbf{H}_{54}\mathbf{N}_{4}\mathbf{Cl}_{4}$ 1) Triäthylenoktaäthyltetrammoniumehlorid. +2PtCl₄ (J. 1861, 520).
- **I**, 1166. $\mathbf{C}_{22}\mathbf{H}_{54}\mathbf{N}_{4}\mathbf{Br}_{4}$ 1) Triäthylenoktaäthyltetrammoniumbromid (J. 1861, 520). — I, 1166.
- $\mathbf{C}_{22}\mathbf{H}_{54}\mathbf{N}_{4}\mathbf{J}_{4}$ 1) Triäthylenoktaäthyltetrammoniumjodid (J. 1861, 521). I, 1166. $\mathbf{C}_{22}\mathbf{H}_{58}\mathbf{O_4N_4}$ C 59.7 - H 12.1 - O 14.5 - N 12.7 - M. G. 442.
 - 1) Triäthylenoktaäthyltetrammoniumhydrat. Salze siehe (J. 1861, 520). - I, 1166.

C₂₂-Gruppe mit vier Elementen.

- $\mathbf{C}_{22}\mathbf{H}_{10}\mathbf{O}_{8}\mathbf{N}_{4}\mathbf{Cl}_{2}$ 1) $\beta\beta$ -Dichlor- $\alpha\alpha$ -Di[?-Dinitronaphtyl] äthen. Sm. 213—214° (B. 11, 301).
 - **II**, 299. 2) isom. $\beta\beta$ -Dichlor- $\alpha\alpha$ -Di[?-Dinitronaphtyl] äthen. Sm. 292—2930
- $\begin{array}{c} (B.\ 11,\ 301).\ -\ II,\ 299.\\ \mathbf{C}_{22}\mathbf{H}_{10}\mathbf{O}_{9}\mathbf{N}_{4}\mathbf{S} & 1) \ \mathbf{Verbindung} \ (\text{aus}\ 2,4,2',4'-\text{Tetraamidobiphenyl-5-Sulfonsäure}) \ (B.\ 23,\ 3463).\ -\ IV,\ 1275.\\ \mathbf{C}_{22}\mathbf{H}_{11}\mathbf{O}_{8}\mathbf{N}_{4}\mathbf{Cl}_{3}\ 1) \ \beta\beta\beta\beta\text{-Trichlor-}\alpha\alpha\text{-Di}[\text{P-Dinitronaphtyl}] \ \text{\"{athan.}} \ \ \mathbf{Sm.}\ \ 258^{\circ}\ (B.\ 11,\ 300). \end{array}$
- · II. 298.
- $C_{22}H_{12}O_2N_2S_2$ 1) 2,2-Dithio- $\beta\beta$ -Binaphtoxazol (B. 21, 419). II, 885.
- C₂₂H₁₂O₃N₂Br₆1) Diäthyläther d. ?-Hexabrom-8,8'-Dioxy-66'-Bichinolyl-55'-Oxyd. Sm. bei 130° u. Zers. (B. 22 [2] 297). IV, 1078.
- C₂₂H₁₂O₄N₂Cl, 1) 3,7-Dichlor-2-Phenylamido-8-Phenylimido-6-Oxy-1,4,5-Triketo-
- sâure. Sm. 179—180° (B. 30, 785). C₂₂H₁₈ON₂Br 1) Bromrosindon (A. 262, 244). IV, 1056.
- C₂₂H₁₃O₈N₂Cl₃ 1) Triacetat d. Verb. C₁₈H₇O₃N₂Cl₃. Sm. noch nicht bei 250° (A. 286, 54). — IV, 1059.
- $\textbf{C}_{22}\textbf{H}_{14}\textbf{ON}_{2}\textbf{Cl}_{2} \hspace{0.1cm} \textbf{1)} \hspace{0.1cm} \textbf{2-[4-Chlorphenyl]} \\ \textbf{amido-4-[4-Chlorphenyl]} \\ \textbf{imido-1-Keto-1,4-Di-1-Keto-1,4-Di-1-Keto-1,4-Di-1-Keto-1,4-Di-1-Keto-1,4-Di-1-Keto-1-Ket$ hydronaphtalin. Sm. 217—218° (B. 21, 681). — III, 375.
- $\textbf{C}_{22}\textbf{H}_{14}\textbf{ON}_{2}\textbf{Br}_{2} \hspace{0.1cm} 1) \hspace{0.1cm} \textbf{2}-[\textbf{4}-\textbf{Bromphenyl}] \\ \textbf{a} \\ \textbf{mido} \textbf{4}-[\textbf{4}-\textbf{Bromphenyl}] \\ \textbf{i} \\ \textbf{mido} \textbf{l}-\textbf{Keto-l}, \textbf{4}-\textbf{Di-local} \\ \textbf{mido} \textbf{l}-\textbf{Keto-l}, \textbf{4}-\textbf{Di-local} \\ \textbf{mido} \textbf{l}-\textbf{Keto-l}, \textbf{4}-\textbf{Di-local} \\ \textbf{mido} \textbf{l}-\textbf{Keto-l}, \textbf{4}-\textbf{Di-local} \\ \textbf{mido} \textbf{l}-\textbf{Keto-l}, \textbf{4}-\textbf{Di-local} \\ \textbf{mido} \textbf{l}-\textbf{Keto-l}, \textbf{4}-\textbf{Di-local} \\ \textbf{mido} \textbf{l}-\textbf{Keto-l}, \textbf{4}-\textbf{Di-local} \\ \textbf{mido} \textbf{l}-\textbf{Keto-l}, \textbf{4}-\textbf{Di-local} \\ \textbf{mido} \textbf{l}-\textbf{Keto-l}, \textbf{4}-\textbf{Di-local} \\ \textbf{mido} \textbf{l}-\textbf{Keto-l}, \textbf{4}-\textbf{Di-local} \\ \textbf{mido} \textbf{l}-\textbf{Keto-l}, \textbf{4}-\textbf{Di-local} \\ \textbf{mido} \textbf{l}-\textbf{Keto-l}, \textbf{4}-\textbf{Di-local} \\ \textbf{mido} \textbf{l}-\textbf{Keto-l}, \textbf{4}-\textbf{Di-local} \\ \textbf{mido} \textbf{l}-\textbf{Keto-l}, \textbf{4}-\textbf{Di-local} \\ \textbf{mido} \textbf{l}-\textbf{Keto-l}, \textbf{4}-\textbf{Di-local} \\ \textbf{mido} \textbf{l}-\textbf{Keto-l}, \textbf{4}-\textbf{Di-local} \\ \textbf{mido} \textbf{l}-\textbf{Keto-l}, \textbf{4}-\textbf{Di-local} \\ \textbf{mido} \textbf{l}-\textbf{Keto-l}, \textbf{4}-\textbf{Di-local} \\ \textbf{mido} \textbf{l}-\textbf{Mido} \textbf{l}-\textbf{Mido} \\ \textbf{mido} \textbf{l}-\textbf{Mido} \textbf{l}-\textbf{mido} \textbf{l}-\textbf{mido} \\ \textbf{mido} \textbf{l}-\textbf{mido} \textbf{mido} \textbf{l}-\textbf{mido} \textbf{l}-\textbf{mido} \textbf{l}-\textbf{mido} \textbf{l}-\textbf{mido} \\ \textbf{mido} \textbf{l}-\textbf{mido} hydronaphtalin. Sm. 235° (B. 21, 681). — III, 375.
- C₂₂H₁₄ON₄Br₂ 1) **2,4-Di[4-Bromphenylazo]-1-Oxynaphtalin.** Sm. 233—235° (B. **28**, 1896). **— IV**, *1433*.
- $C_{22}H_{14}O_{2}NBr$ 1) 4-Bromphenylimid d. $\alpha\beta$ -Diphenyläthen- $\alpha\beta$ -Dicarbonsäure. Sm. 133° (B. **26**, 2478). — II, 1897.
- $\mathbf{C}_{22}\mathbf{H}_{14}\mathbf{O}_{2}\mathbf{N}_{3}\mathbf{Cl}$ 1) 12-Chlorphenylat d. 9-Nitro- $\alpha\beta$ -Naphtophenazin. + FeCl₃, 2+ PtCl₄ (B. 31, 3098). 2) 7-Chlorphenylat d. 10-Nitro- $\alpha\beta$ -Naphtophenazin $+2H_2O.+FeCl_3$,
- 2 + PtCl₄, + AuCl₃ (B. 30, 2638). IV, 1052.
 5,7-Lakton d. 7-Phenyloxydhydrat-αβ-Naphtophenazin-5-Sulfonsäure. Sm. 302-304° (B. 29, 2073; 31, 2429). IV, 1053. C22H14O2N2S
 - 5,12-Lakton d. 12-Phenyloxydhydrat-αβ-Naphtophenazin-5-Sulfonsäure. Sm. oberh. 360° (B. 29, 2074; 31, 2429). IV, 1053.
- $\mathbf{C}_{22}\mathbf{H}_{14}\mathbf{N}_{2}\mathbf{ClBr}$ 1) 7-Bromphenylat d. 9-Chlor- $\alpha\beta$ -Naphtophenazin (B. 31, 303). IV, 1052.
- 1) Acetylthio-β-Dinaphtylamin. Sm. 211° (B. 21, 2810). II, 869. $\mathbf{C}_{22}\mathbf{H}_{15}\mathbf{ONS}$

1) ?-Chlor-?-Phenylamido-4-Phenylimido-1-Keto-1,4-Dihydro-C₂₂H₁₅ON₂Cl naphtalin. Sm. 157°. (2HCl, PtCl₄) (B. **21**, 1046). — III, 377. 2) 7-Phenyloxydhydrat d. 5-Chlor-αβ-Naphtophenazin. Chlorid (B.

30, 1828). — IV, 1052.

3) 7-Phenyloxydhydrat d. 9-Chlor-αβ-Naphtophenazin. Chlorid, Bromid, Nitrat (B. 31, 303). — IV, 1052.

C₂₂H₁₅ON₄Br 1) 8-Brom-?-Di[Phenylazo]-1-Oxynaphtalin. Sm. 2220 u. Zers. (Soc. 63, 1058). — IV, 1433.

C₂₂H₁₅O₂N₂Cl 1) Acetat d. 5-Chlor-6-Oxy-2,3-Diphenyl-1,4-Benzdiazin. Sm. 185 bis 186° (C. 1895 [1] 855).

 $C_{22}H_{15}O_2N_4Cl$ 1) 7-[4-Nitrochlorphenylat] d. 5-Amido- $\alpha\beta$ -Naphtophenazin. Zers.

bei 260° (B. 31, 3082). 2) 12 - Chlorphenylat d. parachinoïd. 9-Nitro-5 - Amido-αβ-Naphto-phenazin + H₂O (B. 31, 3090).
 3) 12 - Chlorphenylat d. orthochinoïd. 9-Nitro-5-Amido-αβ-Naphto-phenylat d. orthochinoïd.

phenazin (B. 31, 3090).
4) 7-Chlorphenylat d. 10-Nitro-5-Amido-αβ-Naphtophenazin (Nitrophenylrosindulinchlorid). 2 + PtCl₄ (B. 30, 2637; 31, 3079, 3090). -IV, 1204.

 $C_{22}H_{15}O_2N_4Br_31$) Tribromderivat d. Verb. $C_{22}H_{18}O_2N_4$. Sm. 224—225° (B. 26, 1184). **- IV**, 1225.

1) 4,4'-Tetrazobiphenylnaphtionsäure (B. 19, 1699). — IV, 1543. $\mathbf{C}_{22}\mathbf{H}_{15}\mathbf{O}_{3}\mathbf{N}_{5}\mathbf{S}$

1) 7-[4-Amidochlorphenylat] d. 10-Nitro-5-Amido-αβ-Naphtophena- $\mathbf{C}_{22}\mathbf{H}_{16}\mathbf{O}_{2}\mathbf{N}_{5}\mathbf{Cl}$ $zin + 3 H_2O$ (B. 31, 3084).

1) 4-[2-Oxy-1-Naphtyl]azobiphenylsulfonsäure. Na, Ba (Soc. 49, 383). $C_{22}H_{16}O_4N_2S$ - IV, 1439.

2) 4-[4-Oxy-1-Naphtyl]azobiphenylsulfonsäure. Na, Ba (Soc. 49, 383). IV, 1439.

3) Verbindung (aus 1,4-Naphtochinon-2-Sulfonsäure). Zers. oberh. 2200 (B. **25**, 427). — III, 388.

1) 4-Phenylazo-1-[2-Oxy-1-Naphtyl]azobenzol-4*-Sulfonsäure. Na $\mathbf{C}_{99}\mathbf{H}_{16}\mathbf{O}_{4}\mathbf{N}_{4}\mathbf{S}$ (B. 13, 1838). — IV, 1434.

1) 4-Phenylazo-1-[2-Oxy-1-Naphtylazo] benzol-?-Disulfonsäure. Na, $C_{22}H_{16}O_7N_4S_2$ (B. 13, 1839; Soc. 51, 194).— IV, 1434. 2) 4-Phenylazo-l-[3-Oxy-l-Naphtylazo]benzol-l⁴,4⁴-Disulfonsäure?

(Soc. 51, 195; B. 15, 1352). — IV, 1434.

 $\mathbf{C}_{22}\mathbf{H}_{16}\mathbf{O}_{8}\mathbf{N}_{4}\mathbf{S}_{2}$ 1) Naphtalin-2,6-Disulfonsäuredisazophenol (B. 27, 3358). — IV, 1418. $C_{22}H_{17}ONBr_{2}$ 1) αβ-Dibenzoylstyrolimidbromid. Sm. 199° u. Zers. (Soc. 57, 693). —

III, 309. Aethyläther d. 5-Chlor-6-Oxy-2,3-Diphenyl-1,4-Benzdiazin. Sm. 146—147° (C. 1895 [1] 854). C₂₂H₁₇ON₂Cl

1) 2-Phenylamido-1-Phenylazonaphtalin-14-Sulfonsäure (B. 20, 572). $C_{22}H_{17}O_3N_3S$ **- IV**, 1399.

1) 4-Dimethylamidophenylamid d. 9,10-Anthrachinon-2-Sulfon- $\mathbf{C}_{22}\mathbf{H}_{17}\mathbf{O_4NS}$ säure. Sm. 171° (B. 13, 693). — III, 415.

C₂₂H₁₇O₅N₂Cl 1) Aethyläther d. Phenyl-1-Oxynaphtotartrazoniumchlorid. $PtCl_4 + 2H_2O$ (B. 27, 2356). — IV, 1021.

1) 4-Acetylamido-1-Oxy-2,2'-Azonaphtalin-8'-Sulfonsäure. K (B. C22H17O5N3S

29, 2950). — IV, 1438. 1) ?-Brom-2-Keto-3,3'-Di[?-Methylphenyl]-2,3-Dihydroindol (Brom- $C_{22}H_{18}ONBr$ toluisatin). Sm. 235° (B. 18, 2641). — II, 1618.

 $\mathbf{C}_{22}\mathbf{H}_{18}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{Cl}_{2}\mathbf{1}$ Verbindung (aus 2-Benzylamido-1-Phenylamidomethylbenzol). Sm. 1130

(B. 27, 3246). — IV, 629. 1) αα-Phtalyldi[β-Phenylthioharnstoff]. Sm. 210—211° (Soc. 67, 574). $C_{22}H_{18}O_2N_4S_2$ $C_{22}H_{18}O_3N_3Cl$ 1) Monophenylamid d. Chlorphenylamidophenylimidobernsteinsäure? Sm. 170—172° (A. 279, 141).

 $\mathbf{C}_{22}\mathbf{H}_{19}\mathbf{ON}_{2}\mathbf{Br}$ 1) Brommethyllapazin (Soc. 63, 1382). — IV, 622.

 $C_{22}H_{19}O_{2}NS$ 1) ?-Dimethylamidophenylamid d. Anthracen-2-Sulfonsäure. Sm. 165° (B. **28**, 2260).

C₂₂H₁₉O₄N₂Br 1) Bromopianylhydrazobenzol. Sm. 211° (B. 25, 2000). — IV, 1497. 2) 6-Brom-3,4-Dimethyl-1-Diphenylhydrazonmethylbenzol-2-Carbonsäure (Bromopiansäurediphenylhydrazon). Sm. 230°. Ca (B. 25, 2000). — IV, 716.

1) Furfuramidphenylsenföl (B. 10, 1191). - III, 724. $C_{22}H_{19}O_4N_8S$

- 1) ?-Brom- γ -[4-Methylphenyl]amido- α -Keto- $\alpha\gamma$ -Diphenylpropan. Sm. 100,5° (B. 28, 964). III, 228. C₂₂H₂₀ONBr
- 1) α-Phenacetylimido-α-Phenylbenzylamidomerkaptomethan C22 H20 ON, S Phenacetylpseudophenylbenzylthioharnstoff). Sm. 127,5—128,5° **69**, 868).
- C2, H2, O2, N2, Br, 1) Phenylamidoformiat d. 4,6-Dibrom-2-Oxy-5-Phenylamidomethyl-1,3-Dimethylbenzol. Sm. 1830 (A. 302, 82).
- C₂₀H₂₀O₄N₂Cl, 1) Diäthyläther d. 3,6-Dichlor-2,5-Di[2-Oxyphenyl]-1,4-Benzo-
- chinon. Sm. bei 200° (J. pr. [2] 24, 432). III, 343.

 1) Di[γ-1,2-Phtalylamidopropyl]sulfid. Sm. 118° (B. 27, 2174). C, H, O, N, S II, 1803.
 Di[α-1,2-Phtalylamidopropyl]-β-Disulfid. Sm. 159—161° (B. 24,
- $\mathbf{C}_{22}\mathbf{H}_{20}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{S}_{2}$ 2629). — II, 1803.
 - 2) $Di[\alpha-1,2-Phtalylamidopropyl]-\gamma-Disulfid. Sm. 90-91° (B. 27,$ 2172). — II, *1803*.
- C₂₂H₂₀O₄N₂Hg 1) Diacetat d. Quecksilberdichinolyldioxydhydrat + 2 H₂O₂ Sm. 148° (G. **25** [1] 402).
- 1) $Di[\gamma-1,2-Phtalylamidopropyl]$ sulfoxyd. Sm. 158-159° (B. 27. $\mathbf{C}_{22}\mathbf{H}_{20}\mathbf{O}_5\mathbf{N}_2\mathbf{S}$ 2175). — II, 1803.
- 1) $Di[\gamma-1,2-Phtalylamidopropyl]$ sulfon. Sm. 173° (B. 27, 2175). C, H, O, N, S II, 1803.
- 1) 2.5-Diphenylsulfon-1, 4-Di [Acetylamido] benzol (B. 29, 2028). $\mathbf{C}_{22}\mathbf{H}_{20}\mathbf{O}_{6}\mathbf{N}_{2}\mathbf{S}_{2}$
- Di[Phenylhydrazid] d. 1-Naphtylphosphorsäure. Sm. 168-169° (B. 27, 2563). IV, 662.
 Di[Phenylhydrazid] d. 2-Naphtylphosphorsäure. Sm. 198° (B. C, H, O, N, P
 - 27, 2564). IV, 662.
- 1) α -[2-Methylphenyl]- β -[β -Oxy- $\alpha\beta$ -Diphenyläthyl]thioharnstoff. Sm. $\mathbf{C}_{22}\mathbf{H}_{22}\mathbf{ON}_{2}\mathbf{S}$ 156—157° (B. **28**, 1903).
- 1) Verbindung (aus Di Diacetylmethylldisulfid u. Benzidin). Zers, oberh. \mathbf{C}_{2} , \mathbf{H}_{2} , \mathbf{O}_{2} , \mathbf{N}_{2} , \mathbf{S}_{2}
- 150° (Bl. [3] 19, 694).

 1) Aethylester d. Triphenylchlorphosphidoessigsäure. Sm. 90°. 2 + $C_{99}H_{99}O_{9}ClP$ PtCl₄ (B. **27**, 273). — **IV**, 1661.
- Aethylester d. Triphenylbromphosphidoessigsäure. Sm. 147° (B. 27, 274). IV, 1661.
 Aethylester d. Triphenyljodphosphidoessigsäure. Sm. 165—166° $\mathbf{C}_{99}\mathbf{H}_{99}\mathbf{O}_{9}\mathbf{BrP}$
- $\mathbf{C}_{22}\mathbf{H}_{22}\mathbf{O}_{2}\mathbf{JP}$ $(B. \ 27, \ 274). - IV, \ 1661.$
- 1) Chloräthylat d. Berberin + 4H₂O. III, 800. C,,H,,O,NC1
- 1) Jodäthylat d. Berberin (A. 115, 139; C. 1895 [2] 138). III, 800. 1) Bromisonarkotin. Sm. 175° (B. 29, 2041). III, 922. $\mathbf{C}_{22}\mathbf{H}_{22}\mathbf{O_4NJ}$
- $\mathbf{C}_{22}\mathbf{H}_{22}\mathbf{O}_7\mathbf{NBr}$ 1) 3, 3'-Diketo-1, 5, 1', 5'-Tetramethyl-2, 2'-Diphenyl-2, 3, 2', 3'-Tetra- $C_{22}H_{22}O_8N_4S_2$ hydro-4,4'-Bipyrazol-?-Disulfonsäure (Bisantipyridindisulfonsäure)
- (B. 25, 1951). IV, 1263. C₂₂H₂₃ON₂J₃ 1) Verbindung (aus d. Jodmethylat d. 2-Jodchinolin). Sm. 80—82° (A. 282, 377). IV, 262. C₂₂H₂₃O₂N₂Cl 1) Verbindung (aus 8-Oxychinolin). 2 + PtCl₄ + 2H₂O (M. 10, 671). —
- IV, 274.
- C₂₂H₂₃O₂N₂Br 1) Verbindung (aus 8-Oxychinolinbromäthylat) + 3H₂O (J. pr. [2] 54, 7). - IV, 273.
- 1) Verbindung (aus 8-Oxychinolin). Sm. 2020 (M. 10, 671). IV, 274. $\mathbf{C}_{22}\mathbf{H}_{28}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{J}$ 1) Di[α-Acetyl-β-Phenylimidopropyl]disulfid. Sm. 168°. 2HCl (Bl. [3] C, H, O, N, S,
- 19, 693). Chlorathylat d. Cusparin. Sm. 156°. 2 + PtCl₄ (B. 29 [2] 778;
 C. 1895 [2] 826). — III, 778.
 Jodmethylat d. Methylcusparin. Sm. 185° (B. 29 [2] 36; C. 1895 C, H, O, NCl
- $\mathbf{C}_{22}\mathbf{H}_{24}\mathbf{O}_{3}\mathbf{N}\mathbf{J}$ 2] 826). — III, 778.
 - 2) Jodäthylat d. Cusparin. Sm. 2010 (B. 29 [2] 36; C. 1895 [2] 826). - III 778.
- 1) Jodmethylat d. Phosphorigsäuretri-3-Methylphenylester (B. 31, $\mathbf{C}_{22}\mathbf{H}_{24}\mathbf{O}_{8}\mathbf{JP}$
- 1) 1,4-Di[Aethylphenylsulfonamido] benzol. Sm. 179° (A. 265, 188). $\mathbf{C}_{22}\mathbf{H}_{24}\mathbf{O}_4\mathbf{N}_2\mathbf{S}_2$ IV, 594.
- 1) Chlormethylat d. Homochelidonin (2 + PtCl₄ + 4H₂O). III, 806. C₂₂H₂₄O₂NCl
- 2) Chlorathylat d. Chelidonin. $2 + PtCl_4$. III, 805. C₃₂H₂₄O₅NBr 1) Bromäthylat d. Papaveraldin (M. 7, 489). — IV, 442.

1) Jodmethylat d. Homochelidonin. - III, 806. $\mathbf{C}_{22}\mathbf{H}_{24}\mathbf{O}_{5}\mathbf{NJ}$

2) Jodäthylat d. Chelidonin. — III, 805.

2) Jodathylat d. Chelidonin. — III, 805.

C₂₂H₂₄O₆NCl 1) Chlormethylat d. Hydrastin. 2+ l²l²l²l, + AuCl₃. — II, 2051.

C₂₂H₂₄O₆NJ 1) Jodmethylat d. Hydrastin. Sm. 208° (B. 19, 2799). — II, 2051.

C₂₂H₂₄O₆N₂S₂ 1) Di[γ-Benzoylamidopropylsulfid]-2, 2'-Dicarbonsäure (Dipropyldisulfid-γ-Diphtalamidsäure). Sm. 136° (B. 23, 89). — II, 1796.

C₂₂H₂₄O₆N₂S₂ 1) Di[γ-Benzoylamidopropylselenid]-2, 2'-Dicarbonsäure (Dipropylγ-Diselenidphtalamidsäure). Sm. 84° (B. 24, 2135). — II, 1796.

C₂₂H₂₄O₆N₂S₃ 1) Di[γ-Benzoylamidopropyl]sulfon-2, 2'-Dicarbonsäure (Propylsulfon-diphtalamidsäure). Sm. 181–186° (B. 27, 2176). — II, 1796.

diphtalamidsäure). Sm. 181—186° (B. 27, 2176). — II, 1796.

 $C_{22}H_{25}O_2NCl$ 1) Jodmethylat d. Strychnin (J. 1859, 395). — III, 937. $C_{22}H_{25}O_3N_2Cl_3$ 1) Chloralchinin. Sm. 149° u. Zers. (G. 13, 270). — III, 813.

 $\mathbf{C}_{22}^{\mathbf{H}_{25}}\mathbf{O}_{3}\mathbf{N}_{2}\mathbf{Br}^{2}\mathbf{I}$ Bromstrychninmethyloxydhydrat $+4\mathbf{H}_{2}\mathbf{O}$. Zers. bei 265° (B. 18. 1236). — III, *940*.

 $C_{22}H_{25}O_5NBrJl$ Jodmethylat d. Diacetylbrommorphin $+1^{1/2}H_2O$. Sm. bei 200° (A. 297, 216).

 $C_{22}H_{26}ON_3P$ 1) 4-Amidophenyldi [4-Dimethylamidophenyl] phosphinoxyd. 182—186° (A. **229**, 332). — **IV**, 1660.

 $C_{22}H_{26}O_2N_2Br_2$ 1) $\alpha\beta$ -Di[α -Brombutyrylphenylamido]äthan. Sm. 98° (B. 25, 3256). II, 370.

2) $\alpha \beta$ -Di[α -Bromisobutyrylphenylamido]äthan. Sm. 143° (B. 25, 3257). - II. 370.

3) $\alpha \beta$ -Di[α -Brompropionyl-2-Methylphenylamido]äthan. Sm. 181° (B. 25, 3258). — II, 462.

4) $\alpha\beta$ -Di[α -Brompropionyl-4-Methylphenylamido]äthan. Sm. 1820 (B. **25**, 3261). — II, 493.

 $\mathbf{C}_{22}\mathbf{H}_{26}\mathbf{O}_{4}\mathbf{NCl}$ 1) Chloräthylat d. Hydroberberin + 2¹/₂H₂O. Sm. 225⁰ (wasserfrei). $2 + \text{PtCl}_4$, $+ \text{AuCl}_8$. – III, 801.

2) Chlorathylat d. Papaverin $+ 4 H_2 O$. $2 + PtCl_4$ (B. 18, 1577; M. 7, 516). **— IV**, 441.

C₂₂H₂₆O₄NBr 1) Bromäthylat d. Hydroberberin. Sm. 250—251°. — III, 801. 2) Bromäthylat d. Papaverin + 2 H₂O. Sm. 110—111° (wasserfrei) (B. 18, 1577; J. pr. [2] 47, 525; [2] 56, 334; M. 6, 695; 9, 339; 10, 688). - IV, 441.

 $\mathbf{C}_{22}\mathbf{H}_{26}\mathbf{O}_{4}\mathbf{N}\mathbf{J}$ 1) Jodäthylat d. Hydroberberin + H₂O. Sm. 225-226° (A. Spl. 2, 207). — III, 8*01*.

2) Jodäthylat d. Papaverin. Sm. 216° (B. 18, 1577). — IV, 441. 1) Chlormethylat d. Diacetylmorphin. 2 + PtCl₄ + H₂O (A. 222, C22H26O5NC1 209). — III, *899*.

 $\mathbf{C}_{22}\mathbf{H}_{27}\mathbf{ON}_{2}\mathbf{J}$ 1) Jodnethylat d. Strychnidin $+ 2H_2O$ (A. 301, 314).

1) Jodmethylstrychninsäure + H₂O. Na + H₂O (A. 264, 55). — III, 942. 2) Jodmethylisostrychninsäure. Na (A. 264, 76). — III, 943. 1) Di[Benzoylmethylamidopropyl]disulfid. Fl. (B. 26, 1081). — $\mathbf{C}_{22}\mathbf{H}_{27}\mathbf{O}_{3}\mathbf{N}_{2}\mathbf{J}$

 $\mathbf{C}_{22}\mathbf{H}_{28}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{S}_{2}$ II, 1293.

 $\mathbf{C}_{22}\mathbf{H}_{28}\mathbf{O}_{2}\mathbf{N}_{4}\mathbf{S}$ 1) Phenylhydrazid d. Phenylhydrazoncamphersulfonsäure. HCl (Bl. [3] 19, 126). $\mathbf{C}_{22}\mathbf{H}_{28}\mathbf{O}_{3}\mathbf{N}\mathbf{J}$

1) Jodmethylat d. Methylthebeninäthyläther. Sm. 215° (B. 32, 184). $\mathbf{C}_{22}\mathbf{H}_{28}\mathbf{O}_4\mathbf{NCl}$ 1) Chlorcorydalin. Sm. 188-191° (Soc. 67, 17).

2) Chlormethylat d. α -Acetylmethylmorphimethin $+2\frac{1}{2}H_2O$. 2+ $PtCl_4 + 4H_2O$ (A. 222, 225). — III, 905.

3) Chlormethylat d. β -Acetylmethylmorphimethin. 2 + PtCl₄ (A. 222, 229). — III, 905.

4) Chloräthylat d. Acetylcodein $+ \frac{1}{2}H_2O$. $2 + PtCl_4$ (Soc. 28, 318). - III, 905.

C₂₂H₂₈O₄NJ 1) Jodmethylat d. Corybulbin (Soc. 67, 28). — III, 877.

2) Jodmethylat d. α-Acetylmethylmorphimethin. Sm. 207° (B. 27, 1146). — III, 905.

3) Jodmethylat d. β -Acetylmethylmorphimethin (B. 27, 1146). — III, 905.

4) Jodäthylat d. Acetylcodeïn $+ \frac{1}{2} H_2 O$ (Soc. 28, 318). – III, 905. C₂₂H₂₈O₄Br₂S 1) Diisoamyläther d. Dibromdioxydiphenylsulfon. Sm. 100° (A. 172,

57). — II, *840*. 1) Diisoamyläther d. s-Dinitrodioxydiphenylsulfon. Sm. 150-151° (A. 172, 57). — II, 840. $\mathbf{C}_{22}\mathbf{H}_{28}\mathbf{O_8N_2S}$

- $\mathbf{C}_{22}\mathbf{H}_{29}\mathbf{ON}_{2}\mathbf{J}$ 1) Jodmethylat d. Desoxystrychnin (A. 268, 251). - III, 944.
 - 2) Jodmethylat d. Dimethylcinchonin. Sm. 175-177° (A. 277, 286).
- $\mathbf{C}_{22}\mathbf{H}_{29}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{Cl}$ 1) Chlorathylat d. Chinin $+3\,\mathrm{H}_{2}\mathrm{O}$. (HCl, PtCl₄) (Soc. 26, 1180). -III, 814.
 - 2) Chloräthylat d. Conchinin + H₂O. (HCl, PtCl₄) (Soc. 26, 1183). III. 825.
- $C_{22}H_{29}O_2N_2Br$ 1) Bromäthylat d. Chinin + 2 H_2O (Soc. 26, 1180). III, 814.
 - 2) Bromäthylat d. Conchinin + H₂O. Sm. 238° u. Zers. (A. 269, 233). **– III**, 825.
- C,H,O,N,J 1) Jodnethylat d. Methylchinin $+ H_2O$. Sm. 215-218° (B. 14, 80). **- III**, 814.

 - 2) Jodmethylat d. Tetrahydrostrychnin + H₂O (A. 301, 321).
 3) α-Jodäthylat d. Chinin. Sm. 210-211° u. Zers. (A. 91, 163; B. 14,
 - 78; Soc. 26, 1180; J. 1882, 1109). III, 814. 4) β -Jodäthylat d. Chinin + 3H₂O. Sm. 93°. HJ + 3H₂O (M. 15, 47). - III. 814.
 - 5) Jodäthylat d. Conchinin + H₂O. Sm. 248° u. Zers. (A. **129**, 20; **269**, 233; Soc. **26**, 1183). III, 825.

 1) Jodäthylat d. Chininjodäthylat (J. pr. [2] 3, 146). III, 814.

 1) Jodäthylat d. Cinchotenin. Zers. bei 212—213° (M. **15**, 792). —
- $\mathbf{C}_{22}\mathbf{H}_{29}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{J}_{3}$
- $\mathbf{C}_{22}\mathbf{H}_{29}\mathbf{O}_{3}\mathbf{N}_{2}\mathbf{J}$ III, 841.
- C₂₂H₃₀ON₂Br₂ 1) Brommethylatbromäthylat d. Cinchonin. Sm. 197^o (B. 13, 2294). - III, 834.
- 1) Jodmethylatjodäthylat d. Cinchonidin. Sm. 255° u. Zers. +2H₂O $\mathbf{C}_{22}\mathbf{H}_{30}\mathbf{ON}_{2}\mathbf{J}_{2}$ (Sm. 243—245°) (J. 1882, 1109; A. 269, 258). — III, 852.
- 1) Diphenylmonamid d. Dipiperidylphosphinsäure. Sm. 200° (B. 28, $\mathbf{C}_{22}\mathbf{H}_{30}\mathbf{ON}_{3}\mathbf{P}$ 616). — IV, 11.
- \mathbf{C}_{0} , \mathbf{H}_{0} , \mathbf{O}_{0} , \mathbf{N}_{0} , \mathbf{C}_{1} , 1) Di[Chlormethylat] d. Chinin. + PtCl₄ + 2 H₀O, + 2 AuCl₃ (A. 266, 242). — III, 814.
- 1) Jodmethylat d. Diäthylmorphin (B. 15, 2181). III, 899. C22 H30 O3 NJ
- 1) Diphenylsulfonoktohydronikotin. Sm. 143,56 (B. 26, 768, 1031). $\mathbf{C}_{22}\mathbf{H}_{30}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{S}_{2}$ IV, 486.
- $\mathbf{C}_{22}\mathbf{H}_{30}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{H}\mathbf{g}_{2}\mathbf{1})$ Diacetat d. Quecksilberammoniumbase $\mathbf{C}_{18}\mathbf{H}_{26}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{H}\mathbf{g}_{2}$. Sm. 131,50
- $(G.\ 28\ [2]\ 103). IV, 1711.$ $C_{22}H_{31}O_7N_2Cl\ 1)$ Chlormethylat (aus d. Verbindung $C_{19}H_{24}O_7N_2$). $2 + PtCl_4$ (B. 20, 458). — III, 948.
- $\mathbf{C}_{22}\mathbf{H}_{31}\mathbf{O}_{7}\mathbf{N}_{2}\mathbf{J}$ 1) Jodmethylat (aus d. Verb. $\mathbf{C}_{19}\mathbf{H}_{24}\mathbf{O}_{7}\mathbf{N}_{2}$) (B. 20, 458). III, 948. $\mathbf{C}_{22}\mathbf{H}_{34}\mathbf{O}_{17}\mathbf{N}_{10}\mathbf{P}_{2}$ 1) Guanylsäure (H. 26, 137). IV, 1624.
- C₂₂H₃₄N₂Cl₂Hg1) Dichlormethylat d. Quecksilberdi[4-Diäthylamidophenyl] (G. 28
- [2] 451). IV, 1707. $C_{22}H_{34}N_2J_2Hg$ 1) Dijodmethylat d. Quecksilberdi[4-Diäthylamidophenyl]. Sm. 202,8° u. Zers. (G. 28 [2] 451). — IV, 1707.
- C₂₂H₃₇N₃ClP 1) Benzyl-1-Tripiperidylphosphoniumchlorid (B. 28, 2211).

C₂₂-Gruppe mit fünf Elementen.

- 1) Phenylester d. α-Benzoylamido-α-Merkaptopropion-4-Brom-C₂₂H₁₈O₂NBrS phenyläthersäure. Sm. 143° (120°) (H. 20, 429, 440).
- Sm. 1920 (A. $\mathbf{C}_{22}\mathbf{H}_{22}\mathbf{O}_4\mathbf{N}_2\mathbf{Br}_2\mathbf{S}_2$ 1) 1,4-Di[β -Bromäthylphenylsulfonamido] benzol. **272**, 232). — IV, 594.
- 1) Jodmethylat d. α-Bromstrychnin (B. 18, 1236). III, 940. $\mathbf{C}_{22}\mathbf{H}_{24}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{BrJ}$

C₂₃-Gruppe mit einem Element.

C 93,9 — H 6,1 — M. G. 294. C23 H18 1) Diphenylnaphtylmethan (2 isom. Modif.). Sm. 134° u. Sm. 149° (B. 13, 358). — II, 299.

 $\mathbf{C}_{23}\mathbf{H}_{24}$

 $C_{23}H_{32}$

 $C_{23}H_{40}$

 $\mathbf{C}_{23}\mathbf{H}_{16}\mathbf{O}_{3}$

 $C_{23}H_{16}O_4$

2) 1, 3, 4-Triphenyl-R-Penten. Sm. 149° (A. 302, 238). $C_{23}H_{18}$ C 92,6 — H 7,4 — M. G. 298. $\mathbf{C}_{28}\mathbf{H}_{22}$

1) 1,2,4-Triphenyl-R-Pentamethylen. Sd. 285°_{50} (A. 302, 239). C 92,0 - H 8,0 - M. G. 300.

1) 2,4-Dibenzyl-1,3,5-Trimethylbenzol? Sm. 131°; Sd. 355°, (A. ch.

[6] 6, 197). — II, 291. 2) 2,5,2',5'-Tetramethyltriphenylmethan. Sm. 92,5°; Sd. über 360° (J. pr. [2] **35**, 476). — **II**, 290. C 89,6 — H 10,4 — M. G. 308.

1) Benzylpentaäthylbenzol. Sm. 88-89°; Sd. oberh. 360° (Bl. [3] 7, 654). - II, 243.

C 87,3 — H 12,7 — M. G. 316.

1) 2-Hexadekyl-1-Methylbenzol. Sm. 8-9°; Sd. 238,5-239°, (B. 21, 3181). — II, 40.

2) 3-Methylhexadekyl-1-Methylbenzol. Sm. 11-12°; Sd. 236,5-237°₁₅ (B. **21**, 3182). — **II**, 40.

3) 4-Hexadekyl-1-Methylbenzol. Sm. 27,5°; Sd. 239,5-240°, (B. 21,

3182). — II, 40. C 85,2 — H 14,8 — M. G. 324. 1) norm. Trikosan. Sm. 47,7°; Sd. 234°₁₅ (142,5°₀) (B. **15**, 1713; **21**, 2261; $C_{23}H_{48}$ **29**, 1323). — **I**, 107.

C₂₃-Gruppe mit zwei Elementen.

 $\mathbf{C}_{23}\mathbf{H}_{12}\mathbf{O}_4$ C 78,4 - H 3,4 - O 18,2 - M. G. 352.Ag (A. 284, 77). — II, 1916.

1) Picenchinoncarbonsäure. Sm. bei 360°. C 69,0 — H 3,0 — O 28,0 — M. G. 400. $C_{23}H_{12}O_7$ 1) Anhydrid d. Acetylfluoresceïn-3-Carbonsäure. Sm. oberh. 300° (A.

290, 237). C 85,7 — H 4,3 — O 9,9 — M. G. 322. $C_{23}H_{14}O_{2}$

 Picencarbonsaure. Sm. 245°. Ag (A. 284, 79). C 78,0 — H 3,9 — O 18,1 — M. G. 354. $\mathbf{C}_{23}\mathbf{H}_{14}\mathbf{O}_{4}$

1) Benzoat d. ?-Oxy-?-Phenyl-1,4-Naphtochinon (A. 226, 34). —

 $\mathbf{C}_{28}\mathbf{H}_{14}\mathbf{O}_{6}$ C 71,5 - H 3,6 - O 24,9 - M. G. 386.

1) Lakton d. α -[2-Oxy-3,4-Dibenzoxylphenyl]äthen- β -Carbonsäure (Dibenzoat d. Daphnetin). Sm. 152° (B. 12, 113; 17, 935). — II, 1950. 2) Dibenzoat d. Verbindung C₉H₆O₄. Sm. 205—206° (B. 27, 528). —

III, 656. C 90,4 — H 4,9 — N 4,6 — M. G. 305. $C_{23}H_{15}N$ 1) Phenylbenz-β-Naphtoakridin. Sm. 198°. HCl, (2 HCl, PtCl₄) (B. 17, 1505). — IV, 477. C 85,2 — H 4,9 — O 9,9 — M. G. 324. $C_{23}H_{16}O_{2}$

1) 2-Diphenylmethyl-1, 4-Naphtochinon. Sm. 185° (B. 31, 2351).

2) 2-Phenyl-4-Benzoylmethylen-1, 4-Cumaran (Phenacylidenflaven). Sm. 131° (B. 31, 712).

3) Lakton d. γ -Oxy- $\alpha\beta\delta$ -Triphenyl- $\alpha\gamma$ -Butadiën- α -Carbonsäure (Benzaldiphenylmaleïd). Sm. 175—176° (B. 24, 3229). — II, 1728.

4) Acetat d. Picylenearbinol. Sm. 159° (A. 284, 70). C 81,2 — H 4,7 — O 14,1 — M. G. 340. 1) Oxybenzaldiphenylmaleid. Sm. 205° (B. 24, 3856). — II, 1915. 2) 1,3-Diketo-2-Benzoyl-2-[3-Methylphenyl]-2,3-Dihydroinden. Sm.

112—113° (B. **28**, 1390). — **III**, *322*. C 77,5 — H 4,5 — O 18,0 — M. G. 356.

1) Lakton d. β -Oxy- α -Benzoyl- $\alpha\beta$ -Diphenyläthan- α -Ketocarbonsäure. Sm. 137º (B. 31, 2223). $C_{93}H_{16}O_{6}$

C 71,1 — H 4,1 — O 24,7 — M. G. 388. 1) Benzoylphyseion. Sm. 171° (A. 284, 182). — III, 641.

2) Diäthylester d. Di 3-Oxy-1-Naphtyl]methan-2,2'-Dicarbonsäure. Zers. bei 280° (B. 25, 3215). — II, 2038. 3) Diacetat d. Verbindung C₁₉H₁₂O₄. Sm. 178-182° (B. 26, 1141). -

II, 1044.

C 65,7 - H 3,8 - O 30,5 - M. G. 420C28H16O8

1) Acetat d. Säure C₂₁H₁₄O₇ (aus 4-Oxybenzol-1-Carbonsäure). Sm. 230° (*J. pr.* [2] **28**, 208). — II, 1529. C 61,1 — H 3,5 — O 35,4 — M. G. 452.

C.3H16O10

1) Podophylloquercetin. Sm. 275-2770 (B. 15 [2] 378; 24 [2] 646). — III, 645.

 $C \pm 81.2 - H \pm 4.7 - O \pm 14.1 - M. G. \pm 340.$ $C_{23}H_{16}O_{13}$

1) Verbindung (aus Trioxyfluorondicarbonsäure). Sm. 140,5-141,5° (B. 31,

 $C \pm 86.2 - H \pm 5.0 - N \pm 8.7 - M. G. \pm 320.$ $C_{23}H_{16}N_2$

1) 2,3-Diphenyl-α-Naphtimidazol. Sm. 142-143°. HCl, (2HCl, PtCl₄), H_2SO_4 (B. **25**, 2829). — IV, 1061. $C^{2}79,3 - H 4,6 - N 16,1 - M. G. 348.$

 $C_{23}H_{16}N_4$ 1) Verbindung (aus d. Base $C_{16}H_{12}N_4$). Sm. 137—139° (A. 255, 354). —

IV, 1172. 1) 2,5-Dibrom-1,3,4-Triphenyl-R-Penten. Sm. 157° (A. 302, 238). C.3H16Br. C 89.9 - H 5.5 - N 4.6 - M. G. 307.C.3 H17 N

1) α-[1-Naphtyl]imidodiphenylmethan (A. 187, 215). — III, 188.

2) 2, 4, 6-Triphenylpyridin. Sm. 137,5° (A. 302, 240).

3) Acetophenin. Sm. 135°. HCl, (2HCl, PtCl₄) (B. 6, 639; A. 238, 27). **- III**, *130*.

C 82,4 - H 5,1 - N 12,5 - M. G. 335. $C_{23}H_{17}N_3$

1) 5-Amido-2-Phenyl-1-[2-Naphtyl] benzimidazol. Sm. 195°. $+ \frac{1}{2}$ H₂O (Sm. 166°) (Bl. [3] 17, 871). — IV, 1181. 2) 5-Phenylamido-10-Methyl-αβ-Naphtophenazin. Sm. 214°. (2HCl,

PtCl₄) (B. 23, 3807). — IV, 1210. 3) 2,3-Diphenyl-2,3-Dihydro-1,2,4-Naphtisotriazin. Sm. 193°. HCl (Soc. **57**, 329; **59**, 681; B. **23**, 506). — **IV**, 1394. 4) **Methylrosindulin.** Sm. 180—181°. (HCl + AuCl₃), Nitrat (B. **30**, 1829;

31, 2430). — IV, 1205. C 76,0 — H 4,7 — N 19,3 — M. G. 363.

 $C_{23}H_{17}N_5$

 $C_{23}H_{18}O_{3}$

 $C_{23}H_{18}O_4$

 $C_{23}H_{18}O_5$

1) 1,1-Dinaphtylguanidineyanid (A. 98, 242). — II, 605.

C 89.0 - H 5.8 - O 5.2 - M. G. 310. $C_{28}H_{18}O$

1) Anhydro $-\beta\beta$ -Di[1-Oxy-?-Naphtyl] propan. Sm. 186° (J. r. 23, 603). — II, 1008. C 84,7 — H 5,5 — O 9,8 — M. G. 326.

 $C_{23}H_{18}O_{2}$

1) 1,3-Diketo-5-Methyl-2-Phenyl-2-Benzyl-2,3-Dihydroinden. Sm. 120 bis 121° (B. 29, 2378).

2) Aethyläther d. 9-Keto-10-[α-Oxybenzyliden]-9,10-Dihydroanthracen. Sm. 171—173° u. Zers. (B. 23, 2529). — III, 245.

Iakton d. γ-Oxy-αβδ-Triphenyl-α-Buten-α-Carbonsäure. Sm. 127 bis 128° (B. 24, 3861). — II, 1727.

4) Lakton d. β-Dehydroamarsäure. Sm. 129—130° (A. 275, 78). — II, 1727.

C 80.7 - H 5.3 - O 14.0 - M. G. 342.

1) Acetat d. Benzyloxanthranol. Sm. 2810 (B. 23, 1568). — III, 245. 2) Lakton d. γγ-Dioxy-αβδ-Triphenyl-α-Buten-α-Carbonsäure? (Benzyloxydiphenylmaleïd). Sm. 183—185° (B. 24, 3857). — II, 1729.

3) Anhydrid d. $\alpha \beta \gamma$ -Triphenylpropan- $\alpha \gamma$ -Dicarbonsaure. Sm. 198°

(B. 31, 3063). 4) isom. Anhydrid d. αβγ-Triphenylpropan-αγ-Dicarbonsäure. Sm.

bei 180° (B. 31, 3063). 5) Anhydrid d. $\alpha\beta\gamma$ -Triphenylpropan- $\beta\beta^2$ -Dicarbonsäure. Sm. 1916

(B. 20, 2497). — II, 1913.

 $\dot{\mathbf{C}}$ 77,1 — $\dot{\mathbf{H}}$ 5,0 — $\dot{\mathbf{O}}$ 17,9 — $\dot{\mathbf{M}}$. $\dot{\mathbf{G}}$. 358. β-Benzyläther d. α β-Dioxy-γ δ-Diketo-α δ-Diphenyl-α-Buten. Sm. 182 bis 183° (B. 27, 716). — III, 317.
 Aethylester d. β-P-Dibenzoylbenzol-1-Carbonsäure. Sm. 106,5—107°

(B. 7, 1155). — II, 1914. C 73,8 — H 4,8 — O 21,4 — M. G. 374.

1) 3,4,3',4'-Dimethylenäther d. ε -Keto- $\alpha \iota$ -Di[3,4-Dioxyphenyl]- $\alpha \gamma \zeta \vartheta$ -Nonatetraën. Sm. 198—199° (B. 28, 1193). — III, 259

2) Aethylester d. 6-Benzoxyl-3-Benzoylbenzol-1-Carbonsäure. Sm. 870 (A. 240, 169).

 $C_{23}H_{19}N_3$

 $C_{23}H_{20}O_{3}$

- C₂₃H₁₈O₆
 C 70,8 H 4,6 O 24,6 M. G. 390.
 1) meso-αβ-Dibenzoxyl-β-Phenylpropionsäure. Sm. 187° u. Zers. (B. 16, 1289). Π, 1761.
 2) Diacetat d. α-Aurinoxyd (M. 16, 374).
 3) Diacetat d. β-Aurinoxyd (M. 16, 374).
 CC₂₃H₁₈O₁₀
 C 60,8 H 4,0 O 35,2 M. G. 454.
 1) Tetracetat d. Fisetin. Sm. 200—201° (196—198°) (B. 19, 1742; C. 1896 [2] 741; Soc. 71, 1195). 1 Π, 584.
 2) Tetracetat d. Luteolin. Sm. 223—226° (213—215°) (Soc. 69, 209; B. 29.
- 1013; M. 17, 422). III, 585.

 3) Verbindung (aus Maclurin). Sm. 181—182° (B. 27, 1629). III, 207.

 C₂₃H₁₈O₁₃ C 80,7 H 5,3 O 14,0 M. G. 342.
- 1) 3,4,5,6-Tetraacetoxylxanthen-1,8-Dicarbonsäure. Sm. 241° (B. 31,271). C 85,7 H 5,6 N 8,7 M. G. 322. 1) Di[2-Methylamido-P-Naphtyl]methan. Sm. 202—203°. Nitrit, Pikrat
 - 1) Di[2-Methylamido-P-Naphtyl]methan. Sm. 202—203°. Nitrit, Pikrat (J. pr. [2] 35, 319; Soc. 73, 542, 551). IV, 1076.
 2) 4-Benzylidenamido-1-Phenylamidonaphtalin. Sm. 109° (A. 286,
 - 184). IV, 922. 3) α -Imido- α -[Phenyl-2-Naphtyl]amido- α -Phenylmethan (Benzenylphenyl-2-Naphtylamidin). Sm. 147° (B. 30, 1783). — IV, 845.
 - phenyl-2-Naphtylamidin). Sm. 147° (B. 30, 1783). IV, 845. 4) α-Phenylimido-α-Phenylamido-l-Naphtylmethan (1-Naphtendiphenylamidin). Sm. 183,5° (B. 16, 642). — IV, 956.
 - 5) 2,6-Diphenyl-3-Benzyl-1,4-Diazin. Sm. 95° (Soc. 63, 1372). IV, 1088.
 6) 2,3-Diphenyl-1,2-Dihydro-α-Naphtimidazol. Sm. 138° (B. 25, 2828).
 - IV, 920.
 Nitril d. αβγ-Triphenylpropan-αγ-Dicarbonsäure. Sm. 137-138° (B. 31, 3060).
 C 78,8 H 5,1 N 16,0 M. G. 350.
- C₂₃H₁₈N₄ C 78,8 H 5,1 N 16,0 M. G. 350. 1) 3-Phenyl-2-[3-Amidophenyl]-2,3-Dihydro-1,2,4-Naphtisotriazin. Sm. 190—191° (Soc. 59, 700). — IV. 1395.
- Sm. 190—191° (Soc. 59, 700). IV, 1395.

 C₂₃H₁₈S

 1) Thiënyltriphenylmethan (2 [oder 3] -Triphenylmethylthiophen). Sm. 237°; Sd. 433—438° u. ger. Zers. (B. 28, 1537; 29, 1402). III, 749.

 C₂₃H₁₉N

 C₂₃H₁₉N

 C_{89,3} H 6,1 N 4,5 M. G. 309.
 - 1) 2,5-Diphenyl-1-[2-Methylphenyl]pyrrol. Sm. 114—115°; Sd. oberh. 300° (B. 22, 3089). IV, 438.
 2) 2,5-Diphenyl-1-[4-Methylphenyl]pyrrol. Sm. 201°(181°) (B. 22, 3090;
 - 31, 2718). IV, 438. C 81.9 - H 5.6 - N 12.5 - M. G. 337.
 - 1) Diphenyl-I-Naphtylguanidin. Sm. 155° (B. 3, 7). II, 604.
 2) 2-[4-Methylphenyl]amido-I-Phenylazonaphtalin. Sm. 156° (152°)
 (B. 23, 1327; 25, 2846). IV, 1397.
 - 3) 4-[4-Methylphenyl]amido-l-Phenylazonaphtalin. Sm. 144° (A. 256, 256). IV, 1397.
 - 4) 2-Phenylamido-1-[4-Methylphenyl]azonaphtalin. Sm. 120° (B. 23, 1325). IV, 1400.
 C 88,5 H 6,4 O 5,1 M. G. 312.
- $C_{23}H_{20}O$ C 88,5 H $^{'}$ 6,4 O 5,1 M. G. 312. 1) **2-Keto-1,3-Dicinnamyliden-R-Pentamethylen.** Sm. 215—218° u. Zers. (B. **29**, 1838). $C_{23}H_{20}O_{2}$ C 84.2 - H 6.1 - O 9.7 - M. G. 328.
 - 0. C 84,2 H 6,1 O 9,7 M. G. 328. 1) $\alpha \varepsilon$ -Diketo- $\alpha \gamma \varepsilon$ -Triphenylpentan. Sm. 85° (B. 29, 1493). — III, 307. 2) 2,4-Dibenzoyl-1,3,5-Trimethylbenzol. Sm.117°; Sd. bei 300° (A. ch. [6] 6, 234; B. 28, 3208). — III, 307.
 - 2,3,5-Triphenyltetrahydro-1,4-Pyron. Sm. 153° (M. 18, 440; 19, 414).
 Lakton d. Amarsäure. Sm. 140,5° (J. 1877, 812; A. 275, 67). II, 1725.
 - 5) Benzoat d. P-Oxyphenyl-1, 2, 3, 4-Tetrahydronaphtalin. Sm. 107—108°
 (B. 24, 181). II, 1148.
 C 80,2 H 5,8 O 14,0 M. G. 344.
 - αε-Diketo-γ-[2-Oxyphenyl]-αε-Diphenylpentan (2-Oxybenzaldiacetophenon). Sm. 131° (B. 29, 242). III, 307.
 γ-Oxy-αβδ-Triphenyl-α-Buten-α-Carbonsäure. Sm. 173—174°. Ag (B. 24, 3862). II, 1727.
 - 3) α-Dehydroamarsäure. Sm. 173°. Ag (A. 275, 76). II, 1727.
 4) β-Dehydroamarsäure. Sm. 238°. Ag (A. 275, 76). II, 1727.

CogHooOg 5) Benzoat d. β -Oxy- α -Keto- $\alpha\beta$ -Di[4-Methylphenyl]äthan. Sm. 119° (B. 22, 381). - III, 235. $\dot{\text{C}}$ 76.7 — $\dot{\text{H}}$ 5.5 — $\dot{\text{O}}$ 17.8 — $\dot{\text{M}}$. G. 360. C23 H20 O4

1) Homo-o-Kresylphtalein (Bl. [3] 21, 71).

- 2) Diacetat d. 4,4'-Dioxytriphenylmethan. Sm. 109-111° (B. 22, 1944). **– II**, 1003.
- 3) $\alpha\beta\gamma$ -Triphenylpropan- $\alpha\gamma$ -Dicarbonsäure. Sm. 236 237° u. Zers. $+ C_2H_6O$, Ag_2 (B. 31, 3061).

 $C_{23}H_{20}O_{5}$

- 4) Verbindung (aus Fuchsin) + H₂O (M. 16, 398). C 73,4 H 5,3 O 21,3 M. G. 376. 1) Trimethyläther d. 2,4-Dibenzoyl-1,3,5-Trioxybenzol. Sm. 179° (B. 27, 1499). III, 305.
- 2) Diacetat d. a,4,4'-Trioxytriphenylmethan. Sm. 119° (A. 217, 227). - II, 1115.
- 3) Aethylester d. Propionylisophenanthroxylenacetessigsäure. 134° (Soc. 59, 17). — II, 1909.

C 70.4 - H 5.1 - O 24.5 - M. G. 392.C28 H20 O8

1) Diäthylester d. 2,6-Diphenyl-1,4-Pyron-3,5-Dicarbonsäure. Diathylester d. 2,6-Diphenyl-1,4-Pyron-3,5-Dicarbonsaure. Sm. 140,5° u. Zers. (B. 23, 3738; A. 261, 189). — II, 2038.
 C 65,1 — H 4,7 — O 30,2 — M. G. 424.
 Triacetat d. 5,6,7-Trioxy-1,2,4-Trimethyl-9,10-Anthrachinon. Sm. 174° (A. 240, 291). — III, 457.
 Triäthylester d. 9,10-Diketo-9,10-Dihydroanthracen-1,2,4-Tricarbonsäure. Sm. 125° (J. pr. [2] 41, 128). — II, 2086.
 Verbindung (aus Phloretin). Sm. 173° (B. 27, 1631, 2688). — III, 230. C 60,5 — H 4,4 — O 35,1 — M. G. 456.

 $\mathbf{C}_{23}\mathbf{H}_{20}\mathbf{O}_{8}$

1) Capransaure (J. pr. [2] 57, 427).

 $C_{23}H_{20}O_{10}$

 $C_{23}H_{20}N_4$

 $C_{23}H_{20}N_6$

 $C_{23}H_{22}O$

- 2) Triacetat d. Quercetindimethyläther. Sm. 154-155° (Soc. 67, 498). - III, 604.
- $C_{23}H_{20}O_{11}$ C 58,5 - H 4,2 - O 37,3 - M. G. 472.1) Tetracetat d. Anhydro- $\alpha \alpha$ -Di[2,3,4(?) Trioxyphenyl] propionsäure. Zers. bei 200° (B. 16, 2408). — II, 2078. C 85,5 — H 6,2 — N 8,6 — M. G. 324.
- $C_{23}H_{20}N_2$ 1) 2-Phenylhydrazon-4, 5-Diphenyl-2, 3-Dihydro-R-Penten. Sm. 170 bis 180° u. Zers. (Soc. 51, 423). — III, 251.

2) γ-Diphenylmethylenhydrazon-α-Phenyl-α-Buten. Sm. 126° (J. pr. [2] **44.** 206). — III. 187.

- 3) 1-Aethyl-2,4,5-Triphenylimidazol (Aethyllophin). Sm. 2340. (2 HCl, PtCl₄) (M. 17, 305).
- 4) 2,6-Diphenyl-4-Benzyl-1,4-Dihydro-1,4-Diazin. $HCl + 3 H_2O$, (2 HCl, PtCl₄) (Soc. 63, 1365). — IV, 1030.
- 5) Verbindung (aus Benzyleyanid). Sm. 212—215° (J. pr. [2] 52, 114 Anm.).
 C 78,4 H 5,7 N 15,9 M. G. 352.
 1) Aribin + 8 H₂O. Sm. 229°. 2 HCl, (2 HCl, PtCl₄), H₂SO₄, 2 H₂SO₄. —
- III, 780.
- 2) Blausaures Hydrobenzamid. Sm. 55°. 2HCl (B. 13, 2119). III, 36. C 72.6 — H 5.3 — N 22.1 — M. G. 380.
 - 1) m-Phenylendiamindisazo-p-Toluol- β -Naphtalin (B. 16, 2031). IV, 1401.
- 1) Triphenylmethan + Thiophen (B. 26, 853). C 75,2 H 5,7 N 19,1 M. G. 367. $C_{23}H_{20}S$ $C_{23}H_{21}N_5$
 - 1) Cyanid d. Phenyldi[2-Methylphenyl] guanidin. HCl+H₂O (B. 13,
 - 994). II, 460. 2) Cyanid d. Phenyldi[4-Methylphenyl]guanidin + ½H₂O. Sm. 110 bis 115° (B. II, 975). II, 489. C 87.9 - H 7.0 - O 5.1 - M. G. 314.
 - 1) α -Keto- $\beta\gamma$ -Diphenyl- α -[2,4(?)-Dimethylphenyl]propan. Sd. 365—375° (B. 24, 3541). - III, 260.
 - 2) α -Keto- $\beta\gamma$ -Diphenyl- α -[2,5-Dimethylphenyl] propan. Sm. 60,5°; Sd. 370—380° (B. 24, 3542). III, 260.
 - 3) α -Keto- $\beta\gamma$ -Diphenyl- α -[3,4-Dimethylphenyl]propan. Sm. 75° (B. 24, 3541). — III, 260.
 - 4) α -Kéto- γ -Phényl- $\alpha\beta$ -Di[4-Methylphenyl]propan. Sm. 92—93° (B. 22, 383). III, 260.

 $C_{23}H_{22}O_6$

 $C_{23}H_{23}N_3$

 $\mathbf{C}_{23}\mathbf{H}_{24}\mathbf{O}_{4}$

 $C_{23}H_{24}O_{6}$

 $C_{23}H_{22}O_{2}$ C 83,6 - H 6,7 - O 9,7 - M. G. 330.

1) 1,2-Dioxy-1,2,4-Triphenyl-R-Pentamethylen. Sm. 142° (A. 302, 237). 2) Aethylester d. $\beta\beta\beta$ -Triphenylpropionsäure. Sm. 81° (Soc. 51, 228). - II, 1483.

3) Phenylmesitylcarbinolester d. Benzolcarbonsäure. Sm. 94° (A. ch. [6] 6, 217). — II, 1144.

 $C^{7}9.8 - H 6.3 - O 13.9 - M. G. 346.$ C23 H22 O3

1) $\alpha \varepsilon$ - Diketo - γ - [2-Furanyl] - $\alpha \varepsilon$ - Di[4-Methylphenyl] pentan (Furaldi-

methyl-p-Tolylketon]. Sm. 112—113° (B. 29, 2249). — III, 730.

2) Amarsäure + H₂O. Na + 2 H₂O, K, Ca, Ba + 2 H₂O, Ag (J. 1870, 586; 1877, 812; J. r. 9, 298; A. 275, 67). — II, 1725. C 76,2 — H 6,1 — O 17,7 — M. G. 362.

 $C_{23}H_{22}O_4$

1) Leukoderivat d. Verbindung $C_{23}H_{20}O_4$ (aus Fuchsin) (M. 16, 400). C 70,1 — H 5,6 — O 24,3 — M. G. 394.

1) Ononetin (J. 1855, 715). — III, 599. C 64.8 - H 5.2 - O 30.0 - M. G. 426.C23H22O8

1) Erlenroth. Pb₂ (J. 1870, 859). — III, 590. C 62,4 — H 5,0 — O 32,6 — M. G. 442. C23H22O9

1) α , 2- ε , 2'-Dilakton d. $\alpha \varepsilon$ -Dioxy- γ -Keto- $\alpha \varepsilon$ -Di[3, 4-Dimethoxylphenyl]pentan-2,2'-Dicarbonsäure (Dimekonindimethylketon). Sm. 151° (M. 12, 475; 14, 398). — II, 2103.

2) Acetylrufin (A. 156, 7). — III, 601.

3) Tetracetat d. Phloretin. Sm. 94° (A. 156, 2; B. 27, 2686; 28, 1395).

 $\mathbf{C}_{23}\mathbf{H}_{22}\mathbf{O}_{10}$ C 60.3 - H 4.8 - O 34.9 - M. G. 458.

1) Weintraubenfarbstoff (Bl. 32, 104). — III, 673. $\mathbf{C}_{23}\mathbf{H}_{22}\mathbf{N}_{2}$

1) W sinteraction (5.6 Jan. 1977). The control of t 18, 3079). — III, 23.

3) $\alpha\beta$ -Di[1-Naphtylamido]propan. HCl (B. 25, 3278). — II, 601. 4) $\alpha\beta$ -Di[2-Naphtylamido]propan. HCl (B. 25, 3279). — II, 604.

5) 6-Methyl-1-Aethyl-2, 3-Diphenyl-1, 2-Dihydro-1, 4-Benzdiazin. Sm

129° (B. **26**, 203). — IV, 1076. °C 78,0 — H 6,2 — N 15,8 — M. G. 354. $\mathbf{C}_{23}\mathbf{H}_{22}\mathbf{N}_4$

1) 1,3-Di[Phenylhydrazon]-2,2-Dimethyl-2,3-Dihydroinden. Sm. 184 bis 1876 (A. 252, 86). — IV, 784. C 88,2 — H 7,3 — N 4,5 — M. G. 313.

 $\mathbf{C}_{23}\mathbf{H}_{23}\mathbf{N}$

1) Tribenzylpyridin. Sm. 278—280° (B. 25, 2428). — IV, 466. C 80,9 — H 6,7 — N 12,3 — M. G. 341.

1) 5-[4-Methylphenyl]amido-2, 6-Dimethyl-1-[4-Methylphenyl]benzimidazol. Sm. 162—163°. (2 HCl, PtCl₄) (B. **26**, 2779). — **IV**, 1152. 2) Base (aus Hydrobenzamid). HCl + 2 H₂O, (2 HCl, PtCl₄) (A. **111**, 155).

III, 21.

 $C_{23}H_{24}O$ C 87,3 — H 7,6 — O 5,1 — M. G. 316.

1) Isobutyläther d. α-Oxytriphenylmethan. Sm. 48° (C. 1896 [1] 416). $\mathbf{C}_{23}\mathbf{H}_{24}\mathbf{O}_3$ C 79,3 — H 6,9 — O 13,8 — M. G. 348.

1) $\alpha \alpha \beta$ -Tri[2-Oxy-1-Methylphenyl]äthan.. Erweicht bei 85° (A. 257, 322). - II. 1029.

2) ααβ-Tri[3-Oxy-1-Methylphenyl]äthan. Erweicht bei 90° (A. 257, 324). — ĬI, 1029.

3) ααβ-Tri[4-Oxy-1-Methylphenyl]äthan. Erweicht bei 100° (A. 257, 324). — II, 1029.

4) Tri[2-Methylphenyläther] d. ααα-Trioxyäthan. Sm. 87,5—89° (B.

24, 3683). — **II**, 737. 5) Tri[3-Methylphenyläther] d. ααα-Trioxyäthan. Sm. 99—100° (B. 24,

3682). — II, 744. 6) Tri [4-Methylphenyläther] d. ααα-Trioxyäthan. Sm. 135,5° (B. 24,

3681). — II, 749. C 75,8 - H 6,6 - O 17,6 - M. G. 364.

1) Säure (aus Amarsäure). Sm. 127—135° u. Zers. Ag (A. 275, 72). — II, 1725.

 $C_{69,7} - H_{6,1} - O_{24,2} - M. G. 396.$ 1) Dimethyläther d. Curcumin. Sm. 135° (B. 30, 193).

- Coo Hoa Oa 2) Diäthylester d. $\alpha \varepsilon$ -Diketo- $\alpha \varepsilon$ -Diphenylpentan- $\beta \delta$ -Dicarbonsäure. Sm. 86° (130,5°) (A. 281, 57; 302, 215). — II, 2034.
 - 3) Diathylester d. isom. $\alpha \varepsilon$ -Diketo- $\alpha \varepsilon$ -Diphenylpentan- $\beta \delta$ -Dicarbonsäure. Fl. (A. 302, 216).
 - 4) Diäthylester d. αε-Diketo-αε-Diphenylpentan-γγ-Dicarbonsäure. Sm. 118—119° (B. 19, 3144). — II, 2035.
 - 5) Diäthylester d. $\beta\delta$ -Diketo- $\alpha\varepsilon$ -Diphenylpentan- $\gamma\gamma$ -Dicarbonsäure (D. d. Diphenacetylmalonsäure). Fl. (B. 29, 1988).
 - 6) Diäthylester d. 2,6-Diphenyltetrahydro-1,4-Pyron-3,5-Dicarbonsäure. Sm. 115° (B. 29, 996).
 C 67,0 - H 5,8 - O 27,2 - M. G. 412.
 Triäthyläthermonacetat d. Luteolin.
- C28 H24 O7 Sm. $185 - 186^{\circ}$ (183 - 185°) (Soc. **69**, 801; *M*. **17**, 423). — **III**, 583. C 64,5 — H 5,6 — O 29,9 — M. G. 428. $\mathbf{C}_{23}\mathbf{H}_{24}\mathbf{O}_{8}$
- 1) $\alpha \eta$ -Diphenylheptan- $\beta \beta \zeta \zeta$ -Tetracarbonsäure. Zers. bei 207°. (Soc. 59, 843). — II, 2085.
 - 2) Diacetat d. Pinoresinol. Sm. 164° (M. 15, 512; 18, 485). III, 563. 3) Verbindung (aus 3, 5 - Dioxy - 1 - Methylbenzol u. Chloralhydrat oder
- C₁₆H₁₆O₆) (Am. **9**, 135; Soc. **73**, 399). **II**, 962. C 62,2 H 5,4 O 32,4 M. G. 444. 1) Pikropodophyllin. Sm. 227° (B. **15** [2] 377; **24** [2] 646). **III**, 644. 2) Podophyllotoxin + 2 H₂O. Sm. 93—95° (B. **24** [2] 645). **III**, 644. C 87,9 H 7,6 N 4,5 M. G. 314. $C_{23}H_{24}O_{9}$
- C, H, N, 1) α-Phenyl-α-Benzyl-β-[4-Isopropylbenzyliden]hydrazin. Sm. 89—90° (G. **27** [2] 237). — **IV**, 812. C 80,7 — H 7,0 — N 12,3 — M. G. 342.
- $\mathbf{C}_{23}\mathbf{H}_{24}\mathbf{N}_4$ l) $\alpha \alpha$ -Di[α -Methyl- β -Benzylidenhydrazido]- α -Phenylmethan (Tribenzalmethylhydrazin). Sm. 109° (B. 31, 62).
- 1) Tribenzyläther d. ααα-Trimerkaptoäthan. Sm. 46° (B. 25, 358). C28H24S8 II, 1053.
- C'80,4 H 7,3 N 12,2 M. G. 343. $C_{23}H_{25}N_3$ 1) α-Phenylimidodi [4-Dimethylamidophenyl] methan (Phenylauramin). Sm. 170-171°. HCl, (2HCl, PtCl₄), Pikrat (B. 20, 2850, 3296). — IV, 1173.
 - 2) 3-Hexyl-2-Phenyl-2, 3-Dihydro-1, 2, 4-Naphtisotriazin. Sm. 176,5%. HCl, (2HCl, PtCl₄) (B. **24**, 1007). — IV, 1394. C 74,4 — H 6,7 — N 18,9 — M. G. 371.
- $C_{23}H_{25}N_5$ 1) 3,5-Di[α -Phenylhydrazonäthyl]-2,6-Dimethylpyridin. Fl. HCl, $\frac{\text{HNO_3}}{\text{C 86,8}}$ (B. 30, 2298). — IV, 800. C 86,8 — H 8,2 — O 5,0 — M. G. 318. C, H, O
- 1) γ -Keto- $\alpha \varepsilon$ -Di[4-Isopropylphenyl]- $\alpha \delta$ -Pentadiën (Dicuminalaceton). Sm. 106—107° (A. **223**, 148). — III, 253. C 72,3 — H 6,8 — 0, 20,9 — M. G. 382. $C_{23}H_{26}O_5$
- 1) Diäthylester d. γ -Keto-as-Diphenylpentan- $\beta\delta$ -Dicarbonsäure. Sm. 92° (A. **261**, 185). II, 1978. C 69,3 H 6,5 O 24,1 M. G. 398.
- $\mathbf{C}_{23}\mathbf{H}_{26}\mathbf{O}_{6}$ 1) Tetraäthyläther d. Fisetin. Sm. 106-107° (B. 19, 1745). - III, 584. 2) Tetraäthyläther d. Luteolin. Sm. 146—149° (B. 30, 656).
- C 66,7 H 6,3 O 27.0 M. G. 414. $C_{23}H_{26}O_7$ 1) Tetraäthyläther d. Quercetin. Sm. 120-1220 (M. 5, 76; 9, 541). -
- III, 604. $\mathbf{C}_{23}\mathbf{H}_{26}\mathbf{O}_{11}$ C 57,7 — H 5,4 — O 36,8 — M. G. 478.
- Acetylphloridzin + 2 H₂O (A. 156, 6). III, 600.
 Säure (aus Dimekonindimethylketon) (M. 14, 398). II, 2103.
 C 83,6 H 7,8 N 8,5 M. G. 330. $\mathbf{C}_{23}\mathbf{H}_{26}\mathbf{N}_2$ 1) αα-Di[Aethylphenylamido]phenylmethan. (2HCl, PtCl₄) (A. Spl. 3,
 - 363). III, 30.
 - 2) 4',42-Di[Dimethylamido]triphenylmethan (Leukomalachitgrün). Sm. 102° (93—94°). 2 HCl, (2 HCl, PtCl₄), Pikrat (B. 11, 1239; 12, 798, 1693; 13, 2228; 16, 150; 18, 539, 988; M. 9, 1148; A. 206, 122; 217, 255). — IV, 1042
 - 3) isom. ?-Di[Dimethylamido] triphenylmethan (A. 260, 15). IV, 1042.
- C 77,1 H 7,3 N 15,6 M. G. 358. 1) α -[2-Amidophenyl]imidodi[4-Dimethylamidophenyl]methan (2-Amidophenyl] $C_{23}H_{26}N_4$ dophenylauramin). Sm. 199—200°. Pikrat (J. pr. [2] 50, 424). — IV, 1173.

C93 H98 O8

 $\mathbf{C}_{23}\mathbf{H}_{34}\mathbf{N}_2$

2) a-[4-Amidophenyl]imidodi[4-Dimethylamidophenyl]methan (4-Ami- $C_{23}H_{26}N_4$ dophenylauramin). Sm. 221-222°. HCl, (2HCl, PtCl₄), Pikrat (J. pr. [2] **50**, 403). — **IV**, 1173.

3) a-Phenylhydrazondi [4-Dimethylamidophenyl] methan. Sm. 174 bis

175° (B. **20**, 1111). — **IV**, 776. C 71,5 — H 6,7 — N 21,8 — M. G. 386. $C_{23}H_{26}N_6$

1) Di[Cinnamylidenamido] pentamethylentetramin. Sm. 2070 (A. 288, 236). — III, 60. С 80,0 — H 7,8 — N 12,2 — M. G. 345.

Cos HorNa

1) 2'-Amido-2², 2³-Di[Dimethylamido] triphenylmethan. Sm. 134-135⁰ (B. 17, 1891). — IV, 1193. 2) 2'-Amido-42,48-Di[Dimethylamido]triphenylmethan. Sm. 650. 2HCl,

(2 HCl, PtCl₄), Pikrat (B. **22**, 1885). — IV, 1193. 3) 3'-Amido-4²,4³-Di[Dimethylamido]triphenylmethan. Sm. 130° (B.

12, 803; 15, 683). — IV, 1193. 4) 4'-Amido-4',4'8-Di[Dimethylamido] triphenylmethan. Sm. 151-152°

(B. 15, 2527; 16, 709; 24, 3140). — IV, 1194.

5) 2-Oktyl-4, 6-Diphenyl-1, 3, 5-Triazin. Sm. 43°; Sd. 284—285° (B. 23, 2385). — IV, 1199. C 78,4 — H 8,0 — O 13,6 — M. G. 352.

 $\mathbf{C}_{23}\mathbf{H}_{28}\mathbf{O}_{3}$

1) Acetat d. Cannabinol. Sm. 75° (Soc. 75, 25).

C 75,0 — H 7,6 — O 17,4 — M. G. 368. $\mathbf{C}_{23}\mathbf{H}_{28}\mathbf{O}_4$

1) norm. Propylenäther d. Eugenol. Sm. 82,5° (J. 1877, 582). — II, 974. 2) isom. Propylenäther d. Eugenol. Sm. 56—58° (J. 1877, 582). — II, 974.

3) Verbindung (aus Campheroxalsäure). Sm. 242° (Am. 21, 254). C 71,9 — H 7,3 — O 20,8 — M. G. 384.

 $C_{23}H_{28}O_{5}$

1) Methyltriäthyläther d. Brasilin. Sm. 149° (B. 27, 525). — III, 653. C28 H28 O6 C 69.0 - H 7.0 - O 24.0 - M. G. 400.

Diäthyläther d. Pinoresinol. Sm. 118° (M. 18, 487).
 C 63,9 — H 6,5 — O 29,6 — M. G. 432.
 Flavaspidsäure. Sm. 157—159° (C. 1896 [2] 1037).

C23 H29 O31 1) Tanacetumgerbsäure = $(C_{23}H_{29}O_{31})_x$ (J. 1882, 1176). — III, 591. C 81,6 - H 8,9 - O 9,5 - M. G. 338. $\mathbf{C}_{23}\mathbf{H}_{30}\mathbf{O}_2$

1) Aethyloktoäthenylisopropylessigsäure. Fl. (A. 202, 325). — II, 1473. C23 H30 O4 C 74,6 - H 8,1 - O 17,3 - M. G. 370.

1) Propyläther d. Bidurochinon. Sm. 116° (B. 29, 2183).

 $C_{23}H_{30}O_7$ C 66.0 - H 7.2 - O 26.8 - M. G. 418.1) Kosin. Sm. 148° (B. 27 [2] 311).

 $\mathbf{C}_{23}\mathbf{H}_{30}\mathbf{N}_{2}$ C 82,6 - H 9,0 - N 8,4 - M.G. 334.

1) Verbindung (aus d. Base C₂₈H₈₂N₂). HCl, HJ (Bl. 47, 46). — IV, 1018. $\mathbf{C}_{23}\mathbf{H}_{31}\mathbf{N}_{3}$

C 79,1 — H 8,9 — N 12,0 — M. G. 349.

1) Verbindung (Nitril aus Isoamylidenphenylamin). Sm. 136° (B. 25, 2047). **- II**, 444.

C 65,7 — H 7,6 — O 26,7 — M. G. 420. Aspidin. Sm. $124,5^{\circ}$ (C. **1896** [2] 1036). C28 H32 O7

C 82,1 - H 9,5 - N 8,3 - M. G. 336. $C_{23}H_{82}N_{2}$

1) Base (aus Dimethylanilin u. Oenanthylchlorid). Sm. 72,5°; Sd. 278°15. (2 HCl, PtCl₄) (Bl. 47, 44). — IV, 996. C 77,1 — H 9,5 — O 13,4 — M. G. 358.

C23 H34 O3

1) Methylester d. Anacardsäure. Fl. (В. 20, 1863). — П, 1686. С 70,8 — Н 8,7 — О 20,5 — М. G. 390. $\mathbf{C}_{25}\mathbf{H}_{34}\mathbf{O}_{5}$

1) Verbindung (aus Tamacoaréöl). HgCl (B. 26 [2] 687). $C_{23}H_{34}O_{9}$ C 60,8 - H 7,5 - O 31,7 - M. G. 454.

1) Trimethylester d. Anhydrociliansäure. Sm. 119° (B. 32, 686). C 81.7 - H 10.0 - N 8.3 - M. G. 338.

1) $\alpha \alpha$ -Di[P-Dimethylamidophenyl]heptan. Sm. 59,5°; Sd. 275°₁₅. (2HCl, $PtCl_4$) (Bl. 47, 43). — IV, 986.

2) $\beta\beta$ -Di[4-Diäthylamidophenyl] propan. Sm. 76°. 2HJ (A. 242, 334). IV, 984.

3) Di[Diäthylamidomethylphenyl]methan (aus 2-Diäthylamido-1-Methylbenzol). Sd. 235—245°₂₆ (M. 19, 633).

4) Diisobutylamidodibenzylamidomethan (Bl. [3] 13, 158).

- 5) Diäthylönanthylidendiphenyldiamin. Sd. 215—220° 1. ger. Zers. (A. Spl. $C_{23}H_{34}N_{2}$ **3**, 363). — **II**, 445.
- 1) Verbindung (aus Asphalt). III, 565. C 84,1 H 11,0 O 4,9 M. G. 328. $C_{23}H_{34}S$ $C_{23}H_{36}O$

1) Myroxin (C. 1897 [1] 421). C 80.2 - H 10.4 - O 9.3 - M. G. 344.

C28H36O2 1) 2,4-Diönanthyl-1,3,5-Trimethylbenzol. Sd. 255°_{18-20} (B. **30**, 1286). C 65,1 — H 8,5 — O 26,4 — M. G. 424.

1) Prophetin (J. 1859, 566). — III, 602.
C 58,5 — H 7,6 — O 33,9 — M. G. 472.

1) Tetraäthylester d. βζ-Diketo-δ-Isobutylheptan-αγεη-Tetracarbon- $C_{23}H_{36}O_7$

 $\mathbf{C}_{23}\mathbf{H}_{36}\mathbf{O}_{10}$

säure (T. d. Isovalerylidenbisacetondicarbonsäure). Sm. 118º (A. 288, 358). C 83.6 - H 11.5 - 0 4.8 - M. G. 330. $C_{23}H_{38}O$

1) Pentadekyl-4-Methylphenylketon. Sm. 60°; Sd. 262°₁₅ (160°₀) (B. 21, 2266; **29**, 1327). — III, *157*.

2) Propyläther d. Oxycampherpinakonan. Sm. 86° (B. 27, 2349; A. **292**, 14).

C 79.8 - H 11.0 - O 9.2 - M. G. 346. $C_{23}H_{38}O_{2}$

Methyläther d. Pentadekyl-4-Oxyphenylketon. Sm. 70,5°; Sd. 279 bis 280°₁₅ (B. 21, 2269). — III, 157.
 Propionat d. Cinchol. Sm. 110° (A. 228, 295). — II, 1069.
 Propionat d. Cupreol. Sm. 111° (A. 228, 293). — II, 1068.
 4-Methylphenylester d. Palmitinsäure. Sm. 47°; Sd. 258°₁₅ (B. 17, 1270)

1379). — II, 749.

5) Cetylester d. Benzolcarbonsäure. Sm. 30° (A. 102, 221). — II, 1141. C 73.0 - H 10.1 - O 16.9 - M. G. 378.

 $C_{23}H_{38}O_4$ 1) Fellinsäure. Sm. 169° (120°). Mg + 2½ H₂O, Ba + 4 H₂O (*H.* 10, 187; 11, 268; 19, 567; *B.* 27, 1344). — I, 733. C 41,4 — H 5,7 — O 52,8 — M. G. 666. 1) Arabinose (Soc. 45, 54). — I, 1101. $\mathbf{C}_{23}\mathbf{H}_{38}\mathbf{O}_{22}$

C 83,1 - H 12,1 - O 4,8 - M. G. 332

- $\mathbf{C}_{23}\mathbf{H}_{40}\mathbf{O}$ 1) ?-Oxy-4-Hexadekyl-1-Methylbenzol. Sm. 62°; Sd. 267—268°, (B. 21, 3183). — II, 777. C 79,3 — H 11,5 — O 9,2 — M. G. 348.
- $\mathbf{C}_{23}\mathbf{H}_{40}\mathbf{O}_{2}$ 1) Methylcetyläther d. 1,2-Dioxybenzol. Sm. 54° (R. 12, 273). — II, 909.

C'62,2 - H 9,0 - O 28,8 - M. G. 444. $C_{23}H_{40}O_{8}$ 1) Tetraäthylester d. Undekan- $\delta\delta\vartheta\vartheta$ -Tetracarbonsäure. Sm. $52-54^{\circ}$; Sd. $253-256_{80}^{\circ}$ (Soc. **59**, 836). — **I**, 862.

2) Tetraäthylester d. β9-Dimethylnonan-γγηη-Tetracarbonsäure. Sd. 250—252°₈₀ (Soc. 59, 839). — I, 863.
 C 80,2 — H 11,6 — N 8,1 — M. G. 344.
 1) Hymenodictin. 2HCl, (2HCl, PtCl₄), 2C₂H₅J (J. 1883, 1414; 1884,

 $C_{23}H_{40}N_2$ 1397). — III, 887. C 83,4 — H 12,4 — N 4,2 — M. G. 331.

 $C_{23}H_{41}N$ 1) ?-Amido-4-Hexadekyl-1-Methylbenzol. Sm. 54°; Sd. 264—265°₁₅ (B. **21**, 3183). — **II**, 566. C 78,9 $\stackrel{\checkmark}{-}$ H 12,0 $\stackrel{\checkmark}{-}$ O 9,1 $\stackrel{\checkmark}{-}$ M. G. 350. $C_{23}H_{42}O_{2}$

1) Methylester d. Behenolsäure. Sm. 22° (B. 25, 964). — I, 536. C 79,8 — H 12,1 — N 8,1 — M. G. 346.

1) Dimethyldianhydrolupinin. (2 HCl, 2 AuCl₈) (C. 1897 [2] 361). C 78,4 — H 12,5 — O 9,1 — M. G. 352.

1) Vitylglykol (B. 25 [2] 286). C 75,0 — H 12,0 — O 13,0 — M. G. 368. $C_{28}H_{42}N_2$

 $\mathbf{C}_{23}\mathbf{H}_{44}\mathbf{O}_{2}$

 $C_{23}H_{44}O_{3}$ 1) Methylester d. Oxybehensäure. Sm. 57-58° (J. pr. [2] 48, 340). C 71,9 - H 11,5 - O 16,6 - M. G. 384. $\mathbf{C}_{23}\mathbf{H}_{44}\mathbf{O}_{4}$

1) Eikosylmalonsäure. Sm. 119-120° (G. 27 [2] 302). 2) Diäthylester d. Heptadekan-αα-Dicarbonsäure (Diäthylester d. Cetyl-

malonsäure). Sd. 300—360° (A. 206, 357). 3) Diäthylester d. Heptadekan-11-Dicarbonsäure (D. d. Dioktylmalonsäure). Sd. 338-340° (A. **204**, 163). — I, 690.

4) Verbindung (Keton aus Isovaleriansäure). Sd. 200-210° (A. **202**, 328). C 53,9 — H 8,6 — O 37,5 — M. G. 512.

 $C_{23}H_{44}O_{12}$

1) Convallamarin (J. 1858, 518; 1882, 1130). — III, 578. 130 RICHTER, Lex. d. Kohlenstoffverb.

C 81.7 - H 13.6 - O 4.7 - M. G. 338. $\mathbf{C}_{23}\mathbf{H}_{46}\mathbf{O}$

1) μ-Ketotrikosan (Lauron). Sm. 66° (69°) (A. 84, 289; B. 15, 1712; Soc. **57**, 981). — **I**, 1006.

C 78,0 — H 13,0 — O 9,0 — M. G. 354. C23H46O2

1) β-Methylbutylester d. Stearinsäure. Sm. 20—21° (Bl. [3] 15, 286). 2) Isoamylester d. Stearinsäure. Sm. 25,5° (J. 1858, 301; A. 88, 293). - I, 445.

3) Heptylester d. Palmitinsäure (B. 30, 1495).

C 71.5 — H 11.9 — O 16.6 — M. G. 386. C28 H46 O4

1) Glycerinmonarachin (A. ch. [3] 47, 355). — I, 447.

 $C_{23}H_{48}O$ C 81.2 - H 14.1 - O 4.7 - M. G. 340.

1) μ-Oxytrikosan (Dilaurylalkohol). Sm. 75-76° (Soc. 37, 983). — I, 240.

C₂₃-Gruppe mit drei Elementen.

 $C_{23}H_{13}ON_{3}$

C 79,5 — H 3,7 — O 4,6 — N 12,1 — M. G. 347. 1) 1,2-Naphtochinon-3,4-Akridonazin. Sm. 276° (B. 27, 3076). —

III, $39\overline{5}$. C 75,4 — H 3,8 — O 13,1 — N 7,6 — M. G. 366. $C_{23}H_{14}O_{3}N_{2}$

1) 1,1-Dinaphtylparabansäure. Sm. 246° (B. 21, 973). — II, 611. C 72,3 — H 3,7 — O 16,7 — N 7,3 — M. G. 382. 1) 2,4-Di[Phtalylamido]-1-Methylbenzol. Sm. 232—233° (B. 10, 1161). $C_{23}H_{14}O_4N_2$

— IV, 606. C 62,4 — H 3,2 — O 21,7 — N 12,7 — M. G. 442.

 $C_{23}H_{14}O_6N_4$

1) Trinitroacetophenin (B. 6, 641). — III, 130. C 58.7 - H 3.0 - O 20.4 - N 17.9 - M. G. 470. $C_{23}H_{14}O_6N_6$

1) ?-Trinitro-2, 3-Diphenyl-2, 3-Dihydro-1, 2, 4-Naphtisotriazin. Sm. 249° (Soc. 59, 681). — IV, 1394.

2) ?-Trinitro-2, 3-Diphenyl-2, 3-Dihydro-1, 2, 4-Naphtisotriazin. Sm. 295° (Soc. 59, 681). — IV, 1394.

C 86,0 - H 4,7 - O 5,0 - N 4,3 - M. G. 321. $C_{28}H_{15}ON$

1) Benzoylphenylnaphtylcarbazol. Sm. 170° (B. 29, 270). — IV, 453. 2) 1-[β -Phenyläthenyl]phenanthrenoxazol. Sm. 171—172° (Soc. 57, 11).

- III, 446.

C 75.6 - H 4.1 - O 8.8 - N 11.5 - M. G. 365 $C_{23}H_{15}O_2N_3$

1) 5-Nitro-2-Phenyl-1-[1-Naphtyl] benzimidazol. Sm. 171—173° (Bl. [3] 17, 869). — IV, 562.

2) 5-Nitro-2-Phenyl-1-[2-Naphtyl]benzimidazol. Sm. 177—178° (Bl. [3]

17, 869). — IV, 562.
3) 2-[2-Nitrophenyl]-3-Phenyl-α-Naphtimidazol. Sm. 242°. (2 HCl, PtUl₄) (B. 25, 2830). — IV, 1062. 4) 2-[3-Nitrophenyl]-3-Phenyl-α-Naphtimidazol. Sm. 2090 (B. 25,

2831). — IV, 1062. 5) $2-[4-Nitrophenyl]-3-Phenyl-\alpha-Naphtimidazol.$ Sm. 238° (B. 25, 2831). — IV, 1062.

6) Menaphtoximid? Sm. 245° (A. 98, 244). — II, 605.

7) Betainverbindung + 2H₂O (aus 2-Phenylamido-1-Phenylazonaphtalin-1²-Carbonsäure). HCl (B. **28**, 340). — **IV**, 1462.

8) Betaïnverbindung + 3H₂O (aus 2-Phenylamido-1-Phenylazonaphtalin1³-Carbonsäure). HCl (B. 28, 339). — IV, 1462.

9) Betaïnverbindung + 3H₂O (aus 2-Phenylamido-1-Phenylazonaphtalin1⁴-Carbonsäure). HCl (B. 28, 339). — IV, 1462.

C₂₈H₁₅O₂Br 1) 6-Brom-2-Phenyl-4-Benzoylmethylen-1,4-Cumaran (Bromphenacylidenflaven). Sm. 169-170° (B. 31, 712).

2) Lakton d. δ -Brom- γ -Oxy- $\alpha\beta\delta$ -Triphenyl- $\alpha\gamma$ -Butadiën- α -Carbonsäure (Brombenzaldiphenylmaleïd). Sm. 165° (B. **24**, 3855). — II, 1728. C 78,2 — H 4,2 — O 13,6 — N 4,0 — M. G. 353.

 $C_{23}H_{15}O_3N$

1) 5-Benzoyl-2[oder 3]-Phenylamido-1, 4-Naphtochinon. Sm. 199 bis 200° (A. 247, 184). — III, 255.

2) 6-Benzoyl-2[oder 3]-Phenylamido-1,4-Naphtochinon. Sm. 209 bis 210° (A. **247**, 187). — III, 255.

- 3) Nitril d. β -Benzoxyl- α -Benzoyl- β -Phenylakrylsäure (N. d. Tribenzoyl- $C_{23}H_{15}O_3N$ essigsäure). Sm. 138° (*J. pr.* [2] **58**, 155). C 74,7 — H 4,1 — O 17,3 — N 3,8 — M. G. 369.
- $\mathbf{C}_{23}\mathbf{H}_{15}\mathbf{O_4N}$
 - 1) Dibenzoat d. ?-Dioxychinolin. Sm. 130—134° (B. 20, 1822). IV. 288.
 - 2) Lakton d. δ -Nitro- γ -Oxy- $\alpha\beta\delta$ -Triphenyl- $\alpha\gamma$ -Butadiën- α -Carbonsäure
- $\mathbf{C}_{23}\mathbf{H}_{15}\mathbf{O_4N_3}$
- (Nitrobenzaldiphenylmaleïd). Sm. 1755—177° (B. 24, 3869). II, 1728. C 69,5 H 3,8 O 16,1 N 10,6 M. G. 397. 1) Benzoat d. 1-[3-Nitrophenyl]azo-2-Oxynaphtalin. Sm. 171° (Soc. 55, 116). IV, 1430. C 64,9 H 3,5 O 15,1 N 16,5 M. G. 425.
- $C_{23}H_{15}O_4N_5$
 - 1) 2,3-Di[3-Nitrophenyl]-2,3-Dihydro-1,2,4-Naphtisotriazin. Sm. 248 bis 240⁶ u. Zers. + C₂H₄O₂ (Soc. **59**, 693). — **IV**, 1395.
 2) **2**, **3**-Di[**4-N**itrophenyl]-**2**, **3**-Dihydro-**1**,**2**,**4**-Naphtisotriazin. Sm. 267
 - bis 270° u. Zers. $+ C_2H_4O_2$ (Soc. **59**, 694). **IV**, 1396. C 53,4 H 2,9 O 24,7 N 19,0 M. G. 517.
- $C_{23}H_{15}O_8N_7$
 - 1) ?-Tetranitro-2, 3-Diphenyl-2, 3-Dihydro-1, 2, 4-Naphtisotriazin. Sm.
- 305° (Soc. **59**, 681). **IV**, 1394. C 82,1 H 4,8 O 4,8 N 8,3 M. G. 336. $\mathbf{C}_{23}\mathbf{H}_{16}\mathbf{ON}_{2}$
 - 1) 2-[2-Oxyphenyl]-3-Phenyl-α-Naphtimidazol. Sm. 175—176°. HCl (B. 25, 2830). IV, 1062.
 - 2) 9-Methyl-7-Phenyl- $\alpha\beta$ -Naphtophenazon[5] (Methylrosindon). Sm. 255°
 - (A. 256, 243). IV, 1064.
 3) 7-Benzylrosindon [9] (ms-Benzylisorosindon). Sm. 210°. HCl, HBr, HJ (B. 31, 2480).
 - 4) Benzylrosindon. Sm. 262—264° (A. 290, 297). IV, 1057.
- $C_{23}H_{16}ON_4$ C 75.8 - H 4.4 - O 4.4 - N 15.4 - M. G. 364.
 - 1) 2-Phenyl-3-[3-Nitrophenyl]-2,3-Dihydro-1,2,4-Naphtisotriazin.
 - Sm. 215° u. Zers. + ½ C₂H₄O₂ (Soc. 59, 700). IV, 1394.

 2) 2-Phenyl-3-[4-Nitrophenyl]-2,3-Dihydro-1,2,4-Naphtisotriazin. Sm. 228-229° u. Zers. (Soc. 59, 700). IV, 1394.

 C 78,4 H 4,5 O 9,1 N 7,9 M. G. 352.

 1) Acetylcarbanilamidophenanthrol. Sm. 163-164° (B. 22, 3244). —
- $\mathbf{C}_{23}\mathbf{H}_{16}\mathbf{O}_{2}\mathbf{N}_{2}$
 - III. 442.
 - 2) Methyläther d. 9-Oxyrosindon [5]. α-Modif. Sm. 264—265° (aus Benzol); β-Modif. Sm. 308° (B. 29, 2756; 31, 307, 2482, 2483). IV, 1059.
 - 3) Acetat d. 2-[4-Oxyphenyl]phenanthrenimidazol. Sm. 205-210° u. Zers. (Soc. 41, 146). — III, 447.
 - 4) Benzoat d. 2-Oxy-1-Phenylazonaphtalin. Sm. 125° (Soc. 55, 115). IV, 1429.
 - 5) Benzoat d. 4-Oxy-1-Phenylazonaphtalin. Sm. 118-119° (Soc. 55, 606). — IV, 1428. C 72,6 — H 4,2 — O 8,4 — N 14,7 — M. G. 380.
- $C_{28}H_{16}O_{2}N_{4}$
 - 1) Homoterephtalendiazoximdibenzenyl. Sm. 179,5° (B. 22, 2980). II, 1844.
 - 2) 3-Phenyl-2-[2-Nitrophenyl]-2,3-Dihydro-1,2,4-Naphtisotriazin. Sm. 210—211° (Soc. 59, 683). — IV, 1395.
 - 3) 3-Phenyl-2-[3-Nitrophenyl]-2,3-Dihydro-1,2,4-Naphtisotriazin.
 - Sm. 228° (Soc. 59, 699). IV, 1395. 4) 3-Phenyl-2-[4-Nitrophenyl]-2,3-Dihydro-1,2,4-Naphtisotriazin. Sm. 2930 u. Zers. (Soc. 59, 685). — IV, 1396.
- $C_{23}H_{16}O_{2}Br_{2}$ 1) Lakton d. γδ-Dibrom-γ-Oxy-αβδ-Triphenyl-α-Buten-α-Carbonsäure. Sm. 154° u. Zers. (B. 24, 3854). H, 1727. $C_{23}H_{16}O_{3}N_{2}$ C 75,0 H 4,3 O 13,0 N 7,6 M. G. 368.
- - 1) 5 Keto-2-[α-Nitrobenzyliden]-3,4-Diphenyl-2,5-Dihydropyrrol (Nitrobenzaldiphenylmaleïmidin). Zers. bei 260° (B. 24, 3872). — II, 1728.
 - 2) 2-[2-Benzoylamidophenyl]amido-1,4-Naphtochinon. Sm. 238-2390 (B. 28, 356). - IV, 565.
 - 3) Benzoat d. 8-Acetylamido-5-Oxychinolin. Sm. 180° (B. 27, 1940). **– IV**, 912.
 - 4) Benzoat d. 5-Benzoylamido-8-Oxychinolin. Sm. 205° (B. 27, 1939). — IV, 912. C 69,7 — H 4,0 — O 12,1 — N 14,1 — M. G. 396.
- C23H16O3N4 1) 1-Oxy-2,4-Diphenylazonaphtalin-23-Carbonsäure. Zers. bei 2000 (B. **24**, 1602). — **IV**, 1463.

C 71.9 - H 4.2 - O 16.6 - N 7.3 - M. G. 384.C28H18O4N2

1) 3,5-Diketo-2,4-Dibenzoyl-1-Phenyltetrahydropyrazol, Sm. 111° (B. 25, 1511). — IV, 955. C 67,0 — H 3,9 — O 15,5 — N 13,6 — M. G. 412.

C23H16O4N4

1) β-Naphtol-p-Azobenzol-p-Azosalicylsäure. Sm. oberh. 255° (Soc. 47. 667). —IV, 1470. C 66,3 — H 3,8 — O 25,1 — N 6,7 — M. G. 416.

 $C_{23}H_{16}O_6N_2$

1) Lakton d. γδ-Dinitro-γ-Oxy-αβδ-Triphenyl-α-Buten-α-Carbonsäure. Sm. 146° u. Zers. (B. 24, 3868). — II, 1727.

C₂₃H₁₆O₁₀Br₂1) Tetracetat d. Dibromluteolin. Sm. 218—220° (Soc. 69, 210). — III, 585. Coath Research 1 3-Phenyl-2-[4-Chlorphenyl]-2,3-Dihydro-1,2,4-Naphtisotriazin. Sm. 206° u. Zers. $+ C_2H_6O$ (Soc. 59, 691). — IV, 1394. C23H16N3Br 1) 3-Phenyl-2-[4-Bromphenyl]-2,3-Dihydro-1,2,4-Naphtisotriazin.

Sm. 211° u. Zers. (Soc. 59, 691). — IV, 1394.

 1) 1,1-Dinaphtylamidocyanurchlorid. Sm. 215° (B. 19, 243). — II, 624.
 2) 2,2-Dinaphtylamidocyanurchlorid. Sm. 278° (B. 19, 2057). — II, 624.
 C 85,4 — H 5,3 — O 4,9 — N 4,3 — M. G. 323. C28 H16 N5 Cl

 $\mathbf{C}_{23}\mathbf{H}_{17}\mathbf{ON}$

1) 5-Keto-2-Benzyliden-3,4-Diphenyl-2,5-Dihydropyrrol (Benzaldiphenylmaleïmidin). Sm. 241—242° (B. 24, 3859). — II, 1728. 2) Phenyl-1-Naphtylamid d. Benzolcarbonsäure. Sm. 152° (A. 209, 154).

— II. 1168.

3) Phenyl-2-Naphtylamid d. Benzolcarbonsäure. Sm. 147-1480 (1360)

(A. 209, 158; B. 17, 1591). — II, 1168. C 78,7 — H 4,8 — O 4,6 — N 11,9 — M. G. 351.

C28 H17 ON8

1) 2-Benzoylamido-l-Phenylazonaphtalin. Sm. 162-163 (B. 18, 799). - IV, 1393.

2) 4-Benzoylamido-1-Phenylazonaphtalin. Sm. 2010 (B. 28, 2198). IV, 1392.

3) Verbindung (aus 3-Nitrobenzol-1-Carbonsäurealdehyd) (B. 16, 1999). — III, 17. C 81,4 — H 5,0 — O 9,4 — N 4,1 — M. G. 339.

C28H17O2N

1) 1-Phenylimido-5-Oxy-3-Keto-2,4-Diphenyl-2, 3-Dihydro-R-Penten.

Sm. 175—176° (A. **284**, 259). — III, 320. 2) ?-Oxy-?-Phenyl-1,4-Naphtochinon-2-Methylphenylimid. Sm. 107 bis 108° (A. 226, 41). — III, 460.

3) ?-Oxy-?-Phenyl-1,4-Naphtochinon-4-Methylphenylimid. Sm. 154 bis 155° (A. 226, 41). — III, 460.

4) Benzoat d. 7-Phenylamido-2-Oxynaphtalin. Sm. 137° (B. 26, 3088).

– II, 1149. 5) 1,2,5-Triphenylpyrrol-3-Carbonsäure. Sm. 273° (B. 21, 3062). — IV, 449.

6) 3-Phenyl-2-Benzylchinolin-4-Carbonsäure. Sm. 293—295°. Ag (J. pr. 2] 57, 467).

7) Phenylester d. Phenyl-2-Naphtylamidoameisensäure. Sm. 1490 (B. **24**, 2919). — II, 617.

8) 4-Methylphenylimid d. $\alpha\beta$ -Diphenyläthen- $\alpha\beta$ -Dicarbonsäure. Sm.

192° (B. **26**, 2478). — II, 1897. C 75,2 — H 4,6 — O 8,7 — N 11,4 — M. G. 367. $C_{23}H_{17}O_{2}N_{3}$

1) 4-[3-Nitrobenzyliden]amido-1-Phenylamidonaphtalin. Sm. 1690 (A. 286, 185). — IV, 923.

2) 4-[4-Nitrobenzyliden]amido-l-Phenylamidonaphtalin. Sm. 168° (A. 286, 185). — IV, 923.

3) 2-Oxyphenylbenzoylhydrazimido- β -Naphtalin. Sm. 1830 (B. 18, 3127). **– IV**, 1576.

4) 4-Oxyphenylbenzoylhydrazimido-β-Naphtalin. Sm. 244° (B. 18, 3130). - IV, *1576*.

5) 2-Phenylamido-1-Phenylazonaphtalin-12-Carbonsäure. Sm. 2150 (B. 28, 335). — IV, 1462.

6) 2-Phenylamido-l-Phenylazonaphtalin-l³-Carbonsäure. Sm. 235°. Na (B. 28, 335). — IV, 1462.

7) 2-Phenylamido-l-Phenylazonaphtalin-l⁴-Carbonsäure. Sm. 258°. Na (B. 28, 334). — IV, 1462.

8) Acetylderivat d. Verb. C₂₁H₁₅ON₃. Sm. 140-141⁰ (B. 23, 2938). -IV, 848.

- $\mathbf{C}_{23}\mathbf{H}_{17}\mathbf{O}_{2}\mathbf{N}_{3}$ 9) Benzoat d. 3-Oxy-1-Phenyl-5-[β -Phenyläthenyl]-1,2,4-Triazol. Sm. 125° (Soc. 71, 216). — IV, 1167.
- 10) Verbindung (aus 4-Oxyazobenzol). Sm. 149° (B. 23, 492). IV, 1408.
 C 77,8 H 4,8 O 13,5 N 3,9 M. G. 355. $C_{23}H_{17}O_3N$
 - 1) 4-Oxy-5-Keto-3-Benzoyl-1, 2-Diphenyl-2, 5-Dihydropyrrol. Zers. bei 250—252° (B. 31, 1308). 2) 2,5-Diphenyl-1-[2-Oxyphenyl] pyrrol-3-Carbonsäure. Sm. 244—245°
 - (B. **22**, 3093). **IV**, 450. C 72,1 H 4,4 O 12,5 N 11,0 M. G. 383.
- $C_{23}H_{17}O_3N_3$

 $\mathbf{C}_{23}\mathbf{H}_{18}\mathbf{ON}_{4}$

- 1) 4-Nitro-2-Benzoylamido-1-[2-Naphtyl]amidobenzol. Sm. 217—218°
- (Bl. [3] 17, 867). IV, 562. 2) 5,7-Di[Benzoylamido]-8-Oxychinolin. Sm. 263—264° (J. pr. [2] 53, 543). **— IV**, 1160.
- 3) Verbindung (aus d. Chlorid d. β-Trichloracetyl-αβ-Dichlorakrylsäure).
 Sm. 229° (B. 25, 2232). II, 406.
 C 71,3 H 4,4 O 20,7 N 3,6 M. G. 387.
- $C_{23}H_{17}O_5N$ 1) Lakton d. δ -Nitro- $\gamma\gamma$ -Dioxy- $\alpha\beta\delta$ -Triphenyl- α -Buten- α -Carbonsäure? (Oxynitrobenzyldiphenylmaleid). Sm. 123-1250 (B. 24, 3866). -
- II, 1729. $\mathbf{C}_{23}\mathbf{H}_{17}\mathbf{ClS}$ 1) 2-Chlor-?-Triphenylmethylthiophen. Sm. 204—205° (B. 29, 1404). **– III**, 749.
- C28H17BrS 1) 2-Brom-?-Triphenylmethylthiophen. Sm. 191—1920 (B. 29, 1402). **– III**, 749.
- $C_{23}H_{17}JS$ 1) 2-Jod-P-Triphenylmethylthiophen. Sm. 184—185° (B. 29, 1404). $\mathbf{C}_{23}\mathbf{H}_{18}\mathbf{ON}_{2}$ C 81,6 - H 5,3 - O 4,7 - N 8,3 - M. G. 338.
 - 1) $\alpha\beta$ -Diphenyl- α -[2-Naphtyl]harnstoff. Sm. 132—133° (B. 23, 426). - II, 617.
 - 2) 3-Benzoylamido-1-[Benzoyl-2-Naphtyl]amidobenzol. Sm. 173° (B. **26**, 979). — IV, 573.
 - 3) 4-[2-Oxybenzyliden]amido-l-Phenylamidonaphtalin. Sm. 135° (A. **286**, 185). — IV, 923.
 - 4) ?-Phenylamido-1-[4-Amidobenzoyl] naphtalin. Sm. 92°. (2 HCl, PtCl₄),
 - Pikrat (B. 22, 1894). III, 254.
 5) 2-[2-Oxy-1-Naphtyl]azodiphenylmethan (Diphenylmethan-o-azo-β-Naphtol). Sm. 134° (B. 27, 2788). IV, 1439.
 - 6) 2-[2-Oxyphenyl]-3-Phenyl-1,2-Dihydro-α-Naphtimidazol. Sm. 139° (B. 25, 2830). IV, 920.
 7) Phenylamid d. 3-Phenylamidonaphtalin-2-Carbonsäure. Sm. 168
 - bis 169,5° (B. **25**, 2743). II, 1459. C 75,4 H 4,9 O 4,4 N 15,3 M. G. 366.
 - 1) s-Di[α-Imido-2-Naphtylmethyl]harnstoff. Sm. noch nicht bei 300° (B. 25, 1426). — IV, 956.
 - 2) 4-Phenylazo-2-[4-Methylphenyl]azo-l-Oxynaphtalin. Sm. 165° (B.
 - 25, 1339). IV, 1437. 3) Methyläther d. 2,4-Di[Phenylazo]-1-Oxynaphtalin. Sm. 123° (B. 24, 1596). IV, 1433.
 - 4) α -[1-Naphtyl]azo- α -[1-Naphtyl]hydrazon- β -Ketopropan. Sm. 174,5 bis 175° (B. **25**, 3547). — IV, 1230.
 - 5) 2-Phenylureïdo-1-Phenylazonaphtalin. Sm. 205° (B. 23, 502). IV. 1393.
 - 6) α -Phenyl- β -Phenylazo- β -[2-Naphtyl]harnstoff. Sm. 123° (B. 21, 2566). · IV, 1574.
- C 78,0' H 5,1 O 9,0 N 7,9 M. G. 354. $C_{23}H_{18}O_{2}N_{2}$ 1) Benzimid. Sm. 167° (A. 34, 189; 54, 372; J. 1850, 488; Berz. J. 16, 246; J. r. 1, 213). — III, 36.
 - 2) 4-Benzoylamido-3-Oxy-1-[?-Amidophenyl]naphtalin. Sm. 172-1730 (Soc. 55, 125). — II, 903.
 - 3) α -Phenylhydrazon- α -[2-Oxyphenyl]- α -[?-Oxy-2-Naphtyl] methan (A. **257**, 92). — IV, 778.
 - 4) Phenylhydrazon d. Oxalyldibenzylketon? Sm. 181-182° (A. 284, 261). — IV, 788.
 - 5) Benzoat d. α-Phenyl-β-[4-Oxy-l-Naphtyl]hydrazin. Sm. 162° (B. 24. 2314). — IV, 1506.

- C₂₃H₁₈O₂N₂ 6) 1-Nitroso-5-Keto-2-Benzyl-3,4-Diphenyl-2,5-Dihydropyrrol. Sm.
 - 135—136° (B. 24, 3863). II, 1727.

 7) Acetat d. 2-[4-Oxyphenyl]-4,5-Diphenylimidazol (A. d. p Oxylophin). Sm. 229° (B. 15, 2169). III, 27.
 - 8) Methyloxydhydrat d. Isorosindon. Chlorid, Jodid, Nitrat (B. 31, 306).
 - IV, 1056. 9) Aethylester d. 2,3-Diphenyl-1,4-Benzdiazin-6-Carbonsäure. Sm. 151° (B. 23, 3628). — III, 286.
 - 10) Verbindung (aus d. Benzoat d. 2-Oxy-1-Phenylazonaphtalin). Sm. 172 bis 173° (Soc. 55, 115). — IV, 1429.
- C 72,3 H 4,7 O 8,4 N 14,6 M. G. 382. $C_{23}H_{18}O_{2}N_{4}$
 - 1) 2- β -Naphtolazo-l-Phenylnitrosamidomethylbenzol. Sm. 155° (J. pr. [2] **55**, 374). — IV, 1436.
 - 2) αβ-Di[1-Naphtylhydrazon]propionsäure. Sm. 196° (A. 248, 89). IV, 927.
 - 3) αβ-Di[2-Naphtylhydrazon]propionsäure. Sm. bei 222° u. Zers. (A.
 - 248, 90). IV, 929. 4) Phenylamid d. 1-Phenylpyrazol-4,5-Dicarbonsäure. Sm. 205—206°
 - (A. 295, 319). IV, 544.
 5) Phenylimid d. 2-[4-Methylphenyl]imido-5-Methyl-2,3-Dihydrobenzimidazol - 1, 3 - Dicarbonsäure. Sm. 232 — 233° (B. 24, 2521). —
 - Verbindung (aus d. Amid d. β-Trichloracetyl-αβ-Dichlorakrylsäure). Sm. 221° (B. **25**, 2233). — II, 406. C 74,6 — H 4,9 — O 12,9 — N 7,6 — M. G. 370.
- $\mathbf{C}_{23}\mathbf{H}_{18}\mathbf{O}_{3}\mathbf{N}_{2}$
 - 1) Monooxim d. 4-Oxy-5-Keto-3-Benzoyl-1, 2-Diphenyl-2, 5-Dihydropyrrol. Zers. bei 213-215° (B. 31, 1308).
 - 2) Verbindung (aus Thebaolchinon). Sm. 1920 (B. 28, 943; 30, 1392). IV, 1087.
- C₂₃H₁₈O₃Br₄ 1) Diäthyläther d. Tetrabromaurin. Sm. 110-115° (B. 17, 1627). -II, 1120.
- $C_{23}H_{18}O_3S_2$ 1) 2-Naphtyläther d. α -Merkapto- γ -[2-Naphtyl]sulfon- β -Ketopropan. Sm. 133° (J. pr. [2] 55, 414).
- C 71.5 H 4.7 O 16.5 N 7.2 M. G. 386. $C_{23}H_{18}O_4N_2$
 - 1) α -Phenylhydrazon- α -[3,4,5-Trioxyphenyl]- α -[4-Oxy-1-Naphtyl]methan. Sm. 210° (A. 269, 314). — IV, 778.
 - 2) $2 Oxy 2 [\alpha Nitrobenzyl] 5 Keto 3, 4 Diphenyl 2, 5 Dihydropyrrol$ + H₂O (Oxynitrobenzyldiphenylmaleimidin) (B. 24, 3871). - II, 1729.
 - 3) 5,6-Methylenäther-7,8-Dimethyläther d. 5,6,7,8-Tetraoxy-2,3-Diphenyl-1,4-Benzdiazin. Sm. 222° (B. 23, 2291). III, 286.
- 1) $\alpha \gamma$ -Di[2-Naphtylsulfon]- β -Ketopropan. Sm. 200° (*J. pr.* [2] **55**, 407). C 50,2 H 3,3 O 26,2 N 20,3 M. G. 550. $C_{23}H_{18}O_5S_9$ $C_{23}H_{18}O_9N_8$
 - 1) Diäthylester d. Carbonyldi [3-Nitrophenylhydrazoncyanessigsäure]. Sm. 141—142° (J. pr. [2] 51, 224). — IV, 1455.
- $\mathbf{C}_{23}\mathbf{H}_{18}\mathbf{O}_{11}\mathbf{N}_{4}$ C 52,5 - H 3,4 - O 33,5 - N 10,6 - M. G. 526.
- 1) Diäthyläther d. Tetranitroaurin. Sm. 105° (B. 17, 1626). II, 1121. $\mathbf{C}_{23}\mathbf{H}_{13}\mathbf{N}\mathbf{J}$ 1) Jodäthylat d. Iso-β-Naphtoakridin. Sm. 283—284° (Soc. 73, 548).
- 1) 2-[1-Naphtyl]imido-3-[1-Naphtyl]tetrahydrothiazol. Sm. 139°. (2 HCl, $\mathbf{C}_{23}\mathbf{H}_{18}\mathbf{N}_{2}\mathbf{S}$ $PtCl_4$) (B. **21**, 967). — **II**, 610.
 - 2) 2-[2-Naphtyl]imido-3-[2-Naphtyl]tetrahydrothiazol. Sm. 172°. (2HCl, $PtCl_4$) (B. 21, 968). — II, 619.
- $C_{23}H_{18}N_3Cl$ 1) 7-Chlorphenylat d. 5-Methylamido- $\alpha\beta$ -Naphtophenazin (Methylrosindulinchlorid). + AuCl₃ (B. 31, 2430).
 - 2) 7-Chlorbenzylat d. 5-Amido- $\alpha\beta$ -Naphtophenazin (A. 290, 295). IV, 1204.
- 1) Verbindung (aus Trimethylenbromid u. s-Diäthylthioharnstoff) (B. 23, $C_{28}H_{18}N_4S_2$ 2200). — I, 1325.
- $\mathbf{C}_{23}\mathbf{H}_{19}\mathbf{ON}$ C 84,9 — H 5,8 --04,9 - N4,3 - M.G. 325.
 - 1) 2-Keto-1-Methyl-3, 3, 5-Triphenyl-2, 3-Dihydropyrrol. α-Modif. Sm. 143°; β Modif. Sm. 138° (Soc. 57, 697, 724). — IV, 475.
 - 2) 5-Keto-2-Benzyl-3,4-Diphenyl-2,5-Dihydropyrrol (Benzyldiphenylmaleimidin). Sm. 169-170° (B. 24, 3863). — II, 1727.

- C23 H19 ON3
- C 68,2 H 5,4 O 4,5 N 11,9 M. G. 353.
- 1) 2-β-Naphtolazo-1-Phenylamidomethylbenzol. Sm. bei 176° (J. pr. [2] **55**, 374). — IV, 1436.
- 2) 2-Oxy-1-[4-Benzylamidophenyl]azonaphtalin. Sm. 1240 (Soc. 55, 596). · IV, *1431*.
- 3) 4-Oxy-1-[4-Benzylamidophenyl]azonaphtalin (Soc. 55, 596). IV, 1431.
- 4) Base (aus 2-Phenylamido-1-p-Methylphenylazonaphtalin). Chlorid + HgCl₂, Chlorid + SnCl₂, 2 Chlorid + PtCl₄, Nitrat, Pikrat (B. 23, 1326). — IV, 1400.
- 5) Base (aus Benzolazo- β -Tolylnaphtylamin). Chlorid + SnCl₂, 2Chlorid + PtCl₄, Nitrat, Pikrat (B. 23, 1328). IV, 1397. C 80,9 H 5,6 O 4,1 N 9,4 M. G. 341.

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- 1) 1,3-Diketo-4,4-Dibenzyl-1,2,3,4-Tetrahydroisochinolin. Sm. 1740 (B. **20**, 2496). — **II**, 1913.
- 2) β -Phenylamido- $\alpha\alpha$ -Dibenzoylpropen. Sm. 166—167° (A. 291, 101).
- 3) 3-[4-Isopropylphenyl]- β -Naphtochinolin-1-Carbonsäure (Cumyl- β -Naphtochinolinsäure). Sm. 255° (B. 27, 2030). IV, 472.
- 4) Amid d. γ -Keto- $\alpha\beta\delta$ -Triphenyl- α -Buten- α -Carbonsäure. Sm. 203 bis 204° (B. 24, 3858). — II, 1728. C 74,8 — H 5,1 — O 8,6 — N 11,4 — M. G. 369.

 $C_{28}H_{19}O_2N_3$

- 1) β -Phtalylamido- α -Phenylhydrazon- α -[4-Methylphenyl]äthan. 154° (B. **31**, 2132).
- 2) Aethylester d. 3,4-Diphenyl-1,2,5-Triazol-1-[Phenyl-4'-Carbon-
- säure]. Sm. 99° (B. 27, 1136). III, 288.
 3) Diacetylchrysanilin. HCl, HNO₃ (B. 17, 433). IV, 1212.
 4) Naphtylamidoformiat d. 4-Oxy-s-Diphenylhydrazin. Sm. 155° (B.
- 23, 493). IV, 1504. $C_{23}H_{19}O_{3}Br$ 1) αs -Diketo- γ -[5-Brom-2-Oxyphenyl]- αs -Diphenylpentan. Sm. 158 bis 159° (B. 29, 243). III, 307. $C_{33}H_{19}O_{4}N$ C 74,0 H 5,1 O 17,2 N 3,7 M. G. 373.
 - 1) Aethylester d. δ -Cyan- $\gamma \varepsilon$ -Diketo- $\alpha \eta$ -Diphenyl- $\alpha \zeta$ -Heptadiën- δ -Carbonsäure (B. 21 [2] 645). — II, 1910.
 - 2) Aethylester d. 4,5-Diketo-2-Phenyl-1-[2-Naphtyl]tetrahydropyrrol-**3-Carbonsäure.** Sm. 142—143° (B. **30**, 604). — **IV**, 369. C 68,8 — **H** 4,7 — O 16,0 — N 10,5 — M. G. 401.
- C23H19O4N3
 - 1) 4- $[\beta$ -Acetoxylimido $\alpha\beta$ -Diphenyläthyliden]hydrazidobenzol 1-Carbonsäure. Sm. 176° (B. **27**, 1135). — III, 291. C 70,9 — H 4,9 — O 20,6 — N 3,6 — M. G. 389.
 - 1) O-Benzoat-N-4-Methylbenzoat d. 4-Methoxylbenzhydroxamsäure. Sm. 162° (C. 1898 [2] 1080).
 - 2) isom. O-Benzoat-N-4-Methylbenzoat d. 4-Methoxylbenzhydroxamsäure. Sm. 132° (C. 1898 [2] 1080).
 - 3) O-4-Methylbenzoat-N-4-Methoxylbenzoat d. Benzhydroxamsäure. Sm. 120—121° (C. 1898 [2] 1080).
 - 4) isom. O-4-Methylbenzoat-N-4-Methoxylbenzoat d. Benzhydroxamsäure. Sm. 127° (C. 1898 [2] 1080).
 - 5) O-4-Methoxylbenzoat-N-Benzoat d. 4-Methylbenzhydroxamsäure. Sm. 142° (C. 1898 [2] 1080). C 68,1 — H 4,7 — O 23,7 — N 3,4 — M. G. 405.

C23 H19 O6 N

 $C_{23}H_{19}O_5N$

- 1) Benzoat d. 4-Methoxylbenzoyl-4-Methoxylbenzhydroxamsäure.
- α-Modif. Sm. 152—153°; β-Modif. Sm. 148—149° (A. 186, 28). II, 1535.
 2) 4 Methoxylbenzoat d. 4 Methoxylbenzoylbenzhydroxamsäure. α-Modif. Sm. 137,5—138,5°; β-Modif. Sm. 137,5—138,5° (A. 186, 30). — II, 1535.
- 3) 4-Methoxylbenzoat d. Benzoyl-4-Methoxylbenzhydroxamsäure. Sm. $147,5^{\circ}$ (A. 186, 28). — II, 1535.
- 4) Methylimid d. Dieinnamylweinsäure. α -Modif. Sm. 70—72°; β -Modif.
- Sm. 95°; + C_6H_6 (Sm. 80—81°) (B. 30, 3041). $C_{23}H_{19}N_6Cl_3$ 1) 3,3,5-Trichlor-1,2,4-Tri[Phenylhydrazon]-R-Pentamethylen. Fl. (B. 21, 2437). C 81,2 — H 5,9 — O 4,7 — N 8,2 — M. G. 340.
- $\mathbf{C}_{23}\mathbf{H}_{20}\mathbf{ON}_{2}$ 1) 3-Oxy-1-Phenylhydrazon-3,4-Diphenyl-2,3-Dihydro-R-Penten. Sm. 197° u. Zers. (Soc. 51, 422). — III, 251.

 $\mathbf{C}_{23}\mathbf{H}_{21}\mathbf{ON}_{3}$

 $C_{23}H_{21}O_{2}N$

2) 3-Keto-1-Methyl-2,4-Diphenyl-5-Benzyl-2,3-Dihydropyrazol (A. $C_{23}H_{20}ON_{2}$ **296**, 13). — IV, 1033. 3) Amid d. γ -Cyan- $\alpha\beta\gamma$ -Triphenylpropan- α -Carbonsäure (B. 31, 3064). C 77,5 — H 5,6 — O 9,0 — N 7,9 — M. G. 356.

 $C_{23}H_{20}O_2N_2$ 1) 2,3-Dibenzoyl-1-Methyl-1,2,3,4-Tetrahydro-2,3-Benzdiazin. Sm. 185° (B. 30, 3030). — IV, 854. 2) Dimethyläther d. 6-Methyl-2, 3-Di[4-Oxyphenyl]-1, 4-Benzdiazin (Toluanisaldehydin). Sm. 152—156° (B. 11, 1660). — IV, 620.

3) Anhydro- α -Benzyliden - α - Oxy- β -[4-Methylphenyl] amido- β -Phenylpropionsäure. Sm. 215° (B. 29, 1740).

4) Acetat d. α-Oximido-β-[4-Methylphenyl] imido-αβ-Diphenyläthan. Sm. 120-121° (B. 25, 2598). — III, 290.
 C 72,3 — H 7,8 — O 12,6 — N 7,3 — M. G. 382.

 $C_{23}H_{20}O_{3}N_{2}$

1) 5-Benzoat d. 4-Benzoylamido-5-Oximidomethyl-1, 3-Dimethylbenzol. Sm. 142—142,5° (*J. pr.* [2] **58**, 342). C 66,3 — H 4,8 — O 15,4 — N 13,5 — M. G. 416.

 $C_{23}H_{20}O_4N_4$

1) β -Phenylhydrazon- α -Phenylamido- β -Phenylimidopropan- $\alpha^{2,2}$ -Dicarbonsäure (Phenylhydrazonpyrotraubendianthranilsäure). Sm. 250° u. Zers. (B. 30, 1191). — IV, 689.

2) Diacetat d. Resorcindisazobenzoltoluol. Sm. 175—176° (B. 15, 2822).

– IV, 1444,

3) Diacetat d. isom. Resorcindisazobenzoltoluol: Sm. 195-196° (B. 15,

2822). — IV, 1444. 4) Dibenzoat d. 1-Amidooximidomethyl-4-[β-Amido-β-Oximidoäthyl]benzol. Sm. 184° (B. **22**, 2980). — II, 1844.

Dibenzoat d. α-Amido-β-[4-Methylphenyl]-αβ-Dioximidoäthan. Sm. 193—194° (B. 24, 816). — II, 1210.

1) $\alpha\beta$ -Di[2-Naphtylsulfon] propan. Sm. 123° (*J. pr.* [2] 53, 493). 2) isom. $\alpha\beta$ -Di[2-Naphtylsulfon] propan. Sm. 157° (*J. pr.* [2] 53, 494). 3) $\alpha\gamma$ -Di[2-Naphtylsulfon] propan. Sm. 145° (*J. pr.* [2] 53, 493). C 68,3 — H 4,9 — O 19,8 — N 6,9 — M. G. 404. $C_{23}H_{20}O_4S_2$

 $\mathbf{C}_{23}\mathbf{H}_{20}\mathbf{O}_5\mathbf{N}_2$

Monoacetat d. Phenyl-3,4,5-Trioxy-2-[α-Phenylhydrazonäthyl]-phenylketon. Sm. 248-249° (J. r. 25, 117). — IV, 785.

1) Dibenzoat d. β_7 -Dioxypropylphenylsulfon. Sm. 86—87° (A. 283, 190). C 46,0 — H 3,3 — 0 32,0 — N 18,7 — M. G. 600. $C_{23}H_{20}O_6S$ $\mathbf{C}_{23}\mathbf{H}_{20}\mathbf{O}_{12}\mathbf{N}_{8}$

1) ?-Hexanitro - 4', 4'-Di[Dimethylamido]triphenylmethan. Sm. 200° u. Zers. (A. 206, 128). — IV, 1044.
1) 2-Dibenzylamido - 4-Phenylthiazol. Sm. 106° (G. 23 [2] 439). —

 $\mathbf{C}_{23}\mathbf{H}_{20}\mathbf{N}_{2}\mathbf{S}$

2) 2-Amido-4-Phenyl-?-Dibenzylthiazol. HJ (G. 24 [1] 69). — IV, 916. 3) 2-Benzylimido-3-Benzyl-4-Phenyl-2, 3-Dihydrothiazol. Sm. 66-67°.

HBr (G. 23 [2] 441). — IV, 916. 4) Aethyläther d. 2-Merkapto-1,4,5-Triphenylimidazol. Sm. 154-155°

(A. **284**, 31). — III, 224.

5) 1-Naphtylamido-1-Naphtylimidomethyläthylsulfid. Sm. 98°. (2 HCl, PtCl₄), HJ (B. **21**, 966). — II, 610.

6) 2-Naphtylamido-2-Naphtylimidomethyläthylsulfid. Sm. 100°. (2HCl, $PtCl_4$) (B. **21**, 968). — II, 619.

 $C_{23}H_{20}N_6Cl_2$ 1) Verbindung + $2H_2O$ (aus Phenylhydrazin u. Trichlortriketo-R-Pentamethylen) (B. **25**, 858). — IV, 787. C 84,4 — H 6,4 — O 4,9 — N 4,3 — M. G. 327.

1) 5-Keto-1-Methyl-2,4,4-Triphenyltetrahydropyrrol. Sm. 153,5° (Soc. **57**, 700). — **IV**, 470. C 77,7 — H 5,9 — O 4,5 — N 11,8 — M. G. 355.

1) Nitril d. α -Benzyliden- α -Oxy- β -[4-Methylphenyl]amido- β -Phenylpropionsaure. Sm. 262° u. Zers. (B. 29, 1738). C 80,4 — H 6,1 — O 9,3 — N 4,1 — M. G. 343.

1) Diphenacylbenzylamin. Fl. HCl, (2 HCl, PtCl₄), HBr (Soc. 63, 1364). - III, *127*

2) Diphenacyl-p-Toluidin. Sm. 255° (B. 23, 168). — III, 127.

3) α -Phenylamido- β -Benzoyl- γ -Oxy- α -Phenyl- β -Buten. Sm. 83-84° (B. 31, 1394).

4) α -Phenylamido- β -Benzoyl- γ -Keto- α -Phenylbutan. Sm. 172—173° (B. **31**, 1394).

 $\mathbf{C}_{28}\mathbf{H}_{21}\mathbf{O}_{2}\mathbf{N}$ 5) β -[4-Methylphenyl]acetylamido- α -Keto- $\alpha\beta$ -Diphenyläthan. Sm. 150° (B. **26**, 1339). — III, 220.

6) ?-Benzoylamido-2, 4, 5-Trimethyldiphenylketon. Sm. 227° (B. 17, 1806). — III, 236.

7) Amid d. β-Dehydroamarsäure. Sm. 232° (A. 275, 79). — II, 1727.

8) Methylamid d. $\alpha\alpha$ -Diphenyl- β -Benzoylpropionsäure. Sm. 156° (Soc. **57**, 702). — II, *1726*. C 74,4 — H 5,7 — O 8,6 — N 11,3 — M. G. 371.

 $C_{23}H_{21}O_2N_3$

1) Diacetyltriphenylguanidin. Sm. 131° (B.~8,~384). — II, 351. 2) Nitril d. α -Benzylidenamido- β -[4-Methoxylphenyl]amido- α -Oxy- β -Phenylpropionsäure. Sm. 233° u. Zers. (B. 31, 2708).

 $C_{23}H_{21}O_3N_3$

C 71,3 — H 5,4 — O 12,4 — N 10,8 — M. G. 387. 1) Benzoyldi[Benzoylamidomethyl]amin. Sm. 266—267° (A. 288, 250).

 Aethylester d. 4-[β-Oximido-αβ-Diphenyläthyliden]hydrazidobenzoll-Carbonsäure. Sm. 226° (B. 27, 1135). — III, 291.
 Verbindung (aus d. Methylamid u. d. Aethylester d. α-Cyan-β-Phenylakrylsäure). (2 isom. Formen.) Sm. 157° u. 180° (J. pr. [2] 45, 512). — II, 1417.

C₂₃H₂₁O₃Br₃ 1) Tri [5-Brom-3-Methylphenyläther] d. ααα-Trioxyäthan. Sm. 151,5 bis 153° (B. **24**, 3683). — II, 745.

2) Tri[3-Brom-4-Methylphenyläther] d. ααα-Trioxyäthan. Sm. 160 bis 161° (B. **24**, 3682). — II, 751. C 73,6 — H 5,6 — O 17,1 — N 3,6 — M. G. 375.

 $\mathbf{C}_{23}\mathbf{H}_{21}\mathbf{O}_{4}\mathbf{N}$

1) Pulvinpiperidinsäure. K + H₂O, Ca, Piperidinsalz (A. 282, 32). -C 63.4 - H 4.8 - O 22.1 - N 9.7 - M. G. 435. $C_{23}H_{21}O_6N_3$

1) Protocatechuglykotolyltriazin. Sm. 120° u. Zers. (B. 27, 1987). —

- 1) Methyl-α-Phenyldithiobenzyl-c-Phenylalduret. Sm. 127°. HCl (B. $\mathbf{C}_{23}\mathbf{H}_{21}\mathbf{N}_{3}\mathbf{S}_{2}$ 28, 1109). — III, 35.
- 1) Aethyltriphenylthioammelin. Sm. oberh. 100°. HBr (B. 20, 1069; $\mathbf{C}_{28}\mathbf{H}_{21}\mathbf{N}_{5}\mathbf{S}$ **21**, 871). — **II**, *399*. C 80,7 — H 6,4 — O 4,7 — N 8,2 — M. G. 342. $\mathbf{C}_{23}\mathbf{H}_{22}\mathbf{ON}_{2}$

1) Amidodiphenacylbenzylamin. Sm. 80° u. Zers. (2 HCl, PtCl₄ + 3 H₂O) (Soc. 63, 1365). — III, 127.

2) α -Benzyliden - β -[4-Isopropylbenzoyl]- β -Phenylhydrazin. Sm. 126°. - IV, 751.

- 3) Diäthylen-4,4'-Diamidotriphenylcarbinol (Phenyldiphenylpiperazincarbinol) (B. 22, 1781). — II, 1086.
- 4) Benzoylderivat d. isom. Base $C_{16}H_{18}N_2$ (vom Sm. 85,5°). Sm. 156° (B. 27, 1302, 1561 Berichtigung).
- 5) Benzoylderivat d. Base $C_{16}H_{18}N_2$. Sm. 218° (B. 25, 2031; 27, 1302). **- II**, 443.

C 74,6 - H 5,9 - O 4,3 - N 15,1 - M. G. 370. $\mathbf{C}_{23}\mathbf{H}_{22}\mathbf{ON}_{4}$

1) Phenylhydrazid d. α-Phenylhydrazon-α-Phenyl-αγ-Butadiën-δ-Carbonsäure. Sm. 198° (194°) (A. 282, 198; B. 27, 844). — IV, 698. C 77,1° — H 6,1 — O 8,9 — N 7,8 — M. G. 358. $\mathbf{C}_{23}\mathbf{H}_{22}\mathbf{O}_{2}\mathbf{N}_{2}$

1) **3,4-Di**[Phenacetylamido]-**1-M**ethylbenzol. Sm. 174—176° (B. **24**, 633).

— IV, 617. 2) 3,5-Di[Acetylphenylamido]-1-Methylbenzol. Sm. 160° (J. pr. [2] 33, 544). — IV, 625.

- 3) α -Benzoylamido- γ -Phenylbenzoylamidopropan. Sm. 96,5—97,5° (G. 19, 691). II, 1170.
- 4) α -Benzoylamido- β -[2-Methylphenyl]benzoylamidoäthan. Sm. 164,5° (B. 24, 2195). - II, 1169.
- 5) α -Benzoylamido β -[4-Methylphenyl] benzoylamido athan. Sm. 161° (B. 24, 2197). — II, 1169.
- 6) $\alpha \varepsilon$ -Dioximido- $\alpha \gamma \varepsilon$ -Triphenylpentan. Sm. 163,5° (A. 302, 243).
- 7) Dibenzyläther d. $\alpha\beta$ -Dioximidopropylbenzol. Sm. 55-56° (A. 291, 294). — III, *269*.
- 8) Aethylester d. β-Diphenylhydrazon-β-Phenylpropionsäure. Sm. 109
 bis 110° (B. 30, 3009). IV, 695.
- Di [Phenylamid] d. 1-Methylbenzol-3-[Aethyl-ββ-Dicarbonsäure]. Sm. 188° (B. 23, 111). II, 1856.

C23 H23 O5 N

 $\mathbf{C}_{23}\mathbf{H}_{23}\mathbf{O}_{6}\mathbf{N}$

C₂₃H₂₂O₂N₂10) Verbindung (aus 6-Phenyleumalin u. 2 Molec. Anilin). Sm. 115-118°. + C₆H₆ (Sm. 142°) (B. **29**, 1677; G. **26** [2] 345). C 71,5 — H 5,7 — O 8,3 — N 14,5 — M. G. 386.

C23H22O2N4

1) Phenylosazon d. Oxyphenylcumalin. Sm. 193° (A. 282, 202). -II, 1680.

2) α -Phenyl- β -Acetylhydrazid d. β -Benzyliden- α -Phenylhydrazidoessigsäure. Sm. 184° (A. 301, 85). C 73,8 - H 5,9 - O 12,8 - N 7,5 - M. G. 374.

 $\mathbf{C}_{23}\mathbf{H}_{22}\mathbf{O}_{3}\mathbf{N}_{2}$

1) Methyläther d. 2-β-Benzoylamidoäthyl]benzoylamido-1-Oxybenzol. Sm. 134—135° (B. 27, 930). — II, 1176.

2) α - Benzylidenamido - α - Oxy - β - [4 - Methylphenyl] amido - β - Phenylpropionsäure. Sm. 213° u. Zers. (B. 29, 1735). C 68,6 — H 5,5 — O 11,9 — N 13,9 — M. G. 402.

 $C_{23}H_{22}O_3N_4$

1) 4-Phenylamidoformyl-7-[β-Phenylharnstoff]-3-Methyl-3,4-Dihydrol,4-Benzoxazin. Sm. 207° (B. 30, 1640). — IV, 854.
 C 70,8 — II 5,6 — O 16,4 — N 7,2 — M. G. 390.

C28H22O4N2

1) α -Benzylidenamido- β -[4-Methoxylphenyl]amido- α -Oxy- β -Phenylpropionsäure + H₂O. Sm. 198° (B. 31, 2707). 2) Diathylester d. $\alpha \gamma$ -Di[2-Cyanphenyl]propan- $\beta \beta$ -Dicarbonsäure.

Sm. 86° (B. **22**, 2019). — **II**, 1893. C 66,0 — H 5,3 — O 15,3 — N 13,4 — M. G. 418. $C_{23}H_{22}O_4N_4$

1) 4 - [3 - p - Dimethylamidophenylazophenyl] - 2,6 - Dimethylpyridin-3,5-Dicarbonsäure. Zers. bei 170° (G. 17, 470). — IV, 1487.

2) Aethylester d. $\beta\beta$ -Di[5-Keto-1-Phenyl-4,5-Dihydropyrazolyl-4-]propionsäure. Sm. 173 — 174° (145°). (2 HCl, PtCl₄) (B. 28, 632). — TV, 1266. C 60,8 — H 4,8 — O 28,2 — N 6,2 — M. G. 454.

 $C_{23}H_{22}O_8N_2$

1) 2,4-Di[2,5-Dimethyl-1-Pyrryl]-1-Methylbenzol-2³,2⁴,4²,4⁴-Tetracarbonsäure. Zers. bei 248° (A. 236, 313). — IV, 1021.

 $\mathbf{C}_{23}\mathbf{H}_{22}\mathbf{N}_{2}\mathbf{S}_{2}$ 1) Verbindung (aus Benzaldehyd u. Phenylthioessigsäureamid). + PtCl₄ (4. 192, 60). — III, 35. C 77,3 — H 6,4 — O 4,5 — N 11,8 — M. G. 357. 1) 4-Methylphenylamid d. 4-Methylphenylamido-4-Methylphenyl-

 $C_{23}H_{23}ON_3$

imidoessigsäure. Sm. 182° (B. **28**, 62). C 80,0 — H 6,7 — O 9,3 — N 4,0 — M. G. 345.

C28H28O2N

1) 3-Allo-Lemonyl- β -Naphtochinolin-l-Carbonsäure. Sm. 235° (J. pr. [2] **58**, 88).

2) 3-Citriodoraldehyd-β-Naphtochinolin-1-Carbonsäure. Sm. 204°

(J. pr. [2] 58, 78).

3) Citral -β-Naphtochinolin-1-Carbonsäure. + ½ H₂O. Sm. 197°. Ag (B. 27, 354, 2026; 28, 2133; 31, 3327; J. pr. [2] 58, 83). — IV, 460.
4) Amid d. Amarsäure. Sm. 145—152° (A. 275, 70). — II, 1725. C 74,0 — H 6.2 — O 8,6 — N 11,2 — M. G. 373.

 $\mathbf{C}_{23}\mathbf{H}_{23}\mathbf{O}_{2}\mathbf{N}_{3}$

 $C_{23}H_{23}O_3N$

C 74,0 — H 6.2 — O 8,6 — N 11,2 — M. G. 373.

1) α-Phenyl-β-[4-Methylphenyl]-β-[2-Acetylamidobenzyl]harnstoff. Sm. 141° (J. pr. [2] 55, 246). — IV, 633.

2) Tri[4-Methylphenyl]biuret. Sm. 155—156° (B. 21, 506). — II, 495. C 76,4 — H 6,4 — O 13,3 — N 3,9 — M. G. 36f.

1) Phenylpiperin (3,4-Methylenäther d. s-Keto-s-Piperidyl-α-[3,4-Dioxyphenyl]-δ-Phenyl-αγ-Pentadiën). Sm. 134° (B. 28, 1196). — IV, 17.

2) Aethylester d. α-[2-Naphtyl]amido-γ-Oxy-α-Phenyl-β-Buten-β-Carbonsäure. Sm. 100—101° (B. 31, 1389).

3) Aethylester d. α -[2-Naphtyl]amido- γ -Keto- α -Phenylbutan- β -Carbonsäure. Sm. 74-750 (B. 31, 1389).

C 70.2 - H 5.8 - O 20.3 - N 3.6 - M. G. 393.

1) Berberin + Aceton. — III, 800.
2) Decarbousninanilid. Sm. 169—171° (G. 12, 247). — II, 2057.
C 67,5 — H 5,6 — O 23,5 — N 3,4 — M. G. 409.
1) Corycavin. Sm. 214—215°. HCl, (2HCl, PtCl₄ + 3 H₂O), HJ (A. 277, 15; C. 1896 [2] 793). — III, 877.

 $\mathbf{C}_{23}\mathbf{H}_{23}\mathbf{N}_{2}\mathbf{C}\mathbf{1}$ 1) Chloräthylat d. 5 oder 6-Methyl-2-Phenyl-1-Benzylbenzimidazol. $2 + \text{PtCl}_4$ (B. 11, 594). — IV, 619.

 $C_{23}H_{23}N_2Br$ 1) Diäthyleyaninbromid. Sm. noch nicht bei 290° (R. 3, 340). — IV, 315. $C_{23}H_{23}N_2J$ 1) Diäthyleyaninjodid. Sm. 271—273° (R. 2, 321). — IV, 315.

2) Diäthylisocyaninjodid. Sm. 150—152° u. Zers. (R. 3, 346). — IV, 308.

- 3) Jodäthylat d. 5 oder 6-Methyl-2-Phenyl-1-Benzylbenzimidazol $\mathbf{C}_{23}\mathbf{H}_{23}\mathbf{N}_{2}\mathbf{J}$ $+1^{1}/_{2}$ H₂O. Sm. 180–181°. $+J_{2}$ (B. 11, 593). – IV, 619.
- $C_{23}H_{23}N_3S_2$ 1) α-Methyläthyltriphenyldithiobiuret. Sm. 157,5° (B. 21, 108).
 - 2) β -Methyläthyltriphenyldithiobiuret. Sm. 156,5° (B. 21, 109). H, 400. C 74,2 — H 6,4 — O 4,3 — N 15,1 — M. G. 372.
- $\mathbf{C}_{23}\mathbf{H}_{24}\mathbf{ON}_{4}$
 - 1) Aethyläther d. 2-Oxy-?-Di[2-Methylphenylazo]-1-Methylbenzol.
 - Sm. 102° (B. 23, 3260). IV, 1424.

 2) Aethyläther d. 2-Oxy-?-Di[4-Methylphenylazo]-1-Methylbenzol. Sm. 107-108° (B. 23, 3262). - IV, 1424.
 - 3) α -Phenyl- β -Phenylazo- β -[4-Isopropylbenzyl]harnstoff. Sm. 101° (B. 21, 929). — IV, 1573.
 - 4) α -Phenyl- β -[4-Methylphenyl]azo- β -[2,4,5-Trimethylphenyl]harnstoff. Sm. 102° (B. 25, 1360). — IV, 1573.
 - 5) 4-Dimethylamidophenylamid d. α-Phenyl-β-Benzylidenhydrazido-
 - essigsäure. Sm. 184—185° (B. 30, 1101; A. 301, 77).

 6) Verbindung (aus Acetophenonphenylhydrazon u. Formaldehyd).

 185° (Soc. 69, 1286). IV, 771.
- C 76,7 H 6,6 O 8,9 N 7,8 M. G. 360. $C_{23}H_{24}O_{2}N_{2}$
 - 1) 4-Aethyläther d. 5-[2-Oxybenzyliden]amido-2-[4-Methylphenyl]amido-4-Oxy-1-Methylbenzol. Sm. 157° (B. 27, 2708). — III, 74.
 - 2) Diäthyläther d. α-Phenylhydrazondi[2-Oxyphenyl]methan. 114° (B. 19, 2611). — IV, 776.
 - 3) Isobutyläther d. ?-Phenylamido-?-Oxy-2-Methyl-1, 4-Benzochinonphenylimid. Sm. 117° (B. 16, 1561). — III, 361.
 - 4) Verbindung (aus Benzylidendiacetylaceton). Sm. 1770 (A. 281, 83). -
- IV, 788. C 71,1 H 6,2 O 8,2 N 14,4 M. G. 388. $C_{23}H_{24}O_{2}N_{4}$
 - ββ-Di[5-Keto-3-Methyl-1-Phenyl-4,5-Dihydropyrazolyl-4-] propan. Sm. 138° (A. 238, 181; B. 30, 484). IV, 1265.
 Di[3 Keto 1,5 Dimethyl 2 Phenyl 2, 3 Dihydropyrazolyl 4 -]-
 - methan + H₂O (Methylenbisantipyrin). Sm. 179° (177°) wasserfrei. 2 HCl + H₂O, (2 HCl, PtCl₄), (HCl, AuCl₃), H₂SO₄, H₃PO₄, Pikrat (A. 255, 246; B. 28, 1183; 29, 1826; Bl. [3] 15, 520; [3] 17, 1023; G. 26 [2] 407). - IV, 1264.
- C 66.3 H 5.8 O 7.7 N 20.2 M. G. 416. $\mathbf{C}_{23}\mathbf{H}_{24}\mathbf{O}_{2}\mathbf{N}_{6}$
 - 1) Verbindung (aus Akonsäure u. Phenylhydrazin). Sm. 178-1790 (B. 27, 3441). — IV, 708.
- C 70.4 H 6.1 O 16.3 N 7.1 M. G. 392. $\mathbf{C}_{23}\mathbf{H}_{24}\mathbf{O}_4\mathbf{N}_2$
 - 1) Acetoxylstrychnin. (2 HCl, PtCl₄) (Z. 1871, 435). III, 939.
- $\mathbf{C}_{23}\mathbf{H}_{24}\mathbf{O}_{4}\mathbf{N}_{4}$ C 65,7 - H 5,7 - O 15,2 - N 13,3 - M. G. 420.1) Anhydrodi [Acetylphenylhydrazid] d. Hydrochelidonsäure (A. 267,
 - 97). IV, 714.
 - 2) Ketobisphenylacetylhydrazidanhydrid d. β -Acetylpropan- $\alpha \gamma$ -Dicarbonsäure. Sm. 243° (A. 295, 122). — IV, 715.
- $C_{23}H_{24}O_5N_2$
- C 67,6 H 5,9 O 19,6 N 6,9 M. G. 408.

 1) Verbindung (aus Phtalylessigsäure). Sm. 129° (B. 19, 2368). II, 1873.

 1) ααα-Tribenzylsulfonäthan. Sm. 218° (B. 25, 358). II, 1053.
- $\mathbf{C}_{23}\mathbf{H}_{24}\mathbf{O}_{6}\mathbf{S}_{3}$
- $\mathbf{C}_{x3}\mathbf{H}_{24}\mathbf{O}_7\mathbf{Br}_2$ 1) Tetraäthyläther d. Dibromquercetin. Sm. $169-173^\circ$ (M, 15, 685). - III, 605.
- $\mathbf{C}_{23}\mathbf{H}_{24}\mathbf{O}_{8}\mathbf{N}_{4}$
 - C 57,0 H 5,0 O 26,4 N 11,6 M. G. 484.

 1) Dinitrobrucin. (2HCl, PtCl₄) (B. 14, 766). III, 947.
 C 56,6 H 4,9 O 32,8 N 7,7 M. G. 488.
- $\mathbf{C}_{23}\mathbf{H}_{24}\mathbf{O}_{10}\mathbf{N}_{2}$ 1) Verbindung (aus Ouabain). Zers. bei 300°. NH₄, K, Na, Ca + 2H₂O (Bl. [3] 19, 992; C. 1898 [2] 352).
- C₂₃H₂₄N₂Cl₂ 1) 2',5'-Dichlor-4',4'-Di[Dimethylamido]triphenylmethan. Sm. 1790 (A. 296, 72). - IV, 1043.
- 1) Trimethylentriphenyldithioharnstoff. Sm. 144-145° (B. 23, 1172). C23H24N4S2
- II, 397. C 71,3 H 6,5 O 4,1 N 18,1 M. G. 387. $\mathbf{C}_{23}\mathbf{H}_{25}\mathbf{ON}_{5}$
 - 1) α-Phenylhydrazon-3-Nitrosodi [4-Dimethylamidophenyl] methan. Sm. 148° (B. 22, 338). — IV, 776.

 $C_{23}H_{25}O_{3}N_{3}$

C 79.5 - H 7.2 - O 9.2 - N 4.0 - M. G. 347.CogHogOoN 1) 3-Citronellal- β -Naphtochinolin-1-Carbonsäure + H₀O. Sm. 2250 (wasserfrei). Ag (B. 27, 354, 2024; 31, 2902). — IV, 451. C 73,6 — H 6,7 — O 8,5 — N 11,2 — M. G. 375. 1) 3'-Nitro-2², 2³-Diamido-3², 5², 3³, 5³-Tetramethyltriphenylmethan?

 $C_{22}H_{25}O_{2}N_{3}$

Sign. 91—92°. 2 HCl, (2 HCl, PtCl₄) (B. 21, 3216). — IV, 1048. 2) 4'-Nitro-2², 2³-Diamido-3², 5², 3³, 5³-Tetramethyltriphenylmethan?

Sm. 89-90°. 2 HCl, (2 HCl, PtCl₄) (B. 21, 3215). - IV, 1048.

3) 4-Nitrophenyldi [Amidodimethylphenyl] methan (aus 2-Amido-1, 3-Dimethylbenzol). Sm. 136° (M. 19, 641).

4) 2'-Nitro-4²,4³-Di[Dimethylamido] triphenylmethan. Sm. 159—160° (B. 15, 682; 17, 1889). — IV, 1044.

5) 3'-Nitro-42,43-Di[Dimethylamido]triphenylmethan. Sm. 1520 (B. 12, 802). — IV, 1044. 6) 4'-Nitro-4², 4³-Di[Dimethylamido] triphenylmethan. Sm. 176—177°

(B. 14, 2526). — IV, 1044. 7) 5'-Nitroso-4², 4³-Di[Dimethylamido]-2'-Oxytriphenylmethan?

217° (B. 31, 2352).

8) α - Oxy - 4' - Nitroso - 42, 48 - Di[Dimethylamido] triphenylmethan.

142—143° (Bl. [3] 17, 657).
9) Verbindung (aus 4'-Nitro-4², 4³-Tetramethyldiamidotriphenylmethan). Sm. 100—105° (*Bl.* [3] **17**, 657). C 76,0 — H 6,9 — O 13,2 — N 3,9 — M. G. 363.

CogHosOgN

1) Monopiperidid d. α-Truxillsäure. Sm. 250° (B. 22, 2263). — IV, 17. 2) Monopiperidid d. β-Truxillsäure. Sm. 224° (B. 22, 2264). — IV, 17.

3) Monopiperidid d. γ -Truxillsäure. Sm. 261°. Piperidinsalz + 3 $\rm H_2O$ (B. 22, 2262). — IV, 17.

4) Verbindung (aus Amarsäure). Sm. 124° u. Zers. (A. 275, 71). — II, 1725. C 70,6 — H 6,4 — O 12,3 — N 10,7 — M. G. 391.
1) Acetylamidostrychnin + H₂O. Sm. 205° (M. 7, 77). — III, 941.
2) α-Oxy-2-Nitro-4', 4²-Di[Dimethylamido]triphenylmethan. Sm. 163°

(B. 17, 1890). — II, 1086. 3) α-Oxy-3-Nitro-4',4²-Di[Dimethylamido] triphenylmethan. Pikrat (B. 12, 802; 13, 672). - II, 1086.

4) α-Oxy-4-Nitro-4', 42-Di[Dimethylamido]triphenylmethan. Pikrat (B. 12, 800; 14, 2528). — II, 1086.

C₂₃H₂₅O₃Sb 1) Monoacetat d. Antimontri [3-Methylphenyl]dioxydhydrat. Sm. 142 bis 143° (A. 242, 187). — IV, 1697. 2) Monoacetat d. Antimontri[4-Methylphenyl]dioxydhydrat. Sm. 168

 $C_{28}H_{25}O_4N$

bis 169° (A. 242, 175). — IV, 1697.
C 72.8 — H 6,6 — O 16,9 — N 3,7 — M. G. 379.
1) Lanthopin. Sm. bei 200°. HCl + 6H₂O, (2HCl, PtCl₄ + 2H₂O) (A. 153, 57; A. Spl. 8, 271). — III, 913.
2) Aethylester d. 6-[4-Aethoxylphenyl] amido-4-Keto-2-Phenyl-

1,2,3,4-Tetrahydrobenzol-3-Carbonsäure. Sm. 168° (A. 294, 279).

1) Verbindung (aus Methylaurin) (A. 202, 204). — II, 1121. C 69,9 — H 6,3 — O 20,2 — N 3,5 — M. G. 395. $C_{23}H_{25}O_4Cl$ $\mathbf{C}_{28}^{\circ}\mathbf{H}_{25}^{\circ}\mathbf{O}_{5}\mathbf{N}$

1) Methyläther d. Diacetylthebenin (Diacetylmethebenin). Sm. 176° (B. **32**, 180).

C28H25O6N C 67,1 - H 6,1 - O 23,4 - N 3,4 - M. G. 411.

1) Aethylhydrastin. Sm. 126-127°. (2 HCl, PtCl₄), (HCl, AuCl₃), HNO₃ (B. 23, 411; R. 5, 299). — II, 2054. C 62,9 — H 5,7 — O 21,9 — N 9,5 — M. G. 439.

 $\mathbf{C}_{23}\mathbf{H}_{25}\mathbf{O}_{6}\mathbf{N}_{8}$

1) Nitrobrucin + 4 H, O. Zers. bei 240°. (2 HCl, PtCl₄), HNO₃ (B. 19, 521).

 $C_{23}H_{25}O_6N_5$ C 59,1' - H 5,4 - O 20,5 - N 15,0 - M. G. 467.

1) 1,3,5-Trinitrobenzol + Di[4-Dimethylamidophenyl]methan. 114^{6} (R. 7, 227). — IV, 974. C 62,3 — H 5,6 — O 28,9 — N 3,2 — M. G. 443.

 $C_{23}H_{25}O_8N$

Verbindung (aus Ouabaïn). Sm. 280° u. Zers. NH₄ (Bl. [3] 19, 992;
 C. 1898 [2] 352).
 4³-Chlor-4′, 4²-Di[Dimethylamido]triphenylmethan. Sm. 142—143°.

C₂₈H₂₅N₂Cl (2 HCl, PtCl₄) (B. 19, 743). — IV, 1043. 1) Diäthylisocyaninjodid $+ \frac{1}{2}$ H₂O (B. 16, 1851). — IV, 308.

 $\mathbf{C}_{28}\mathbf{H}_{25}\mathbf{N}_{2}\mathbf{J}$

 $\mathbf{C}_{92}\mathbf{H}_{95}\mathbf{N}_{9}\mathbf{Cl}_{2}$ 1) 4'-Amido-4',4'-Di[3-Chlor-4-Dimethylamido] triphenylmethan. Sm. 181° (B. **20**, 1565). — IV, 1194. C 79,8 — H 7,5 — O 4,6 — N 8,1 — M. G. 346.

C23H26ON2

1) ?-Tetramethyldiamido-2-Oxytriphenylmethan. Sm. 127-128° (B. 14, 2522). — II. 904.

2) P-Tetramethyldiamido-4-Oxytriphenylmethan. Sm. 163° (B. 14, 2523). **— II**, 904.

3) α-Oxy-4,4'-Di[Dimethylamido]triphenylmethan (Malachitgrün). 132°. Salze siehe (A. 206, 130; 217, 250; B. 11, 950, 1238; 12, 769; 13, 2222; 14, 2521; 28, 211; Bl. [3] 9, 688). — II, 1084.

4) 2-Oxy-1-Di[Aethylphenylamido]methylbenzol (Salhydräthylanilid).

Fl. (A. 150, 195). — III, 73.

 $C_{23}H_{26}O_2N_2$

C 76,2 — H 7,2 — O 8,8 — N 7,7 — M. G. 362. 1) $4',4^2$ -Di[Dimethylamido]- $2',2^2$ -Dioxytriphenylmethan. Sm. 176° (J. pr. [2] **54**, 252).

 $\mathbf{C}_{2\mathbf{3}}\mathbf{H}_{2\mathbf{6}}\mathbf{O}_{3}\mathbf{N}_{2}$

- C 73,0 H 6,9 O 12,7 N 7,4 M. G. 378. 1) Strychninvinyloxydhydrat. Salze siehe (J. 1861, 544). III, 938.
- 2) $\alpha, 1', 1^2$ -Trioxy-3',32-Di[Dimethylamido]triphenylmethan (Tetramethylrosamin). Chlorid, (2 Chlorid + PtCl₄) (B. 22, 3002). — II, 1115. 3) Isoamylester d. αδ-Di[Phenylimido]-γ-Ketopentan-α-Carbonsäure.
- Sm. 126—127° (Bl. [3] 11, 481).

C, H, O, N,

C 70,1 — H 6,6 — O 16,2 — N 7,1 — M. G. 394. 1) **Aricin.** Sm. 188° u. Zers. $HCl + 2H_2O$, $(2HCl, PlCl_4 + 5H_2O)$, HJ, HNO_3 , H_2SO_4 , Rhodamid, Acetat, Dioxalat $+ 2H_2O$, Salicylat $+ 2H_2O$ (A. 185, 310; Berx. J. 9, 222; 13, 265; 24, 403). — III, 855.

2) Brucin + 4H₂O. Sm. 105° (178° wasserfrei). Salze meist bek. Lit. be-

deutend. - III, 944.

 $C_{23}H_{26}O_4N_4$

 $C_{23}H_{26}O_6N_2$

3) Cusconin $+ 2 \dot{H}_2 O$. Sm. 110^6 (wasserfrei). (HCl, $HgCl_2 + 2 H_2 O$), (2HCl, $PtCl_4 + 5 H_2 O$), $H_2 SO_4$, Rhodanid (A. 185, 301). — III, 855.

4) Concusconin + H_2O . Sm. 144°. $(2 \text{HCl}, \text{PtCl}_4 + 5 \text{H}_2O)$, H_2SO_4 , Oxalat (B. 16, 61; A. 225, 234). - III, 929.

5) Diacetylapochinin. (2HC), PtOl₄ + 2H₂O) (A. 205, 336). — III, 818.
 6) Diacetylapoconchinin. Sm. 60°. (2HCl, PtOl₄ + 2H₂O) (A. 205, 337).

7) Diacetylcupreïn. Sm. 88º (A. 230, 63). — III, 822. C 65,4 — H 6,2 — O 15,1 — N 13,3 — M. G. 422.

1) Phenylhydrazon d. 4-Acetyl-5-Phenyl-4,5-Dihydropyrazol-3,4-Dicarbonsäurediäthylester. α-Form Sm. 135—136°; β-Form Sm. 110 bis 111° (B. 28, 222). — IV, 893.

C 67.3 - H 6.3 - O 19.5 - N 6.8 - M. G. 410. $\mathbf{C}_{28}\mathbf{H}_{26}\mathbf{O}_5\mathbf{N}_2$

1) Aethylhydrastimid. Sm. 150—151° (B. 23, 2903). — II, 2054.

C 64.8 - H 6.1 - O 22.5 - N 6.6 - M. G. 426.

1) Narceinimid. HCl, HNO₃, H₂SO₄ (A. 286, 251). — II, 2081.

2) αη-Di[Benzoylamido]heptan-δδ-Dicarbonsäure. Sm. 188—189°. Ba (B. 26, 2141). — II, 1192.

C 62,4 - H 5,9 - O 25,3 - N 6,3 - M. G. 442. $C_{23}H_{26}O_7N_2$

1) Narceinoximanhydrid. Sm. 171-173° (A. 277, 52). - II, 2081.

1) Aethyltribenzylammoniumjodid. Sm. 190° (B. 7, 82; 19, 1029). — $\mathbf{C}_{23}\mathbf{H}_{26}\mathbf{N}\mathbf{J}$ II, 523.

2) Jodäthylat d. 3,5-Di[2-Methylbenzyl]pyridin. Sm. 148-149° (A. 280, 86). — IV, 457.

3) Jodäthylat d. 3,5-Di[3-Methylbenzyl]pyridin. Sm. $109-109.5^{\circ}$ (A. 280, 82). — IV, 457.

4) Jodáthylat d. 3,5-Di [4-Methylbenzyl|pyridin. Sm. 148-150° (A. 280,

77). — IV, 458. C₂₃H₂₆N₃Cl 1) 4'-Chlor-3'-Amido-4²,4³-Di[Dimethylamido]triphenylmethan. Sm.

 $167-167,5^{\circ}$ (A. **294**, 382). — IV, 1194. 1) Trimethylrosanilinjodid. - II, 1091. C28H26N3J

1) Aethyltribenzylphosphoniumchlorid + H₂O. 2 + PtCl₄ (Soc. 53, 725). $C_{23}H_{26}ClP$ **— IV**, 1665.

1) Isoamyltriphenylphosphoniumjodid. Sm. 174° (A. 229, 315). — C28H26JP 1) Aethyltribenzylarsoniumjodid. Sm. 148° (A. 233, 77). — IV, 1691. $C_{28}H_{26}JAs$

 $\mathbf{C}_{23}\mathbf{H}_{27}\mathbf{ON}_3$

 $\mathbf{C}_{23}\mathbf{H}_{28}\mathbf{O}_{4}\mathbf{N}_{2}$

 Trimethylrosanilin. Chlorid, Jodid, Acetat (Bl. 25, 200; N. Handw. d. Ch. 1, 624; Soc. 51, 172). — II, 1091. 2) α-Oxy-2, 2', 2²-Tetramethyltriamidotriphenylmethan. Sm. 190-191°

3) α-Oxy-4, 4', 42-Tetramethyltriamidotriphenylmethan (B. 16, 2904).

C 76.5 - H 7.5 - O 4.4 - N 11.6 - M. G. 361.

(B. 17, 1892). — II, 1087.

- II, 1087 4) Oxim d. Malachitgrün. Sm. 168° u. Zers. (B. 28, 211). C 79,1 — H 7,7 — O 9,2 — N 4,0 — M. G. 349. 1) Diphenylamidoformiat d. Geraniol. Sm. 83—84° (82,2°) (J. pr. [2] 53, $\mathbf{C}_{23}\mathbf{H}_{27}\mathbf{O}_{2}\mathbf{N}$ 45; [2] **56**, 8). — **III**, 477 C 72,4 — II 7,1 — O 16,8 — N 3,7 — M. G. 381. $\mathbf{C}_{23}\mathbf{H}_{27}\mathbf{O}_{4}\mathbf{N}$ 1) Propylidenpapaverinium. Fl. (J. pr. [2] 56, 329). C 67,5 — H 6,6 — O 15,6 — N 10,2 — M. G. 409. 1) Amidobrucin. 3 HCl (B. 19, 523). — III, 947. 2) Nitrosodimethylstrychnin. 2 HCl (A. 264, 68). — III, 938. C 69,5 — H 6,8 — O 20,1 — N 3,5 — M. G. 397. $C_{23}H_{27}O_4N_3$ $\mathbf{C}_{23}\mathbf{H}_{27}\mathbf{O}_5\mathbf{N}$ 1) Dipropionylmorphin. (2 HCl, PtGl₄) (A. **222**, 206). — III, 899. C 66,8 — H 6,5 — O 23,2 — N 3,4 — M. G. 413. 1) Methylcolchicin (M. **9**, 870). — III, 873. $\mathbf{C}_{23}\mathbf{H}_{27}\mathbf{O}_{6}\mathbf{N}$ 2) Triacetat d. Dihydromorphin + H₂O. Sm. 155° (158° wasserfrei) (Bl. [3] **21**, 232). C 62,6 — H 6,1 — O 21,8 — N 9,5 — M. G. 441. $C_{23}H_{27}O_6N_3$ 1) Nitrosobrucinsäure. HCl (A. 304, 40). C 64,3 — H 6,3 — O 26,1 — N 3,3 — M. G. 429. 1) Aethylhydrasteïn + 2H₂O. Sm. 130° (206—207° z. 2. Male). (2HCl, $C_{23}H_{27}O_7N$ PtCl₄ + 4H₂O) (B. 23, 412). — II, 2053. 2) Hydrastinäthyloxydhydrat + $2^{1}/_{2}$ H₂O. Sm. 225—226°. — II, 2051. C 60,4 — H 5,9 — O 24,4 — N 9,2 — M. G. 457. 1) Nitrobrucinhydrat (A. 304, 43). $C_{23}H_{27}O_7N_3$ C 62,0 - H 6,1 - O 28,8 - N 3,1 - M. G. 445. $C_{23}H_{27}O_8N$ 1) Narcein + 3H₂O. Sm. 170° (145,2°). Salze meist bek. Lit. bedeutend. **— II**, 2079. 2) Pseudonarcein + 3H₂O. Sm. bei 195°. HCl + 3H₂O, (2HCl, PtCl₄) (A. **247**, 169). — III, 915. 3) Narkotinmethyloxydhydrat. Chlorid, Jodid (A. 247, 168). - III, 915. 4) Isonarkotinmethyloxydhydrat (B. 30, 1747). $C_{23}H_{27}N_{2}Cl_{3}$ 1) Verbindung (aus α -Oxy-4,4'-Di[Dimethylamido]triphenylmethan) (Bl. [3] 9, 688). — II, 1085. C₂₃H₂₇N₂Br₃ 1) Verbindung (aus α-Oxy-4,4'-Di[Dimethylamido]triphenylmethan) (Bl. [3] 9, 688). — II, 1085. C 79,3 — H 8,0 — O 4,6 — N 8,0 — M. G. 348. $\mathbf{C}_{23}\mathbf{H}_{28}\mathbf{ON}_{2}$ 1) s-Di[1,2,3,4-Tetrahydro-2-Naphtylmethyl]harnstoff. Sm. 225,5 bis 226° (B. 22, 1914). — II, 590. C 75,8 — H 7,7 — O 8,8 — N 7,7 — M. G. 364. $\mathbf{C}_{23}\mathbf{H}_{28}\mathbf{O}_2\mathbf{N}_2$ 1) Di [Phenylamid] d. Oxycamphocarbonsäure. Sm. 222—223° (C. 1895 [2] 217). C 70,4 — H 7,1 — O 8,2 — N 14,3 — M. G. 392. $\mathbf{C}_{23}\mathbf{H}_{28}\mathbf{O}_2\mathbf{N}_4$ 1) Anhydrodi [äthylphenylhydrazid] d. Hydrochelidonsäure. Sm. 220 bis 222° (A. 267, 100). — IV, 714. C 72,6 — H 7,4 — O 12,6 — N 7,4 — M. G. 380. 1) Dimethylstrychnin + 6H₂O (A. 264, 66). — III, 938. $\mathbf{C_{23}H_{28}O_{3}N_{2}}$ 2) Isodimethylstrychnin + 3H₂O (A. 264, 82). — III, 938.
 3) Aethylstrychnin + 4H₂O (Strychninäthyloxydhydrat + 2H₂O). Sm. 260° u. Zers. Salze siehe (A. 92, 338; 304, 50; J. pr. [2] 3, 158; B. 16, 2748). - III, 938. 4) Propionylchinin. Sm. 129°. (2 HCl, $PtCl_4 + 2H_2O$), (HCl, $AuCl_3 + 2H_2O$) (A. 205, 358). — III, 815. (21101, $1104 + 211_20$), (1101, $1101_3 + 211_20$), (1101, $1101_3 + 211_20$), (1101, $1101_3 + 211_20$), (1101, 1101,

R. 14, 232). — III, 939. 3) Aethylcarbonat d. Chinin (Euchinin). Sm. 95° (C. 1897 [1] 182).

- $C_{23}H_{28}O_5N_2$ C 67,0 - H 6,8 - O 19,4 - N 6,8 - M. G. 412.
 - 1) Hydrobrucin (Soc. 39, 459). III, 944.
- $C_{23}H_{28}O_6N_2$
- $\mathbf{C}_{23}\mathbf{H}_{28}\mathbf{O}_7\mathbf{N}_2$
- Hydrobritch (306, 36, 493). III, 344.
 Brucinsäure + H₂O. Sm. 245° u. Zers. (A. 304, 38). C 64,5 H 6,5 O 22,4 N 6,5 M. G. 428.
 Methylhydrastmethylamid. Sm. 182°. HCl (B. 23, 2904). II, 2053.
 Aethylhydrastamid. Sm. 140° (B. 23, 2902). II, 2054. C 62,1 H 6,3 O 25,2 N 6,3 M. G. 444.
 Narceïnamid + H₂O. Sm. 178° (wasserfrei). HCl (A. 286, 250). II, 2020 II, 2080.
- C 60,0 H 6,1 O 27,8 N 6,1 M, G, 460. $\mathbf{C}_{28}\mathbf{H}_{28}\mathbf{O}_{8}\mathbf{N}_{2}$
- 1) Narceinoxim + H₂O. Zers. bei 167° (A. 277, 52). II, 2081.
- 1) s-Di[1,2,3,4-Tetrahydro-2-Naphtylmethyl|thioharnstoff. Sm. 142,5 C,8H,8N,S bis 143° (B. **22**, 1914). — II, 590. C 78,7 — H 8,2 — O 9,1 — N 4,0 — M. G. 351.
- $\mathbf{C}_{23}\mathbf{H}_{29}\mathbf{O}_{2}\mathbf{N}$
- 1) Diphenylamidoformiat d. Citronellol. Fl. (J. pr. [2] 56, 14, 42). C 72,8 H 7,6 O 8,4 N 11,1 M. G. 379.
- $C_{23}H_{29}O_2N_3$
- 1) Cyanathylat d. Chinin. Sm. 90° (B. 16, 2747). III, 814. C 67,8 H 7,1 O 7,9 N 17,2 M. G. 407. $C_{23}H_{29}O_2N_5$
 - 1) Verbindung (aus 4-Amido-1-Methylbenzol u. 4-Nitroso-1-Dimethylamido-
- $C_{23}H_{29}O_4N$
- benzol) (B. 12, 1824). II, 329. C 72,1 H 7,6 O 16,7 N 3,6 M. G. 383. 1) d-Methylcorydalin. Sm. 112°. HCl + 6H₂O (A. 277, 8). III, 876.
 - 2) i-Methylcorydalin. Sm. 224° u. Zers. HCl+3H2O, (2HCl, PtCl4), (HCl, AuCl₃) (C. 1898 [2] 115).
- $C_{28}H_{29}O_5N$
- C 69,2 H 7,3 O 20,0 N 3,5 M. G. 399. 1) Propyloxydhydrat d. Papaverin. Chlorid, Sulfat $+ 2 H_{QO}$ (J. pr. [2] **56**, 330, 339).
- C 59.6 H 6.3 O 31.1 N 3.0 M. G. 463. $C_{23}H_{29}O_9N$
 - 1) Amidocuminsaures Helicin (B. 12, 2033). III, 68.
- C 55,7 H 5,9 O 35,6 N 2,8 M. G. 495. $C_{23}H_{29}O_{11}N$ 1) Benzylmonamid d. Tetracetylschleimsäurediäthylester. Sm. 182
- bis 184° (M. 14, 486). II, 531. C 72,8 — H 8,6 — O 4,6 — N 8,0 — M. G. 350. $C_{23}H_{30}ON_{2}$
- 1) Diäthylidencinchonin. Sm. 85°. (2HCl, PtCl₄) (A. 269, 282). III, 834. C 75,4 H 8,2 O 8,7 N 7,6 M. G. 366.
- $C_{23}H_{80}O_2N_2$
- αι-Di[Benzoylamido] nonan. Sm. 118,5° (C. 1897 [2] 849).
 C 72,3 H 7,8 O 12,6 N 7,3 M. G. 382.
 Yohimbinanhydrid. HCl (C. 1899 [1] 529). $C_{23}H_{30}O_3N_2$
 - - 2) Aethylester d. Phenylhydrazonsantonsäure. Sm. 115-116° (G. 22
- [2] 195). II, 1788. C 69,4 H 7,5 O 16,1 N 7,0 M. G. 398. $C_{23}H_{30}O_4N_2$
 - Methyloxydhydrat d. Gelseminin. Sm. 203° (C. 1896 [1] 111).
 C 66,6 H 7,2 O 19,3 N 6,8 M. G. 414.
- $C_{23}H_{30}O_5N_2$ 1) Conchairaminmethyloxydhydrat. Salze siehe (A. 225, 250). — III, 930.
- C 71,7 H 8,0 O 16,6 N 3,6 M. G. 385.C23 H31 O4 N 1) 1-Benzoat d. 1-Oximido-3-Hexyl-5-Methyl-1, 2, 3, 4-Tetrahydro
 - benzol-4-Carbonsäureäthylester. Sm. 157—159° (A. 288, 344). 1) Chlorisoamylat d. 1-Isoamyl-2-Phenylbenzimidazol. HCl + 1 u.
- C₂₃H₃₁N₂Cl $3 \text{H}_2\text{O}$, $2 + \text{PtCl}_4$ (A. 210, 366). — IV, 1007. 1) Jodisoamylat d. 1-Isoamyl-2-Phenylbenzimidazol. + J₂ (A. 210,
- $\mathbf{C}_{23}\mathbf{H}_{31}\mathbf{N}_{2}\mathbf{J}$ 364). — IV, 1007. C 78,4 — H 9,1 — O 4,5 — N 7,9 — M. G. 352. $\mathbf{C}_{28}\mathbf{H}_{32}\mathbf{ON}_2$
 - 1) Isoamyloxydhydrat d. 1-Isoamyl-2-Phenylbenzimidazol. Sm. 80 bis 81° u. 91-92°. (Chlorid + HCl + 1 u. 3 H₂O), 2 Chlorid + PtCl₄, Jodid, Jodid + J₂, Nitrat (A. 210, 364). — IV, 1007. C 69,0 — H 8,0 —/O 16,0 — N 7,0 — M. G. 400.
- $C_{23}H_{32}O_4N_2$ 1) Yohimbin (oder $C_{21}H_{28}O_3N_2 + \frac{1}{2}H_2O$). Sm. 234° (C. 1897 [2] 978; 1899 [1] 529).
- 1) s-Di[6-Isobutyl-2-Methylphenyl]thioharnstoff. Sm. 175° (B. 17, 2344). C23H32N2S - II, 564.
 - 2) s-Di[4-Pseudobutyl-2-Methylphenyl]thioharnstoff. Sm. 184° (B. 17, 2335). — II, 564.
 - 3) s-Di[Pentamethylphenyl]thioharnstoff. Sm. 252° (B. 18, 1828). -II, 565.

 $\textbf{C}_{23}\textbf{H}_{32}\textbf{N}_{4}\textbf{S}_{2}$ 1) $\alpha\iota\text{-Di}[\textbf{Phenylthiure\"ido}]$ nonan. Sm. 104,5° (C. **1897** [2] 849). $\textbf{C}_{23}\textbf{H}_{33}\textbf{O}_{8}\textbf{N}_{3}$ C 57,6 — 11 6,9 — O 26,7 — N 8,8 — M. G. 479.

1) Cetylester d. 2,4,6-Trinitrobenzol-1-Carbonsäure. Sm. 121-1220 (B. **29**, 1399).

 Diamyläther d. α-[1-Naphtyl]sulfon-βγ-Dimerkaptopropan.
 (J. pr. [2] 56, 468). C, H, O, S, 2) Diamyläther d. α -[2-Naphtyl]sulfon- $\beta\gamma$ -Dimerkaptopropan. (J. pr. [2] 56, 465).

1) $\beta \gamma$ -Diamylsulfon- α -[2-Naphtyl]sulfonpropan. Sm. 136° (J. pr. [2] C.3 H.34 O6 S8 C 73,8 — H 10,1 — O 8,6 — N 7,5 — M. G. 374.

 $C_{23}H_{88}O_{2}N_{2}$

1) s-Palmitylphenylharnstoff. Sm. 90-91° (Soc. 69, 1596). C 59,2 - H 8,2 - O 20,6 - N 12,0 - M. G. 466. $C_{23}H_{38}O_6N_4$

1) 2,4,6-Trinitro-1-Heptdekylamidobenzol. Sm. 86° (Soc. 59, 715). — II, 336. C 80,0 — H 11,3 — O 4,6 — N 4,1 — M. G. 345.

C28H39ON

 α-Oximido-α-[4-Methylphenyl] hexadekan. Sm. 60° (J. pr. [2] 54, 402).
 Hexadekyl-2-Methylphenylsulfon. Sm. 65° (J. pr. [2] 54, 526). $C_{23}H_{40}O_2S$ 1) 1,4-Methylhexadekylbenzol-?-Sulfonsäure. Na (B. 21, 3183). — II, 161.

 $\mathbf{C}_{23}^{20}\mathbf{H}_{40}^{10}\mathbf{O}_{3}\mathbf{S}$ $\mathbf{C}_{23}\mathbf{H}_{42}\mathbf{ON}_{2}$ C 76,2 - H 11,6 - O 4,4 - N 7,7 - M. G. 362.

1) 6-Oxy-4,5-Dimethyl-2-Heptadekyl-1,3-Diazin. Sm. 980 (Pinner,

1) Dichlorid d. Brassidinsäuremethylester. Sm. 42,5° (B. 24, 4123). — $\mathbf{C}_{23}\mathbf{H}_{44}\mathbf{O}_{2}\mathbf{Cl}_{2}$

I. 477. 2) Dichlorid d. Erucasäuremethylester. Sm. 30,5 ° (B. 24, 4123). —

I, 477. 1) Verbindung (aus Cardol) (C. 1896 [1] 112). C, H, O, S

C, 3H45O, N

1) Verbindung (aus Cardoi) (C. 1856 [1] 112).
C 61,7 — H 10,1 — 0 25,1 — N 3,1 — M. G. 447.
1) Psychosin (J. pr. [2] 25, 25). — III, 574.
C 78,2 — H 13,3 — 0 4,5 — N 4,0 — M. G. 353.
1) Lauronoxim. Sm. 39—40° (Soc. 57, 983). — I, 1031.
C 75,0 — H 13,0 — 0 4,3 — N 7,6 — M. G. 368.
1) s-Diisoundekylharnstoff. Sm. 94—95° (G. 24 [2] 283).
1) s-Diisoundekylthioharnstoff. Sm. 50—51°. 4 + PtCl₂ (G. 24 [2] 281). $C_{23}H_{47}ON$

 $\mathbf{C}_{23}\mathbf{H}_{48}\mathbf{ON}_2$

 $C_{23}H_{48}N_{2}S$

C₂₃-Gruppe mit vier Elementen.

C₂₃H₁₄O₇N₃Br 1) 2-Naphtylester d. 3-Brom-4, 6-Dinitro-5-Amido-2-Oxybenzol-1-Carbonsäure. Sm. 222º (B. 26, 1470). — II, 1514.

C₂₃H₁₅ON₄Br 1) ?-Brom-2-[2- β -Oxynaphtylazophenyl] benzimidazol. Sm. 160 bis 170°. HCl (B. 31, 322). — IV, 1491. C₂₃H₁₆ONCl 1) Phenyl-[?-Chlor-2-Naphtyl]amid d. Benzolcarbonsäure. Sm. 1520 (B. 17, 1591). — II, 1168.

1) 5-Keto-2-[a-Brombenzyliden]-3,4-Diphenyl-2,5-Dihydropyrrol $\mathbf{C}_{28}\mathbf{H}_{16}\mathbf{ONBr}$ (Brombenzaldiphenylmalermidin). Sm. 213-214° (B. 24, 3869).

1) 2-[1-Naphtyl]imido-4-Keto-3-[1-Naphtyl]tetrahydrothiazol. Sm. C23H16ON.S 176° (B. 21, 974). — II, 610.

2) 2-[2-Naphtyl]imido-4-Keto-3-[2-Naphtyl]tetrahydrothiazol. Sm. 174° (B. 21, 974). — II, 620.

 $\mathbf{C}_{23}\mathbf{H}_{16}\mathbf{O}_{4}\mathbf{N}_{4}\mathbf{Cl}_{2}\mathbf{1}) \ \gamma - \mathbf{Phenylhydrazon} - \alpha \varepsilon - \mathbf{Di}[\mathbf{5} - \mathbf{Chlor-2} - \mathbf{Nitrophenyl}] - \alpha \delta - \mathbf{Pentadiën}.$ Sm. 194—195° u. Zers. (A. **262**, 144). — IV, 778.

 $\mathbf{C}_{23}\mathbf{H}_{17}\mathbf{ON}_{2}\mathbf{Cl}$ 1) Chlormethylat d. Isorosindon. $2 + \text{PtCl}_{4}$, $+ \text{AuCl}_{3}$ (B. 31, 307). - IV, 1056.

 $\mathbf{C}_{23}\mathbf{H}_{17}\mathbf{ON}_{2}\mathbf{J}$ 1) Jodmethylat d. Isorosindon. Zers. bei 170-180° (B. 31, 306). -IV, 1056.

 $\mathbf{C}_{23}\mathbf{H}_{17}\mathbf{ON_4}\mathbf{Br} \quad 1) \quad \alpha - \mathbf{Phenyl} - \beta - [\mathbf{2} - \mathbf{Naphtyl}] \\ \mathbf{azo} - \beta - [\mathbf{4} - \mathbf{Bromphenyl}] \\ \mathbf{harnstoff.} \quad \mathbf{Sm.} \quad 139 \\ \mathbf{mather} = \mathbf{Mather} +$ bis 140° (B. 21, 2570). — IV, 1574.

- 1) Benzoyl-l-Naphtylamid d. Benzolsulfonsäure. Sm. 193-194° (Am. C28H17O8NS 19, 764).
 - 2) Benzoyl-2-Naphtylamid d. Benzolsulfonsäure. Sm. 161-162° (Am. **19**, 765).
- $C_{23}H_{17}O_3N_3S$ 1) 2-Phenylazo-l-Benzylidenamidonaphtalin-5-Sulfonsäure (B. 30, 53). — IV, 1399.
 - 2) 2,3-Diphenyl-2,3-Dihydro-1,2,4-Naphtisotriazin-24-Sulfonsäure. Zers, bei $250-260^{\circ}$. Ca + $4H_2O$, Ba + $2H_2O$ (Soc. 59, 687). -IV, 1399.
- C₂₃H₁₇O₄N₂Cl 1) Anhydro-4-Methylphenyl-1-Aethoxylnaphtotartrazoniumchlorid (B. **27**, 2357). — IV, 1021.
- 1) P-Brom-2-Keto-l-Methyl-3,3,5-Triphenyl-2,3-Dihydropyrrol. Coa H18 ONBr
- Sm. 153° (Soc. 57, 699, 728). IV, 475.

 1) Diphenyläther d. 4-Chlor-5,5-Dioxy-2-Keto-3-Methyl-1-Phenyl-C₉₈H₁₈O₈NCl 2,5-Dihydropyrrol (Chlorcitrakonanildiphenyläther). Sm. 125° (A. 295, 63).
- C₂₃H₁₈O₄N₃Br 1) Farbstoff (aus Dibromgallanilid u. Nitrosodimethylanilin) (Bl. [3] 15, 408).
- 1) Verbindung (aus 1-Methylbenzol-4-Sulfonsäure-1-Naphtylamid). Sm. 201° (B. 27, 2372). IV, 1392. $C_{28}H_{19}O_2N_3S$
 - 2) Verbindung (aus 1-Methylbenzol-4-Sulfonsäure-2-Naphtylamid). Sm. 187° (B. 27, 2373). IV, 1393.
- 1) $\alpha \gamma$ -Di[2-Naphtylsulfon]- β -Oximidopropan. C25H19O5NS Sm. 116° (J. pr. [2] **55**, 408).
- C₂₃H₁₉O₅N₂Cl 1) Aethyläther d. 4-Methylphenyl-1-Oxynaphtotartrazoniumchlorid
- (B. 27, 2357). IV, 1021. 1) 2 [2 Methylphenylbenzoylamido] 5 [2 Methylphenylamido] 1,3,4-Thiodiazol. Sm. 214° (B. 23, 367). IV, 1236. $\mathbf{C}_{23}\mathbf{H}_{20}\mathbf{ON}_4\mathbf{S}$
 - 2) 2 [4 Methylphenylbenzoylamido] 5 [4 Methylphenylamido] -
- 1,3,4-Thiodiazol. Sm. 186° (B. 23, 365). IV, 1236. C₂₈H₂₀O₂N₂Cl₂ 1) 2^3 ,5³-Dichlor-4',4²-Di[Acetylamido] triphenylmethan. (A. 299, 353). - IV, 1043.
- $C_{23}H_{20}O_4NC1$ 1) Chlorbenzylat d. Papaverolin $+ 2 H_2 O$. Sm. 158° (J. pr. [2] 56, 343). $\textbf{C}_{23}\textbf{H}_{20}\textbf{O}_{6}\textbf{N}_{4}\textbf{Cl}_{2}\textbf{1}) \hspace{0.1cm} \gamma\textbf{-Phenylhydrazon} - \alpha \hspace{0.1cm} \varepsilon\textbf{-Dioxy} - \alpha \hspace{0.1cm} \varepsilon\textbf{-Di}[\textbf{5-Chlor-2-Nitrophenyl}] \hspace{0.1cm} \textbf{pentan.}$
- Sm. $193,5^{\circ}$ (A. **262**, 142). IV, 777. 1) Benzylester d. Dimerkaptomethylenamidothiolameisensäuredi-C23H21ONS3 benzyläthersäure. Sm. 92° (B. 28, 1938).
- 1) Verbindung (aus Acetylchlorid u. Amarin) (J. pr. [2] 27, 298). CosH21ON2Cl III, 24.
- C₂₈H₂₁ON₂Cl₃ 1) Trichlorvinylstrychnin? (J. 1861, 544). III, 938.
- $\mathbf{C}_{23}\mathbf{H}_{21}\mathbf{ON}_4\mathbf{Br}$ 1) δ -Brom- γ -Phenylhydrazon- $\beta\delta$ -Di[Phenylamido]butan- β -Carbonsäure. Sm. 80° (B. 23, 551). — II, 439.
- 1) Benzaldehyd-l-Naphtylthionaminsaures Amidobenzol. Sm. 1030 $\mathbf{C}_{28}\mathbf{H}_{22}\mathbf{O}_{3}\mathbf{N}_{2}\mathbf{S}$ (A. 274, 254). - III, 7.
- 1) Farbstoff (aus 3,6 · Di [Dimethylamido] -9-Phenylxanthen-9-Sulfonsäure) C₂₃H₂₂O₄N₂S (J. pr. [2] 54, 255).
- 1) Isopropylenäther d. Benzol-1, 2-Dicarbonsäure- β -Merkaptoäthyl- $\mathbf{C}_{23}\mathbf{H}_{22}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{S}_{2}$
- $\begin{array}{c} \text{imid. Sm. } 141-143^{\circ} \ (B.\ 25,\ 3054). \ --\text{II},\ 1801. \\ \textbf{C}_{23}\textbf{H}_{28}\textbf{O}_{2}\textbf{N}_{3}\textbf{Cl}_{2}\ 1) \ 2^{2}, 2^{3}\text{-Dichlor} -4'\text{-Nitro} -4^{2}, 4^{3}\text{-Di}[\text{Dimethylamido}] \text{triphenylmethan.} \end{array}$ Sm. 208°. Pikrat (B. 20, 1564). — IV, 1044.
- 1) 3,3'-Di[Aethylamido]phenolsaccharein (Bl. [3] 17, 699). $C_{23}H_{23}O_3N_3S$ 2) 3,3'-Di[Dimethylamido]phenolsaccharein (Bl. [3] 17, 699).
- C₂₃H₂₃O₄N₂Br₃ 1) Tribrombrucin (B. 18, 1238; 23 [2] 496). III, 947 1) Jodmethylat d. Dibenzylidentropinon. Sm. 264-265° u. Zers. (B. C₂₃H₂₄ONJ
- 30, 736). IV, 466. $\mathbf{C}_{23}\mathbf{H}_{24}\mathbf{ON}_{2}\mathbf{Cl}_{2}$ 1) α - Oxy - 2', 5'- Dichlor - 2², 2³- Di | Methylamido | -1², 1³ - Dimethyltri
 - phenylmethan (A. 296, 84). 2) α -Oxy-2', 5'-Dichlor- 4^2 , 4^3 -Di[Dimethylamido]triphenylmethan. Sm. 168—169° (A. 296, 72, 81).
- C₉₃H₉₄O₉N₉Cl 1) 4'-Chlor-3'-Nitro-4⁹, 4³-Di[Dimethylamido]triphenylmethan. Sm. 133—134° (A. **294**, 382). — IV, 1044.
- $\mathbf{C}_{23}\mathbf{H}_{24}\mathbf{O}_{2}\mathbf{N}_{4}\mathbf{Br}_{4}\mathbf{1})\ \mathbf{Di}\left[\mathbf{4},\mathbf{5}-\mathbf{Dibrom-3-Keto-1},\mathbf{5}-\mathbf{Dimethyl-2-Phenyltetrahydropyrazo-1}\right]$ lyl-4-|methan. Sm. 140° u. Zers. (B. 28, 1184). — IV, 1265.
- 1) s-Diantipyrylthioharnstoff. Sm. 248° u. Zers. (A. 293, 65). $C_{28}H_{24}O_{2}N_{6}S$ IV, 1109.

1) Dimethylanilinsulfonphtalein (Am. 20, 128).

 $C_{23}H_{24}O_4N_2Cl_2$ 1) Dichlorbrucin (B. 23 [2] 496). — III, 947. $C_{23}H_{24}O_4N_2Br_2$ 1) Dibrombrucin (B. 23 [2] 496). — III, 947.

(J. pr. [2] 54, 254).

(Soc. 73, 406).

C₂₃H₂₈O₇NCl

1) Acetylchlorid + Tribenzylphosphinoxyd (Soc. 55, 227). - IV, 1665.

Na

1) 3, 6-Di [Dimethylamido] - 9 - Phenylxanthen - 9 - Sulfonsäure.

 $\mathbf{C}_{23}\mathbf{H}_{24}\mathbf{O}_{2}\mathbf{ClP}$ $\mathbf{C}_{23}\mathbf{H}_{24}\mathbf{O}_{3}\mathbf{N}_{2}\mathbf{S}$

C23H24O4N2S

1) α-Oxy-4-Chlor-4', 42-Di[Dimethylamido] triphenylmethan. CogHosONoCl Sm. 144-146° u. Zers. (B. 19, 744). - II, 1086. $C_{23}H_{25}O_{2}N_{2}Cl$ 1) Vinylchlorid d. Strychnin. 2 + PtCl₄ (J. 1861, 544). — III, 939. $C_{23}H_{25}O_3N_2Cl$ 1) Strychninacetylchlorid. 2 + PtCl₄ (J. 1874, 876). — III, 939. $C_{23}H_{25}O_4N_2Br$ 1) Brombrucin (J. 1847/48, 629). — III, 947. 1) Jodmethylat d. Verb. C₂₀H₂₃O₂N (aus Tropinon). Sm. 186—187° u. C23 H26 O2 NJ Zers. (B. 30, 2719). C₂₃H₂₆O₂N₂Br₂1) Strychninbromäthyliumbromid (J. 1861, 543). — III, 938. Verbindung (aus Tetramethyldiamidobenzhydrol u. Benzolsulfinsäure). Sm. 194° (B. 30, 2804). — IV, 973. $C_{23}H_{26}O_2N_2S$ 1) 4,4'-Di[Dimethylamido]triphenylmethan-?-Sulfonsäure. Na, Mg $C_{23}H_{26}O_3N_2S$ $+4 H_2 O$, Ca $+3 H_2 O$ (B. 13, 2226). — IV, 1196. 1) α -Oxy-4, 4'-Di [Dimethylamido] triphenylmethan-?-Sulfonsäure. Na, Mg + 4 H₂O, Ca + 3 H₂O (A. 217, 258). — II, 1089. $\mathbf{C}_{23}\mathbf{H}_{26}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{S}$ 1) 3,4-Di[Aethylphenylsulfonamido]-1-Methylbenzol. $\mathbf{C}_{23}\mathbf{H}_{26}\mathbf{O}_4\mathbf{N}_2\mathbf{S}_2$ $+ \frac{1}{2} C_2 H_6 O$ (Sm. 117°) (A. **265**, 190). — IV, 617. 1) Chloräthylat d. Hydrastin. 2 + PtCl₄, + AuCl₃. - II, 2051. C,3H,6O,NCl 1) Jodmethylat d. Methylhydrastin. Zers. bei 250° (B. 23, 408). $\mathbf{C}_{23}\mathbf{H}_{26}\mathbf{O}_{6}\mathbf{N}\mathbf{J}$ II, 2052. 2) Jedäthylat d. Hydrastin. Sm. 205-206° (J. 1884, 1397; 1889, 1910). - II, 2051. 1) m-Benzolsulfamido-d-Cocaïn. Sm. 69°. HCl (B. 27, 1883). — $\mathbf{C}_{23}\mathbf{H}_{26}\mathbf{O}_{6}\mathbf{N}_{2}\mathbf{S}$ III, 868. 1) Chlormethylat d. Narkotin. 2 + PtCl₄ (A. **247**, 168). — III, 915. 2) Chlormethylat d. Isonarkotin. 2 + PtCl₄ (B. **30**, 1747). $\mathbf{C}_{23}\mathbf{H}_{26}\mathbf{O}_7\mathbf{NCl}$ 1) Jodmethylat d. Narkotin. Fl. (A. 247, 168). — III, 915. 2) Jodmethylat d. Isonarkotin. Sm. 212° (B. 30, 1746). $\mathbf{C}_{23}\mathbf{H}_{26}\mathbf{O}_7\mathbf{NJ}$ $C_{23}H_{26}O_7N_3J$ 1) Jodmethylat d. Methylnitrohydrastimid. Zers. bei 250° (A. 271, 404). — II, 2053. $\mathbf{C}_{23}\mathbf{H}_{27}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{Cl}$ 1) Chloräthylat d. Strychnin. 2 + PtCl₄ (A. 92, 339). — III, 938. 1) Jodäthylat d. Strychnin (A. 92, 339). - III, 938. $\mathbf{C}_{23}\mathbf{H}_{27}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{J}$ $C_{23}H_{27}O_3N_2Cl$ 1) β -Oxychloräthylat d. Strychnin + H_2O . 2 + $PtCl_4$, + $AuCl_3$ (A. 157, 8; R. 14, 232). — III, *939*. C₂₃H₂₇O₃N₂Br 1) Strychninbromäthyliumhydrat. Salze siehe (J. 1861, 543). — III, 938.

1) Di [4-Dimethylamidophenyl]-4'-Amidophenylmethan-2'-Sulfon- $C_{23}H_{27}O_3N_3S$ säure (B. 29, 2300). — IV, 1196. C₂₃H₂₇O₄N₂Cl 1) Diacetylhydrochlorapochinin. Sm. 184°. (2HCl, PtCl₄ + H₂O) (A. 205, 351). — III, 819. 2) Diacetylhydrochlorapoconchinin. Sm. 168°. (2 HCl, PtCl₄ + 3 H₂O) (A. 205, 352). — III, 826. $\mathbf{C}_{23}\mathbf{H}_{27}\mathbf{O}_5\mathbf{N}_2\mathbf{J}$ 1) Jodmethylat d. Methylhydrastimid. Sm. 240-245° (B. 23, 2903). **- II**, 2052. $\mathbf{C}_{23}\mathbf{H}_{27}\mathbf{O}_{6}\mathbf{N}_{2}\mathbf{J}$ 1) Jodmethylat d. Methylhydrastinoxim. Sm. 155-156° (A. 271, 394). - II, 2053. $\mathbf{C}_{23}\mathbf{H}_{27}\mathbf{O}_{7}\mathbf{N}_{2}\mathbf{J}$ 1) Jodmethylat d. Dioxymethylhydrastimid. Sm. 1900 (A. 271, 407). **– II**, 2053. $\mathbf{C}_{23}\mathbf{H}_{28}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{Br}_{2}\mathbf{1}) \ \alpha\gamma - \mathbf{Di}[\alpha - \mathbf{Brompropionyl-4-Methylphenylamido}] \ \mathbf{propan.} \ \ \mathbf{Sm.} \ \ 127^{\,0}$ (B. 31, 3248). $C_{28}H_{28}O_{3}N_{2}S$ 1) Benzaldehyd - 2,4 - Dimethylphenylthioaminsaures 4 - Amido - 1,3 -Dimethylbenzol. Sm. 98° (A. 274, 234). — III, 7. $\mathbf{C}_{23}\mathbf{H}_{28}\mathbf{O_4NC1}$ 1) Chlorpropylat d. Papaverin. Sm. 80° (J. pr. [2] 56, 334). $\mathbf{C}_{23}\mathbf{H}_{28}\mathbf{O}_5\mathbf{NJ}$ 1) Jodäthylat d. Diacetylmorphin $+ \frac{1}{2} H_2 O$ (Soc. 28, 315). — III, 899. 1) Piperidid d. Diphenylketon-3,3' oder 3,4'-Disulfonsäure. Sm. 168° $\mathbf{C}_{23}\mathbf{H}_{28}\mathbf{O}_{5}\mathbf{N}_{2}\mathbf{S}_{2}$

1) Chlormethylat d. Methylhydrastein. 2+PtCl₄. - II, 2052.

- $\mathbf{C}_{93}\mathbf{H}_{98}\mathbf{O}_{7}\mathbf{NJ}$ 1) Jodnethylat d. Methylhydrastein. - II. 2052.
- 1) Jodmethyl-Methylstrychninsäure + H₂O (A. 264, 58). III, 942. CoaHooOaNoJ
 - 2) Jodmethyl-Methylisostrychninsäure + H₂O. Sm. 270-275° u. Zers. (A. 264, 76). — III, 943.
 - 3) Jodmethylat d. Gelseminin + 2H₂O. Sm. 286° u. Zers. (B. 26, 1058; C. 1896 [1] 111).
- $\mathbf{C}_{23}\mathbf{H}_{20}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{Cl}$ 1) Chlormethylat d. Conchairamin + $2\mathbf{H}_{2}\mathbf{O}$. (2 + HCl, PtCl₄ + $14\mathbf{H}_{2}\mathbf{O}$) (A. **225**, 251). — III, 903.
- 1) Jodmethylat d. Conchairamin + 1(3) H₂O (A. 225, 250). III, 930. $\mathbf{C}_{23}\mathbf{H}_{29}\mathbf{O}_4\mathbf{N}_2\mathbf{J}$ C23H29O6N4P 1) Verbindung (aus 2,4-Diamido-1-Methylbenzol u. Phosphortrianhydro-
- brenztraubensäure). Sm. 178° u. Zers. (B. 21, 2924). IV, 604.

 1) Jodmethylat d. Methylthebeninpropyläther. Sm. 202° (B. 32, 187). $\mathbf{C}_{28}\mathbf{H}_{30}\mathbf{O}_{3}\mathbf{NJ}$
- 1) Chlormethylat d. i-Corydalin. 2 + PtCl₄, + AuCl₃ (C. 1898 [2] 115).
 1) Jodmethylat d. d-Corydalin (A. 277, 8). III, 876. $\mathbf{C}_{23}\mathbf{H}_{30}\mathbf{O}_{4}\mathbf{NCl}$
- $\mathbf{C}_{23}\mathbf{H}_{30}\mathbf{O}_{4}\mathbf{N}\mathbf{J}$ 2) Jodmethylat d. i-Corydalin. Sm. 1850 (C. 1898 [2] 115).
- 3) Jodäthylat d. Butyrylmorphin (Soc. 28, 322). III, 899. 1) Piperidid d. Diphenylmethan-4, 4'-Disulfonsäure. Sm. 171-172° $C_{23}H_{30}O_{4}N_{2}S_{2}$
- (Soc. 73, 409) 1) Jodnethylat d. Trimethylcolchidimethinsäuremethylester. Zers. C28 H80 O5 NJ bei 237° (M. 9, 876). — III, 874.
- 1) Jodmethylat d. Di[4-Dimethylamidophenyl]thiënylmethan. Sm. C, H, N, J, S $210-212^{\circ}$ (B. 20, 515). — III, 749.
- 1) Bromisobutylat d. Cinchonin + H₂O. Sm. 176° (wasserfrei) (Bl. [3] C,3H31ON2Br 11, 987). — III, 834.
- 1) Jodäthylat d. Aethylcinchonin. Sm. 242° u. Zers. (B. 13, 2288). C₂₃H₃₁ON₃J III, 834.
 - 2) Jodäthylat d. Dimethylcinchonin. Sm. 138° (A. 277, 286). III, 833.
- - III, 848.
- 1) Di[Jodäthylat] d. Cinchonin + H₂O. Sm. 264° u. Zers. (B. 13, 2288). $\mathbf{C}_{23}\mathbf{H}_{39}\mathbf{ON}_{9}\mathbf{J}_{9}$ **– III**, 833.
 - 2) Di [Jodäthylat] d. Cinchonibin. Sm. 251° (J. 1888, 2288). III, 848.
 - 3) Di[Jodäthylat] d. Cinchonidin. Sm. 255° u. Zers. (B. 11, 1824;
- J. 1882, 1109; A. 269, 259). III, 852.

 4) Di[Jodäthylat] d. Cinchonifin. Sm. 248° u. Zers. (B. 27 [2] 257).

 C₂₃H₃₂O₂N₂Br₂1) Di[Bromäthylat] d. α-Oxycinchonin + H₂O. Sm. 210° (J. 1889, 2019).

 III, 840.
- $\mathbf{C}_{23}\mathbf{H}_{32}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{J}_{2}$ 1) Jodmethylat d. Chininjodäthylat + $\mathbf{H}_{2}\mathbf{O}$. Sm. $206-208^{\circ}$ u. Zers.
 - (B. 14, 78; J. 1882, 1109). III, 814. 2) Jodäthylat d. Chininjodmethylat + H₂O. Sm. 157—160° u. Zers.
 - (B. 14, 77). III, 814. 3) Di [Jodäthylat] d. α-Oxycinchonin. Sm. 240° (J. 1889, 2019). — III, 840.

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- 1) Phenylbenzyldi[1-Piperidyl]phosphoniumchlorid. $2 + PtCl_4$ (B. C23H32N2ClP **31**, 1045). — **IV**, 1682.
- 1) neutr. Chininglycerophosphat $+ 10 \,\mathrm{H}_2\mathrm{O}$ (C. 1898 [1] 782). $\mathbf{C}_{23}\mathbf{H}_{33}\mathbf{O}_{8}\mathbf{N}_{2}\mathbf{P}$
- $\mathbf{C}_{23}\mathbf{H}_{34}\mathbf{O}\mathbf{N}_{2}\mathbf{B}\mathbf{r}_{2}$ 1) Di[Bromäthylat] d. Hydroeinchonin (*J. pr.* [2] 8, 306). III, 836. $\mathbf{C}_{23}\mathbf{H}_{34}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{J}_{2}$ 1) Di[Jodäthylat] d. Nichin + 2H₂O. Sm. 137° u. Zers. (*M.* 14, 431). **– III**, 820.
- 1) s-Palmitylphenylthioharnstoff. Sm. 62-63° (Soc. 69, 1595). C₂₃H₃₈ON₂S
- $\mathbf{C}_{23}\mathbf{H}_{46}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{J}_{2}$ 1) Di[Jodmethylat] d. Lupinin (C. 1897 [2] 361).

C₂₃-Gruppe mit fünf Elementen.

 $\mathbf{C}_{23}\mathbf{H}_{26}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{ClBr}$ 1) Strychninbromäthyliumchlorid. $2+\mathrm{PtCl}_{4}$, $+\mathrm{AuCl}_{3}$ (J. 1861, 543). — III, 938.

C₂₄-Gruppe mit einem Element.

- C 97,3 H 2,7 M. G. 296. C24H8
- 1) Carbopetrocen. Sm. 268°. Pikrat (A. ch. [5] 17, 28). II, 305. C 95,4 — H 4,6 — M. G. 302. C24H14
- 1) Di[1-Naphtyl]äthin. Sm. 171°. Pikrat (Sm. 180°) (Bl. [3] 7, 644). II, 302. C 94,1 — H 5,9 — M. G. 306.
- $C_{24}H_{18}$
 - 1) 1,2,3-Triphenylbenzol. Sm. 157° (B. 26, 69; A. 281, 72).
 2) 1,3,5-Triphenylbenzol. Sm. 169—170° (B. 7, 1123; 14, 2516; 23, 2534; 27 [2] 338, 339; Bl. 50, 637; G. 22 [2] 77; J. 1877, 393; A. 209, 3). II, 300.
 - 3) 4,4'-Diphenylbiphenyl (Benzerythren). Sm. 317° (307—308°); Sd. 428°₁₈
 - (A. 203, 134; Am. 17, 620). II, 300. 4) Dibiphenyl? Sm. 187° (M. 3, 815). C 90,6 H 9,4 M. G. 318.
- $\mathbf{C}_{24}\mathbf{H}_{30}$
- 1) Dodekahydro-1, 3, 5-Triphenylbenzol (B. 23, 2534). II, 278.
- C 90,0 H 10,0 M. G. 320. 1) Kohlenwasserstoff (aus Cholsäure). Sd. 215—325° (Bl. 33, 317). $C_{24}H_{32}$
- II, 255. C 88,3 H 11,7 M. G. 326. $C_{24}H_{98}$
- 1) Eikosihydro-1,3,5-Triphenylbenzol. Fl. (B. 23, 2534). II, 176. C 87,3 — H 12,7 — M. G. 330. $C_{24}H_{42}$
 - 1) Oktadekylbenzol. Sm. 36°; Sd. 249°₁₅ (147°₀) (B. 19, 2984; 29, 1326). - II. 40.
 - 2) 4-Hexadekyl-1, 3-Dimethylbenzol. Sm. 33,5°; Sd. 249,5— 250°_{15} (149°) (B. 21, 3184; 29, 1326). — II, 40.
 - 3) norm. Hexapropylbenzol. Sm. 118° (B. 26 [2] 693).
- C24H48 C 85,7 — H 14,3 — M. G. 336.
- C24H50
- 1) Tricaprylen. Fl. (J. r. 26, 255). C 85,2 H 14,8 M. G. 338. 1) norm. Tetrakosan. Sm. 51,1°; Sd. 243°₁₅ (B. 15, 1718; 16, 391). I, 107.
- C24Cl18 1) Perchlor-1, 3, 5-Triphenylbenzol (B. 16, 2883). — II, 300.
- 1) Kupferacetylid + H₂O (B. 30, 814). C24Cu12

C₂₄-Gruppe mit zwei Elementen.

- $\mathbf{C}_{24}\mathbf{H}_{10}\mathbf{O}_{10}$ C 62.9 - H 2.2 - O 34.9 - M. G. 458.
- 1) Humussäure (J. 1876, 878). I, 1108. C24H12O2
- C 86,7 H 3,6 O 9,6 M. G. 332.

 1) Biacenaphtylidendion. Sm. 295° (A. 276, 17; 290, 201). III, 311. C 75,0 H 3,1 N 21,9 M. G. 384.

 1) Benzotriphenazin (B. 21, 1228). IV, 1332. $C_{24}H_{12}N_6$
- C24H14O C 90,6 - H 4,4 - O 5,0 -
- C 90,6 H 4,4 O 5,0 M. G. 318.

 1) Biacenaphtylidenon. Sm. 262° (A. 290, 202). III, 266. C24H14O5
- C 75,4 H 3,7 O 20,9 M. G. 382.

 1) Naphtalfluoresceïn. Sm. 308° (A. 227, 136). II, 2039. $\mathbf{C}_{24}\mathbf{H}_{14}\mathbf{O}_{6}$ C 72,4 - H 3,5 - O 24,1 - M. G. 398
- 1) Dibenzoat d. Oxyjuglon. Sm. 169-170° (B. 18, 472). III, 387. C24H14O7
- C 69,6 H 3,4 O 27,0 M. G. 414. 1) Pyrogallolanhydrid (A. 202, 280). — II, 1012. C 44,0 — H 2,1 — O 53,8 — M. G. 654.
- $\mathbf{C}_{24}\mathbf{H}_{14}\mathbf{O}_{22}$
- 1) Carminsäure. Anilinsalz, Chinolinsalz (B. 30, 1759). $\mathbf{C}_{24}\mathbf{H}_{14}\mathbf{N}_2$ C 87,3 — H 4,2 — N 8,5 — M. G. 330.
- 1) Phenanthrennaphtochinoxalin (Naphtophenanthrazin). Sm. 2730 (B. 18, 2426). — IV, 1094. C 83,5 — H 4,3 — N 12,2 — M. G. 345.
- $C_{24}H_{15}N_{8}$ 1) β -Amidonaphtophenanthrazin (B. 23, 2546). — IV, 1219.

- $C_{24}H_{16}O_{2}$ C 85,7 — H 4,7 — O 9,5 — M. G. 336.
 - 1) Acetat d. Alkohol C₂₀H₁₄O (aus 2-Oxynaphtalin). Zers. bei 280° (A. ch. [5] **28**, 189). — **II**, 1095.
- C94 H16 O3 C 81.8 - H 4.5 - O 13.6 - M. G. 352.
 - 1) Lakton d. α -Phenoxyl- α -Phenyl- α -[2-Oxy-1-Naphtyl]essigsäure. Sm. 160° (B. 31, 2825).
- C24 H16 O4 C 78,3 - H 4,3 - O 17,4 - M. G. 368.
 - 1) Dibenzoat d. 2,7-Dioxynaphtalin. Sm. 138-139° (B. 14, 2209). -
 - 2) $\alpha \gamma$ -Lakton d. γ -Oxy- $\gamma \gamma$ -Di[2-Oxynaphtyl]propen- α -Carbonsäure (α-Naphtolmaleïnfluoresceïnsäureanhydrid). Sm. 118-120° (B. 18, 2867). **— II**, 1989.
 - 3) α,8-Lakton d. αα-Di[?-Oxyphenyl]-α-Naphtylmethan-8-Carbonsäure (Phenolnaphtaleïn). Sm. 120° (u. oberh. 200°) (B. 28, 992). — II, 1989.
 - 4) Aethylester d. Phtalaconcarbonsäure. Sm. 209-211° (B. 17, 1389). **– II**, 1915.
 - 5) Diphenylester d. Naphtalin-1,5-Dicarbonsäure. Sm. 198-1990 (G. **26** [1] 99).
- C24H16O7
- C 69,2 H 3,8 O 26,9 M. G. 416.

 1) Diacetat d. Fluoresceïn. Sm. 200° (A. 183, 13). II, 2062.

 2) Diacetat d. Hydroninonphtaleïn. Sm. 210° (B. 6, 508; 11, 715). —
- II, 2066. C'66,7 - H 3,7 - O 29,6 - M. G. 432.C24H16O8
- 1) Diacetat d. Resorcinoxaleïnanhydrid (B. 14, 2567). II, 937. $C_{24}H_{16}N_2$ C 86.7 - H 4.8 - N 8.4 - M. G. 332.
 - 1) 2,3 Diphenyl 1,4 Naphtisodiazin. Sm. 147° (B. 18, 2426). IV, 1091.
 - 2) 2,8-Diphenylphenanthrolin. Fl. (2HCl, PtCl₄) (A. 281, 19). IV, 1092.
- C24H16N4 C 80,0 - H 4,4 - N 15,6 - M. G. 360.
- 1) Phenylfluorindin. HCl (B. 29, 367, 1248, 1250, 1608). IV, 1300. C 90,3 H 5,3 N 4,4 M. G. 319. $C_{24}H_{17}N$
 - 1) **2,3-Diphenyl-\alpha-Naphtindol.** Sm. 140-141°; Sd. 315-330°₁₀. + Aceton (Soc. 65, 896). — IV, 477.
 - 2) **2,3-Diphenyl-\beta-Naphtindol.** Sm. 166—167°; Sd. 330—340°₁₅. + Aceton, Pikrat (Soc. 65, 897). — IV, 477.
- C 83.0 H 4.9 N 12.1 M. G. 347. $C_{24}H_{17}N_{3}$
 - 1) 3,5-Diphenyl-1-[2-Naphtyl]-1,2,4-Triazol. Sm. 144° (J. pr. [2] 54, 165). — IV, 1187. 2) 2-Methyl-4,6-Di[2-Naphtyl]-1,3,5-Triazin. Sm. 195° (B. 25, 1437,
 - 1626). IV, 1218.
 - 3) Phenylaposafranin. Sm. 201°. (2HCl, PtCl₄) (B. 30, 1831, 2625). —
- $C_{24}H_{17}N_5$
- IV, 1177. C 76,8 H 4,5 N 18,7 M. G. 375. 1) P-Di[2-Naphtylazo] pyrrol. Sm. 228° (B. 19, 2255). IV, 1483. 1) 2-Brom-1,3,5-Triphenylbenzol. Sm. 104° (B. 7, 1125). II, 300. $\mathbf{C}_{24}\mathbf{H}_{17}\mathbf{Br}$ C 89,4 — H 5,6 — O 5,0 — M. G. 322 $C_{24}H_{18}O$
 - 1) ?-Oxy-1,2,3-Triphenylbenzol. Sm. 226° (B. 26, 68). II, 905.
 - 2) 1,1 [oder 2,2]-Diphenyl-1,2-Dihydro-β-Naphtofuran. Sm. 141—142° (A. 279, 333). — III, 734.
- C 85.2 H 5.3 O 9.5 M. G. 338.C24H18O2
 - 1) 6-Methyl-2-Phenyl-4-Benzoylmethylen-1,4-Cumaran (Methylphenacylidenflaven). Sm. 156-157° (B. 31, 712).
 - 2) Lakton d. γ -Oxy- δ -[3-Methylphenyl]- β -Diphenyl- $\alpha\gamma$ -Butadiën- α -Carbonsäure (m-Xylaldiphenylmaleïd). Sm. 134° (B. 26, 2481).
 - 3) Lakton d. γ-Oxy-δ-[4-Methylphenyl]-αβ-Diphenyl-αγ-Butadiën-α-Carbonsäure. Sm. 165° (B. 24, 3854). — II, 1729.
- C 81.4 H 5.1 O 13.5 M. G. 354.C24H18O8
 - 1) Acetat d. 4-Oxy-2, 3, 5-Triphenylfuran. Sm. 135° (B. 31, 1248). C 77.8 — H 4.8 — O 17.3 — M. G. 370.
- C24H18O4 1) $\alpha\alpha\delta$ -Triphenyl- $\alpha\gamma$ -Butadiën- $\beta\gamma$ -Dicarbonsäure (α -Benzyliden- γ -Diphenylitakonsäure). Zers. bei 207%. Ca + 3 H₂O (B. 30, 95).

- 2) Lakton d. β-Oxy-α-Benzoyl-αγ-Diphenylpropan-α-Ketocarbonsäure. $C_{24}H_{18}O_4$ Sm. 137° (B. 31, 2222).
 - 3) 1,2-Phenylenester d. β -Phenylakrylsäure. Sm. 129° (B. 25, 3533). - II, 1406.
 - 4) Diacetat d. 2,2'-Dioxy-1,1'-Binaphtyl. Sm. 109° (Bl. [3] 19, 612).
 5) Benzoat d. β-Oxy-αα-Dibenzoylpropen. Sm. 87-88° (A. 277, 197;
 - **291**, 100). III, 319.
- C 74.6 H 4.7 O 20.7 M. G. 386. $C_{24}H_{18}O_{5}$
 - 1) 4-[1-Naphtyl]äther d. 4-Oxy-1,2-Diacetoxylnaphtalin. Sm. 220° u. Zers. (B. 30, 2567).
 - 2) 2-[1-Naphtyl]äther d. 2-Oxy-1,4-Diacetoxylnaphtalin. Sm. noch nicht bei 300° (B. 30, 2566).
 - 3) Acetylfluorescein. H₂SO₄ (J. pr. [2] 23, 54, 544). III, 137.
 - 4) Acetylderivat d. α-Orcinphtalin. Sm. 219° (B. 29, 2634; A. 183, 73). - II, 1913.

 - 5) Verbindung (aus Corallinphtaleïn) (B. 11, 1429). II, 1121. 6) Verbindung (aus 1,3-Dioxybenzol). Sm. 261° (B. 10, 1469; Bl. [3] 13, 900). — II, 917. C 71,6 — H 4,5 — O 23,9 — M. G. 402.
- $C_{24}H_{18}O_6$ 1) 3,4-3',4'-Dimethylenäther d. $\alpha\delta$ -Diketo- δ -Phenyl- $\alpha\beta$ -Di[3,4-Dioxyphenyl]butan (Phenacyldesoxypiperonoïn). Sm. 156° (A. 289, 324; B.
 - **26**, 63). III, 308. 2) Monacetat d. α-Orcinphtalein? (A. 183, 67; B. 29, 2632, 2636). -II, 2066.
 - 3) Diacetat d. Phenolphtalein. Sm. 1430 (A. 202, 74). II, 1983.
 - 4) Diacetat d. Phenolphtalidein. Sm. 1090 (A. 202, 105) III, 261. 5) Diacetat d. ?-Dibenzoyl-1, 3-Dioxybenzol. Sm. 150 (A. 210, 260). - III, 305.
 - 6) $\alpha, 2'$ -Lakton d. α -Oxy- α -[2,4-Diacetoxylphenyl]- $\alpha\alpha$ -Diphenylmethan-2'-Carbonsäure (Benzolresorcinphtaleïndiacetat). Sm. 137º (B. 14, 1861). - II, 1986.
 - 7) Aethylester d. chinoïden Fluoresceïnacetat. Sm. 189 190° (M. **17**, 434).
- C 68.9 H 4.3 O 26.8 M. G. 418. $\mathbf{C}_{24}\mathbf{H}_{18}\mathbf{O}_{7}$
 - 1) Diacetat d. Fluorescin. Sm. 200-2020 (M. 13, 423). II, 2038.
 - 2) Diacetat d. Hydrochinonphtalin. Sm. 190-191 (B. 11, 716). II, 2038.
- $C_{24}H_{18}O_{8}$ C'66,4 - H 4,1 - O 29,5 - M. G. 434.
- 1) Dimethylester d. Disalicylsäurephtalid. Sm. 1710 (A. 303, 285). $C_{24}H_{18}O_{9}$ C 64,0 - H 4,0 - O 32,0 - M. G. 450.
 - 1) Oxymethylfurolphloroglucid (C. 1896 [2] 485).
- $C_{24}H_{18}O_{11}$
- C 59,8 H 3,7 O 36,5 M. G. 482.

 1) Anhydrid d. Caprarsäure (B. 30, 1987; J. pr. [2] 57, 425).

 2) Verbindung 4H₂O (aus Rufigallussäure). Zers. bei 230° (A. 141, 346; M. 1, 434). — III, 439.
- $\mathbf{C}_{24}\mathbf{H}_{18}\mathbf{O}_{12}$ C 57,8 — H 3,6 — O 38,6 — M. G. 498.
 - 1) Pentaacetat d. 1, 2, 3, 5, 7-Dioxyanthragallol. Sm. 2290 (A. 240, 275). - III, 438.
 - 2) Pentaacetat d. 1,2,5,8,?-Pentaoxy-9,10-Anthrachinon (J. pr. [2] 43, 250). — III, 438. C 86,2 — H 5,4 — N 8,4 — M. G. 334. 1) 4,4'-Diphenylazobenzol. Sm. 249—250° (B. 13, 1962). — IV, 1402.
- $C_{24}H_{18}N_2$

 - 2 -Phenyl-N-Benzyl-α [oder β]-Naphtimidazol (αβ-Naphtobenzaldehydin).
 Sm. 117° (B. 29, 1502).
 IV, 1062.
 - 3) 2-Phenyl-3-[4-Methylphenyl]-α-Naphtimidazol. Sm. 155° (B. 25, 2833). — IV, 1061.
 - 4) 2,4-Diphenyl-3,4-Dihydro-1,4-Naphtisodiazin. Sm. 164—165° (B.
 - 24. 2680). IV, 1064. 5) 2,3-Diphenyl-1,2 oder 3,4-Dihydro-1,4-Naphtisodiazin. Sm. 1720 (B. 26, 192). — IV, 1090. C 79,5 — H 5,0 — N 15,5 — M. G. 362.
- $\mathbf{C}_{24}\mathbf{H}_{18}\mathbf{N}_{4}$ 1) 7,8-Di[Phenylhydrazon] acenaphten. Sm. 219° (A. 276, 11). — III, 404.
 - 2) 4,4'-Di[Phenylazo]biphenyl. Sm. 226° (B. 29, 103). 3) Phenylsafranin. HCl, $H_2CO_3 + H_2O$ (B. 21, 2620). — IV, 1305.

 $C_{24}H_{18}N_4$

 $\mathbf{C}_{24}\mathbf{H}_{18}\mathbf{N}_{6}$

 $C_{24}H_{20}O_3$

 $\mathbf{C}_{24}\mathbf{H}_{20}\mathbf{O}_{5}$

 $\mathbf{C}_{24}\mathbf{H}_{20}\mathbf{O}_{6}$

- 4) Phenylamidoaposafranin. Sm. 203-204° (189-190°). HCl, (HCl, AuCl₃), HBr, HJ, HNO₃ (B. **23**, 838; **26**, 381; **28**, 350, 1713; **29**, 364, 1604; A. **262**, 254; **272**, 312; **286**, 189; **290**, 272; J. pr. [2] **46**, 568). IV, 1279.
- 5) Amidodiphenylindulin. Sm. 150° (A. 262, 256; 266, 255; 286, 195).
 6) Phenylamidoindulin. Sm. 246°. HNO₈ (A. 272, 315). IV, 1284.
 7) Pseudomauveïn. HCl, (2 HCl, PtCl₄) (Soc. 35, 725). IV, 1305.
 8) Base (aus Phensin u. Dihydrophenazin). 2 HCl, (2 HCl, PtCl₄), H₂SO₄
- (A. 168, 13; 292, 260). IV, 1000. C 73,9 H 4,6 N 21,5 M. G. 390.
- 1) **4,4'-Di[Phenylazo]azobenzol.** Sm. 166—167° (B. **31**, 996). **IV**, 1372.
- 1) Biphenylsulfid. Sm. 171-172° (B. 13, 387). II, 895. $\mathbf{C}_{24}\mathbf{H}_{18}\mathbf{S}$
- $\mathbf{C}_{24}\mathbf{H}_{18}\mathbf{S}_{2}$
- 1) Biphenyldisulfid. Sm. 148—150° (B. 13, 387). II, 895.
 1) Quecksilberdi-3-Biphenyl. Sm. 216° (B. 28, 592). IV, 1713.
 C 82,5 H 5,4 N 12,0 M. G. 349.
 1) Aethylrosindulin. Sm. 184° (A. 256, 237; B. 30, 1830). IV, 1206. $\mathbf{C}_{24}\mathbf{H}_{18}\mathbf{H}\mathbf{g}$ $\mathbf{C}_{24}\mathbf{H}_{19}\mathbf{N}_{3}$

 - 2) Verbindung (aus 3-Nitrobenzolazosalicylsäure). Sm. 1970 (A. 251, 193). - IV, 1469. C 76,4 - H 5,0 - N 18,6 - M. G. 377.
- $C_{24}H_{19}N_{5}$
 - 1) 4-Amidophenylamidoaposafranin. Sm. 227° u. Zers. HCl (B. 29, 366). **IV**, 1280.
- C 88.9 H 6.2 O 4.9 M. G. 324. $\mathbf{C}_{24}\mathbf{H}_{20}\mathbf{O}$ 1) 4-Keto-1,2,6-Triphenyl-1,2,3,4-Tetrahydrobenzol. Sm. 138° (A.
 - **281**, 68). III, 263. 2) isom. 4-Keto-1, 2, 6-Triphenyl-1, 2, 3, 4-Tetrahydrobenzol. Sm. 186° (A. **281**, 70, 90). — III, *263*. C 84,7 — H 5,9 — O 9,4 — M. G. 340.
- $C_{24}H_{20}O_{2}$ 1) 1-Oxy-4-Keto-1, 2, 6-Triphenyl-1, 2, 3, 4-Tetrahydrobenzol. Sm. 2480
 - (B. 26, 66; Soc. 57, 783). III, 263. 2) Dibenzoat d. 2,3-Dioxy-1,2,3,4-Tetrahydronaphtalin. Sm. 89-90°
 - (B. **26**, 1834).
 - 3) **Verbindung** (aus α -Oxy- β -Phenylpropionsäure). Sm. 102° (B. 13, 304). · III, 52. C 80,9 - H 5,6 - O 13,5 - M. G. 356.
 - 1) $\alpha \beta \gamma$ -Tribenzoylpropan. Sm. 137° (B. 24, 601). III, 322.
 - 2) Acetat d. 10-Oxy-9-Keto-3-Methyl-10-[4-Methylphenyl]-9,10-Dihydroanthracen. Sm. 87° (A. 299, 291).
 - 3) Lakton d. γ -Oxy- $\alpha\beta\delta$ -Triphenylbutan- β -Ketocarbonsäure. Sm. 67° (B. **31**, 2222).
 - 4) Verbindung (aus Phenylessigsäurepropylester). Sm. 170° (Soc. 37, 483). • II, *1310*.
- C 77,4 H 5,4 O 17,2 M. G. 372. C24H20O4
 - 1) $\mathbf{Rosol} + \mathbf{H}_2\mathbf{0}$ (*M.* 16, 386).
 - 2) Diacetat d. β -Oxy- $\alpha\beta$ -Diphenyl- α -[4-Oxyphenyl] athen. Sm. $186-187^{\circ}$ (Soc. 57, 965). — III, 258.
 - 3) Dibenzoat d. 2,3-Dioxy-1,2,3,4-Tetrahydronaphtalin (A. 288, 98).
 - 4) Aethylester d. Hydrophtalaconcarbonsäure. Sm. 211-2130 (B. 17, 1393). — II, 1914. C 74,2 — H 5,1 — O 20,6 — M. G. 388. 1) Diäthyläther d. Fluoresceïn. Sm. 181—182° (B. 27, 2792; 28, 50).
 - **II**, 2061.
 - 2) Aethylester d. Aethylätherfluoresceïn. Sm. 159° (A. 183, 17; B. 28, 47). — II, 2061.
 - 3) Diacetat d. Methylaurin (A. 202, 209). II, 1121.
 - C 71.3 H 4.9 O 23.8 M. G. 404. 1) Formonetin (J. 1855, 716). — III, 599.

 - 2) Acetat d. Orcinaurin (J. pr. [2] 25, 279). II, 1125.
 3) Diacetat d. Resorcinphenylaceteïn. Sm. 150° u. Zers. (J. pr. [2] 48, 399). — II, *1123*.
 - 4) Dibenzoat d. 3,6-Dioxy-5-Isopropyl-2-Methyl-1,4-Benzochinon. Sm. 163° (B. 14, 95). — III, 369.
 - 5) Tribenzoat d. $\alpha\beta\gamma$ -Trioxypropan. Sm. $76-76,5^{\circ}$ (Berthelot, Chim. org. synth. 2, 108; R. 1, 46, 143; J. pr. [2] 36, 353; B. 24, 779; 28, 1170; M. 10, 393; A. 301, 101). II, 1142.

C24H20O11

 $\mathbf{C}_{24}\mathbf{H}_{20}\mathbf{N}_{4}$

6) ?-Diacetoxyltriphenylmethan-2-Carbonsäure. Sm. 146° (A. 202, 83). C24H20O6 **- II**, 1911.

7) Methylester d. isom. $\alpha\beta$ -Dibenzoxyl- β -Phenylpropionsäure. Sm. 113,5° (B. 12, 538). — II, 1761. C 68,6 — H 4,7 — O 26,7 — M. G. 420.

C24H20O7

1) Triphenylester d. Citronensäure. Sm. 124,5° (J. pr. [2] 31, 470). — II, 667.

2) $\beta \gamma$ -Dibenzoat d. $\beta \gamma$ -Dioxypropylester d. 2-Oxybenzol-1-Carbonsäure. Fl. (B. 24, 779). — II, 1492.

C24H20O8 C 66,1 - H 4,6 - O 29,3 - M. G. 436.

1) $\beta \gamma$ -Di[2-Oxybenzoat] d. $\beta \gamma$ -Dioxypropylester d. Benzolcarbonsäure. Sm. 95° (B. 24, 779). — II, 1492. C 63,7 — H 4,4 — O 31,9 — M. G. 452.

 $C_{94}H_{90}O_{9}$

1) 4-[2,3-Diacetoxylphenyl] äther d. 4-Oxy-1,2-Diacetoxylnaphtalin. Sm. 184-188° (B. 30, 2567). 2) 2-[2,3-Diacetoxylphenyl]äther d. 2-Oxy-1,4-Diacetoxylnaphtalin.

Sm. 165-170° (B. 30, 2565).

3) Tri[2-Oxybenzoat] d. $\alpha\beta\gamma$ -Trioxypropan. Sm. 79° (B. 24, 780). — II, 1493.

C24H20O10 C 61,5 - H 4,3 - O 34,2 - M. G. 468

1) Tetracetat d. 2,4,6,8-Tetraoxy-1,5-Dimethyl-9,10-Anthrachinon. Sm. 234° (A. 240, 281). — III, 456.

2) Pentacetat d. Tetraoxyanthranol. Sm. 2030 (B. 21, 1172). — III, 245. C 59,5 - H 4,1 - O 36,4 - M. G. 484.

 $\mathbf{C}_{24}\mathbf{H}_{20}\mathbf{O}_{12}$

Tetracetat d. Isorhamnetin. Sm. 195—196° (Soc. 73, 270).
 C 57,6 — H 4,0 — O 38,4 — M. G. 500.
 Caprarsäure. Zers. bei 240—260°. Ba (B. 30, 1987; J. pr. [2] 57, 423).

 $\mathbf{C}_{24}\mathbf{H}_{20}\mathbf{O}_{14}$ C 54,1 - H 3,7 - O 42,1 - M. G. 532.

1) Pentacetyl-α-Digallussäure. Sm. 137° (A. 170, 66). — II, 1925.

2) Pentacetyl- θ -Digallussäure (B. 17, 1478). — II, 1925. 3) Pentacetyltannin (A. 170, 73; B. 17, 1504; θ . 27 [1] 91). — II, 1926. C 52,6 — H 3,6 — O 43,8 — M. G. 548. C24H20O15

1) Pentacetylellagengerbsäure. — II, 2085. C 85,7 - H 5,0 - N 8,3 - M. G. 336. $\mathbf{C}_{24}\mathbf{H}_{20}\mathbf{N}_{2}$

1) 1,2[?]-Di[α -Cyan- β -Phenyläthyl]benzol. Fl. (B. 21, 1318). — II, 1914. 2) 2-Benzylidenamido-l-[1-Naphtylamido] methylbenzol. Sm. 1076 (J. pr. [2] **52**, 408). — **IV**, 628.

3) 2-Benzylidenamido-1-[2-Naphtylamido]methylbenzol. Sm. 1220 (J. pr. $[2]_{52}$, 412). — IV, 629.

4) α-Phenylimido-α-[Methyl-2-Naphtyl] amido-α-Phenylmethan. Sm. 110°. HJ (B. 30, 1784). — IV, 845.

5) α-[2-Naphtyl]imido-α-Methylphenylamido-α-Phenylmethan. Sm. 84°. HJ (B. 30, 1784). — IV, 845.

6) β -Phenylimido - β -Phenylamido - α -[1-Naphtyl] äthan. Sm. 130,5° (B. 16, 642). — IV, 971.

7) Tetraphenylhydrazin. Sm. 147° u. Zers. (Soc. 67, 1091). — IV, 660. 8) s-Di[4-Biphenyl]hydrazin. Sm. 247° (B. 13, 1961). — IV, 1504.

9) Phenanthroisobutylphenazin (aus 2,3-Diamido-1-Isobutylbenzol). 144° (B. 21, 2951). — IV, 646.

10) Phenanthroisobutylphenazin (aus 3,4-Diamido-1-Isobutylbenzol). 146,5°. 2HCl (B. 20, 3256). — IV, 646.

11) Retenchinoxalin (Resazin). Sm. 164° (A. 229, 123). — IV, 1089. C 79,1 — H 5,5 — N 15,4 — M. G. 364.

1) Tetraphenyltetrazon. Sm. 123° u. Zers. (A. 190, 182). — IV, 1308. 2) Base (aus Formaldehyd u. 1,2-Diamidonaphtalin). Sm. 165°. 2 HCl (B. 25, 2714). — IV, 991.

C 73,5 - H 5,1 - N 21,4 - M. G. 392. C24H20N6

1) 4,4'-Di[Phenylamidoazo] biphenyl (J. 1864, 436). — IV, 1575.

C24H208 1) P-Triphenylmethyl-2-Methylthiophen. Sm. 181-1820 (B. 29, 1403). - III, 750. $\mathbf{C}_{24}\mathbf{H}_{20}\mathbf{P}_{2}$

1) Tetraphenyldiphosphin. Sm. 67°; Sd. bei 400° (B. 21, 1509). — IV, 1658. 1) Phenylkakodyl. Sm. 135° (B. 15, 1954). — IV, 1687. $\mathbf{C}_{24}\mathbf{H}_{20}\mathbf{As}_{2}$

 $\mathbf{C}_{24}\mathbf{H}_{20}\mathbf{Pb}$ 1) Bleitetraphenyl. Sm. 224-225° (B. 20, 717, 3331). - IV, 1715. $\mathbf{C}_{24}\mathbf{H}_{20}\mathbf{Si}$

1) Siliciumtetraphenyl. Sm. 233°; Sd. oberh. 530° (B. 18, 1541; 19, 1013). - IV, 1702.

 $C_{24}H_{20}Sn$

1) Zinntetraphenyl. Sm. 225-226°; Sd. oberh. 420° (B. 22, 2917). -IV, 1715. C 89,2 - H 6,5 - N 4,3 - M. G. 323.

 $\mathbf{C}_{24}\mathbf{H}_{21}\mathbf{N}$

1) 2,5-Diphenyl-1-[2,4-Dimethylphenyl]pyrrol. Sm. 147—149° (B. 22, 3091). — IV, 438. C 82,0 — H 6,0 — N 12,0 — M. G. 351.

 $\mathbf{C}_{24}\mathbf{H}_{21}\mathbf{N}_{3}$

 $C_{24}H_{21}N_5$

 $\mathbf{C}_{24}\mathbf{H}_{22}\mathbf{O}_{2}$

C24H22O3

 $\mathbf{C}_{24}\mathbf{H}_{22}\mathbf{O}_{4}$

 $C_{24}H_{22}O_5$

 $C_{24}H_{22}O_6$

C24H22O7

 $\mathbf{C}_{24}\mathbf{H}_{22}\mathbf{O}_{8}$

1) 1,2,4-Tri[Phenylamido]benzol. Sm. 252° (M. 11, 23). — IV, 1122. 2) 1,3,5-Tri[Phenylamido]benzol. Sm. 193°. HCl, (2 HCl, PtCl₄) (G. 20,

337). — IV, 1125. 3) Phenyl-?-Methylphenyl-1-Naphtylguanidin. Sm. 60° (B. 3, 7). — II, 604.

4) Kyanbenzin. Sm. 170-1710 (Soc. 37, 567). - II, 1314. 5) 4-Benzylazo-1-Benzylamidonaphtalin. HCl (B. 30, 877). — IV, 1401.

6) 6-Amido-5-Phenyl-2,4-Dibenzyl-1, 3-Diazin (Kyanbenzylin). Sm. 106°. $(2 \text{HCl}, \text{PtCl}_4)$ (J. pr. [2] 39, 256; [2] 53, 246). — IV, 1217.

7) Azinverbindung (aus Phenauthrenchinon u. 3,4,5-Triamido-1-Pseudo-butylbenzol). Sm. 219—220° (J. pr. [2] 48, 102). — IV, 1134.

C 76,0 — H 5,5 — N 18,5 — M. G. 379.

 Azobenzolazo-β-Aethylnaphtylamin. Sm. 141-142° (B. 17, 2670). IV, 1401.

2) Toluoldisazotoluol- β -Naphtylamin. Sm. 201—203° (B. 20, 1180). — IV, 1402.

3) Verbindung (aus 4-Nitroso-1, 3-Di[Phenylamido]benzol). Sm. 1600 (A. 286, 177). — IV, 572.

C 84.2 - H 6.4 - O 9.4 - M. G. 342.

- Diäthyläther d. α-Dioxybinaphtyl. Sm. 211° (B. 17, 2453). II, 1004.
 Diäthyläther d. β-Dioxybinaphtyl. Sm. 90° (B. 17, 2455). II, 1005.
- 3) 3,6-Dibenzoyl-1,2,4,5-Tetramethylbenzol. Sm. 269—270°; Sd. oberh. 380° (A. ch. [6] 1, 512). — III, 308. C 80,4 — H 6,1 — O 13,4 — M. G. 358.

αε-Diketo-γ-[6-Oxy-3-Methylphenyl]-αε-Diphenylpentan. Sm. 151° (B. 31, 713 Anm.).
 C 77,0 — H 5,9 — 0 17,1 — M. G. 374.
 Leukorosol (M. 16, 387).

2) Benzol-1,2[?]-Di[α -Phenyläthyl- β -Carbonsäure] ($\beta\beta$ -Phenylen- $\beta\beta$ -Diphenyldipropionsäure). Sm. 235°. Ba + 7 H₂O, Ag₂ (B. 25, 2124). -II, 1914.

3) Benzol-1, 2[?]-Di[β -Phenyläthyl- α -Carbonsäure]. Sm. 251 ° (B. 21, 1319). — II, 1914.

4) δ -Keto- δ -[4-Methoxylphenyl]- $\alpha\beta$ -Diphenylbutan- α -Carbonsäure. Sm.

201° (A. 281, 62). — Π , 1918. 5) α , 23-Lakton d. α , 4', 42-Trioxytriphenylmethan - 4', 42-Diäthyläther-2⁸-Carbonsäure (laktoïder Diäthyläther d. Phenolphtaleïn). Sm. 122^o (B. 28, 3258; 29, 138; 30, 175; C. 1895 [1] 599).

6) α ,2°-Lakton d. α -Oxy- α α -Di[?-Oxy-?-Aethylphenyl]- α -Phenylmethan-23-Carbonsäure + H₂O. Zers. bei 130° (B. 17, 671). - II, 1987.

7) Diacetat d. $\alpha\beta$ -Dioxy- $\alpha\alpha\beta$ -Triphenyläthan. Sm. 214° (C. 1897 [2] 662). 8) Diacetat d. 4-Hydrodesylphenol. Sm. 156-157 (Soc. 57, 970). -II, 1112.

9) Diacetat d. P-Di[α -Oxybenzyl] benzol. Sm. 143-1440 (B. 9, 311). -

10) Dibenzoat d. αα-Dioxy-α-[4-Isopropylphenyl] methan (Cumylendibenzoat). Sm. 88° (A. 109, 368). — III, 55. C 73,8 — H 5,6 — O 20,5 — M. G. 390.

Diäthyläther d. Fluorescin. Sm. 187° (B. 28, 51). — II, 2038.
 C 70,9 — H 5,4 — O 23,6 — M. G. 406.

1) Benzoat d. Toluresitannol (C. 1895 [1] 353). C 68,3 - H 5,2 - O 26,5 - M. G. 422.

1) Verbindung (aus Rosol) (*M.* 16, 389). C 65,7 — H 5,0 — O 29,2 — M. G. 438.

1) Diacetat d. Hydromethylumbelliferon (oder C₁₂H₁₂O₄). Sm. 221-222° (Am. 5, 436). — II, 1780.

C,4H,2O,

C. H. O.

C,4H,2O12

C,4H,9,N,

1) Tetracetat d. Brasilin. Sm. 149-151° (B. 9, 1886; 18, 1139). — III, 653.

Hexacetat d. α-Hexaoxybiphenyl. Sm. 145° (A. 169, 242). — II, 1041.
 Hexacetat d. β-Hexaoxybiphenyl. Sm. 170° (B. 12, 1246) — II, 1043.
 Hexacetat d. γ-Hexaoxybiphenyl. Sm. 163—164° (M. 1, 673).
 C 85.2 — H 6.5 — N 8.3 — M. G. 338.

 $C_{63.4} - H_{4.8} - O_{31.7} - M_{6.454}$

C 61,3 - H 4,7 - O 34,0 - M. G. 470.

1) Pentacetat d. Coccinin (B. 16, 2169). — II, 2098. 2) Baphiasäure (J. 1876, 896). — III, 620. C 57,4 — II 4,4 — O 38,2 — M. G. 502.

1) 2,7-Di[4-Methylphenylamido]naphtalin. Sm. 236—237° (B. 20, 1373). - IV, 925. 2) 1-Benzylamido-2-[4-Methylphenyl]amidonaphtalin. Sm. 157°. HCl $(B. \ 27, \ 2779). - IV, \ 918.$ 3) 1,4,1',4'-Tetramethyl-2,2'-Azonaphtalin. Sm. 253° (B. 28 [2] 619; \hat{G} . 26 [1] 18). — IV, 1402. 4) 1,4-Di[1-Naphtyl]hexahydro-1,4-Diazin. Sm. 265° (B. 22, 1782). II, 601. 5) 1,4-Di[2-Naphtyl]hexahydro-1,4-Diazin. Sm. 228° (B. 23, 1984). II. 604. 6) 5-Isobutyl-2,3-Diphenyl-1,4-Benzdiazin. Sm. 96° (B. 21, 2592). 7) 6-Isobutyl-2, 3-Diphenyl-1, 4-Benzdiazin. Sm. 144°. HCl (B. 20, 3257). — IV, 646. C 78,7 — H 6,0 — N 15,3 — M. G. 366. $\mathbf{C}_{24}\mathbf{H}_{22}\mathbf{N}_{4}$ 1) ?-Tetraamido-1, 3, 5-Triphenylbenzol. Sm. 137-138° (B. 23, 2535). -IV. 1304. 2) isom. ?-Tetraamido-1, 3, 5-Triphenybenzol. Sm. 96-98° u. Zers. (B. 23, 2536). — IV, 1304. C 73,1 - H 5,6 - N 21,3 - M. G. 394. C24H29N Verbindung (aus d. Verb. C₂₄H₂₆N₆). Sm. 104° (B. 21, 2498). — IV, 766.
 Anhydrotriacetophenondisulfid. Sm. 107—108° (B. 28, 904). — III, 129. C,4H,28, C24 H23 N3 C 81,6 - H 6,5 - N 11,9 - M. G. 353.1) 5-Amido-7-Pseudobutyl-2, 3-Diphenyl-1, 4-Benzdiazin? Sm. 124 bis 125° (J. pr. [2] **48**, 103). — IV, II34... C 75,6 — H 6,0 — N 18,4 — M. G. 381. l) Cyanid d. Tri[2-Methylphenyl]guanidin. Sm. 141° (B. **12**, 1857). — $C_{24}H_{23}N_5$ II, 460. 2) Cyanid d. Tri[4-Methylphenyl]guanidin. Sm. 1840 (1820). HCl+ $3\,\mathrm{H}_2\mathrm{O},\ (2\,\mathrm{HCl},\mathrm{PtCl}_4)\ (B.\ 11,\ 976;\ Bl.\ 41,\ 127).\ -\ 11,\ 489.$ C $87.8\ -\ \mathrm{H}\ 7.3\ -\ \mathrm{O}\ 4.9\ -\ \mathrm{M}.\ \mathrm{G}.\ 328.$ CoAHOAO 1) Dibenzylidenmenthenon. Sm. 129-130° (A. 305, 273). $\mathbf{C}_{94}\mathbf{H}_{24}\mathbf{O}_{2}$ C 83.7 - H 6.9 - O 9.3 - M. G. 3441) Benzoat d. a-Oxy-2,3,4,6-Tetramethyldiphenylmethan. Sm. 75° (Bl. 42, 173). — II, 1144. 2) Aethylester d. α' -Phenyl- $\alpha^2\alpha^3$ -Di[4-Methylphenyl] methan- α' 2-Carbonsäure. Sm. 197—198° (A. 299, 289). 3) Verbindung (aus Eucarvon u. Benzaldehyd). Sm. 193-1940 (A. 305, 243). C 70,6 — H 5,9 — O 23,5 — M. G. 408.

1) Homopterocarpin. Sm. 82—86° (A. ch. [6] 17, 115). — III, 672.
C 63,2 — H 5,2 — O 31,6 — M. G. 456. $\mathbf{C}_{24}\mathbf{H}_{24}\mathbf{O}_{6}$ $C_{24}H_{24}O_{9}$ 1) Triäthylester d. 2,4,6-Trimethyl-1,3,5-Benztrifuran-1,3,5-Tricarbonsäure. Zers. bei 260° (B. 19, 2935). — III, 736. C 84,7 — H 7,1 — N 8,2 — M. G. 340. $C_{24}H_{24}N_{2}$ 1) Propylamarin. (Ag, HBr) (B. 18, 3079). — III, 23. 2) 4,4'-Di[2,5-Dimethyl-1-Pyrryl]biphenyl. Zers. oberh. 130° (B. 19, 3158). — IV, 72. 3) Dibenzyldihydrobipyridyl (B. 14, 1504). — IV, 887. C24H24N4 C 78,3 - H 6,5 - N 15,2 - M G. 368. 1) 4,4'-Di[Dimethylamido]-1,1'-Azonaphtalin. Sm. 145°. 2 Pikrat (M. 16, 799). — IV, 1391. C 72,7 — H 6,1 — N 21,2 — M. G. 396. 1) Tribenzylmelamin. 2 HCl (B. 5, 695). — II, 532. 2) Tri[4-Methylphenyl]melamin. Sm. 283° (J. pr. [2] 33, 294). — II, 513. $\mathbf{C}_{24}\mathbf{H}_{24}\mathbf{N}_{6}$

 $\mathbf{C}_{24}\mathbf{H}_{24}\mathbf{S}_{3}$

C24H26O10

 $C_{24}H_{26}O_{12}$

C24H26O13

 $\mathbf{C}_{24}\mathbf{H}_{26}\mathbf{N}_{2}$

 $\mathbf{C}_{24}\mathbf{H}_{26}\mathbf{N}_4$

- 1) Trithioacetophenon. Sm. 122° (B. 28, 898). III, 129.
- 2) α-Trithio-m-Toluylaldehyd. Sm. 144° (B. 29, 151). III, 53.
- 3) β -Trithio-m-Toluylaldehyd. Sm. 225°. $+3 C_6 H_6$ (B. 29, 151). -III, 53.
- 4) α-Trithio-p-Toluylaldehyd. Sm. 149—150° (B. 29, 152). III, 53. 5) β -Trithio-p-Toluylaldehyd. Sm. 180°. $+3 C_8 H_8 (B. 29, 152)$. — III, 53.
- C 87,3 H 7,9 O 4,8 M. G. 330. 1) Dibenzylmenthenon. Sm. 72—75° (A. 305, 274). $C_{24}H_{26}O$
 - 2) 3-Oxy-?-Dibenzyl-4-Isopropyl-1-Methylbenzol. Sm. 76° (112°) (G. 11,
- 350, 436). II, *904.* C 83,2 - H 7,5 - O 9,3 - M. G. 346. $C_{24}H_{26}O_{2}$
 - 1) Verbindung (aus Carvenon u. Benzaldchyd). Sm. 170-171°. HCl (A. 305, 270).
- $\mathbf{C}_{24}\mathbf{H}_{26}\mathbf{O}_{5}$ C 73.1 - H 6.6 - O 20.3 - M. G. 394.
- 1) Otobit. Sm. 133° (A. 91, 370). III, 639. $\mathbf{C}_{24}\mathbf{H}_{26}\mathbf{O}_{6}$ C 70.2 - H 6.3 - O 23.4 - M. G. 410.
 - 1) Succinat d. 3,4-Dioxy-1-Allylbenzol-3-Methyläther (S. d. Eugenol). Sm. 89,5-90° (B. 30, 1795; C. 1897 [2] 276).
 - 2) Diäthylester d. Aethylidendi [Benzoylessigsäure]? Sm. 820 (A. 231, 68). C 65.1 - H 5.9 - O 28.9 - M. G. 442.
- $C_{24}H_{26}O_8$ 1) Diacetylphysodsäure. Sm. 158° (J. pr. [2] 57, 420).
 - 2) Diäthylester d. Diphenylessigweinsäure. Fl. (A. ch. [7] 3, 476). -
 - 3) Diäthylester d. Di[2-Methylbenzoyl] weinsäure. Fl. (Soc. 69, 1311, 1589).
 - 4) Diäthylester d. Di[3-Methylbenzoyl] weinsäure. Fl. (Soc. 69, 1317, 1590).
 - 5) Diäthylester d. Di [4-Methylbenzoyl] weinsäure. Sm. 92-93° (A. ch. [7] **3**, 479; Soc. **69**, 1314, 1591). — II, 1340. C 60.8 — H 5,5 — O 33,7 — M. G. 474.
 - 1) Diäthylester d. Dibenzoylschleimsäure. Sm. 1720 (M. 14, 487). II, 1155.
 - C'56,9 H 5,1 O 37,9 M. G. 506.
 - Triacetat d. Leucodrin. Sm. 188—189° (A. 290, 316). III, 636.
 C 55,2 H 5,0 O 39,8 M. G. 522.

 - Caramelin (J. 1852, 651). I, 1107.
 Iridin (B. 26, 2010, 2039). III, 596.
 C 84,2 H 7,6 N 8,2 M. G. 342.
 - 1) 1,3-Diphenyl-2-[4-Isopropylphenyl]tetrahydroimidazol (Cuminolathylenanilin). Sm. 124—125° (B. 20, 733). — III, 56. C 77,8 — H 7,0 — N 15,1 — M. G. 370.
 - 1) 1, 4 Di [4 Dimethylamidobenzylidenamido] benzol (Rubifuscin). Sm. bei 270° (277–278°). $2 \text{HCl} + 5 \text{H}_2\text{O}$ (B. 16, 2729; 26, 1034; 28, 109, 326; **31**, 2254). — **IV**, 596. C 72,4 — H 6,5 — **N** 21,1 — M. G. 398.
- $\mathbf{C}_{24}\mathbf{H}_{26}\mathbf{N}_{6}$ 1) Verbindung (aus Phenylhydrazin u. Chloraceton). Sm. 157-158° (B. 21, 2497). — IV, 766. C 87,6 — H 8,2 —
- $\mathbf{C}_{24}\mathbf{H}_{27}\mathbf{N}$
- C 87,6 H'8,2 N 4,2 M. G. 329.
 1) Tri[β-Phenyläthyl]amin. Fl. HCl (J. 1879, 440). II, 539.
 2) Tri[3-Methylbenzyl]amin. Fl. HCl, HNO₃ (A. 142, 303; 151, 129).
- $C_{24}H_{27}N_3$ C 80.6 - H 7.6 - N 11.8 - M. G. 357.1) α -[4-Methylphenyl]imidodi[4-Dimethylamidophenyl]methan. (2HCl,
 - PtCl₄) (B. 20, 2853). IV, 1174. 2) 1,3,5-Tri[4-Methylphenyl]hexahydro-1,3,5-Triazin (4-Methylphenyl) imidomethan). Sm. 127—128° (123°) (B. 18, 3302; 27, 1808; 31, 3253; A. 302, 352). — II, 509.
 - 3) isom. 4-Methylphenylimidomethan. Sm. 225-227° u. Zers. (207 bis 209°) (B. 18, 3302; 27, 1808; 31, 3253; A. 302, 352). — II, 509. C 65,3 — H 6,1 — N 28,6 — M. G. 441.

 1) Toluidylmelamin (B. 19, 2059). — IV, 606.
- $\mathbf{C}_{24}\mathbf{H}_{27}\mathbf{N}_{9}$
- 1) Wismuthtri[2,4-Dimethylphenyl]. Sm. 175° (A. 251, 333). IV, 1699. $\mathbf{C}_{24}\mathbf{H}_{27}\mathbf{Bi}$
 - 2) Wismuthtri [2, 5-Dimethylphenyl]. Sm, 194,5° (B. 30, 2847). IV, 1699.

C24H30O5

 $C_{24}H_{30}O_{7}$

 $C_{24}H_{30}O_{8}$

C24H30O12

C 82,7 - H 8,0 - O 9,2 - M. G. 348.C24H28O2

1) Verbindung (aus Tetrahydrocarvon u. Benzaldehyd). Sm. 1750 (A. 305, 267). C 75,8 — H 7,4 — O 16,8 — M. G. 380. C24H28O4

1) Aethylester d. d-7-Benzoxyl-5,8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Aethyl-α-Carbonsäure (Ae. d. d-Benzoylsantonigen Säure). Sm. 78° (B. 16, 427). — II, 1671.

2) Aethylester d. i-7-Benzoxyl-5, 8-Dimethyl-1,2,3,4-Tetrahydronaphtalin-2-Aethyl-α-Carbonsäure (Ae. d. Benzoylisosantonigen Säure). Sm.

90-91° (B. 16, 428). — II, 1671. 3) Verbindung (aus Ouabaïn) (Bl. [3] 19, 734, 992; C. 1898 [2] 352). C 72,7 — H 7,1 — O 20,2 — M. G. 396.

 $C_{24}H_{28}O_5$ 1) Sagaresinotannol (B. 28 [2] 1056).

C 69,9 - H 6,8 - O 23,3 - M. G. 412. $\mathbf{C}_{24}\mathbf{H}_{28}\mathbf{O}_{6}$

1) Diacetat d. Diisoeugenol. Sm. 150—151° (B. 24, 2874). — II, 980. C 67,3 — H 6,5 — O 26,2 — M. G. 428.

C,4H,8O, 1) Diacetylguajakonsäure. Sm. 61-63° (C. 1897 [1] 167).

C24H28O8 C 64.8 - H 6.3 - O 28.8 - M. G. 444.1) Aethylester d. Barbatinsäure. Sm. 132° (*J. pr.* [2] **57**, 239). C 56,7 — H 5,5 — O 37,8 — M. G. 508. 1) Asebotin. Sm. 147,5° (*R.* **2**, 99). — III, 572. C 83,7 — H 8,1 — N 8,1 — M. G. 344.

 $\mathbf{C}_{24}\mathbf{H}_{28}\mathbf{O}_{12}$ $\mathbf{C}_{24}\mathbf{H}_{28}\mathbf{N}_{2}$

1) 1, 2-Di [2, 4-Dimethylphenylamidomethyl] benzol. Sm. 106° (B. 31, 422). 2) α-Phenyl-αα-Di[4-Dimethylamidophenyl] äthan. Sd. oberh. 360° u.

Zers. (A. **242**, 337). — **IV**, 1045. C 77,4 — H 7,5 — N 15,0 — M. G. 372. $\mathbf{C}_{24}\mathbf{H}_{28}\mathbf{N}_4$

 $1)\ \ 2, 2 - \mathbf{Di}[4 - \mathbf{Dimethylamidophenyl}] - 5 - \mathbf{Methyl} - 2, 3 - \mathbf{Dihydrobenzimi-limit}$ dazol (3,4-Toluylenauramin). (2 HCl, PtCl₄), Pikrat (B. 20, 2853). — IV, 1175. C 80,2 — H 8,1 — N 11,7 — M. G. 359.

 $C_{24}H_{29}N_{8}$

1) 5'-Amido-4², 4³-Di[Dimethylamido]-2'-Methyltriphenylmethan. Sm.

160° (B. 24, 3127). — IV, 1197. 2) 6'-Amido-4',4's-Di[Dimethylamido]-3'-Methyltriphenylmethan. Sm.

180° (B. 24, 3130). — IV, 1197. 3) 4'-Methylamido-4², 4³-Di[Dimethylamido]triphenylmethan. Sm. 115 bis 116° (B. 16, 2907). — IV, 1194. 4) 2-Nonyl-4,6-Diphenyl-1,3,5-Triazin. Sm. 38°; Sd. 292—294°₁₅ (B.

23, 2385). — **IV**, 1199. C 82,3 — H 8,6 — O 9,1 — **M**. G. 350. $\mathbf{C}_{24}\mathbf{H}_{30}\mathbf{O}_{2}$

1) $\alpha \delta$ -Diketo- $\alpha \delta$ -Di[2-Methyl-5-Isopropylphenyl] butan (Dicymyläthylenketon). Sd. bei 320° (B. 20, 1378). — III, 302.

2) Diisoamylcarbobenzonsäure (A. 184, 169). — II, 1477. C 78,7 — H 8,2 — O 13,1 — M. G. 366.

C24H30O8 1) Aethylester d. d-Benzyläthersantonigen Säure (G. 25 [2] 357). $C_{24}H_{30}O_4$

C 75,4 - H 7,8 - O 16,8 - M. G. 382.1) Diacetat d. $\alpha\beta$ -Dioxy- $\alpha\beta$ -Di[4-Isopropylphenyl]äthan. Sm. 143—144°

(B. 10, 54). — II, 1103. 2) Diacetat d. 3,3'-Dioxy-4,4'-Dipropyl-1,1'-Dimethyl-?-Biphenyl. Sm.

113—114° (B. 23, 2763). — II, 997. C 72,4 — H 7,5 — O 20,1 — M. G. 398. 1) Verbindung + $1^{1}/_{2}$ H₂O (aus Strophantidin). Zers. bei 350—360° (B. 31, 539).

 $C_{24}H_{30}O_{6}$ C 69,5 — H 7,2 — O 23,2 — M. G. 414. 1) Lecidsaure. Sm. 147° (J. pr. [2] 58, 508).

Diacetylguajakharssäure. Sm. 108—110° (B. 30, 379; M. 18, 716).
 C 67,0 — H 7,0 — O 26,0 — M. G. 430.

1) Athamantin. Sm. 79°. 2 HCl (A. 51, 315; 110, 359). — III, 619. C 64,6 — H 6,7 — O 28,7 — M. G. 446.

1) Phytolaceatoxin. Sm. 170° (B. 24 [2] 648). — III, 642. C24H80O11

1) Phytolaceatoxin. Sm. 170 (B. 24 [2] 049). — III, 042. C 58,3 — H 6,1 — O 35,6 — M. G. 494.

1) Polystichoflavin. Sm. 158—158,59 (C. 1898 [2] 1103). C 56,4 — H 5,9 — O 37,6 — M. G. 510.

1) Tetracetat d. Coniferin. Sm. 125—126° (B. 8, 1140). — III, 577.

2) Hexaäthylester d. Benzolhexacarbonsäure. Sm. 72,5—73° (J. 1862, 201). 281; A. 177, 273). — II, 2105.

C24H80O15 C 51,6 - H 5,4 - O 43,0 - M. G. 558.1) Caramelin (J. 1861, 79). — I, 1107. 2) Scopolin + $2H_2O$ (oder $C_{15}H_{16}O_{10} + H_2O$). Sm. 218° (R. 3, 177). 3) Safflorgelb. 4PbO (A. 58, 358). — III, 656. C 48.8 - H 5.1 - O 46.0 - M. G. 590.C24H30O17 1) Xylylsäure. Ca, Ba (Z. 1867, 669). — I, 1108. C 56,3 — H 6,2 — O 37,5 — M. G. 512. $C_{24}H_{32}O_{12}$ 1) Tetraäthylester d. 3,6-Dioxy-1,4-Benzochinondiäthyläther-2,5-Di[Methyldicarbonsäure]. Sm. 115° (Am. 17, 599). C 50,0 — H 5,6 — O 44,4 — M. G. 576. C24H32O16 1) Hexacetylarabin (Z. 1869, 265). — I, 1102. 2) Hexacetylinulin (A. 160, 85). — I, 1096. C 81,4 — H 9,6 — O 9,0 — M. G. 354. $\mathbf{C}_{24}\mathbf{H}_{34}\mathbf{O}_{2}$ 1) Diisoamyläther d. 4,4'-Dioxy-3,3'-Dimethylbiphenyl. Sm. 69° (B. **21**, 1068). — **II**, 993. C 77.8 - H 9.2 - O 13.0 - M. G. 370. $C_{24}H_{34}O_{3}$ 1) Myroxocarpin. Sm. 115° (A. 77, 306). — III, 638. C 74.6 - H 8.8 - O 16.6 - M. G. 386. $C_{94}H_{34}O_{4}$ Dehydrocholeinsäure (oder C₂₈H₃₈O₄). Sm. 182-183°. Ba + 1¹/₂(3)H₂O (B. 18, 3046; 20, 1044; 26, 149; H. 17, 612). — II, 1872.
 Diacetylmetacopaivasäure. Sm. 74-75° (M. 2, 517). — III, 559. 3) Diäthylguajakharzsäure. Sm. 100-102° (M. 19, 104). C 71,6 — H 8,5 — O 19,9 — M. G. 402. C94H34O5 C 71,0 — H 8,5 — O 19,5 — M. G. 402.

1) Asaresinotannol (C. 1897 (1) 820).

2) Periplogenin. Sm. 185° (C. 1897 [2] 130).

3) Dehydrocholsäure + ½ C₆H₆. Sm. 239° (232°). Na, Ca, Ba, Pb + ½ H₂O, Cu + ½ H₂O, Ag (B. 14, 71; 18, 3048; 19, 2007; 26, 148; 32, 683; H. 16, 493; 19, 285, 288; 25, 310). — II, 1969.

4) Isodehydrocholal. Sm. 242° (B. 25, 808; H. 16, 501). — II, 1970. C 64,0 - H 7,5 - O 28,4 - M. G. 450. $C_{24}H_{34}O_{8}$ 1) Biliansäure, siehe C₂₅H₃₆O₈. — II, 2076. 2) Tetraäthylester d. α -Phenylhexan- $\beta\beta\delta\delta$ -Tetracarbonsäure (T. d. Aethylbenzyldicarboxyglutarsäure). Sd. 210—230°₁₂ (B. 23, 3184; 30, 961). **- II**, 2076. C 84.5 - H 5.7 - O 45.8 - M. G. 594.C24H34O17 1) Hexacetylgallisin (B. 17, 1008). — I, 1061. C 41.8 — H 4.9 — O 53.3 — M. G. 690. $C_{24}H_{34}O_{23}$ Parapektinsäure. K₄, Pb₂ (A. 67, 286). — I, 1105.
 C 84,7 — H 10,6 — O 4,7 — M. G. 340. $C_{24}H_{36}O$ 1) Antiarharz. Sm. 173,5° (C. 1896 [2] 591). C 80,9 - H 10,1 - O 9,0 - M. G. 356. $\mathbf{C}_{24}\mathbf{H}_{36}\mathbf{O}_{2}$ 1) Succinosilvinsäure. Sm. 95°. Ag (C. 1895 [1] 556). C 77,4 — H 9,7 — O 12,9 — M. G. 372. $C_{24}H_{36}O_{3}$ 1) Dyslysin (A. 50, 242; 67, 27; J. 1863, 653; G. 18, 88). — I, 783. $C_{24}H_{36}O_4$ C 74,2 — H 9,3 — O 16,5 — M. G. 388. 1) Dehydrocholeïnsäure. Sm. 182—183°. Ca, Ba $+ 3 H_2 O (B. 18, 3046)$. - II, *1872.* C 66,0 — H 8,3 — O 25,7 — M. G. 436. 1) Laserpitin. Sm. 114° (A. 135, 236; J. 1883, 1361). — III, 635. $C_{24}H_{36}O_{7}$ 2) Cholansäure, siehe $C_{25}H_{38}O_7$. C 63,7 — H 7,9 — O 28,3 — M. G. 452. $C_{24}H_{36}O_{8}$ 1) Cyclamiretin, siehe $C_{15}H_{92}O_2$. — III, 579. C 49,7 — H 6,2 — O 44,1 — M. G. 580. C24H36O16 1) Glykodrupose (A. 138, 6). — III, 592. C 75.8 — H 9.5 — N 14.7 — M. G. 380. $C_{24}H_{36}N_4$ 1) 4,4'-Di[Dipropylamido] azobenzol. Sm. 90°. 2 + 6J, Pikrat (M. 3, 711; 4, 286). — IV, 1362. C 73.8 - H 9.7 - O 16.4 - M. G. 390. $\mathbf{C}_{24}\mathbf{H}_{38}\mathbf{O}_{4}$ 1) d-Diborneolester d. Bernsteinsäure. Sm. 83,7° (B. 22 [2] 255). —

2) 1-Diborneolester d. Bernsteinsäure. Sm. 83,70 (B. 22 [2] 255). —

III, 471.

III, 472.

 $\mathbf{C}_{24}\mathbf{H}_{38}\mathbf{O}_4$

 $\mathbf{C}_{24}\mathbf{H}_{42}\mathbf{O}_{3}$ $C_{24}H_{42}O_4$

III, 467.

3) Diisoborneolester d. Bernsteinsäure. Sm. 82,3° (B. 22 [2] 255). —

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III, 473.
                            C 68,3 — H 9,0 — O 22,7 — M. G. 422.

1) Pertusarsäure. Sm. 103°. Ag (J. pr. [2] 58, 502).

C 65,7 — H 8,7 — O 25,6 — M. G. 438.
 \mathbf{C}_{24}\mathbf{H}_{38}\mathbf{O}_{6}
 \mathbf{C}_{24}\mathbf{H}_{38}\mathbf{O}_7
                            1) Diäthylester d. Anhydrocamphersäure. Sm. 99-100° (Bl. [3] 15, 986).
                                  C 63,4 - H 8,4 - O 28,2 - M. G. 454.
 \mathbf{C}_{24}\mathbf{H}_{38}\mathbf{O}_{8}
                            1) Dipropylester d. Diönanthylweinsäure. Fl. (Bl. [3] 13, 829).
                                 C 45,7 - H 6,0 - O 48,3 - M. G. 630.
 C_{24}H_{38}O_{19}
                            1) Amylum (B. 14, 2253).
C 43,5 — H 5,7 — O 50,8 — M. G. 662.
 \mathbf{C}_{24}\mathbf{H}_{38}\mathbf{O}_{21}
                            1) Oxyccellulose (Bl. [3] 19, 791).
                            1) Harz (aus Doona zeylanica) = (C_{24}H_{39}O_2)_x (M. 12, 102). — III, 555.
 \mathbf{C}_{24}\mathbf{H}_{39}\mathbf{O}_{2}
 C_{24}H_{40}O
                                  C 83.7 - H 11.6 - O 4.6 - M. G. 344
                            1) Paraphytosterin + H_2O (oder C_{28}H_{44}O + H_2O). Sm. 149-150° (H. 15,
                                  430). — II, 1075.
                            2) Heptadekylphenylketon. Sm. 59° (J. pr. [2] 54, 399).
                            3) Pentadekyl-2,4-Dimethylphenylketon. Sm. 37°; Sd. 268-269° 15 (164°)
                                 (B. 21, 2269; 29, 1327). — III, 157. C 80,0 — H 11,1 — O 8,9 — M. G. 360.
\mathbf{C}_{24}\mathbf{H}_{40}\mathbf{O}_{2}
                            1) Caperidin. Sm. 262° (B. 30, 365; J. pr. [2] 57, 434).
2) Lävosin + 4 H<sub>2</sub>O. Na, K, Ca, Ca<sub>2</sub>, Ba<sub>2</sub>, Pb<sub>2</sub>, Pb<sub>3</sub> (Bl. [3] 5, 724).
                            3) Stärke. Lit. bedeutend.
                           4) Aethyläther d. Pentadekyl-4-Oxyphenylketon. Sm. 69°; Sd. 288 bis 289°<sub>15</sub> (B. 21, 2270). — III, 157.
                            5) Phenylester d. Stearinsäure. Sm. 52°; Sd. 267°, (B. 17, 1380). —
                                  II, 662.
                           6) Acetat d. Cholestol. Sm. 124—126° (B. 18, 1807). — II, 1069. C 76,6 — H 10,6 — O 12,8 — M. G. 376.

1) Dimethyläther d. Pentadekyl-3,5[?]-Dioxyphenylketon. Sm. 63,5°; Sd. 289—290°<sub>15</sub> (B. 21, 2270). — III, 157. C 73,5 — H 10,2 — O 16,3 — M. G. 392.
C_{24}H_{40}O_3
\mathbf{C}_{24}\mathbf{H}_{40}\mathbf{O}_{4}
                            1) Choleïnsäure + 11/2 H2O (Desoxycholsäure).
                                                                                                                                Sm. 185—190° (160—170°;
                           1) Cholematre + \frac{1}{2}\frac{1}{12}O (Desoxycholsaure). Sin. 185–180° (100–170°, 149°). Na<sub>2</sub>, Ba + \frac{6}{4}\frac{1}{2}O, Ag + \frac{1}{2}\frac{1}{2}P<sub>2</sub>O (B. 18, 3041; 19, 375, 1140; 20, 1046, 1970; 26, 146; 27, 1346; H. 17, 608; 19, 573; 21, 270). — I, 734. 2) \beta-Hyocholsäure + \frac{1}{4}\frac{1}{4}P<sub>2</sub>O?. Na + \frac{1}{2}\frac{1}{4}P<sub>2</sub>O, Ba + \frac{1}{2}\frac{1}{4}P<sub>2</sub>O, Ag + \frac{1}{4}P<sub>3</sub>O (H. 13, 234). — I, 735. C 70,6 — H 9,8 — O 19,6 — M. G. 408.
\mathbf{C}_{24}\mathbf{H}_{40}\mathbf{O}_{5}
                           1) Cholsäure + 1(2^{1}/_{2})H_{2}O. Sm, 194—195°. Na, K, Ca, Ba, Pb, Ag. Lit. bedeutend. — I, 781. C 67,9 — H 9,4 — O 22,6 — M. G. 424.
C24H40O6
                            1) Säure (aus Cholesterin) (B. 5, 510). — III, 1075.
C24H40O9
                                C 61,0 - H 8,5 - O 30,5 - M. G. 472.
                           1) Adonin (B. 24, 2579; C. 1896 [2] 590). — III, 566. C 59,0 — II 8,2 — O 32,8 — M. G. 488.
C24H40O10
                          1) Yucca-Saponin (oder C_{40}H_{68}O_7) (C. 1895 [1] 352).

C 55,4 — H 7,7 — O 36,9 — M. G. 520.

1) Aescinsäure. K (J. 1862, 490; 1867, 751). — II, 2104.

C 44,4 — H 6,2 — O 49,4 — M. G. 648.

1) Verbindung (aus Melitriose) (Bl. [3] 17, 959).

C 80,9 — H 11,2 — N 7,9 — M. G. 356.
\mathbf{C}_{24}\mathbf{H}_{40}\mathbf{O}_{12}
\mathbf{C}_{24}\mathbf{H}_{40}\mathbf{O}_{20}
\mathbf{C}_{24}\mathbf{H}_{40}\mathbf{N}_{2}
                          1) Conessin (Wrightin). Sm. 121,5—122°. 2HCl + 2H<sub>2</sub>O, (2HCl, 2HgCl<sub>2</sub>), (2HCl, PtCl<sub>4</sub> + ½H<sub>2</sub>O), (2HCl, 2AuCl<sub>5</sub> + 2H<sub>2</sub>O), 2HNO<sub>3</sub>, 2Pikrat + 2H<sub>2</sub>O (J. 1864, 456; 1865, 460; 1888, 2237; B. 19, 60, 78, 1683). — III, 875. C 83,2 — H 12,1 — O 4,6 — M. G. 346.

1) P-Oxy-1-Oktadekylbenzol. Sm. 84°; Sd. 277°<sub>15</sub> (B. 19, 2985). — II, 777.

2) Aethyläther d. 4-Oxy-1-Hexadekylbenzol. Sm. 43—44° (B. 21, 3181). — III, 777.
                           1) Conessin (Wrightin). Sm. 121,5—122°.
\mathbf{C}_{24}\mathbf{H}_{42}\mathbf{O}
                                   — II, 777.
                          3) Verbindung (aus Mesityloxyd). Sm. 110—120° (A. 180, 8). — I, 1008. C 76,2 — H 11,1 — O 12,7 — M. G. 378. 1) Ivain (A. 155, 150). — III, 634.
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C 73.1 - H 10.7 - O 16.2 - M. G. 394.

1) Dimenthylester d. Bernsteinsäure. Sm. 62° (A. ch. [6] 7, 481). —

 $C_{24}H_{42}O_6$

 $\mathbf{C}_{24}\mathbf{H}_{42}\mathbf{O}_{8}$

 $C_{24}H_{42}O_{21}$

 $\mathbf{C}_{24}\overline{\mathbf{H}_{46}}\mathbf{O}_{2}$

 $C_{24}H_{46}O_3$

 $\mathbf{C}_{24}\mathbf{H}_{46}\mathbf{O}_4$

 $\mathbf{C}_{24}\mathbf{H}_{46}\mathbf{O}_{19}$

 $C_{24}H_{48}O$

 $\mathbf{C}_{24}\mathbf{H}_{48}\mathbf{O}_{2}$

 $C_{24}H_{48}O_{3}$

 $\mathbf{C}_{24}\mathbf{H}_{50}\mathbf{N}_{2}$

 $\mathbf{C}_{24}\mathbf{H}_{51}\mathbf{N}$

C 67,6 - H 9,8 - O 22,5 - M. G. 426.

1) Diacetat d. Verb. C₂₀H₃₈O₄ (aus Isobutyraldehyd). Sd. 248—252° (Soc. 43, 95). — I, 947. C 57,8 — H 16,5 — O 25,7 — M. G. 458. I) Triacetoxylstearinsäure. Fl. (J. pr. [2] 39, 342). — I, 738.

2) Diisobutylester d. Dicaproylweinsäure. Fl. (Bl. [3] 11, 368). C 43,6 — H 6,4 — O 50,9 — M. G. 666. 1) β-Maltodextrin (Soc. 71, 517).

2) **Trehalum** (B. **26**, 1331).

C 80.4 - H 11.7 - N 7.8 - M. G. 358.

- $C_{24}H_{42}N_2$ 1) γ-Phenylhydrazonoktadekan. Fl. (Bl. [3] 15, 767). — IV, 769. $\mathbf{C}_{24}\mathbf{H}_{44}\mathbf{O}_4$ C 72,7 - H 11,1 - O 16,1 - M. G. 396.
 - 1) Verbindung (aus Isobutyraldehyd). Sd. 250-255° (Soc. 43, 95; M. 19. 374). — I, 947. C 80,0 — H 22,2 — N 7,8 — M. G. 360.

 $\mathbf{C}_{24}\mathbf{H}_{44}\mathbf{N}_{2}$

1) 1,2-Di[Diisobutylamidomethyl] benzol. Sm. 56°; Sd. oberh. 200°, (B. **31**, 428). C 78,7 — H 12,6 — O 8,7 — M. G. 366.

- 1) Aethylester d. Brassidinsäure. Sm. 29-30°; Sd. oberh. 360° (B. 19, 3324). — I, 528.
- 2) Aethylester d. Erucasaure. Sd. oberh. 360° (B. 19, 3324). I, 528. C 75,4 — H 12,0 — O 12,6 — M. G. 382.
- 1) Aethylester d. Oxybehensäure (Ae. d. Ketobehensäure). Sm. 54° (J. pr. [2] **48**, 338; *B*. **27**, 176). C'72.4 - H 11.5 - O'16.1 - M. G. 398.

1) Dokosan-λμ-Dicarbonsäure (s-Didekylbernsteinsäure). Sm. 134° (A.

- **298**, 180). 2) isom. Dokosan- $\lambda\mu$ -Dicarbonsäure (s-Didekylbernsteinsäure). Sm. 740 (A. **298**, 180).
- Aethylester d. Dioxybrassidinsäure. Sm. 54° (B. 26, 840).
 C 45,1 H 7,2 O 47,6 M. G. 638.
- 1) Verbindung (aus Quercit) (A. ch. [5] 15, 25). I, 283. C 81,8 H 13,6 O 4,5 M. G. 352.
- 1) η -Ketotetrakosan (Hexylseptdekylketon). Sd. 248 $^{\circ}_{10}$ (B. 15, 1718). İ, 1006.
- 2) Gerosin. Sm. 82° (A. 37, 170, 173; A. ch. [3] 13, 451). I, 256.
 C 78,3 H 13,0 O 8,7 M. G. 368.
- 1) Carnaubasäure. Sm. 72,5°. Ca, Pb (A. 223, 306; B. 29, 619, 2899). **–** I, 448.
- 2) Cerosinsäure. Sm. 93,5° (A. ch. [3] 13, 451). I, 256.

- Gingkosäure. Sm. 35^b (J. 1857, 529). I, 448.
 Lignocerinsäure. Sm. 80,5°. Na, K, Pb, Cu, Ag (B. 13, 1713; 21, 880). **- I**, 448.
- 5) Paraffinsäure. Sm. $45-47^{\circ}$ (Bl. 23, 111; siehe auch $C_{13}H_{26}O_{5}N$). I, 448. 6) Säure (aus d. Verb. $C_{6}H_{12}O$). Sm. 62° (B. 11, 2114). 7) Aethylester d. Behensäure. Sm. $48-49^{\circ}$ (A. 64, 344). I, 448.

8) Oktylester d. Palmitinsäure. Sm. 8,5° (J. 1858, 301). — I, 443. C 75,0 — H 12,5 — O 12,5 — M. G. 384.

1) α -Oxybehenäthyläthersäure. Sm. bei 60° (G. 27 [2] 300).

- 2) Aethylester d. α-Oxybehensäure. Sm. 70-71° (G. 27 [2] 300).
- 3) Aethylester d. α-Oxyarachinäthyläthersäure. Sm. 35-37° (M. 17, 537). C 66,7 - H 11,1 - O 22,2 - M. G. 432.
- $\mathbf{C}_{24}\mathbf{H}_{48}\mathbf{O}_{6}$ 1) Diglycerinstearat. Sm. 30° (J. pr. [2] 28, 252). — I, 446. $\mathbf{C}_{24}\mathbf{H}_{50}\mathbf{O}$
 - C 81,4 H 14,1 O 4,5 M. G. 354.

 1) Carnaubylalkohol. Sm. 68—69° (B. 29, 2898). C 78,7 H 13,7 N 7,6 M. G. 366.
 - Diisoamylönanthylidenamin. Fl. (A. 140, 93). I, 955.
 C 81,6 H 14,4 N 4,0 M. G. 353.
 - 1) norm. Trioktylamin. Sd. 365-367°. (2 HCl, PtCl₄) (B. 17, 632). -
 - 2) sec. Trioktylamin. Sd. 370°. HCl, (2HCl, PtCl₄) (B. 17, 637). I, 1138.

 $C_{24}H_{15}O_3N_3$

287, 303).

C₂₄-Gruppe mit drei Elementen.

1) Verbindung (aus 2-Amido 1-Oxybenzol) (J. pr. [2] 19, 321). — II, 713. $C_{24}H_{10}O_{2}N_{3}$ Tetrabromnaphtalfluorescein (Naphtaleosin).
 + C₂H₆O (A. 227, 140).
 - II, 2039.
 C 40,3 - H 1,4 - O 42,6 - N 15,7 - M. G C,4H,0O,Br, Sm. noch nicht bei 310°. $\mathbf{C}_{24}\mathbf{H}_{10}\mathbf{O}_{19}\mathbf{N}_{8}$ - M. G. 714, 1) Hexanitroazoresofurin (В. 17, 1865; 18, 587). — П, 934. С 83,7 — Н 3,5 — О 4,6 — N 8,1 — М. G. 344. $\mathbf{C}_{24}\mathbf{H}_{12}\mathbf{ON}_{2}$ 1) Verbindung (aus Acenaphtenchinon). Sm. noch nicht bei 300° (A. 276, 9). **– III**, 404. 1) Biacenaphtylidendionbromid. Sm. 237° (A. 276, 19). — III, 311. $\mathbf{C}_{24}\mathbf{H}_{12}\mathbf{O}_{2}\mathbf{Br}_{2}$ Naphtalfluoresceïnchlorid. Sm. 283° (A. 227, 139). — II, 2039.
 Naphtalfluoresceïnchlorid. Sm. 283° (A. 227, 139). — II, 2039.
 Bischlorindonphloroglucin. Sm. 241° u. Zers. (B. 32, 266).
 Hexabromderivat d. Verb. C₂₄H₁₈O₅ (B. 10, 1470). — II, 917.
 Diacetat d. Tetrachlorfluoresceïn (A. 238, 336). — II, 2062.
 Diacetat d. Tetrabromfluoresceïn? Sm. 278° (A. 183, 53). — II, 2064.
 C 39,6 — H 1,6 — O 39,6 — N 19,2 — M. G. 728.
 C Oktonitro II. Directatid de Paracticiente. $\mathbf{C}_{24}\mathbf{H}_{12}\mathbf{O}_{3}\mathbf{Cl}_{2}$ $\mathbf{C}_{24}\mathbf{H}_{12}\mathbf{O}_{5}\mathbf{Cl}_{2}$ $\begin{array}{c} \mathbf{C_{24}H_{12}O_5Br_6} \\ \mathbf{C_{24}H_{12}O_7Cl_4} \end{array}$ C24H12O7Br4 $\mathbf{C}_{24}\mathbf{H}_{12}\mathbf{O}_{18}\mathbf{N}_{10}$ 1) ?-Oktonitro-1, 1-Dinaphtylamid d. Bernsteinsäure. Sm. 256° u. Zers. (B. 10, 1713; A. 209, 384). — II, 612. $\mathbf{C}_{24}\mathbf{H}_{13}\mathbf{OBr}_{3}$ 1) Brombiacenaphtylidenondibromid. Sm. bei 280° u. Zers. (A. 290, 203). — III, 266. C 76,0 - H 3,4 - O 16,9 - N 3,7 - M. G. 379. $C_{24}H_{13}O_4N$ 1) Benzoat d. Oxyanthrachinolinchinon. Sm. 175 (A. 276, 26). IV, 461. C₂₄H₁₃O₁₂Br₁₁ 1) Triacetat d. Xanthogallolsäure (B. 20, 2038). — II, 1015. C₂₄H₁₈N₂Cl₁₉ 1) Verbindung (aus Dimethylanilin u. Chlorstickstoff). Sm. 117° (B. 30, 2648; **31**, 246). — **IV**, 660. C 83,3 — H 4,0 — O 4,6 — N 8,1 — M. G. 346. $\mathbf{C}_{24}\mathbf{H}_{14}\mathbf{ON}_{2}$ 1) Oxynaphtophenanthrazin (B. 19, 2792). — IV, 1094. C 79,6 — H 3,9 — O 8,8 — N 7,7 — M. G. 362. $C_{24}H_{14}O_{2}N_{2}$ 1) 1-Naphtylindigo (B. 26, 2547). — II, 1694. 2) 2-Naphtylindigo (B. 26, 2547; 31, 1817). — II, 1694.
 1) Phenolnaphtaleïnchlorid. Sm. 180° (B. 28, 993). — II, 1989. $\mathbf{C}_{24}\mathbf{H}_{14}\mathbf{O}_{2}\mathbf{Cl}_{2}$ 1) Diacetat d. ?-Tetrabrom-9,?-Dioxy-10-Oxyphenylanthracen. $C_{24}H_{14}O_5Br_4$ Sm. 256° (A. 202, 95). — II, 1116. $\mathbf{C}_{24}\mathbf{H}_{14}\mathbf{O}_{6}\mathbf{Br}_{4}$ 1) Diacetat d. Tetrabromphenolphtalein. Sm. 134° (A. 202, 80). -II, 1984. 2) Diacetat d. Tetrabromphenolphtalideïn. Sm. 182-1830 (A. 202, 108). - III, 261. 1) Diacetat d. Dibromfluoresceïn. Sm. 208 - 210° (A. 183, 38). $\mathbf{C}_{24}\mathbf{H}_{14}\mathbf{O}_{7}\mathbf{Br}_{2}$ II, 2063. $C_{24}H_{14}O_8N_9$ C 62,9 - H 3,1 - O 27,9 - N 6,1 - M. G. 458.1) Aethylester d. Dinitrophtalaconcarbonsäure. Sm. oberh. 280° (B. 17, 1389). — II, 1915. C 59,2 — H 2,9 — O 26,3 — N 11,5 — M. G. 486. $C_{24}H_{14}O_8N_4$ 1) α-Tetranitro-1, 3, 5-Triphenylbenzol. Sm. oberh. 370° (B. 23, 2535). · II, 300. 2) β -Tetranitro-1,3,5-Triphenylbenzol. Sm. 108° u. Zers. (B. 23, 2535). - II, 300. C 56,9 - H 2,8 - O 34,8 - N 5,5 - M. G. 506. $C_{24}H_{14}O_{11}N_{2}$ 1) Diacetat d. Dinitrofluoresceïn (A. 183, 30). — II, 2064. C 43,0 — H 2,1 — O 38,1 — N 16,7 — M. G. 670. $\mathbf{C}_{24}\mathbf{H}_{14}\mathbf{O}_{16}\mathbf{N}_{8}$ 1) Hexanitroorcinaurincyaminsäure + H₂O. K₃ (B. 13, 567). — II, 1125. C 79,8 — H 4,2 — O 4,4 — N 11,6 — M. G. 361. C24H15ON3 1) Verbindung (aus Aposafranin u. 2-Amido-1-Oxybenzol) (B. 30, 2493). — IV, 1177. C 78,9 — H 4,1 — O 13,1 — N 3,8 — M. G. 365. $\mathbf{C}_{24}\mathbf{H}_{15}\mathbf{O}_{3}\mathbf{N}$

1) 2-Methyl-4-Phenylchinolinphtalon. Sm. 270° (B. 18, 2407; 19, 2428).

1) polym. Cyanid d. Benzolcarbonsäure = (C₈H₅ON)₈. Sm. 195° (A.

C 73,3 - H 3,8 - O 12,2 - N 10,7 - M. G. 393.

- C 67.8 H 3.5 O 18.8 N 9.9 M. G. 425. $C_{24}H_{15}O_5N_8$
 - 1) Verbindung (aus Kyanbenzylin) + $\frac{1}{2}$ H₂O. Sm. 210° (J. pr. [2] 53, 250). — IV, 1217. C 65,3 — H 3,4 — O 21,8 — N 9,5 — M. G. 441. 1) 2,4,6-Trinitro-1,3,5-Triphenylbenzol (B. 7, 1125). — II, 300.
- $C_{24}H_{15}O_6N_8$

 - 2) 2-Nitro-1,4-Di[Phtalylamidomethyl]benzol. Sm. 253-255° (B. 28, 2992). - IV, 644.
 - 3) Tribenzoyleyanurat (B. 19, 311). II, 1173.
- $C_{24}H_{15}O_7N_3$ C 63,0 + H 3,3 - O 24,5 - N 9,2 - M. G. 457.

1) Chrysenpikrat (J. 1864, 532).

 $C_{24}H_{15}O_8N_5$

- C 57,5 H 3,0 O 25,5 N 14,0 M. G. 501.
- 1) Verbindung (aus Acetylamidobenzolazoxindon). Sm. 275-280° (A. 226, 66). — IV, 1005. C 58,9 — H 3,1 — O 29,4 — N 8,6 — M. G. 489.
- $C_{24}H_{15}O_9N_3$
 - 1) Triphenyläther d. 2,4,6-Trinitro-1,3,5-Trioxybenzol. Sm. 175° (Am. 13, 189; 15, 639). — II, 1022. C 46,7 — H 2,4 — O 25,9 — N 25,0 — M. G. 617.
- $\mathbf{C}_{24}\mathbf{H}_{15}\mathbf{O}_{10}\mathbf{N}_{11}$ C 46,7 H 2,4 U 25,5 N 25,5 R 3. G. G.: Per Constant of the con 465). **— IV**, *1499*.
- 1) Chlorphenylfluorindin (B. 28, 1544). IV, 1300. C 79,1 H 4,4 O 8,8 N 7,7 M. G. 364. $C_{24}H_{15}N_4Cl$ $C_{24}H_{16}O_2N_2$
 - 1) 3-Phenyl-α-Naphtimidazol-2-[Phenyl-2-Carbonsäure]. Sm. 260°. Ca, HCl, Pikrat (B. 27, 2774). — IV, 920.
 - 2) Acetat d. Oxyphenylnaphtophenazin. Sm. 262-262,5° (A. 296, 25). **– IV**, 1090.
- 1) Dibenzoat d. ?-Dimerkaptonaphtalin. Sm. 152-153° (B. 23, 2371). Co.H.O.S. **- II**, 1151.
- C 75.8 H 4.2 O 12.6 N 7.4 M. G. 380. $\mathbf{C}_{24}\mathbf{H}_{16}\mathbf{O}_{8}\mathbf{N}_{2}$
 - 1) Verbindung (aus Diacetylweinsäureanhydrid u. β-Naphtylamin) (Soc. 71, 1062). C 70,6 — H 3,9 — O 11,8 — N 13,7 — M. G. 408. C 70,6 — H 3,9 — O 10,8 — N 15,7 — M. G. 408.
- $C_{24}H_{16}O_3N_4$
 - 1) 5,7-Anhydrid d. 10-Nitro-5-Acetylamido-αβ-Naphtophenazin-7-Phenyloxydhydrat (B. 31, 3079).
- C 72,7 H 4,0 O 16,2 N 7,1 M. G. 396. $\mathbf{C}_{24}\mathbf{H}_{16}\mathbf{O_4N}_2$
 - 1) 1,2-Di[Phtalylamidomethyl]benzol. Sm. 266° (B. 21, 579; 26, 2213). — II, 1807.
 - 2) 1,3-Di [Phtalylamidomethyl]benzol. Sm. 237° (B. 21, 2704). IV, 643. 3) 1,4-Di [Phtalylamidomethyl]benzol. Sm. 279—280° (B. 28, 2992). —
- $C_{24}H_{16}O_4N_4$ C 67.9 - H 3.8 - O 15.1 - N 13.2 - M. G. 424.
 - Isodinitroazodiphenyl? Sm. 187° (B. 10, 140). IV, 1402.
 C 65,4 H 3,6 O 18,2 N 12,7 M. G. 440.
- $C_{24}H_{16}O_5N_4$
 - 1) 4,4'-Di[4-Nitrophenyl]azoxybenzol. Sm. 255° (B. 10, 138). IV, 1341.
 - 2) Isatilim (J. pr. [1] 35, 124). II, 1609.
 - 3) 1-Oxy-2,4-Diphenylazonaphtalin-23,48-Dicarbonsäure. Zers. bei 264° (B. **24**, 1605). — IV, 1464.
- $C_{24}H_{16}O_5Br_4$ 1) Diäthyläther d. Tetrabromfluorescein (A. 183, 51). II, 2064. 2) α,23-Lakton d.?-Tetrabrom-α,42-Dioxy-4'-Acetoxyltriphenylmethan-4'-Aethyläther-2³-Carbonsäure. Sm. 110--111⁰ (B. 30, 179).
- C24H16O6Br4 1) ?-Tetrabrom-?-Diacetoxyltriphenylmethan-2-Carbonsäure.
- 165-166° (A. **202**, 87). \mathbf{H} , $\overline{I911}$. C 55,8 \mathbf{H} 3,1 O 24,8 N 16,3 M. G. 516. $\mathbf{C}_{24}\mathbf{H}_{16}\mathbf{O}_{8}\mathbf{N}_{6}$
 - 1) 4,4'-Di[2,4-Dinitrophenylamido] biphenyl. Sm. oberh. 330° (B. 9, 982). — IV, 963. C 52,6 — H 2,9 — O 29,2 — N 15,3 — M. G. 548.
- $\mathbf{C}_{24}\mathbf{H}_{16}\mathbf{O}_{10}\mathbf{N}_{6}$
 - 1) ?-Tetranitro-1,1-Dinaphtylamid d. Bernsteinsäure. Sm. 225° u. Zers. (B. 10, 1713; A. 209, 383). — II, 612.
- 1) Verbindung (aus 2,5-Di-1-Naphtylamido-1,3,4-Thiodiazol). Sm. 2030 $\mathbf{C}_{24}\mathbf{H}_{16}\mathbf{N}_{6}\mathbf{S}$
 - (B. 23, 361). IV, 1237. 2) Verbindung (aus 2,5-Di-2-Naphtylamido-1,3,4-Thiodiazol). Sm. 200° (B. **23**, 363). — **IV**, 1237. C 86,0 — H 5,0 — O **4**,8 — **N 4**,2 — M. G. 335.
- $\mathbf{C}_{24}\mathbf{H}_{17}\mathbf{ON}$ 1) β -[1-Naphtyl]imido - α -Keto- $\alpha\beta$ -Diphenyläthan (α -Naphtilbenzil). Sm. 138—139° (M. 9, 691). — III, 285.

2) meso-Keto-N-Benzyldihydrophenonaphtakridin. Sm. 188-1890 (B. CoaH17ON **26**, 2595). — **IV**, *464*. C 79,3 — H 4,7 — O 4,4 — N 11,6 — M. G. 363. C24H17ON3 1) 1-Acetyl-2, 5-Di[2-Naphtyl]-1, 3, 4-Triazol. Sm. 1870 (B. 30, 1884; A. 298, 43). — IV, 1217.
2) Phenylamidobenzolindon (Phenylamidoaposafranon). Sm. 256° (A. 266, 253; B. 26, 383; 28, 2287; 29, 1605). — IV, 1179.
3) s-Phenylamidobenzolindon (Mauvindon) (A. 286, 208). — IV, 1179. 4) Acetylrosindulin. HCl, $(2 \text{ HCl}, \text{PtCl}_4)$, $H_2 \text{SO}_4$ (A. 290, 266). — IV, 1207. 5) Acetylisorosindulin. HCl, (2HCl, PtCl,) (J. r. 29, 556). — IV, 1202. C 76,0 — H 4,5 — O 8,4 — N 11,1 — M. G. 379. $\mathbf{C}_{24}\mathbf{H}_{17}\mathbf{O}_{2}\mathbf{N}_{3}$ 1) 2-[3-Nitrophenyl]-3-[4-Methylphenyl]-α-Naphtimidazol. Sm. 1970 (B. 25, 2833). -- IV, 1062.
2) Oxyphenylindulin (Phenylamidosafranol). HCl (A. 286, 200; B. 29, 369). — IV, 1179. C 78,5 — H 4,6 — O 13,1 — N 3,8 — M. G. 367.

 $C_{94}H_{17}O_{3}N$

1) 5-Benzoyl-3-[4-Methylphenyl]amido-1,4-Naphtochinon. Sm. 196 bis 1970 (A. 247, 185). — III, 255.

2) Benzoat d. 1-Benzoylamido-2-Oxynaphtalin. Sm. 226,5° (Soc. 55, 121). — II, 1180.

3) Verbindung (aus Anilin u. d. 1-Phenylnaphtalin-2, 3-Dicarbonsäure-3) Verbillating (aus Amin u. d. 1-Frenymaphtain-2,5-Dicarbonsaure-anhydrid). Sm. 194° u. Zers. (Am. 20, 97).
 C 75,2 — H 4,4 — O 16,7 — N 3,7 — M. G. 383.
 1) Phenolnaphtaleïnoxim. Sm. 220° (B. 28, 993). — II, 1989.
 2) 1,2,5-Triphenylbenzol-2²,5²-Dicarbonsäure. Sm. 295°. Ag (B. 20, 12,2,5)

C24 H17 O4 N

1487). **— IV**, 452.

3) Lakton d. δ -Nitro- γ -Oxy- δ -[3-Methylphenyl]- $\alpha\beta$ -Diphenyl- $\alpha\gamma$ -Butadiën - α - Carbonsäure (Nitro-m-Xylaldiphenylmaleïd). Sm. 165° (B. 26, 2482). — II, 1729.

4) 1-Naphtylester d. 2-[Phenylamidoformyl]oxybenzol-1-Carbonsäure. Sm. 244° (B. 26, 1466). — II, 1496.

5) 2-Naphtylester d. 2-Phenylamidoformyl]oxybenzol-1-Carbonsäure. Sm. 268° (B. 26, 1466). — II, 1496.

6) Monophenylamid d. Pulvinsäure. Sm. 187-188°. NH₄, K + 2 H₂O,

Zn (A. 282, 26). — II, 2031. C 70,1 — H 4,1 — O 15,6 — N 10,2 — M. G. 411. $C_{24}H_{17}O_4N_8$

 $1) \ 1, 4 - \operatorname{Di}[\operatorname{Benzoylamido}] - 3 - \operatorname{Phenylamido} - 2, 5 - \operatorname{Diketo} - 1, 2, 4, 5 - \operatorname{Tetra-Poisson} - 1, 2, 4, 5 - \operatorname{Diketo} - 1, 2, 4, 5$ hydro-1,4-Diazin (Hippuroflavinmonanilid). Sm. 189—192° (B. 26, 2323; A. 287, 82). — II, 1185. C 65,6 — H 3,9 — O 14,6 — N 15,9 — M. G. 439.

 $C_{24}H_{17}O_4N_5$

1) Isatimid (J. pr. [1] 35, 122). — II, 1609.

2) 3-Methyl-2,3-Di [4-Nitrophenyl]-2,3-Dihydro-1,2,4-Naphtisotriazin (Soc. **59**, 694). — **IV**, 1396. C 59,6 — H 3,5 — O 16,6 — N 20,3 — M. G. 483.

 $C_{24}H_{17}O_5N_7$

1) 2,4-Diphenylazo-6-[3-Nitrophenylazo]-1,3,5-Trioxybenzol. Sm. 290° u. Zers. (Soc. 71, 1156). — IV, 1451. C 59,1 — H 3,5 — O 23,0 — N 14,4 — M. G. 487.

 $C_{24}H_{17}O_7N_5$

1) Säure (aus 3-Cyanamidobenzol-1-Carbonsäure) (B. 15, 2119). — II, 1270. $C_{24}H_{17}O_9Br_3$ 1) Tetracetat d. Tribrombrasileïn + H_2O (B. 23, 1429). — III, 655. $C_{24}H_{17}N_2Br$ 1) 4-Bromphenylat d. 2-Phenyl-1,4-Naphtisodiazin (B. 24, 1873). — IV, 1064.

 $C_{24}H_{17}N_3Cl_2$ 1) Chlorphenylaposafranin. 2 + PtCl₄ (B. 31, 302). - IV, 1177. C 82.3 - H 5.1 - O 4.6 - N 8.0 - M. G. 350. $\mathbf{C}_{24}\mathbf{H}_{18}\mathbf{ON}_{2}$

1) 1,2-Di[Benzoylamido]naphtalin. Sm. 291° (A. **254**, 256). — IV, 919. 2) 4,4'-Diphenylazoxybenzol. Sm. 205° (B. 13, 1960). — IV, 1341.

3) 2-[2-Oxyphenyl]-3-[4-Methylphenyl]- α -Naphtimidazol. Sm. 217° (B. 25, 2834). — IV, 1062.

(B. 25, 2534). — IV, 1002.

4) 4-Phenyloxydhydrat d. 2-Phenyl-1,4-Naphtisodiazin. Sm. 148°.
Bromid (B. 24, 1873, 2682). — IV, 1064.

5) Verbindung (aus Oxalyldibenzylketon u. 3,4-Diamido-1-Methylbenzol).
Sm. 290—291° (A. 284, 260). — IV, 621.
C 76,2 — H 4,8 — O 4,2 — N 14,8 — M. G. 378.

 $\mathbf{C}_{24}\mathbf{H}_{18}\mathbf{ON}_{4}$

 $1) \ \mathbf{4} - [\mathbf{1} - \mathbf{Naphtyl}] \mathbf{amido} - \mathbf{5} - \mathbf{Keto} - \mathbf{3} - \mathbf{Methyl} - \mathbf{1} - [\mathbf{1} - \mathbf{Naphtyl}] - \mathbf{4}, \mathbf{5} - \mathbf{Dihydro-like} - \mathbf{1} - \mathbf$ pyrazol. Sm. 220° (Soc. 59, 343). - IV, 930.

- 2) 2-[2- β -Oxynaphtylazo-4-Methylphenyl] benzimidazol. HCl (B. 31, $\mathbf{C}_{24}\mathbf{H}_{18}\mathbf{ON}_{4}$ 323). — IV, 1491.
 - 3) 5,7-Anhydrid d. 5-Amido-10-Acetylamido-\alpha\beta-Naphtophenazin-7-Phenyloxydhydrat (B. 31, 3081).
- C 70.9 H 4.4 O 3.9 N 10.7 M. G. 406. $\mathbf{C}_{24}\mathbf{H}_{18}\mathbf{ON}_{6}$
 - 1) Hexaazoxybenzol. Sm. 206° u. Zers. (B. 20, 362; M. 7, 129). IV, 1336, 1350.
- $\mathbf{C}_{24}\mathbf{H}_{18}\mathbf{OBr}_{2}$ 1) ?-Dibrom-4-Keto-1, 2, 6-Triphenyl-1, 2, 3, 4-Tetrahydrobenzol. Sm. 218° (A. 281, 73). — III, 263.
 - 2) isom. ?-Dibrom-4-Keto-1, 2, 6-Triphenyl-1, 2, 3, 4-Tetrahydrobenzol. Sm. 175° (A. **281**, 73). — III, 263. C 78,7 — H 4,9 — O 8,7 — N 7,6 — M. G. 366.
- $\mathbf{C}_{24}\mathbf{H}_{18}\mathbf{O}_{2}\mathbf{N}_{2}$ 1) $\beta\beta$ -Dibenzoyl- α -[2-Naphtyl]hydrazin. Sm. 162—163° (A. 253, 27). IV, 930.
 - 2) Diphenyläther d. 2,2'-Dioxyazobenzol. Sm. 168-169° (B. 29, 1448). **- IV**, 1405.
 - 3) Diphenyläther d. 4,4'-Dioxyazobenzol. Sm. 149,5—150° (B. 29, 1446).
 - **IV**, *1406*. 4) 2,3-Diketo-l,4-Di[l-Naphtyl]hexahydro-l,4-Diazin. Sm. 281—2830
 - (B. 25, 2948). II, 611. 5) 2,3-Diketo-1,4-Di[2-Naphtyl]hexahydro-1,4-Diazin. Sm. oberh. 360°
 - (B. 25, 2949). II, 620.
 - 6) **2,5**-Diketo-1,4-Di[1-Naphtyl]hexahydro-1,4-Diazin. Sm. 274-275° (B. **23**, 2008; **25**, 2295; J. pr. [2] **40**, 437). II, 613.
 - 7) 2,5-Diketo-1,4-Di[2-Naphtyl]hexahydro-1,4-Diazin. Zers. oberh. 360° (B. 23, 2006). — II, 621.
 - 8) Aethyläther d. 9-Oxyrosindon [5]. Sm. 269° (B. 31, 2484).
 - 9) 1,1-Dinaphtylamid d. Fumarsäure (B. 24, 2005). II, 612. 10) Verbindung (aus Diazobenzolnitrat) (A. 137, 79, 81). — IV, 1515. C 73,1 - H 4,6 - O 8,1 - N 14,2 - M. G. 394.
 - 1) 4,4'-Di[4-Oxyphenylazo]biphenyl (B. 27, 3360). IV, 1418.
 - 2) Acetat d. 2,4-Di[Phenylazo]-1-Oxynaphtalin. Sm. 159-160° (B. 24,
 - 1595). IV, 1433. 3) Verbindung (aus Cinnamylphenylazimid). Sm. 248° (Soc. 61, 285). IV, 671.
- $C_{24}H_{18}O_2S$ 1) Biphenylsulfon. Sm. 214—216° (B. 13, 387). — II, 895. C 75.4 - H 4.7 - O 12.6 - N 7.3 - M. G. 382 $C_{24}H_{18}O_3N_2$

 $C_{94}H_{18}O_{9}N_{4}$

- 1) 3-Keto-1,4-Dibenzoyl-5-Methyl-2-Phenyl-2,3-Dihydropyrazol. Sm. 157° (A. 266, 127). — IV, 550.
- 2) Tribenzoylmelamin. Sm. 2750 u. Zers. (J. pr. [2] 13, 282; [2] 42, 102). **- II**, *1173*.
- 3) Azin (aus o-Toluylendiamin u. Acetylmethylmorpholchinon). Sm. 2120 (B. **31**, 53).
- 4) Hydrobenzamidtrialdehyd (B. 18, 575). III, 93.
- Verbindung (aus Traubensaurem α -Naphtylamin). Sm. noch nicht bei 330° (B. 29, 2721). C 65,8 H 4,1 O 10,9 N 19,2 M. G. 438.
- C24H18O3N6 1) 1,3,5-Tri[Phenylnitrosamido]benzol. Sm. 264—265° (G. 20, 343).— IV, 1125.
 - 2) 2, 4, 6-Triphenylazo-1, 3, 5-Trioxybenzol. Sm. oberh. 300° (Soc. 71,
- 1154). \overline{IV} , 1451. C 72,4 H 4,5 O 16,1 N 7,0 M. G. 398. $C_{24}H_{18}O_4N_2$
 - 1) 3, 5 Diketo 2 Benzoyl 4 $[\alpha$ Oxybenzyliden] 1 [4 Methylphenyl] tetrahydropyrazol. Sm. 133° (B. 30, 1022). — IV, 808. 2) 1-Phenylamido-2,5-Diphenylpyrrol-3,4-Dicarbonsäure + H₂0. Sm.
 - 154° (A. 293, 109). IV, 1037.
 - 3) Aethylester d. Dioximidophtalaconearbonsäure. Sm. 263—264° (B. 17, 1393). II, 1916.
 - 4) Phenylmonohydrazid d. Pulvinsäure. Sm. 201 202°. NH₄, Ca, Phenylhydrazinsalz (A. 282, 36). — IV, 725.
- C 67,6 H 4,2 O 15,0 N 13,1 M. G. 426. $\mathbf{C}_{24}\mathbf{H}_{18}\mathbf{O}_{4}\mathbf{N}_{4}$ 1) 4,4'-Di[2-Nitrophenylamido]biphenyl. Sm. 240° (B. 22, 904). -IV, 963.
 - 2) 4,4'-Di[2,4-Dioxyphenylazo]biphenyl (B. 22, 3015). IV, 1446. 132*

C₂, H₁₂O₄Cl₂ 1) Dibenzoat d. Dichlornaphtydrenglykol. Sm. 148-150° (Bl. 18, 208). - II, 185.

C₂₄H₁₈O₄Br₄ 1) α, 2³-Lakton d. ?-Tetrabrom-α, 4', 4²-Trioxytriphenylmethan-4', 4²-Diäthyläther-23-Carbonsäure (Diäthyläther d. laktoïden Phenolphtaleïn). Sm. 175° (B. 30, 179).

2) Aethylätheräthylester d. chinoïden Tetrabromphenolphtaleïn. Sm.

150—151° (B. 30, 178).

1) Diacetat d. Di[2-Oxynaphtyl]-P-Sulfid. Sm. 147—148° (B. 27, 3001).

2) Diacetat d. Di[2-Oxynaphtyl]-P-Sulfid. Sm. 154° (B. 27, 2545). $\mathbf{C}_{24}\mathbf{H}_{18}\mathbf{O}_{4}\mathbf{S}$ II, 986.

3) Diacetat d. Di[2-Oxynaphtyl]-?-Sulfid. Sm. 1930 (B. 27, 2997).

1) Diacetat d. Di[2-Oxynaphtyl]-?-Disulfid. Sm. 140° (B. 23, 3367). — $C_{24}H_{18}O_4S_2$ II, 986. 2) Diacetat d. Di[2-Oxynaphtyl]-?-Disulfid. Sm. 194° (B. 27, 2998).

C,4H,8O4S4 1) Diacetat d. Di[2-Oxynaphtyl]-?-Tetrasulfid. Sm. 164° (B. 27, 2997). C 69.6 - H 4.3 - O 19.3 - N 6.8 - M. G. 414.C24H18O5N2

1) Phtalyldiphenylasparagin (3 Modif.). α-Modif. + H₂O Sm. 112° (178 bis 180° wasserfrei); β -Modif. Sm. 203—204°, Ag; γ -Modif. + H₂O Sm. 193—194°, Ag (β . 16, 10). — II, 1811.

Verbindung (Säure aus 3-Amidobenzol-1-Carbonsäure). Sm. über 300° u. Zers. (A. 281, 6). — II, 1677.

3) Verbindung (Säure aus 4-Amidobenzol-1-Carbonsäure). Sm. über 300°

u. Zers. (A. 281, 5). — II, 1677. 1) Di[3-Phenylsulfonphenyl]äther. Sm. 69—70° (B. 20, 186). — II, 814. $\mathbf{C}_{24}\mathbf{H}_{18}\mathbf{O}_{5}\mathbf{S}_{2}$ C 67,0 — H 4,2 — O 22,3 — N 6,5 — M. G. 430. 1) Hydrobenzamid-4-Tricarbonsäure. Ag₃ (B. 19, 576). — III, 93. $C_{24}H_{18}O_6N_2$

2) Diäthylester d. Triphendioxazindicarbonsäure. Sm. oberh. 300° (B. 30, 994). — IV, 1083.

3) Verbindung (aus d. Benzol-1, 2-Dicarbonsäuremonaldehyd). Sm. 1870 (A. 239, 88). — II, 1625.

4) Verbindung (aus Piperonal). Sm. 172° (B. 14, 792). — III, 103.
 5) Verbindung (aus Piperonal). Sm. 213° (B. 14, 791). — III, 103.
 C 59,3 — H 3,7 — O 19,7 — N 17,3 — M. G. 486.

 $\mathbf{C}_{24}\mathbf{H}_{18}\mathbf{O}_{6}\mathbf{N}_{6}$ 1) 2, 4, 6-Trinitro-1, 3, 5-Tri[Phenylamido] benzol. Sm. 238° (Am. 10, 290). **— IV**, 1125.

C₂₄H₁₈O₆Br₆ 1) Hexabromhomopterocarpin (A. ch. [6] 17, 117). — III, 673.

 $C_{24}H_{18}O_6S_2$ 1) 1,3,5 - Triphenylbenzol - ? - Disulfonsäure. Ba (B. 23, 2536). II, 300.

 $C_{24}H_{18}O_6S_3$ 1) 3,4-Methylenäther d. α -Trithio-3,4-Dioxybenzaldhehyd (Trithiopiperonal). Sm. 183° (B. 29, 146). — III, 103.

 3,4-Methylenäther d. β-Trithio-3,4-Dioxybenzaldehyd. Sm. 236° (B. 29, 147). — III, 103.
 Verbindung (aus Diphenylsulfondisulfonsäure). Sm. 192—193° (B. 19, $C_{24}H_{18}O_6S_4$ 3127). — II, 815.

C 64,6 - H 4,0 - O 25,1 - N 6,3 - M. G. 446. $C_{24}H_{18}O_7N_2$

1) Triacetat d. Trioxyphenylaposafranon. Sm. 220-225° (B. 31, 2439). $C_{24}H_{18}O_8S_3$ 1) Diphenylester d. Diphenylsulfon-?-Disulfonsäure. Sm. 131-1326

(J. pr. [2] 47, 373). — II, 840. $C_{24}H_{18}O_9Br_2$ 1) Tetracetat d. Dibrombrasileïn + H_2O (B. 23, 1429). — III, 655.

C₂₄H₁₈O₉Br₄ 1) Tetracetat d. Tetrabrombrasilin. Sm. 220—222° (B. 18, 1141). —

III, 654.

C₂₄H₁₈O₉S₃ 1) Tribenzolsulfonat d. 1,2,3-Trioxybenzol. Sm. 140-142° (B. 24, 418). **— II**, 1012.

2) Tribenzolsulfonat d. 1,3,5-Trioxybenzol. Sm. 115-1170 (B. 24, 418). • II, 1020.

C 44.8 - H 2.8 - O 34.9 - N 17.4 - M. G. 642. $\mathbf{C}_{24}\mathbf{H}_{18}\mathbf{O}_{14}\mathbf{N}_{8}$

1) Lakton d. α -Oxy- α '-[Hexanitrotetramethyldiamidodiphenyl]- α ²-Phenylmethan-α² 2-Carbonsäure. Tafeln. Zers. bei 230° (A. 206, 99). - II, 1723.

 $C_{24}H_{18}O_{15}S_2$ 1) Anhydrid d. 1, 3, 5-Trioxybenzolsulfonsäure (A. 178, 194). — II, 1022. $C_{24}H_{18}N_3Cl$ 1) Phenylaposafraninchlorid. 2 + PtCl₄ (B. 30, 2625).

 $C_{24}H_{18}N_4S_2$ 1) Disulfid d. 4-Merkaptoazobenzol. Sm. 162° (J. pr. [2] 41, 210). — IV, 1411.

 $\mathbf{C_{24}H_{19}ON}$

 $\mathbf{E}_{24}\mathbf{H}_{19}\mathbf{ON}_{3}$

 $\mathbf{P}_{24}\mathbf{H}_{19}\mathbf{ON}_{5}$

 ${f E}_{24}{f H}_{19}{f O}_2{f N}$

 $\mathbf{H}_{19}\mathbf{O}_{2}\mathbf{N}_{3}$

 $_{24}H_{19}O_{3}N$

- C 85,4 H 5,6 O 4,7 N 4,2 M. G. 337.
- 1) β -[2-Naphtyl]amido- α -Keto- $\alpha\beta$ -Diphenyläthan. Sm. 131—132°. HCl J. pr. [2] **34**, 22; B. **26**, 1339). — III, 221.
- 2) 5-Keto-2-[3-Methylbenzyliden]-3,4-Diphenyl-2,5-Dihydropyrrol (m-Xylaldiphenylmaleïmidin). Sm. 224—225° (B. **26**, 2482). — II, 1729. 3) 1-[4-Isopropylphenyl]phenanthrenoxazol. Sm. 186° (Soc. **39**, 225).
- III, 446.
- 4) 2-Methylphenyl-2-Naphtylamid d. Benzolcarbonsäure. Sm. 117—118° (B. 16, 2083). — II, 1168.
- 5) 4-Methylphenyl-2-Naphtylamid d. Benzolcarbonsäure. Sm. 139° (B. 16, 2080). — II, 1168.

C 78.9 - H 5.2 - O 4.4 - N 11.5 - M. G. 365.

- 1) 2,5-Di[Phenylamido]-1,4-Benzochinonphenylimid. Sm. 202-2030 (B. 18, 787; 21, 675, 910; 25, 3574; 31, 1459; A. 262, 247; 273, 118; M. 9, 415). — III, 341.
- 2) Dimethylamidophenylphenonaphtoxazin. Sm. bei 275°. HCl (B. 25,
- 3000; J. 1881, 571). IV, 1209.

 3) Methyläther d. 2-[2-Oxyphenyl]-3-Phenyl-2,3-Dihydro-1,2,4-Naphtisotriazin. Sm. 167° (Soc. 59, 698). IV, 1415.

 4) Verbindung (aus Phenylindulin). Sm. 218° u. Zers. (A. 266, 250). —
- IV, 1280. C 73,3 H 4,8 O 4,1 N 17,8 M. G. 393.

- 1) **4-Acetylamido-1, 3-Di**[Phenylazo]naphtalin. Sm. 265° (B. **21**, 3241). **– IV**, 1401.
- 2) α Acetylamidonaphtalindisazobenzol. Sm. 275° (B. 21, 2146). — IV, 1401.
- 3) β -Acetylamidonaphtalindisazobenzol. Sm. 206° (B. 21, 2147). — IV, 1401.
- 4) 3-[2- β -Naphtolazobenzyl]-3,4-Dihydro-1,2,3-Benztriazin. Sm. 185° u. Zers. (J. pr. [2] 55, 368). — IV, 1492. C 81.6 - H 5.4 - O 9.1 - N 3.9 - M. G. 353.

1) Benzeyanidin. Sm. 123-124° (Soc. 37, 742). - II, 1157.

- 2) 2,5-Diphenyl-1-[2-Methylphenyl]pyrrol-3-Carbonsäure. Sm. 226 bis 227° (B. **22**, 3088). — **IV**, 449.
- 3) 2,5-Diphenyl-1-[4-Methylphenyl]pyrrol-3-Carbonsäure. Sm. 205 bis
- 206° (B. 22, 3089). IV, 449. 4) Phenylimid d. β -Truxillsäure. Sm. 180° (B. 26, 836). II, 1902. C 75.6 - H 5.0 - O 8.4 - N 11.0 - M. G. 381.
- 1) 2 Oxy 1 [2 Benzoylamidomethylphenyl] azonaphtalin. Sm. 215° (J. pr. [2] 51, 283). — IV, 1437.
- 2) Methyläther d. 2-Oxyphenylbenzoylhydrazimido- β -Naphtalin. Sm. 152—153° (B. 18, 3131). — IV, 1576.
- 3) Phenanthronitropseudobutylphenazin. Sm. 235—236° (J. pr. [2] 48, 107). **— IV**, *64*7.
- 4) 12-Phenyloxydhydrat d. 5-Acetylamido-αβ-Naphtophenazin. Chlorid, 2 Chlorid + PtCl₄, Sulfat (A. 290, 263). - IV, 1207.
- 5) 12 Phenyloxydhydrat d. 9 Acetylamido $\alpha\beta$ Naphtophenazin. Chlorid, 2 Chlorid + PtCl₄, Bichromat (B. 31, 3100).
- 6) Base (aus Anilin u. Muscarinhydrochlorid). HCl (B. **25**, 3004). — IV, 1209.
- $7) \ \ \textbf{2-[4-Methylphenyl]} a mido-\textbf{1-Phenylazonaphtalin-l}^2 \textbf{Carbons\"{a}ure.}$ Sm. 221° (B. **28**, 336). — **IV**, 1462.
- 8) 2-[4-Methylphenyl]amido-1-Phenylazonaphtalin-1³-Carbonsäure. Sm. 245⁹. Na (B. 28, 336). IV, 1462.
- 9) 2-[4-Methylphenyl]amido-1-Phenylazonaphtalin-1⁴-Carbonsäure. Sm. 262°. Na (B. 28, 335). IV, 1462.
- 10) 1-Benzolazo-2-Methyl-5-Phenylpyrrol-3-Carbonsäure. Sm. 195° (B. 19, 3162). — IV, 1486.
- C 78,0 H 5,1 O 13,0 N 3,8 M. G. 369.1) Acetylderivat d. 2-Diphenylamido-1, 4-Naphtochinon. Sm. 172-1730 (Soc. 37, 642). — III, 376.
- 2) 1-Benzoyl-2, 4,5-Trimethylphenylimid d. Benzol-1, 2-Dicarbonsäure. Sm. 181° (B. 17, 1803). — III, 237.

C 67.7 - H 4.5 - O 11.3 - N 16.5 - M. G. 425. $C_{24}H_{19}O_3N_5$

1) 4-Nitrobenzolazo-1, 3-Xylolazo-β-Naphtol. Sm. 278° (Soc. 43, 434). • IV, 1437.

C 84.5 - H 5.6 - O 19.8 - N 20.5 - M. G. 441.C24H19O4N5

1) 2,4-Dinitro-1,3,5-Tri [Phenylamido] benzol. 2 Modif. Sm. 179°. + CHCl. (Am. 11, 455; 16, 37; 18, 668). - IV, 1125.

2) 7 - [4 - Acetylamidophenyloxydhydrat] d. 10 - Nitro - 5 - Amido - $\alpha\beta$ -Naphtophenazin. Sm. 250° u. Zers. (B. 31, 3086).

C 71.8 - H 4.7 - O 20.0 - N 3.5 - M. G. 401. $C_{24}H_{19}O_5N$

1) 1-Keto-3,3-Di[?-Acetoxylphenyl]-1,3-Dihydroisoindol (Diacetat d. Imidophenolphtaleïn). Sm. 254-256° (G. 24 [1] 76). - II, 1985.

C 69,1 - H 4,6 - O 23,0 - N 3,3 - M. G. 417. $C_{24}H_{19}O_6N$

1) Verbindung (aus 3,4-Dioxy-1-[β-Amidoäthyl] benzolmethylenäther-2-Carbonsäure). Sm. 148-150° (Soc. 57, 1059). - II, 1764.

 $C_{94}H_{19}O_0Br_3$ 1) Tetracetat d. Tribrombrasilin. Sm. 145-147 (B. 18, 1140). III, 654.

2) isom. Tetracetat d. Tribrombrasilin. Sm. 2630 (B. 22, 1552). III, 654.

C₂₄H₁₉N₂Br 1) Phenanthrobromisobutylphenazin (aus 5-Brom-3, 4-Diamido-1-Isobutyl-

benzol). Sm. 153,5° (B. 21, 2955). — IV, 646. 1) Jodphenylat d. Base $C_{18}H_{14}N_4$ (B. 28, 350). $\mathbf{C}_{24}\mathbf{H}_{19}\mathbf{N}_4\mathbf{J}$ $\mathbf{C}_{24}\mathbf{H}_{20}\mathbf{ON}_{2}$ C 81.8 - H 5.7 - O 4.5 - N 8.0 - M. G. 352.

1) 6-Oxy-5-Phenyl-2, 4-Dibenzyl-1, 3-Diazin. Sm. 180° (J. pr. [2] 39, 258). - IV, 1089.

2) 2-Keto-1,4-Di[1-Naphtyl]hexahydro-1,4-Diazin. Sm. 92° (B. 25, 2934). — II, 613.

3) 2-Keto-1,4-Di[2-Naphtyl]hexahydro-1,4-Diazin. Sm. 222—224° (B. 25, 2935). — II, 621.

4) 2-Keto-4-Methyl-1,3-Di[2-Naphtyl]tetrahydroimidazol (Propylen-2-

Dinaphtylharnstoff). Sm. 157° (B. 25, 3280). — II, 618. 5) 2-[2-Oxybenzyliden]amido-1-[1-Naphtylamido]methylbenzol. Sm. 162° (J. pr. [2] 52, 409). — IV, 628.

6) 2-[Oxybenzyliden]amido-1-[2-Naphtylamido]methylbenzol. Sm. 1170

(J. pr. [2] 52, 412). — IV, 629. 7) 4-[4-Methylphenyl]imido-P-[4-Methylphenyl]amido-1-Keto-1,4-Di-hydronaphtalin. Sm. 183°. HCl, Pikrat (B. 8, 1025; 13, 125; 17, 715; 21, 394; Soc. 45, 159). — III, 394.

8) 2-Naphtylamid d. β-[2-Naphtyl]amidocrotonsäure. Sm. 200° (B. 17, 543). — II, 622.

9) Verbindung (aus Bis-2-Nitroso-1,4-Dimethylnaphtalin). Zers. bei 1800 (G. **26** [1] 34).

10) Verbindung (aus Zimmtaldehyd, Anilin u. Brenztraubensäure). Sm. 1940 (B. 22, 3007). - IV, 459.

C24H20ON C 75.8 - H 5.3 - O 4.2 - N 14.7 - M. G. 380.

1) 4,4'-Di[Phenylamido]azoxybenzol. Sm. 173° (B. 21, 2614). — IV, 1338. 2) ?-Di[4-Methylphenylazo]-1-Oxynaphtalin. Sm. 205-206° (B. 28, 1895). — IV, 1437.

3) 5-[2-Methylphenyl]azo-2-[2-Oxy-1-Naphtyl]azo-1-Methylbenzol. Sm. 1869 (B. 20, 1182). — IV, 1437.

4) 3-[4-Methylphenyl]azo-4-[2-Oxy-1-Naphtyl]azo-1-Methylbenzol. Sm. 177° (B. 20, 1179). — IV, 1437.

5) 3-[4-Methylphenyl]azo-4-[4-Oxy-1-Naphtyl]azo-1-Methylbenzol.

Sm. 210° (B. 20, 1178). — IV, 1437. 6) Aethyläther d. 2,4-Di[Phenylazo]-1-Oxynaphtalin. Sm. 121° (B. 24,

1595). — IV, 1433.
7) α -Phenyl- β -[4-Methylphenyl]- β -[2-Naphtyl]azoharnstoff.

(B. 21, 2568). — IV, 1575. 8) Diphenylhydrazon d. 8-Aldehyd d. Naphtalin-1,8-Dicarbonsäure. Sm. 213° (A. **276**, 16). — II, 1694.

 $C_{24}H_{20}OAs_2$ 1) Diphenylarsenoxyd. Sm. 91-92° (B. 15, 1954; A. 201, 229). -IV, 1687.

C 78,3 — H 5,4 — O 8,7 — N 7,6 — M G 368. $\mathbf{C}_{24}\mathbf{H}_{20}\mathbf{O}_{2}\mathbf{N}_{2}$

1) Methylenäther d. ε -Phenylhydrazon- ε -Phenyl- α -[3,4-Dioxyphenyl]- $\alpha \gamma$ -Pentadiën. Sm. 49—50° (B. 28, 1194). — IV, 778. 2) 4,4'-Difuralamido-3,3'-Dimethylbiphenyl. Sm. 188—189° (192°) (B.

30, 2013, 2302; A. 258, 378). — IV, 982. 3) P-Di[Acetylamido]binaphtyl. Sm. oberh. 200° (B. 18, 3256). — IV, 1073.

4) P-Di[Acetylamido]-1,1-Binaphtyl. Sm. oberh. 3006 (B. 19, 2551). IV, 1073.

5) Dimethyläther d. Di[2-Oxy-1-Naphtyliden]hydrazin. (Bl. [3] 17, 310).

6) Dimethyläther d. Di [4-Oxy-1-Naphtyliden] hydrazin. Sm. 185° (Bl. [3] 17, 307).

7) Diäthyläther d. Dioxybiphenylenchinoxalin. Sm. 260° (B. 23, 1212).

- III, 445.

8) Chinolinresorcin. Sm. 102° (B. 16, 886). — IV, 253.

9) Chinolinhydrochinon (B. 16, 886). — IV, 253.

10) 1,1-Dinaphtylamid d. Bernsteinsäure. Sm. 285° u. Zers. (275°) (A.

209, 382; B. 10, 1713; C. 1896 [1] 109). — II, 612. 11) 2,2-Dinaphtylamid d. Bernsteinsäure. Sm. 266° (264°) (B. 25, 3268;

 \vec{C} . 1896 [1] 996). — II, 620. 12) Phenylamidoimid d. β-Truxillsäure. Sm. 213° (B. 26, 837). — IV, 712.

13) Phenylamidoimid d. γ -Truxillsäure. Sm. 249° (B. 27, 1412). — IV, 712. C 72,7 — H 5,0 — O 8,1 — N 14,1 — M. G. 396. $\mathbf{C}_{24}\mathbf{H}_{20}\mathbf{O}_{2}\mathbf{N}_{4}$

1) s-1,2-Naphtylendiphenyldiharnstoff (B. 22, 1377). — IV, 919.

2) $2 - \beta$ -Naphtolazo-1-[2-Methylphenylnitrosamido]methylbenzol. Sm. $147 - 148^{\circ}$ (J. pr. [2] 55, 375). - IV, 1436.

3) 4-[2-Methylphenyl]azo-5-Phenyl-1-[2-Methylphenyl]pyrazol-3-Carbonsäure. Sm. 179⁶ (B. **26**, 1884). — IV, 1491. C 75,0 — H 5,2 — O 12,5 — N 7,3 — M. G. 384.

 $C_{24}H_{20}O_3N_2$

1) Di[5-Phenylimidomethyl-2-Methyl-4-Furanyl]äther. Sm. 124° (B. 28 [2] 787).

2) Anhydrid d. 1-Naphtylamidoessigsäure. Sm. 273° (B. 22, 1808; 25, 2293). — II, 613.

3) 1-Naphtylmonamid d. l-Naphtylimidodiessigsäure. Sm. 197-1990 (B. **23**, 2005). — **II**, *613*.

4) 1,1-Dinaphtylamid d. Aepfelsäure. Sm. 2050 (B. 23, 2046). — II, 612.

5) 2,2-Dinaphtylamid d. Aepfelsäure. Sm. 260-263° (B. 23, 2047). -II, 620.

C₂₄H₂₀O₃Br₄ 1) Diäthyläther d. Tetrabromrosolsäure. Sm. 110-115⁰ (B. 17, 1627). **- II**, *1122*.

C 72,0 - H 5,0 - O 16,0 - N 7,0 - M. G. 400. $\mathbf{C}_{24}\mathbf{H}_{20}\mathbf{O}_{4}\mathbf{N}_{2}$

1) αβ-Di[Benzoylamido]-αβ-Di[2-Furyl]äthan. α-Derivat Sm. oberh. 300°; β-Derivat Sm. 246° (B. 17, 2410). — III, 693.

2) 1-Naphtylamid d. Weinsäure. Sm. 2140 (2100) (A. 279, 148; B. 27

[2] 514; C. 1896 [1] 109). 3) 2-Naphtylamid d. Weinsäure. Sm. 280° (264—265°) (A. 279, 150;

C. 1896 [1] 996). C₂₄H₂₀O₄Cl₂ 1) Dibenzoat d. 3,6-Dichlor-2,5-Dioxy-4-Isopropyl-1-Methylbenzol. Sm. 190—191° (B. 15, 658). — II, 1151.

 $\mathbf{C}_{24}\mathbf{H}_{20}\mathbf{O}_{4}\mathbf{Br}_{2}$ 1) Verbindung (aus 1,4-Di[Brommethyl] benzol). Sm. 80° (B. 18, 2073). — III, 93.

1) Tetraphenylkieselsäure. Sm. 47—48°; Sd. 417—420° (B. 16, 1252; 18, 1679; Am. 14, 545). — II, 661. C 69,5 — H 4,8 — O 19,2 — N 6,7 — M. G. 416. $\mathbf{C}_{24}\mathbf{H}_{20}\mathbf{O}_4\mathbf{Si}$ $\mathbf{C}_{24}\mathbf{H}_{20}\mathbf{O}_{5}\mathbf{N}_{2}$

Verbindung (aus 3-Amido-1-Methylbenzol-4-Carbonsäure). Sm. noch nicht 350° (B. 27, 1401). — II, 1352.
 C 45,0 — H 3,1 — O 12,5 — N 39,4 — M. G. 640.

 $C_{24}H_{20}O_5N_{18}$

1) Verbindung (aus Aceton) (B. 27, 940).

 $C_{24}H_{20}O_5B_2$ $\mathbf{C}_{24}\mathbf{H}_{20}\mathbf{O}_{6}\mathbf{N}_{2}$

Tetraphenyldiborat. Fl. (A. Spl. 5, 206). — II, 658. C 66,7 — H 4,6 — O 22,2 — N 6,5 — M. G. 432. 1) Tetracetylindigweiss. Sm. 258° u. Zers. (B. 24, 4134). — II, 1623. 2) 1,4-Xylylendiphtalaminsäure. Zers. bei 279°. Ag₂ (B. 28, 2992). — IV, 644.

3) Diacetat d. Cotoïnazobenzol. Sm. 155-156° (Soc. 71, 1150). - IV, 1479.

C₂₄H₂₀O₆N₂ 4) Verbindung (aus d. Monäthyläther d. 1,3-Dioxybenzol). Sm. 230° (M. 1. 893). — II, *931*.

C,4H,0O,Cl, 1) 1,4-Diäthyläther-2,5-Dibenzoat d. 3,6-Dichlor-1,2,4,5-Tetraoxybenzol. Sm. 215° (Am. 17, 643).

C₂₄H₂₀O₆S₂ 1) polym. 4,4'-Dioxydiphenylsulfoxyd. Sm. 188° (B. 25, 1895). — II, 951.

C 64,3 — H 4,5 — O 25,0 — N 6,2 — M. G. 448. 1) Tetrahydroazoresorufin. 2HCl (B. 17, 1862). — II, 933. $\mathbf{C}_{24}\mathbf{H}_{20}\mathbf{O}_7\mathbf{N}_2$

C24H20O7Cl2 1) Verbindung (aus d. Diäthyläther d. 3,6-Dichlor-2,5-Dioxy-1,4-Benzo-

C₂₄H₂₀O₉N₂ C 60,0 - H 4,2 - O 30,0 - N 5,8 - M. G. 480. C₂₄H₂₀O₉Br₂ 1) Tetracetat d. Dibrombrasilin. Sm. 185° (B. 22, 1551). - III, 654. C₂₄H₂₀O₁₀N₆ C 52,2 - H 3,6 - O 29,0 - N 15,2 - M. G. 552.

1) Tri[P-Trinitrophenylamid] d. Citronensäure. Sm. 108° u. Zers. (B. 21, 666). — II, 423.

IV. 1707.

C24H20N3Cl 1) P-Chlor-6-Brom-5-Phenyl-2, 4-Dibenzyl-1, 3-Diazin (Chlorkyanbenzyl-1, . 65° (J. pr. [2] 23, 247). — IV, 1217. 2) 7-Chlorphenylat d. 5-Dimethylamido- $\alpha\beta$ -Naphtophenazin (Dimethylamido-

rosindulinchlorid). 2 + PtCl₄ (B. 30, 2628). - IV, 1205. 3) 12-Chlorphenylat d. 10-Dimethylamido-αβ-Naphtophenazin (Dimethylisorosindulinehlorid). 2 + PtCl₄, + AuCl₃ (B. 30, 2634). - IV, 1201.

C.4H.20N3Br 1) ?-Brom-6-Amido-5-Phenyl-2, 4-Dibenzyl-1, 3-Diazin (Bromkyanbenzylin) (J. pr. [2] 53, 247). — IV, 1217. 1) s-1,2-Naphtylendi[phenylthioharnstoff]. Sm. 355—360° u. Zers. (B. $\mathbf{C}_{24}\mathbf{H}_{20}\mathbf{N}_{4}\mathbf{S}_{2}$

22, 1377). — IV, 919. 1) Diphenyljodoniumsulfid (B. 27, 1596).

 $\mathbf{C}_{24}\mathbf{H}_{20}\mathbf{J}_{2}\mathbf{S}$ $\mathbf{C}_{24}\mathbf{H}_{20}\mathbf{J}_{2}\mathbf{S}_{3}$ 1) Diphenyljodoniumtrisulfid (B. 27, 1596).

1) Sulfid (aus Phenyldichlorphosphin). Sm. 192-193 (B. 10, 816). C24H20S8P2

C 85.0 - H 6.2 - O 4.7 - N 4.1 - M. G. 339.C24H21ON

1) 4-Oximido-1,2,6-Triphenyl-1,2,3,4-Tetrahydrobenzol. Sm. 1200 (A. 281, 71). - III, 263.

2) isom. 4-Oximido-1,2,6-Triphenyl-1,2,3,4-Tetrahydrobenzol. Sm. 209° (A. 281, 72). — III, 263.

3) 2-Keto-1-Aethyl-3,3,5-Triphenyl-2,3-Dihydropyrrol. α-Modif. Sm. 122—123°; Sd. 312—314°₃₈; β-Modif. Sm. 129° (Soc. 57, 703, 731). —

IV, 475. 4) Benzoylderivat d. 2-Methylen-1,3-Dimethyl-3-Phenyl-2,3-Dihydro-

indol. Sm. 141° (G. 28 [2] 399).

 $\mathbf{C}_{24}\mathbf{H}_{21}\mathbf{ON}_{8}$ C 78.5 - H 5.7 - O 4.4 - N 11.4 - M. G. 367.

1) 7-Phenyloxydhydrat d. 5-Dimethylamido-αβ-Naphtophenazin (Dimethylrosindulin). Chlorid, Nitrat + 1/2 H2O, Bichromat (B. 30, 2628). -IV, 1205.

2) 12-Phenyloxydhydrat d. 10-Dimethylamido- $\alpha\beta$ -Naphtophenazin (Dimethylisorosindulin). Chlorid, Nitrat (B. **30**, 2634). — IV, 1201. C 72,9 — H 5,3 — O 4,0 — N 17,7 — M. G. 395.

 $\mathbf{C}_{24}\mathbf{H}_{21}\mathbf{ON}_{5}$

1) 4-Phenylazo-6-[1-Naphtyl]azo-3-Dimethylamido-1-Oxybenzol. 180—181° (B. 31, 2777). — IV, 1417

2) 4-[1-Naphtyl]azo-6-Phenylazo-3-Dimethylamido-1-Oxybenzol. Sm. 178° (B. 31, 2777). — IV, 1417.

3) 4-Phenylazo-6-[2-Naphtyl]azo-3-Dimethylamido-1-Oxybenzol, Sm. 154° (B. 31, 2778). — IV, 1418.

4) 4-[2-Naphtyl]azo-6-Phenylazo-3-Dimethylamido-1-Oxybenzol. Sm. 176° (B. 31, 2778). — IV, 1417.

5) 4-[4-Dimethylamidophenylazo]-1-[2-Oxy-1-Naphtylazo]benzol. Sm.

209—210° (Soc. 45, 109). — IV, 1434. 6) 4-[4-Dimethylamidophenylazo]-l-[4-Oxy-l-Naphtylazo]benzol. Zers. bei 200° (Soc. 45, 110). — IV, 1434.

 $C_{24}H_{21}O_2N$ C 81,1 - H 5,9 - O 9,0 - N 3,9 - M. G. 355.

1) 3,5-Dicinnamyl-2,4-Dimethylpyrrol. Sm. 215-216° (G. 23 [2] 302). **- IV**, 102.

2) 1-Acetyl-5-Keto-2,4,4-Triphenyltetrahydropyrrol. Sm. 105° (Soc. 57, 695). — IV, 470.

3) 1-Acetyl-2-Keto-3, 3-Di[?-Methylphenyl]-2, 3-Dihydroindol (Acetyltoluisatin) (B. 18, 2639). — II, 1618.

4) 4-Oximido-1-Oxy-1,2,6-Triphenyl-1,2,3,4-Tetrahydrobenzol. Sm.

233-234° (B. **26**, 67). — III, 264. 5) Aethylester d. 2-Methyl-5-Phenyl-1-[2-Naphtyl]pyrrol-3-Carbon**säure.** Sm. 115° (B. **18**, 2598). — **IV**, 357. C 75,2 — H 5,5 — O 8,4 — N 10,9 — M. G. 383.

 $C_{24}H_{21}O_2N_3$

1) Oxalyltri [2-Methylphenyl] guanidin. Sm. 179° (B. 12, 1858). — II, 467.

2) 8-Nitro-6-Pseudobutyl-2, 3-Diphenyl-1, 4-Benzdiazin. Sm. 195-196° (J. pr. [2] 48, 107). — IV, 647. C 77,6 — H 5,6 — O 12,9 — N 3,8 — M. G. 371.

 $\mathbf{C}_{24}\mathbf{H}_{21}\mathbf{O_3N}$

1) Phenylmonamid d. β-Truxillsäure (β-Truxillanilidsäure). Sm. 197°. Ba (B. **26**, 837). — **II**, *1902*.

2) Phenylmonamid d. γ-Truxillsäure. Sm. 220° (B. 26, 838). — II, 1903.
 C 72,2 — H 5,3 — O 12,0 — N 10,5 — M. G. 399.

 $\mathbf{C}_{24}\mathbf{H}_{21}\mathbf{O}_{3}\mathbf{N}_{3}$ 1) 1, 3, 5-Tribenzoylhexahydro-1, 3, 5-Triazin. Sm. 220-221° (A. 288, 248; B. 28, 938).

2) Tri[2-Methylphenyl]cyanurat. Sm. 152° (B. 20, 2237). — II, 738.
3) Tri[3-Methylphenyl]cyanurat. Sm. 225° (B. 20, 2238). — II, 744.
4) Tri[4-Methylphenyl]cyanurat. Sm. 207° (B. 20, 2238). — II, 750.
5) Benzylcyanurat. Sm. 157°; Sd. über 320° (B. 3, 518; 5, 93). —

II, 525.

 6) 4-Methylphenylisocyanurat. Sm. 265° (B. 21, 412). — II, 494.
 C 63,3 — H 4,6 — O 10,6 — N 21,5 — M. G. 455. $C_{24}H_{21}O_3N_7$

 Verbindung (aus Dihydrodichlorhydroxycitrazinamid) (B. 27, 3452).
 C 74,4 — H 5,4 — O 16,5 — N 3,6 — M. G. 387. $\mathbf{C}_{24}\mathbf{H}_{21}\mathbf{O}_{4}\mathbf{N}$

1) 1-Benzoyl-2, 4, 5-Trimethylphenylmonamid d. Benzol-1, 2-Dicarbonsäure + H₂O. Sm. 195° (B. 17, 2673). — III, 237.
 1) Dibenzoat d. 6-Chlor-2, 5-Dioxy-4-Isopropyl-1-Methylbenzol. Sm.

 $\mathbf{C}_{94}\mathbf{H}_{91}\mathbf{O}_{4}\mathbf{Cl}$ $\mathbf{C}_{24}\mathbf{H}_{21}\mathbf{O}_{5}\mathbf{N}$

1) Diacetat d. Verb. C₂₀H₁₇O₃N (aus Phenolphtaleinoxim). Sm. 205-208° (M. 17, 437).

1) Benzoylfurfurin? . Sm. 290° u. Zers. (J. pr. [2] 27, 317). — III, 722. $C_{24}H_{21}O_5N_2$ C 68,7 - H 5,0 - O 22,9 - N 3,4 - M. G. 419. $C_{24}H_{21}O_6N$

1) Phenylamid d. Carbousninsäure. Sm. 170-1710 (G. 12, 247). -II, 2057.

 $\mathbf{C}_{24}\mathbf{H}_{21}\mathbf{O}_{6}\mathbf{N}_{3}$

C 64,4 — H 4,7 — O 21,5 — N 9,4 — M. G. 447.

1) Tribenzoat d. 1,3,5-Trioxyhexahydro-1,3,5-Triazin. Sm. 168,5° (159°) (B. 29 [2] 659; Soc. 73, 358).
C 62,2 — H 4,5 — O 24,2 — N 9,1 — M. G. 463.

 $\mathbf{C}_{24}\mathbf{H}_{21}\mathbf{O}_7\mathbf{N}_3$

1) Retenpikrat. Sm. 123—124° (J. 1858, 440; J. 185, 80). — II, 276. $C_{24}H_{21}O_9Br$ 1) Tetracetat d. Brombrasilin. Sm. 203—204° (B. 17, 685). — III, 653. C₂₄H₂₁N₂Br 1) 8-Brom-6-Isobutyl-2, 3-Diphenyl-1, 4-Benzdiazin. Sm. 172° (B. 21, 2956). - IV, 646.

 $\mathbf{C}_{24}\mathbf{H}_{21}\mathbf{N}_{3}\mathbf{S}_{3}$ 1) $\mathbf{Tri}[\mathbf{4}\mathbf{-Methylphenyl}]$ trithiocyanurat. Sm. 114° (J. pr. [2] 33, 120). **– II**, 497.

 $C_{24}H_{21}N_4Cl$ 1) 12 - Chlorphenylat d. 9 - Amido-10-Dimethylamido- $\alpha\beta$ -Naphtophen-

azin. $2 + PtCl_4$ (B. 31, 3102, 3105). C 81,4 — H 6,2 — O 4,5 — N 7,9 — M. G. 354. $\mathbf{C}_{24}\mathbf{H}_{22}\mathbf{ON}_{2}$

Nitril d. δ-[4-Methylphenyl]amido-γ-Oxy-αδ-Diphenyl-α-Buten-δ-Carbonsäure. Sm. 175° u. Zers. (B. 31, 2719).
 4-Methylphenylamid d. γ-[4-Methylphenyl]imido-α-Phenylpropen-γ-Carbonsäure. Sm. 204-205° (A. 242, 295). — IV, 448.
 C 75,4 — H 5,7 — O 4,2 — N 14,7 — M. G. 382.

 $\mathbf{C}_{24}\mathbf{H}_{22}\mathbf{ON}_4$ 1) 12-Phenyloxydhydrat d. 9-Amido-10-Dimethylamido- $\alpha\beta$ -Naphtophenazin. 2 Chlorid + PtCl₄, Nitrat, Bichromat (B. **31**, 3102). C 77,8 - H 5,9 - O 8,6 - N 7,6 - M G. 370.

 $\mathbf{C}_{24}\mathbf{H}_{22}\mathbf{O}_{2}\mathbf{N}_{2}$ 1) Bis-2-Nitroso-1,4-Dimethylnaphtalin. Sm. 174-175° (G. 26 [1] 32). C₉₄H₉₉O₉N₉ 2) 4,4'-Diäthylphtalyldiamidobiphenyl, Sm. 250° u. Zers. (A. 258, 363). _ IV, 967.

3) 4-Benzovlamido-3-Methyl-6-Isopropyl-1-Phenylbenzovazol, Sm. $174-175^{\circ}$ (G. **20**, 142; **25** [2] 402). — II. 1148.

4) 1,3-Dibenzoyl-2,4-Dimethyl-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 155° (B. 26, 1385). — IV, 863.

5) α-1,4-Diacetyl-2,3-Diphenyl-1,2,3,4-Tetrahydro-1,4-Benzdiazin.

Sm. 170° (B. 27, 2184). — IV, 1065.
β-1,4-Diacetyl-2,3-Diphenyl-1,2,3,4-Tetrahydro-1,4-Benzdiazin. Sm. 192,5° (B. 27, 2185). — IV, 1065.
Diäthyläther d. 5,8-Dioxy-2,3-Diphenyl-1,4-Benzdiazin. Sm. 163° (B. 23, 1212). — III, 285.

1) Diäthyläther d. Di[1-Oxynaphtyl]-?-Sulfid. Sm. 153° (B. 27, 2545). C,4H,O,S - II, 985.

2) Diäthyläther d. Di[2-Oxynaphtyl]-P-Sulfid. Sm. 1950 (1890) (B. 23. 3356: **27**, 2546). — II, 986.

1) Diäthyläther d. Di[2-Oxynaphtyl]-?-Disulfid. Sm. 158,5° (B. 23, C, H, O, S, 3367). — II, 986.

 $C_{24}H_{22}O_{2}Se$ 1) Diäthyläther d. Di[2-Oxynaphtyl]selenid. Sm. 176° (B. 30, 2824). $C_{24}H_{22}O_{3}N_{2}$ C 74,6 — H 5,7 — O 12,4 — N 7,2 — M. G. 386.

1) Di[5-Phenylhydrazonmethyl-2-Methyl-4-Furanyl]äther. Sm. 1390

(B. **28** [2] 787). C 69,6 — H 5,3 — O 11,6 — N 13,5 — M. G. 414. $\mathbf{C}_{94}\mathbf{H}_{92}\mathbf{O}_{3}\mathbf{N}_{4}$

1) Paracotoïnphenylhydrazid. Sm. 200–201° (G. 23 [2] 200). — III, 640. C 71,6 — H 5,5 — O 15,9 — N 7,0 — M. G. 402. 1) Paracotoïnanilid. Sm. 162° (G. 23 [2] 201). — III, 640. CoaHooOANo

2) Phenylhydrazon d. Mekoninmethylphenylketon. Sm. 143-144° (M. 13, 667). — II, 2022.

3) Di[Phenylamidoformiat] d. 2, 3-Dioxy-1,2,3,4-Tetrahydronaphtalin. Sm. 148—150° (A. **288**, 99). C 67,0 — H 5,1 — O 14,9 — N 13,0 — M. G. 430.

C,4H,O,N,

1) Diacetat d. 4,4'-Bi[5-Oxy-3-Methyl-1-Phenylpyrazol]. Sm. 132 bis 134° (B. 29, 1659). — IV, 1263.

2) Diäthylester d. ?-Diphenylazobenzol-1,4-Dicarbonsäure. Sm. 1260 (B. 24, 2693). - IV, 1475.

1) Verbindung (aus Rubbadin). Zers. über 200° (B. 25, 1883). — II, 658. C 68,9 — H 5,3 — O 19,1 — N 6,7 — M. G. 418. 1) Aethylidencinchoxinsäure. Sm. 206°. Na₂ + xH₂O, Ag₂ (A. 270, C,4H,2O4S2 $C_{24}H_{22}O_5N_2$

356). — IV, 347. C 66,3 — H 5,1 — O 22,1 — N 6,5 — M. G. 434. $C_{24}H_{22}O_6N_2$

1) β_{γ} -Diphenyldiurethan d. 3,4-Dioxy-l-[β_{γ} -Dioxypropyl] benzol-3,4-Methylenäther. Sm. 127° (B. 24, 2882). - II, 1117.

2) Diäthylester d. 3, 6-Di[Phenylamido]-1,4-Diketo-1,4-Dihydrobenzol-2,5-Dicarbonsäure. Sm. 246° (B. 20, 1312). — II, 2009.

C 62.3 - H 4.8 - O 20.8 - N 12.1 - M. G. 462. $\mathbf{C}_{24}\mathbf{H}_{22}\mathbf{O}_{6}\mathbf{N}_{4}$

1) Diäthylester d. 4,4'-Bi[5-Keto-1-Phenyl-4,5-Dihydropyrazol]-3,3'-

 $\mathbf{C}_{24}\mathbf{H}_{22}\mathbf{O}_{6}\mathbf{N}_{18}$

 $\mathbf{C}_{24}\mathbf{H}_{22}\mathbf{O}_7\mathbf{N}_2$

 Diathylester d. 4,4 * Hi[5-Ketto-Frienyl*4, 5-Dinydrogy, azolj*6, 5-Dicarbonsäure. Zers. bei 272° (Soc. 69, 1396). — IV, 707.
 C 43,8 — H 3,3 — O 14,6 — N 38,3 — M. G. 658.
 Verbindung (aus Aceton) (B. 27, 940).
 C 64,0 — H 4,9 — O 24,9 — N 6,2 — M. G. 450.
 Methylenchininoxinsäure. Sm. 282°. Ag₂ (A. 276, 270). — IV, 362.
 Phenylhydrazonderivat d. 2 - Acetyl-1,4 - Diketohexahydrobenzol-20,2 Discharge (Ar. C. H. O.N.). Sp. 207-50 (B. 25, 334). 3,6-Dicarbonsäure (oder $C_{24}H_{24}O_7N_4$). Sm. 207-207,5° (B. 25, 334).

- IV, 727. C 60,2 - H 4,6 - O 23,4 - N 11,7 - M. G. 478. C24H22O7N4 C₂₄H₂₂O₈Cl₂ 1) Dibenzoat d. 3,6-Dichlor-2,5-Dimethoxyl-1,4-Benzochinondimethylhemiacetal. Sm. 193° (Am. 17, 643). — III, 350.

 $C_{24}H_{22}O_9Br_{14}l$) Verbindung (aus Xanthogallol). Sm. 113° (A. 245, 339). — II, 1014. $C_{24}H_{22}O_{12}N_2$ C 54,3 — H 4,2 — O 36,2 — N 5,3 — M. G. 530.

1) Azoopianhydroacetat. Sm. 210° (*J. pr.* [2] **55**, 182).
2) Azomekoninessigsäure. Sm. 257° u. Zers. (*B.* **20**, 880). — IV, 1475. C₂₄H₂₂O₁₂Br₆1) Tetraacetat d. Hexabromkolatannin (*C.* 1898 [1] 579).

 $\mathbf{C}_{24}\mathbf{H}_{22}\mathbf{N}_{2}\mathbf{S}$ 1) 1-Naphtylamido-1-Naphtylimidomethylpropylsulfid. Sm. 95° (2HCl, PtCl₄) (B. 21, 966). — II, 610.

- $\mathbf{C}_{24}\mathbf{H}_{22}\mathbf{N}_{2}\mathbf{S}$ 2) 2-Naphtylamido-2-Naphtylimidomethylpropylsulfid. Sm. 65-66°. (2HCl, PtCl₄) (B. 21, 968). — II, 619.
- 1) Thiosulfanilin = (2,2'-Diamidodiphenyldisulfid). Sm. bei 100° (B. 4, $C_{24}H_{22}N_4S_3$ 392; **27**, 2808). — II, 805. C 84,5 — H 6,7 — O 4,7 —
- N 4,1 M. G. 341. $\mathbf{C}_{24}\mathbf{H}_{23}\mathbf{ON}$
 - 1) 2-Keto-1-Aethyl-3, 3-Di[P-Methylphenyl]-2, 3-Dihydroindol (Aethyltoluisatin). Sm. 108° (B. 18, 2640). - II, 1618.
- C 80,7 H 6,4 O 9,0 N 3,9 $\dot{\text{M}}$. G. 357. $\mathbf{C}_{24}\mathbf{H}_{23}\mathbf{O}_{2}\mathbf{N}$ Aethylamid d. αα-Diphenyl-β-Benzoylpropionsäure. Sm. 128—130°
- (Soc. **57**, 702). II, *1726*. C 74,8 H 6,0 O 8,3 N 10,9 M. G. 385. $\mathbf{C}_{24}\mathbf{H}_{23}\mathbf{O}_{2}\mathbf{N}_{3}$
- 1) Diäthyläther d. 1-Amido-4-Oxy-2-[4-Oxy-2-Naphtyl]azonaphtalin.
 - Sm. 175°. HCl (B. 25, 3065). IV, 1426. C 69,7 H 5,6 O 7,7 N 17,0 M. G. 413. l) Phenylimid d. α-Phenylhydrazonpropionsäure. Sm. 169° (B. 21,
- $\mathbf{C}_{24}\mathbf{H}_{23}\mathbf{O}_{2}\mathbf{N}_{5}$
- 2925). IV, 689. C 77,2 H 6,2 O 12,9 N 3,7 M. G. 373. $C_{24}H_{23}O_3N$ 1) Dibenzoylpseudoephedrin. Sm. 119-120° (B. 22, 1826). - III, 881.
- 2) Benzoat d. 6-Benzoylamido-3-Oxy-4-Isopropyl-1-Methylbenzol. Sm. 166—167° (G. 25 [2] 389).
 - 3) Aethylester d. β -Phenylamido- α -Benzoyl- β -Phenylpropionsäure. Sm. 101° (B. 31, 607).
 - 4) Aethylester d. γ-Phenylamido-α-Oxy-αγ-Diphenylpropen-β-Carbonsäure. Sm. 122° (B. 31, 608).
 C 71,8 H 5,7 O 12,0 N 10,5 M. G. 401.
 1) Triphenylamid d. Tricarballylsäure. Sm. 252° (B. 22, 2922). —
- $\mathbf{C}_{24}\mathbf{H}_{23}\mathbf{O}_{3}\mathbf{N}_{3}$
- II, 422. C 74,0 H 5,9 O 16,4 N 3,6 M. G. 389. $\mathbf{C}_{24}\mathbf{H}_{28}\mathbf{O}_{4}\mathbf{N}$
- 1) Benzoylmorphin. HCl (Soc. 28, 24; A. 294, 215). III, 900. 2) Diäthyläther d. 4-Dibenzoylamido-1, 3-Dioxybenzol. Sm. 171° (B.
 - **20**, 1128). II, 1180. 3) Diäthylester d. α -[1-Naphtyl]imido- α -Phenyläthan- $\beta\beta$ -Dicarbonsäure. Sm. 145,5° (B. 19, 987). — II, 1850.
 - 4) Diäthylester d. α-[2-Naphtyl]imido-α-Phenyläthan-ββ-Dicarbonsäure. Sm. 140,5° (B. 19, 986). II, 1850.
 5) Verbindung (aus 3,5-Diketo-1-Phenylhexahydrobenzol). Sm. 129—131°
- n. Zers. (J. pr. [2] 43, 392; A. 294, 308). III, 279. C 69,1 H 5,5 O 15,3 N 10,1 M. G. 417. $C_{24}H_{23}O_4N_3$ 1) 5-Nitro-3,4-Di[Benzoylamido]-1-Pseudobutylbenzol. Sm. 245—246° (J. pr. [2] 48, 109). - IV, 646.
 - 2) Triphenylamid d. Citronensäure (Citranilid) (A. 82, 86; 98, 90). -II, 423.
- C 64,1 H 5,1 O 21,4 N 9,4 M. G. 449. $C_{24}H_{23}O_6N_3$ 1) Tri[Phenylamidoformiat] d. αβγ-Trioxypropan. Sm. 160-180° (B. 18, 969). — II, *372*.
- $\mathbf{C}_{24}\mathbf{H}_{23}\mathbf{O}_{6}\mathbf{Br}$ 1) Bromhomopterocarpin (A. eh. [6] 17, 117). III, 673. $\mathbf{C}_{24}\mathbf{H}_{24}\mathbf{ON}_{2}$ C 80,9 H 6,7 O 4,5 N 7,9 M. G. 356. 1) 4-Benzylamido-3-Methyl-6-Isopropyl-1-Phenylbenzoxazol. Sm. 152°
 - (G. 21, 253). II, 1148.2) β -[4-Isopropylbenzyliden]hydrazon- α -Oxy- $\alpha\beta$ -Diphenyläthan (Cumi-
 - nalbenzoïnazin). Sm. 117° (*J. pr.* [2] **52**, 225). III, 225. 3) **2** [oder **3**] Dimethylamido **9** [**4** Dimethylamidophenyl] **10** Oxy-
 - anthracen. + 1/2 C₇H₈ (Bl. [3] **15**, 755). 4) Leukophtalgrün. Sm. 235—236° (A. **206**, 108). II, 1723.

 - 5) 4-Isopropylbenzylidenamid d. α -Phenylamido- α -Phenylessigsäure. Sin. $2\overline{2}6^{\circ}$ (B. **31**, 2702).
 - 6) isom. 4-Isopropylbenzylidenamid d. α-Phenylamido-α-Phenylessigsäure. Sm. 198° (B. 31, 2704).
 C 75,0 H 6,2 O 4,2 N 14,6 M. G. 384.
- $\mathbf{C}_{24}\mathbf{H}_{24}\mathbf{ON}_{4}$ 1) Acetyl - α - Diäthylphenosafranin. (2HCl, PtCl₄) (B. 16, 471). —
- IV, 1284. C 77,4 H 6,4 O 8,6 N 7,5 M. G. 372. $\mathbf{C}_{24}\mathbf{H}_{24}\mathbf{O}_{2}\mathbf{N}_{2}$ 1) 1,3-Di[Acetyl-4-Methylphenylamido] benzol. Sm. 176° (J. pr. [2] 33, 221). — IV, 573.

C₂₄H₂₄O₂N₂ 2) 1,4-Di[Acetyl-2-Methylphenylamido]benzol. Sm. 189^o (J. pr. [2] 34, 68). — IV, 589.

3) 1,4-Di[Acetyl-4-Methylphenylamido] benzol. Sm. 172-1730 (J. pr. [2] **33**, 233). — IV, 589.

4) 2-Benzylacetylamido-1-Phenylacetylamidomethylbenzol. Sm. 1730 (B. 27, 3242). — IV, 628.

5) 3-Dimethylamido-9-Oxy-10-Keto-9-[4-Dimethylamidophenyl]-9,10-Dihydroanthracen. Sm. 213° (C. 1897 [2] 591).

6) Phenylhydrazon d. 3-Methyläther-4-Benzoylmethyläther d. 3,4-Dioxy-1-Allylbenzol (Ph. d. Eugenolacetophenon). Sm. 82° (B. 27, 2461).

7) Phenylhydrazon d. 3 - Methyläther - 4 - Benzovlmethyläther - 3,4-Dioxy-I-Propenylbenzol (Ph. d. Isoeugenolacetophenon). Sm. 115,50 (B. 27, 2462). — IV, 772.

8) Phtalgrün, siehe auch C₃₂H₃₅O₂N₃. C. 1897 [2] 548). — II, 1723. HCl, (HCl, ZnCl₂) (A. 206, 107:

9) Lakton d. α - Oxy - α' - [Tetramethyldiamidodiphenyl] - α^2 - Phenylmethan-α²2-Carbonsäure (Tetramethyldiamidodiphenylphtalid). Sm. 190 bis 191°. HCl, 2 HCl, (2 HCl, PtCl₄), Pikrat (A. 206, 92). — II, 1722.

Di [Aethylphenylamid] d. Benzol-1,2-Dicarbonsäure (Aethylanil-phtaleïn). Sm. 140,5—141,5° (A. 227, 187). — II, 1808.

11) 4-Isopropylbenzylidenamid d. Benzolcarbonsäure (Cumylendibenzamid). Sm. 224° (B. 8, 1150). — III, 56.

C24H24O2N6 $C_{67,3} - H_{5,6} - O_{7,5} - N_{19,6} - M_{6,6}$

1) $\text{Di}[\beta\text{-Phenylhydrazon}"athylamid]$ d. Benzol-1,4-Dicarbons"aure. Sm. 195° u. Zers. (B. **27**, 3104). — **IV**, 747. C 74,2 — H 6,2 — O 12,4 — N 7,2 — M. G. 388.

 $C_{24}H_{24}O_3N_2$

1) Anisin + H_2O . Sm. 101° (109° wasserfrei). $HCl + H_2O$, (2HCl, $PtCl_4$) (A. 88, 127; Bl. [3] 19, 174). — III, 84.

2) Anishydramid. Sm. 120° (125-127°) (A. 56, 309; 88, 128; Bl. [3] 19, 173). - III, 84.

3) 3,5-Di[4-Methylphenylacetylamido]-1-Oxybenzol. Sm. 128-129 (G. 20, 321). — II, 724.

4) Diäthylbenzidinphtalsäure. Ba (A. 258, 365). — IV, 967.

C 69,2 - H 5,8 - O 11,5 - N 13,5 - M. G. 416. $C_{24}H_{24}O_8N_4$

1) Tri[?-Acetylamidophenyl]amin. Sm. noch nicht bei 240° (B. 18, 2157).

C24H24O3N6 C 64.9' - H 5.4 - O 10.8 - N 18.9 - M. G. 444.

1) 1, 3, 5-Tri[2-Oxybenzylidenamido] hexahydro-1, 3, 5-Triazin. Sm. 139 bis 140° (Å. 288, 239). — III, 72.

C24H24O3S3 1) Trimethyläther d. α-Trithio-2-Oxybenzaldehyd. Sm. 157° (B. 24, 1446). — III, 71.

2) Trimethyläther d. β-Trithio-2-Oxybenzaldehyd. Sm. 224° (B. 24, 1446). — III, 71.

3) Trimethyläther d. β -Trithio-3-Oxybenzaldehyd. + C_6H_6 (Sm. 147°) (A. 277, 348). — III, 80.

4) Trimethyläther d. α-Trithio-4-Oxybenzaldehyd. Sm. 127° (B. 24, 1442). — III, *83*.

5) Trimethyläther d. β -Trithio-4-Oxybenzaldehyd. Sm. 183°. + C_6H_8 (B. 24, 1441). — III, 84. C 66, 7 — H 5, 6 — O 14, 8 — N 12, 9 — M. G. 432.

C24H24O4N4

1) Di[3-Keto-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyrazolyl-4-]essigsäure (Diantipyrinessigsäure). Sm. 238° u. Zers. (2 HCl, PtCl₄), H₂SO₄ (A. **255**, 241). — **IV**, 1266. Ba, $2 \text{HCl} + 2 \text{H}_2 \text{O}$,

2) Diäthylester d. 2,5-Di[Phenylazo]-1,4-Dihydrobenzol-1,4-Dicar-

bonsäure. Sm. 155° (B. 24, 2693). — IV, 1474.
3) Diäthylester d. 2,5-Di[Phenylazo]-1,4-Dihydrobenzol-3,6-Dicarbonsäure. Sm. 180° (B. 24, 2695). — IV, 1474.

4) Monoacetat d. P-Trioxy-1, 4-Di $[\alpha$ -Phenylhydrazonäthyl] benzol. Sm. 265° (Bl. [3] 6, 156). — IV, 783.

 $\mathbf{C}_{94}\mathbf{H}_{24}\mathbf{O}_{4}\mathbf{N}_{6}$ C 62,6 - H 5,2 - O 13,9 - N 18,3 - M. G. 460.

1) Diäthylester d. 3,3'-Dimethyl-4,4'-Biphenylendi[Hydrazoncyanessigsäure]. Sm. 224—225° (Bl. [3] 19, 1034). — IV, 1277, 1457.

- C₂₄H₂₄O₄S 1) Aethylester d. α -Phenylsulfon- $\beta\beta'$ -Diphenylisobuttersäure. Sm. 118° (Am. 7, 69). — II, 1471. C 62,1 — H 5,2 — O 20,7 — N 12,0 — M. G. 464.
- $C_{24}H_{24}O_6N_4$
 - 1) Diacetat d. 1,2-Diacetyl-3,6-Di[α -Oxybenzyl]-1,2,4,5-Tetrazin. Sm. 203° (B. 30, 1890; A. 298, 26). $\stackrel{-}{-}$ \overrightarrow{IV} , 1290. C 58,5 — H 4,9 — O 19,5 — N 17,1 — M. G. 492.
- $\mathbf{C}_{24}\mathbf{H}_{24}\mathbf{O}_{6}\mathbf{N}_{6}$
 - 1) Diäthylester d. 3,3'-Dimethoxyl-4,4'-Biphenylendi[Hydrazoncyanessigsäure]. Sm. 283—285° (Bl. [3] 19, 1034). — IV, 1457.
- 1) Trithio-3-Methoxyl-4-Oxybenzaldehyd (Trithiovanillin). Sm. 235 bis $C_{24}H_{24}O_6S_3$ 237° u. Zers. $+2 C_0 H_6$ (B. 29, 144). — III, 102. C 61,6 — H 5,1 — O 27,3 — N 6,0 — M. G. 468.
- $C_{24}H_{24}O_8N_2$
 - 1) Di[Acetylphenylamid] d. Diacetylweinsäure. (+ 2C₂H₆O Sm. 137°)
- (B. **24**, 2960). II, 422. C 55,8 H 4,6 O 34,1 N 5,4 M. G. 516. $\mathbf{C}_{24}\mathbf{H}_{24}\mathbf{O}_{11}\mathbf{N}_{2}$
 - 1) Verbindung (aus Amidoopiansäure). Sm. 232-2330 u. Zers. (B. 20, 877). - II, 1945.
- - 1) α-Benzoylimidodi [4-Dimethylamidophenyl] methan (Benzoylauramin).
 - Sm. 179° (*J. pr.* [2] **50**, 431). **IV**, 1175. 2) **2-Keto-3,3-Di**[?-Dimethylamidophenyl]-**2,3-Di**hydroindol (Dimethylanilinisatin). Sm. 234° (B. 18, 2642). — II, 1618.
 - 3) Aethylphenylimesatin (A. 144, 55). II, 1608.
 - 4) Verbindung (aus m-Amidoditolylamin u. Diamidodurol). HNO₃ + 1/2 H₂O (B. **28**, 1356).
- $\mathbf{C}_{24}\mathbf{H}_{25}\mathbf{O}_{8}\mathbf{N}$
- C 76,8 H 6,7 O 12,8 N 3,7 M. G. 375.

 1) Benzyläther d. Morphin. HCl (C. 1899 [1] 705).

 1) Verbindung (aus Pikrorocellin). Sm. 154° (A. 185, 24). II, 1753. C 73,6 H 6,4 O 16,4 N 3,6 M. G. 391. $C_{24}H_{25}O_3N_2$ $\mathbf{C}_{24}\mathbf{H}_{25}\mathbf{O}_4\mathbf{N}$
 - 1) Monäthylester d. 2,6-Dimethyl-4-Phenyl-1-[4-Methylphenyl]-1,4-Dihydropyridin - 3,5 - Dicarbonsäure. Sm. 160° u. Zers. (M. 17, 354).
- IV, $37\overline{1}$. C 70.8 H 6.1 O 19.7 N 3.4 M. G. 407. $C_{24}H_{25}O_5N$
- 1) Benzoylscopolamin. (2HCl, PtCl₄), (HCl, AuCl₃) (B.27 [2] 883).—III,796. C 68,1 H 5,9 O 22,7 N 3,3 M. G. 423.

 1) Allylhydrastin. Sm. 116° (B. 23, 2910).—II, 2054.

 2) Triacetylderivat d. Thebenin. Sm. 160—161° (B. 30, 1376).

 3) Triacetylmorphotebain. Sm. 193—194° (B. 32, 190). $C_{24}H_{25}O_6N$

 - 4) Methylester d. Dibenzoyldioxyanhydroecgonin. Sm. 99-100°. HCl, $\frac{\text{HNO}_{3}}{\text{C}}$ (B. **25**, 1397). — III, 872. C 63,3 — H 5,5 — O 28,1 — N 3,1 — M. G. 455.
- $C_{24}H_{25}O_8N$ 1) Usninanilid. Sm. 170-171° (B. 15, 2241).
- C 49.4 H 4.3 O 43.9 N 2.4 M. G. 583. $C_{24}H_{25}O_{16}N$
 - Verbindung (aus 2,5-Dioxybenzol-1,4-Dicarbonsäurediäthylester). Sm. 148° (B. 19, 2393). II, 2003.
 Phenyldi[1,2,3,4-Tetrahydro-1-Chinolyl]phosphin. Sm. 150° (B. 31,
- $\mathbf{C}_{24}\mathbf{H}_{25}\mathbf{N}_{2}\mathbf{P}$ 1045). — ĬV, 1682.
- 1) α-Methylpropyltriphenyldithiobiuret. Sm. 110° (B. 21, 109). II, 400. $C_{24}H_{25}N_3S_2$ 2) β-Methylpropyltriphenyldithiobiuret. Sm. 111° (B. 21, 109). — II, 400.
 - 3) Diäthyltriphenyldithiobiuret. Sm. 158° (B. 21, 108). II, 400. C 80,4 H 7,2 O 4,5 N 7,8 M. G. 358.
- $\mathbf{C}_{24}\mathbf{H}_{26}\mathbf{ON}_{2}$ 1) Trimethyldihydroamarin. Sm. 158°. HCl, (2HCl, PtCl₄ + 2H₂O) (B. 15,
 - 2328). III, 26. 2) Leukomalachitgrünaldehyd. Sm. 143°. (2 HCl, PtCl₄), + NaHSO₈
- (A. 231, 381). III, 65. C 74,6 H 6,7 O 4,1 N 14,5 M. G. 386. $\mathbf{C}_{24}\mathbf{H}_{26}\mathbf{ON}_{4}$
 - 1) α -Phenyl- β -[4-Methylphenyl]azo- β -[4-Isopropylbenzyl]harnstoff. Sm. 124° (B. 22, 930). — IV, 1573.
 - 2) $\alpha [4 Methylphenyl] \beta [4 Methylphenyl]azo \beta [2, 4, 5 Trimethyl-$
- phenyl]harnstoff. Sm. oberh. 230° (B. 25, 1361). IV, 1573. C 77,0 H 6,9 O 8,5 N 7,5 M. G. 374. 1) 4',42-Di[Dimethylamido]triphenylmethan-23-Carbonsäure. Sm. 200°. (2 HCl, PtCl₄), Pikrat (A. 202, 101; B. 28 [2] 994; C. 1896 [1] 105). $C_{24}H_{26}O_2N_2$ II, 1481.

 $C_{24}H_{26}O_3N_2$

 $C_{24}H_{26}O_5N_4$

 $C_{24}H_{27}O_3N$

C₂₄H₂₆O₂N₂ 2) Phenylamid d. Phenylamidocamphoformencarbonsäure. Sm. 1930 (Am. 21, 256).

 \dot{C} 71,6 $-\dot{H}$ 6,5 $-\dot{O}$ 8,0 $-\dot{N}$ 13,9 $-\dot{M}$ G. 402. $\mathbf{C}_{24}\mathbf{H}_{26}\mathbf{O}_{2}\mathbf{N}_{4}$

1) Resorcindisazopseudocumol (B. 17, 883). — IV, 1445.

Aethylidenbisantipyrin + H₂O. Sm. 153° (wasserfrei). HCl + H₂O, (2 HCl, PtCl₄), Pikrat (B. 28, 1184). — IV, 1273.

3) 3, 3'-Diketo-5, 5'-Dimethyl-1, 1'-Diathyl-2, 2'-Diphenyl-2, 3, 2', 3'-Tetrahydro-4, 4'-Bipyrazol. Sm. 240-250° (B. 17, 2045). — IV, 1263. 4) 5, 5'-Diketo-3, 3'-Dimethyl-4, 4'-Diäthyl-1, 1'-Diphenyl-4, 5, 4'5'-

Tetrahydro-4,4'-Bipyrazol. Sm. 160° (A. 238, 175). — IV, 526.

5) Verbindung (aus Cinchoteninphenylhydrazon). Sm. 286° (B. 28, 1073). C 73,8 — II 6,7 — O 12,3 — N 7,2 — M. G. 390.

1) Verbindung (aus 5-Amido-2-Oxy-1,4-Dimethylbenzol) (B. 20, 980). —

II, 760. C 70,9 — H 6,4 — O 15,8 — N 6,9 — M. G 406. $\mathbf{C}_{24}\mathbf{H}_{26}\mathbf{O}_{4}\mathbf{N}_{2}$

1) dimolec. Phenylimid d. Butan-αγ-Dicarbonsäure. Sm. 175-176° (A. 292, 211).

 \dot{C} 68,2 — \dot{H} 6,2 — \dot{O} 18,9 — \dot{N} 6,6 — \dot{M} . \dot{G} . 422. $\mathbf{C}_{24}\mathbf{H}_{26}\mathbf{O}_5\mathbf{N}_2$

1) m-Benzoylamido-d-Cocain. Fl. HCl (Sm. 216-217°) (B. 27, 1883). - III, 868.

2) Allylhydrastimid. Sm. 139°. HCl, $\rm H_2SO_4$ (B. 23, 2912). — II, 2054. C 64,0 — H 5,8 — O 17,8 — N 12,4 — M. G. 450.

1) Verbindung (aus Ketacetsäurediäthylester u. Phenylhydrazin (A. 269, 42).

 $\begin{array}{c} -\text{ I, } 848. \\ \text{C } 65,7 - \text{ H } 5,9 - \text{ O } 21,9 - \text{ N } 6,4 - \text{ M. G. } 438. \end{array}$ $\mathbf{C}_{24}\mathbf{H}_{26}\mathbf{O}_{6}\mathbf{N}_{2}$

1) 2,5-Diketo-1,4-Di[2-Isopropylphenyl-5-Carbonsäure]hexahydro-1,4-Diazin (*J. pr.* [2] **40**, 440). — II, 1388. C 61,8 — H 5,6 — U 20,6 — N 12,0 — M. G. 466.

 $\mathbf{C}_{24}\mathbf{H}_{26}\mathbf{O_6N_4}$

1) Diäthylester d. Dibutanonsäurephenylhydrazon. (A. 295, 333). — IV, 1291. Sm. 197—198°

1) $\alpha \beta \gamma$ -Tri[2-Methylphenylsulfon] propan. Fl. (J. pr. [2] 54, 529). C24H26O6S3

2) $\alpha\beta\gamma$ -Tri [4-Methylphenylsulfon] propan. Sm. 193—1940 (A. 283, 203). C 53,5 — H 4,8 — O 20,8 — N 20,8 — M. G. 538. $\mathbf{C}_{24}\mathbf{H}_{26}\mathbf{O}_7\mathbf{N}_8$

1) Hexaamidotetrahydroazoresorufin. 6 HCl (B. 18, 588). C 57,8 — H 5,2 — O 25,7 — N 11,2 — M. G. 498. $C_{24}H_{26}O_8N_4$

1) Diacetat d. 3,5,3',5'-Tetra[Acetylamido]-4,4'-Dioxybiphenyl. Sm. bei 300° (B. 21, 3532). — II, 989.

1) Verbindung (aus 1,4 Dioxybeuzol + H₂S) (A. 69, 297). — II, 939. C24H26O8S

 $C_{24}H_{26}N_2J_2$ 1) Dijodmethylat d. 2,4,2',4'-Tetramethyl-6,6'-Bichinolyl. Sm. 270° u. Zers. (B. 20, 2508). — IV, 1077.

1) Phenylsenfölauramin (s-Auramin-Phenylthioharnstoff). Sm. 194-1950 C₂₄H₂₆N₄S (J. pr. [2] **50**, 435). — \overrightarrow{IV} , 1175. \overrightarrow{C} 74,0 — \overrightarrow{H} 6,9 — \overrightarrow{O} 8,2 — \overrightarrow{N} 10,8 — \overrightarrow{M} . G. 389.

 $C_{24}H_{27}O_{2}N_{3}$

1) 4'-Nitro-4², 4⁶-Di[Dimethylamido]-2³-Methyltriphenylmethan. Sm. 193° (B. **24**, 556). — **IV**, 1045.

2) Cyanäthylat d. Strychnin. Sm. 105° (B. 16, 2748). — III, 938. C 76,4 — H 7,2 — O 12,7 — N 3,7 — M. G. 377. 1) Aethylester d. 6-[Aethyl-4-Methylphenyl]amido-4-Keto-2-Phenyl-1,2,3,4-Tetrahydrobenzol-3-Carbonsäure. Sm. bei 70° (A. 294, 278).

2) Monopiperidid d. α-Truxillsäuremonomethylester. Sm. 151° (B. 22, 2263). — IV, 17.

3) Monopiperidid d. 7-Truxillsäuremonomethylester. Sm. 2010 (B. 22, 2262). — IV, 17.

C₂₄H₂₇O₃As 1) Triäthyläther d. Tri[4-Oxyphenyl]arsin. Sm. 88-89° (B. 20, 52). **IV**, 1689.

 $\mathbf{C}_{24}\mathbf{H}_{27}\mathbf{O}_{3}\mathbf{Bi}$ 1) Triäthyläther d. Wismuthtri [4-Oxyphenyl]. Sm. 73 ° (B. 30, 2850). IV, 1698.

C₂₄H₂₇O₃Sb 1) Triäthyläther d. Antimontri[4-Oxyphenyl]. Sm. 82-83°. + HgCl₂ (B. 30, 2841). — IV, 1696. C 73,2 — H 6,9 — O 16,3 — N 3,6 — M. G. 393. 1) Benzoylatropin. (2HCl, PtCl₄), (HCl, AuCl₃) (B. 27 [2] 883). — $\mathbf{C}_{24}\mathbf{H}_{27}\mathbf{O}_4\mathbf{N}$

2) Benzoylhyoseyamin. (2 HCl, PtCl₄), (HCl, AuCl₈) (B. 27 [2] 883).

III, 795.

- 1) Tri[2, 3-Dimethylphenylester] d. Phosphorsäure. Fl. (B. 18, 1703). $\mathbf{C}_{24}\mathbf{H}_{27}\mathbf{O}_{4}\mathbf{P}$ - II, 758.
 - 2) Tri[2, 4-Dimethylphenylester] d. Phosphorsäure. Fl. (B. 18, 1703).
- II, 758. С 70,4 H 6,6 О 19,6 N 3,3 М. G. 409. $C_{24}H_{27}O_5N$
 - 1) Aethyläther d. Diacetylthebenin (Diacetyläthebenin). Sm. 1630 (B. **32**, 183).
 - 2) Aethylester d. 6-[4-Aethoxylphenyl]amido-4-Keto-2-[4-Methoxylphenyl]-1,2,3,4-Tetrahydrobenzol-3-Carbonsäure. Sm. 217° (A. **294**, 296).
- C 65,3 H 6,1 O 25,4 N 3,2 M. G. 441. $\mathbf{C}_{24}\mathbf{H}_{27}\mathbf{O_7N}$
 - 1) Allylhydrastein $+ \frac{11}{2}$ H₂O. Sm. 136° (B. 23, 2911). II, 2054.
- 1) Tri[2-Aethoxylphenylester] d. Phosphorsäure. Sm. 131-132° (C. $\mathbf{C}_{24}\mathbf{H}_{27}\mathbf{O}_7\mathbf{P}$ **1899** [1] 706).
- C 51,0 H 4,8 O 36,8 N 7,4 M. G. 565. $C_{24}H_{27}O_{13}N_3$
 - 1) Trinitroathamantin (A. 110, 361). III, 620.
 - 2) Verbindung (aus 2,5-Diacetyl-1,4-Diketohexahydrobenzol-3,6-Dicarbon-
- säure?). Sm. 280—285° u. Zers. (B. 25, 331). II, 2071.

 1) Verbindung (aus d. Amid. d. Phenylthioessigsäure). Sm. 107,5—108° (A. 184, 302). III, 1328. C24H27NS2
- C₉₄H₉₇Cl₉Bi 1) Wismuthtri [2,4-Dimethylphenyl|dichlorid. Sm. 161° (A. 251, 334). **– IV**, 1699.
 - 2) Wismuthtri [2,5-Dimethylphenyl] dichlorid. Sm. 167,5° (B. 30, 2847). - IV, 1699.
- C₂₄H₂₇Br₂Bi 1) Wismuthtri [2,4-Dimethylphenyl] dibromid. Sm. 117 ° (A. 251, 334). **- IV**, 1699.
 - 2) Wismuthtri [2,5-Dimethylphenyl]dibromid. Sm. 130° (B. 30, 2847). C 80,0 — H 7,8 — O 4,4 — N 7,8 — M. G. 360.
- $\mathbf{C}_{24}\mathbf{H}_{28}\mathbf{ON}_{2}$
 - 1) ?-Tetramethyldiamido-5-Oxy-2-Methyltriphenylmethan. Sm. 150° (B. **24**, 3130). — **II**, 904.
 - 2) ?-Tetramethyldiamido-6-Oxy-3-Methyltriphenylmethan. Sm. 129 bis 130° (B. **24**, 3131). — II, 904.
 - 3) 2-Oxy-1-[2-Oktylphenyl]azonaphtalin. Sm. 142° (B. 31, 940). IV, 1438.
 - 4) 4-Oxy-1-[2-Oktylphenyl]azonaphtalin (B. 31, 939). IV, 1438.
 - 5) Anhydrid d. 2-Methylchinolinäthyloxydhydrat (A. 242, 305). -IV, 308.
- C 76.6 H 7.4 O 8.5 N 7.4 M. G. 376. $C_{24}H_{28}O_2N_2$
 - 1) Monomethyläther d. ? Tetramethyldiamido ? Dioxytriphenylmethan. Sm. 135-136° (B. 17, 1895). - II, 1003.
 - 2) 1,1'-Dibenzoyl-4,4'-Bipiperidyl (B. 31, 2279).
- C 71,3 H 6,9 O 7,9 N 13,9 M. G. 404.
 1) Campholenamidindiureid. Sm. 176°. IV, 533. $\mathbf{C}_{24}\mathbf{H}_{28}\mathbf{O}_{2}\mathbf{N}_{4}$
- $C_{24}H_{28}O_2S_3$
- $\mathbf{C}_{24}\mathbf{H}_{28}\mathbf{O}_4\mathbf{N}_2$
- Verbindung (aus Campher). III, 487.
 C 70,6 H 6,8 O 15,7 N 6,8 M. G. 408.
 Diäthylderivat d. 4,4'-Di[β-Ketobutyrylamido] biphenyl. Sm. oberh. 300° u. Zers. (M. 19, 697). 2) Strychninoxyaceton (J. 1874, 875). — III, 939.

 - 3) Phyllocyaninsäure. Cu (B. 27 [2] 32). 4) Acetat d. Gelseminin. HCl (Sm. 290°) (C. 1896 [1] 111).
 - 5) Diacetat d. $\alpha\beta$ -Dioximido $\alpha\beta$ -Di[4(?)-Isopropylphenyl]äthan. Sm. 127° (B. **23**, 2065). — III, 301.
 - 6) 2,4,5-Trimethylphenylimid-2,4,5-Trimethylphenylamid d. Citronensäure. Sm. 173° (B. 21, 660). — II, 553.
- C 66,1 H 6,4 O 14,7 N 12,8 M. G. 436. $\mathbf{C}_{24}\mathbf{H}_{28}\mathbf{O}_4\mathbf{N}_4$

 - 1) Di[4-Nitrobenzyl]dipiperideïn. Sm. 120,5° (B. 22, 1332). IV, 532.
 2) Diäthylester d. 2,5-Di[Phenylhydrazido]-1,4-Dihydrobenzol-1,4-Dicarbonsäure. Sm. 165° u. Zers. (B. 24, 2690). IV, 724.
 3) Diäthylester d. 3,6-Di[Phenylhydrazido]-1,4-Dihydrobenzol-2,5-
 - Dicarbonsäure. Sm. 208° (B. 24, 2690). IV, 724.
- C 65.5 H 6.3 O 21.8 N 6.3 M. G. 440. $C_{24}H_{28}O_6N_2$
- 1) Hydrodicotarnin. Sm. 211°. (2HCl, PtCl₄), 2HBr, 2HJ (B. 30, 1747).

 $\mathbf{C}_{24}\mathbf{H}_{29}\mathbf{ON}$

 $C_{24}H_{28}O_6N_2$ 2) Diacetat d. $\alpha\beta$ -Di[Oxyacetyl-2-Methylphenylamido]äthan. Sm. 188 bis 189° (B. 23, 2033; A. 279, 60).

3) Sebacinsäurediphenylamid - 3, 3' - Dicarbonsäure (Sebacyldibenzam-

säure). Sm. 275°. Ba + 2H₂O (*G*. **15**, 550). — II, 1266. 4) Allylhydrastamid. Sm. 156° (*B*. **23**, 2912). — II, 2054. C 57,6 — H 5,6 — O 25,6 — N 11,2 — M. G. 500.

 $\mathbf{C}_{24}\mathbf{H}_{28}\mathbf{O}_{8}\mathbf{N}_{4}$

 $C_{24}H_{28}O_9N_2$

C 57,6 — H 5,6 — U 25,6 — N 11,2 — M. G. 500.

1) Verbindung (aus Dioxybenzochinondicarbonsäurediäthylester u. Phenylhydrazin). Sm. 134° (B. 22, 1290). — IV, 732.
C 59,0 — H 5,7 — O 29,5 — N 5,7 — M. G. 488.

1) Aethylester d. Dioxyisopropyldicarboxyldiphenylallophansäure. Sm. oberh. 300° u. Zers. (B. 17, 1306). — II, 1587.
2) Diäthylester d. Azoopiansäure. Sm. 101° (B. 20, 879). — IV, 1475.

1) Isopropyltribenzylammoniumjodid. Sm. 170° (B. 19, 1029). — II, 523. $\mathbf{C}_{24}\mathbf{H}_{28}\mathbf{NJ}$

 $\mathbf{C}_{24}^{\mathbf{H}}\mathbf{H}_{28}\mathbf{N}_{2}\mathbf{Cl}_{2}$ 1) Dichlorbenzylat d. Nikotin (B. 25, 1433). — IV, 857.

 $C_{24}H_{28}N_3Cl$ 1) Methylphenylauraminchlorid (J. pr. [2] 47, 406). — IV, 1173.

1) Tetramethylrosanilinjodid (B. 2, 443). — II, 1091. $\mathbf{C}_{24}\mathbf{H}_{28}\mathbf{N}_{3}\mathbf{J}$

1) Di[Phenylthioharnstoff] d. Base C₁₀H₁₈N₂. Sm. 183° (B. 31, 2272). $\mathbf{C}_{24}\mathbf{H}_{28}\mathbf{N}_{4}\mathbf{S}_{2}$ $\mathbf{C}_{24}\mathbf{H}_{28}\mathbf{J}\mathbf{A}\mathbf{s}$ 1) Propyltribenzylarsoniumjodid. Sm. 145-146° (A. 233, 77). IV, 1691.

2) Isopropyltribenzylarsoniumjodid. Sm. 143° (A. 233, 77). — IV, 1691. C 83,0 — H 8,3 — O 4,6 — N 4,0 — M. G. 347. 1) 1-Benzoyl-?-Triäthyl-1,2-Dihydrochinolin. Sm. 125—126° (B. 29, 240). 2482). — IV, 230. C 76,8 — H 7,7 — O 4,3 — N 11,2 — M. G. 375.

 $\mathbf{C}_{24}\mathbf{H}_{29}\mathbf{ON}_{3}$

1) Tetramethylrosanilin. Jodid (B. 2, 443). — II, 1091. 2) α -Oxy-4', 4², 4³-Pentamethyltriamidotriphenylmethan. Sm. 130°. HJ, Pikrat (B. 2, 443; 6, 357; 11, 2097; 12, 1275; 16, 2006; 19, 108). - II, 1087.

 $\mathbf{C}_{24}\mathbf{H}_{29}\mathbf{O_4N_3}$ C 68,1 - H 6,8 - O 15,1 - N 9,9 - M. G. 423.

1) Aethylester d. Nitrosomethylisostrychninsäure (A. 268, 243). — III, 943.

C24H29O5Sb 1) Triäthyläther d. Tri[4-Oxyphenyl]antimondihydroxyd. Chlorid, Bromid, Jodid, Nitrat (B. 30, 2842). — IV, 1696. C 65,0 — H 6,6 — O 25,3 — N 3,1 — M. G. 443.

 $C_{24}H_{29}O_7N$

1) Aethylester d. Methylhydrastein. Sm. 95-96°. (2HCl, PtCl₄), HNO₃. - II, 2052.

1) Chlorathamantin (A. 110, 362). — III, 620. $\mathbf{C}_{24}\mathbf{H}_{29}\mathbf{O}_7\mathbf{C}\mathbf{1}$

C 62,7 - H 6,3 - O 27,9 - N 3,0 - M. G. 459. $C_{24}H_{29}O_8N$

1) Pseudohomonarceïn + 3H₂O. Sm. 173° u. Zers. (wasserfrei). (2HCl, PtCl₄ + 2H₂O) (A. 247, 173). — III, 915.
2) Narceïnmethylester. HCl, (2HCl, PtCl₄), HJ (A. 277, 48). — II, 2080.

3) Hydroxyäthylat d. Isonarkotin (B. 30, 1746).

 $\mathbf{C}_{24}\mathbf{H}_{29}\mathbf{O}_{8}\mathbf{C}\mathbf{1}$ 1) Diacetat d. Chlorhexaoxybiphenyltetraäthyläther. Sm. 94-96° (B.

31, 617). C 25,2 - H 2,5 - O 58,8 - N 13,5 - M. G. 1143. $\mathbf{C}_{24}\mathbf{H}_{29}\mathbf{O}_{42}\mathbf{N}_{11}$

1) Undekanitrocellulose (C. r. 95, 132).

C 76,2 — H 7,9 — O 8,5 — N 7,4 — M. G. 378. $\mathbf{C}_{24}\mathbf{H}_{30}\mathbf{O}_{2}\mathbf{N}_{2}$

1) Dibenzyloxydhydrat d. Nikotin. Chlorid, Pikrat (B. 25, 1433). -IV, 857.

2) Verbindung (aus 1,3,3-Trimethyl-2-Aethyliden-2,3-Dihydroindol). Sm. 124° (G. 28 [2] 64). C 73,1 — H 7,6 — O 12,2 — N 7,1 — M. G. 394.

 $\mathbf{C}_{24}\mathbf{H}_{30}\mathbf{O}_{3}\mathbf{N}_{2}$

C 73,1 — H 7,6 — O 12,2 — N 7,1 — M. G. 394.

1) Verbindung (aus Methylstrychnin). Sm. 158° (A. 264, 64). — III, 937.

C 68,2 — H 7,1 — O 11,4 — N 13,3 — M. G. 422. $\mathbf{C}_{24}\mathbf{H}_{80}\mathbf{O}_{3}\mathbf{N}_{4}$

1) Verbindung (aus Oxybenzol u. Hexamethylenamin). Zers. bei 115—124° (A. 272, 280). - II, 651.

 $\mathbf{C}_{24}\mathbf{H}_{30}\mathbf{O}_{3}\mathbf{N}_{6}$ $C_{64,0} - H_{6,7} - O_{10,7} - N_{18,6} - M_{6,450}$

1) Phloroglucin + 3 Molec. Phenylhydrazin. Sm. 78-83° (B. 22, 2190). - IV, 654.

 $\mathbf{C}_{24}\mathbf{H}_{30}\mathbf{O}_4\mathbf{N}_2$ C 70.2 - H 7.3 - O 15.6 - N 6.8 - M. G. 410.

1) Diäthylester d. 2, 2'-Diisopropylazobenzol-5, 5'-Dicarbonsäure. Sm. $104-108^{\circ}$ (J. r. 16, 167). — IV, 1466.

- C 65.7 H 6.8 O 14.6 N 12.8 M. G. 438. $\mathbf{C}_{24}\mathbf{H}_{30}\mathbf{O}_{4}\mathbf{N}_{4}$
 - Dimethylester d. γζ-Diphenylhydrazonoktan-αθ-Dicarbonsäure. Sm. 105° (A. 294, 173). IV, 722.
 - 2) Diäthylester d. Diphenylizindiacetbernsteinsäure (B. 17, 2058). —
- C₂₄H₈₀O₅N₉
- 1V, 722.
 C 67,6 H 7,0 O 18,8 N 6,6 M. G. 426.
 1) Methylbrucin + 4H₂O. Sm. 276° u. Zers. (A. 304, 42).
 2) Brucinmethyloxydhydrat. Sm. 250—251°. Salze siehe (J. 1859, 398 B. 14, 772; 17, 2267; 18, 779; J. pr. [2] 3, 162). III, 946.
 3) α-Concusconinmethyloxydhydrat + 5H₂O. Sm. 202°. Salze siehe (A. 202°). **225**, 241). — III, 929.
 - 4) β -Concusconinmethyloxydhydrat $+ 2^{1}/_{2}H_{2}O$. Salze siehe (A. 225, 243). — III, *929*.
 - 5) Di[2,4,5-Trimethylphenylamid] d. Citronensäure. Sm. 194°. Na (B. 21, 661). — II, 552. C 65,2 — H 6,8 — O 21,7 — N 6,3 — M. G. 442. 1) Methylhydrastäthylamid. Sm. 162° (B. 23, 2906). — II, 2053.
- C24H30O6N2
- 1) Diacetat d. s-Di[3-Oxy-4-Isopropyl-1-Methylphenyl]-?-Sulfon. Sm. C24H30O6S $107-108^{\circ}$ (G. 19, 348). — II, 971. C 57,4 — H 6,0 — O 25,5 — N 11,1 — M. G. 502.
- $C_{24}H_{30}O_8N_4$
 - 1) Anhydrodi [Phenylhydrazon] d. Milchzucker. Sm. 223-224° u. Zers. (B. 20, 829). — IV, 794.
- 1) Tri[4-Dimethylamidophenyl]phosphin. Sm. 273° (B. 9, 845; 21, $\mathbf{C}_{24}\mathbf{H}_{30}\mathbf{N}_{3}\mathbf{P}$ 1503; A. **260**, 32). — IV, 1659.
- $C_{24}H_{30}N_3As$ 1) Tri[4-Dimethylamidophenyl] arsin. Sm. 240° (A. 270, 145). IV, 1686. 1) 4,4'-Biphenylendi [Piperidylthioharnstoff]. Sm. 214-2150 (B. 27, $\mathbf{C}_{24}\mathbf{H}_{30}\mathbf{N}_{4}\mathbf{S}_{2}$
- 1561). IV, 965. C 67,1 H 7,2 O 22,4 N 3,3 M. G. 429.
- $C_{24}H_{31}O_6N$ 1) 1-Benzoat d. 1-Oximido-3-Isobutyl-5-Methyl-1, 2, 3, 4-Tetrahydrobenzol-2,4-Dicarbonsäurediäthylester. Sm. 157-158° (A. 288, 333).
- 1) Siliciumtri [4-Dimethylamidophenyl]. Sm. 152° (C. 1896 [1] 843). C 79,1 H 8,8 O 4,4 N 7,7 M. G. 364. $\mathbf{C}_{24}\mathbf{H}_{31}\mathbf{N_3}\mathbf{Si}$ $\mathbf{C}_{24}\mathbf{H}_{32}\mathbf{ON}_{2}$
- 1) Isoamyleinehonidin. (2HCl, PtCl₄), HBr (B. 14, 1923). III, 852. C 75,8 H 8,4 O 8,4 N 7,3 M. G. 380. 1) Chinoisoamylin. Sm. 166,5—167°. H₂SO₄ + 2H₂O (Bl. [3] 7, 311). $\mathbf{C}_{24}\mathbf{H}_{32}\mathbf{O}_{2}\mathbf{N}_{2}$ III, 821.
- C₂₁H₃₂O₃Cl₂ 1) Dichlorisodehydrocholal. Sm. 257° (B. 25, 808; H. 16, 500). II, 1970. C 69,9 - H 7,8 - O 15,5 - N 6,8 - M. G. 412. $\mathbf{C}_{24}\mathbf{H}_{32}\mathbf{O}_{4}\mathbf{N}_{2}$
 - 1) Phtalyltropein. Sm. 70°. (2 HCl, PtCl₄) (A. 217, 102; B. 13, 108, 1085). - III, 788.
 - 2) Diäthylester d. $\alpha\beta$ -Di[Aethylphenylamido]äthan-3,3'-Dicarbon-
- Saure. Sm. 98—100° (4. 226, 247). II, 1259.
 C 55,4 H 6,1 O 27,7 N 10,8 M. G. 520.
 Di[Phenylhydrazon] d. Isomaltose. Sm. 158° (B. 23, 3688; 28, 3025). $C_{24}H_{32}O_9N_4$
 - **IV**, 793.
 - 2) Di[Phenylhydrazon] d. Maltose. Sm. bei 206° (B. 17, 583). IV, 793.
 - 3) Di[Phenylhydrazon] d. Milchzucker. Sm. 200° u. Zers. (B. 17, 583; 20, 828). — IV, 794.
 - 4) Di[Phenylhydrazon] d. Turanose. Sm. 215-220° u. Zers. (B. 27, 2488). — IV, 794. C 82,1 — H 9,4 — O 4,5 — N 4,0 — M. G. 351.
- $\mathbf{C}_{24}\mathbf{H}_{33}\mathbf{ON}$
 - 1) Di[?-Isoamylphenyl]amid d. Essigsäure. Sm. 81° (B. 20, 1259). —
- 1) Monochlorid d. Dehydrocholsäure. Sm. 241°. Na, Ag (H. 16, 502). $\mathbf{C}_{24}\mathbf{H}_{33}\mathbf{O}_{4}\mathbf{Cl}$ - II, 1969.
- $C_{24}H_{33}O_5Br$ 1) Bromdehydrocholsäure. Sm. 171—173° u. Zers. (H. 19, 286). II, 1970. C 48.1 - H 5.7 - O 32.1 - N 14.0 - M. G. 598. $C_{24}H_{34}O_{12}N_6$
 - 1) Verbindung (aus Akroleïn u. Phenylhydrazin). Sm. 223° (J. pr. [2] 50, 549). — IV, 748.
- 1) 4,4'-Biphenylendi[Isoamylthioharnstoff]. Sm. noch nicht bei 300° $\mathbf{C}_{24}\mathbf{H}_{34}\mathbf{N}_{4}\mathbf{S}_{2}$
- (B. 27, 1559). IV, 965. C 75,0 H 9,4 O 8,3 N 7,3 M. G. 384. 1) Di[2-Propylpiperidid] d. Benzol-1,2-Dicarbonsäure (Phtalylconiin) $\mathbf{C}_{24}\mathbf{H}_{36}\mathbf{O}_{2}\mathbf{N}_{2}$ (A. 227, 202). - IV, 34.

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C 60,0 - H 7,5 - O 26,7 - N 5,8 - M. G. 480.
\mathbf{C}_{24}\mathbf{H}_{36}\mathbf{O}_{8}\mathbf{N}_{2}

    Oximidobiliansäure. Na (B. 20, 1984). — II, 2077.
    C 64,4 — H 8,3 — O 17,9 — N 9,4 — M. G. 447.

C_{24}H_{37}O_5N_3
                            1) Verbindung (aus Dehydrocholsäure). Zers. bei 270° (B. 19, 2007).
                                 II, 1969.
                                 C 59,6 — H 7,7 — O 29,8 — N 2,9 — M G 483.
\mathbf{C}_{94}\mathbf{H}_{87}\mathbf{O}_{9}\mathbf{N}

    Pyroaconin. HCl + H<sub>2</sub>O, (HCl, AuCl<sub>3</sub>) (Soc. 65, 179). — III, 774.
    C 77,8 — H 10,2 — O 4,3 — N 7,6 — M. G. 370.
    Phenylhydrazid d. Stearolsäure. Sm. 81,5—82° (B. 25, 2670). —

\mathbf{C}_{24}\mathbf{H}_{38}\mathbf{ON}_{2}
                                 IV, 667.
                                 C 68,6 - H 9,0 - O 19,0 - N 3,3 - M. G. 420.
\mathbf{C}_{94}\mathbf{H}_{88}\mathbf{O}_{5}\mathbf{N}

    Omicholin (Bl. 51, 159). — ΠΙ, 667.
    C 77,2 — H 10,4 — O 8,6 — N 3,7 — M. G. 373.

C_{24}H_{39}O_{2}N
                           C 77,2 — H 10,4 — O 8,6 — N 3,7 — M. G. 373.

1) Phenylacetylamid d. Palmitinsäure. Sm. 60—61° (Am. 18, 700). C 57,5 — H 7,8 — O 21,9 — N 2,8 — M. G. 501.

1) Aconin (oder C<sub>25</sub>H<sub>41</sub>O<sub>9</sub>N; C<sub>26</sub>H<sub>41</sub>O<sub>11</sub>N). Sm. bei 140°. HCl + 2H<sub>2</sub>O, (HCl, AuCl<sub>3</sub>), (HJ, HgJ<sub>2</sub>), 7 + H<sub>2</sub>SO<sub>4</sub> (Soc. 61, 393, 400; 63, 448; B. 27, 730). — III, 774. C 77,4 — H 10,7 — O 4,3 — N 7,5 — M. G. 372.

1) Phenylhydrazid d. Celsäure. Sm. 72—73° (B. 26, 122). — IV, 667. C 74.2 — H 10.3 — O 8.2 N 7.2 M G. 365.
C_{24}H_{39}O_{10}N
\mathbf{C}_{24}\mathbf{H}_{40}\mathbf{ON}_{2}
                           C 74,2 — H 10,3 — O 8,2 — N 7,2 — M. G. 388.

1) s-Palmityl-2-Methylphenylharnstoff. Sm. 98° (Soc. 69, 1596).

2) s-Palmityl-4-Methylphenylharnstoff. Sm. 89—90° (Soc. 69, 1597).

3) Phenylhydrazid d. Ricinolsäure. Sm. 62—63° (B. 27, 3474).
C_{94}H_{40}O_{2}N_{2}
                           4) Phenylhydrazid d. Ricinelaïdinsäure. Sm. 110-110,5° (M. 15, 313;

B. 27, 3474). — IV, 693.
Phenylhydrazid d. Ricinsäure. Sm. 110—110,5° (B. 27, 3474). —

                                 IV, 693.
C 71,3 — H 9,9 — O 11,9 — N 6,9 — M. G. 404.
\mathbf{C}_{24}\mathbf{H}_{40}\mathbf{O}_{3}\mathbf{N}_{2}
                            1) Phenylhydrazid d. θ-Keto-λ-Oxyheptadekan-α-Carbonsäure (Ph. d.
                                 Oxyketostearinsäure) (B. 27, 3124). — IV, 704.
                           1) Jodcholsäure. 4 + HJ (B. 20, 686). — I, 783.

1) Braune Jodcholsäure (B. 28, 386).

C 50,3 — H 7,0 — O 28,0 — N 14,7 — M. G. 572.
C_{24}H_{40}O_5J
\mathbf{C}_{24}\mathbf{H}_{40}\mathbf{O}_{5}\mathbf{J}_{2}
\mathbf{C}_{24}\mathbf{H}_{40}\mathbf{O}_{10}\mathbf{N}_{6}
                           1) Hemialbumin (Bl. 23, 161). — IV, 1586.

C 44,2 — H 6,1 — O 36,8 — N 12,9 — M. G. 652.

1) Säure (aus Eiweiss) (Bl. 23, 161). — IV, 1586.

C 80,2 — H 11,4 — O 4,5 — N 3,9 — M. G. 359.
\mathbf{C}_{24}\mathbf{H}_{40}\mathbf{O}_{15}\mathbf{N}_{6}
\mathbf{C}_{24}\mathbf{H}_{41}\mathbf{ON}

    α-Oximido-α-Phenyloktadekan. Sm. 53° (J. pr. [2] 54, 399).
    Phenylamid d. Stearinsäure. Sm. 93,6° (A. 91, 152; J. pr. [2] 54,

                           400; Am. 18, 699). — II, 370.
3) Septdekylamid d. Benzolcarbonsäure. Sm. 91° (B. 21, 2489). —
                                 II, 1161.
                           4) ?-Cetylphenylamid d. Essigsäure. Sm. 104—104,5°; Sd. 295°<sub>15</sub> (B. 21,
                                3181). — II, 566.
C 76,8 — H 10,9 — O 8,5 — N 3,7 — M. G. 375.
\mathbf{C}_{24}\mathbf{H}_{41}\mathbf{O}_{2}\mathbf{N}
                           1) α-Phenylamidostearinsäure. Sm. 84,5°; Sd. 273—275°<sub>15</sub> (B. 24, 2395).
                                     - II, 436.
                           C 60,8 — H 10,1 — O 15,7 — N 3,4 — M. G. 407.

1) Amid d. Cholsäure + 3H<sub>2</sub>O. Sm. 125—130° (130—140° wasserfrei) (J. pr. [2] 19, 308; B. 6, 1186; 20, 1976). — I, 1398. C 77,0 — H 11,2 — O 4,3 — N 7,5 — M. G. 374.

1) s-Phenylheptadekylharnstoff. Sm. 99° (B. 21, 2492). — II, 378.

2) Phenylhydrazid d. Stearinsäure. Sm. 105—107° (M. 14, 37). — IV, 667.
C24H41O4N
\mathbf{C}_{24}\mathbf{H}_{42}\mathbf{ON}_{2}
                           1) 1-Oktadekylbenzol-?-Sulfonsäure. Na (B. 19, 2985). — II, 161.
C_{24}H_{42}O_3S
                           1) Lycoctonin (C. 1895 [1] 1184).
C 47,5 — H 6,9 — O 31,7 — N 13,8 — M. G. 606.
\mathbf{C}_{24}\mathbf{H}_{42}\mathbf{O}_7\mathbf{N}
\mathbf{C}_{24}\mathbf{H}_{42}\mathbf{O}_{12}\mathbf{N}_{6}
                           1) Hemiproteïdin + H<sub>2</sub>O (Bl. 23, 161). — IV, 1586.
1) s-Septdekylphenylthioharnstoff. Sm. 79° (B. 21, 2491). — II, 392.
\mathbf{C}_{24}\mathbf{H}_{42}\mathbf{N}_{2}\mathbf{S}
                            1) Tetra[Jodmethylat] d. 2,4,2',4'-Tetra[Dimethylamido]biphenyl. Sm. 205° u. Zers. (B. 30, 2943).
\mathbf{C}_{24}\mathbf{H}_{42}\mathbf{N}_{4}\mathbf{J}_{4}
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 $C_{24}H_{43}O_{10}P$ 1) Tetracetat d. Säure $C_{16}H_{35}O_{6}P$ (A. ch. [6] 23, 343). — I, 1504.

- $C_{24}H_{44}ON_{2}$ C 76,6 - H 11,7 - O 4,3 - N 7,4 - M. G. 376.
 - 1) 6-Oxy-4-Methyl-5-Aethyl-2-Heptadekyl-1, 3-Diazin. Sm. 920 (Pinner, Imidoäther 233). — IV, 833. C 78,9 — H 12,9 — O 4,4 — N 3,8 — M. G. 365. 1) Lauronoxim. Sm. 39—40° (Soc. 57, 983). 1) Chlorid d. Lignocerinsäure. Sm. 48—50° (B. 13, 1720). — I, 460.
- C24H47ON
- C24H47OCl $\mathbf{C}_{24}\mathbf{H}_{47}\mathbf{O}_{2}\mathbf{Br}$ 1) Aethylester d. α-Brombehensäure. Sm. 49-51° (G. 27 [2] 299). $C_{24}H_{47}O_3N$
 - C 72,5 H 11,8 O 12,1 N 3,5 M. G. 397.
 - 1) Oxim d. Oxybrassidinsäureäthylester. Sm. 28-29° (B. 26, 841, 1868). 2) Aethylester d. μ-Pelargonylamidododekancarbonsäure. Sm. 54° (B. **26**, 842, 1868).

C₂₄-Gruppe mit vier Elementen.

- 1) Anhydrobisdiketohydrinden-4-Chloranilid (B. 30, 3144). $C_{24}H_{14}O_2NCl$
- $C_{24}H_{14}O_3N_2S$ 1) Naphtophenanthrazinsulfonsäure. Na (B. 19, 1720). — IV, 1094.
 - 2) isom. Naphtophenanthrazinsulfonsäure (aus 1,2-Diamidonaphtalin-6-Sulfonsaure). Na (B. 21, 3485). — IV, 920.

 1) Azoresorufyl. 2 HCl (B. 17, 1858). — II, 933.

 1) Oktobromderivat d. Verb. C₂₄H₂₂O₆N₁₈ (B. 27, 943).
- C24H14O5N2Cl2
- $C_{24}H_{14}O_6Br_8N_{18}$
- 1) Nitrosotetranitrodisazobenzol-4-Chlorphenylhydrazin. Sm. 120 $\mathbf{C}_{24}\mathbf{H}_{14}\mathbf{O}_{9}\mathbf{N}_{11}\mathbf{Cl}$
- bis 122° u. Zers. (J. pr. [2] 43, 495). IV, 1373. $C_{24}H_{14}O_{10}N_2Br_2$ 1) $\alpha, 2^3$ -Lakton d. 5′, 5²-Dibrom-3′, 3²-Dinitro- α -Oxy-4′, 4²-Diacetoxyltriphenylmethan-23-Carbonsäure (Diacetat d. Dibromdinitro-
- phenolphtalein). Sm. 145° (G. 26 [1] 268).

 1) 2-Oxynaphtylazoderivat (d. 4-Amidophenyläther d. 5-Merkapto-2-Thiocarbonyl-3-Phenyl-2,3-Dihydro-1,3,4-Thiodiazol). Sm. 218° (B. C24H16ON4S3 29, 2141). — IV, 683.
- 2) p-Oxyamidotetraphentrithiazin (C. 1898 [2] 1151).
- 1) ?-Dichlor-1, 4-Benzochinondi [2-Amidozimmtsäure] (Bl. [3] 15, $\mathbf{C}_{24}\mathbf{H}_{16}\mathbf{O}_{6}\mathbf{N}_{2}\mathbf{Cl}_{2}$
- 1) Siliciumtetra[?-Nitrophenyl]. Sm. 93-105° (B. 19, 1017). - $\mathbf{C}_{24}\mathbf{H}_{16}\mathbf{O}_{8}\mathbf{N}_{4}\mathbf{Si}$ IV, 1702.
- 1) Benzoat d. 4-Oxy-1-[2-Brom-4-Methylphenyl] azonapatalin. Sm. $\mathbf{C}_{24}\mathbf{H}_{17}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{Br}$
- 150° (B. 31, 1784). IV, 1436.

 1) Diacetylverbindung d. Verb. C₂₀H₁₃O₇NS (M. 11, 425). II, 1807.

 1) 3-Chlor-2, 5-Di[Phenylamido]-1,4-Benzochinonphenylimid. Sm. $C_{24}H_{17}O_9NS$ $\mathbf{C}_{24}\mathbf{H}_{18}\mathbf{ON}_{3}\mathbf{Cl}$
 - 195° (J. pr. [2] 28, 428). III, 342. 2) 7-Chlorphenylat d. 5-Acetylamido- $\alpha\beta$ -Naphtophenazin. Zers. bei 290°. $2 + PtCl_4$ (A. 290, 263). — IV, 1207.
 - 3) 12-Chlorphenylat d. 5-Acetylamido- $\alpha\beta$ -Naphtophenazin. Zers.
 - bei 260°. $2 + \text{PtCl}_4$ (A. 290, 263). IV, 1207. 4) 12-Chlorphenylat d. 9-Acetylamido- $\alpha\beta$ -Naphtophenazin. 2 +
- PtCl₄ (B. 31, 3099). 1) 2-[1-Naphtylacetylamido]-5-[1-Naphtylamido]-1,3,4-Thiodiazol. C24H18ON4S
 - Sm. 263° (B. 23, 361). IV, 1237. 2) 2-[2-Naphtylacetylamido]-5-[2-Naphtylamido]-1,3,4-Thiodiazol.
- $\mathbf{C}_{24}\mathbf{H}_{18}\mathbf{ON}_{6}\mathbf{Br}_{2}$
- 1) 7-[4-Acetylamidochlorphenylat] d. 10-Nitro-5-Amido- $\alpha\beta$ -Naphto- $\mathbf{C}_{24}\mathbf{H}_{18}\mathbf{O}_{3}\mathbf{N}_{5}\mathbf{C}\mathbf{l}$ phenazin (B. 31, 3085).
- 1) 6-Brom-2,4-Dinitro-1,3,5-Tri[Phenylamido]benzol. Sm. 175 bis $\mathbf{C}_{24}\mathbf{H}_{18}\mathbf{O}_{4}\mathbf{N}_{5}\mathbf{Br}$ 176° (Am. 12, 294). — IV, 1125.
- 1) Di[?-Nitro-?-Phenylamidophenyl]sulfon (B. 7, 437). II, 840. $\mathbf{C}_{24}\mathbf{H}_{18}\mathbf{O}_6\mathbf{N}_4\mathbf{S}$
- Trimethyläther d. β-Trithio-3,5-Dinitro-4-Oxybenzaldehyd.
 Sm. 188° (B. 29, 158). III, 84. $C_{24}H_{18}O_{15}N_6S_3$

1) P-Brom-6-Oxy-5-Phenyl-2, 4-Dibenzyl-1, 3-Diazin. Sm. 120° (J. pr. $\mathbf{C}_{24}\mathbf{H}_{19}\mathbf{ON}_{2}\mathbf{Br}$ [2] **53**, 247). — IV, 1089. 1) Jodäthylat d. Isorosindon (B. 31, 2484). $\mathbf{C}_{24}\mathbf{H}_{19}\mathbf{ON}_{2}\mathbf{J}$ $C_{24}H_{19}ON_4Cl$ 1) 7-Chlorphenylat d. 5-Amido-9-Acetylamido-αβ-Naphtophenazin.

 $2 + PtCl_4$ (B. 30, 1567). — IV, 1296.

2) 7- Chlorphenylat d. 5-Amido-10-Acetylamido-αβ-Naphtophenazin (B. 31, 3080).
1) Jodmethylat d. 9-Oxyrosindon[5]methyläther. Zers. bei 100°

 $\mathbf{C}_{24}\mathbf{H}_{19}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{J}$ (B. 31, 308). — IV, 1059.

1) 5, 12 - Anhydrid d. 10 - Dimethylamido - $\alpha\beta$ - Naphtophenazin-C24H19O3N3S 12-Phenyloxydhydrat (B. 31, 2435). 1) P-Brom-2-Keto-1-Aethyl-3, 3, 5-Triphenyl-2, 3-Dihydropyrrol. $C_{24}H_{20}ONBr$

Sm. 142° (Soc. **57**, 705, 736). — IV, 475. 1) Diphenylarsenoxychlorid. Sm. 117° (A. **201**, 230). — IV, 1688. $C_{24}H_{20}OCl_4As_2$ $\mathbf{C}_{24}\mathbf{H}_{20}\mathbf{O}_{2}\mathbf{NBr}$ 1) ?-Brom-l-Acetyl-2-Keto-3, 3-Di[?-Methylphenyl]-2, 3-Dihydroindol (Acetylbromtoluisatin). Sm. 156° (B. 18, 1618).

1) Di[5-Acetylamido-1-Naphtyl]disulfid. Sm. 274° (B. 23, 1123).

 $C_{24}H_{20}O_{2}N_{2}S_{2}$

II, 869. 2) Di[5-Acetylamido-2-Naphtyl]disulfid. Sm. 276° u. Zers. (B. 24, 335). **— II**, 889.

1) Diphenylmonamid d. Phosphorsäurediphenylester. Sm. 180° (B. $C_{24}H_{20}O_3NP$ 28, 614).

1) 4,4'-Di[Phenylsulfonamido]biphenyl. Sm. 232° (A. 272, 231). — $\mathbf{C}_{24}\mathbf{H}_{20}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{S}_{2}$ IV, 966.

2) Phenylamid d. Biphenyl-2,2'-Disulfonsäure. Sm. 157° (A. 261, 330). — II, 226.

 $\mathbf{C}_{24}\mathbf{H}_{20}\mathbf{O}_{4}\mathbf{Br}_{2}\mathbf{S}_{4}$ 1) Bromid d. Phenylester d. Benzolthionsulfonsäure. Fl. (A. 145, 319; **149**, 110). — **II**, 818.

1) Diäthyläther d. Di[?-Nitro-2-Oxynaphtyl]-?-Sulfid. Sm. 2350 $\mathbf{C}_{24}\mathbf{H}_{20}\mathbf{O}_{6}\mathbf{N}_{2}\mathbf{S}$ (B. **23**, 3362). — **II**, 986. 2) Diäthyläther d. isom. Di[?-Nitro-2-Oxynaphtyl]-?-Sulfid. Sm.

202° (B. 23, 3363). — II, 986.

1) Diphenyldiamid d. Diphenylsulfondisulfonsäure. Sm. 212° (B. 19, 3127). — II, 815.

1) Aethyläther d. Naphtalin-2, 6-Disulfonsäuredisazophenol. Na₂ C,4H,00,N,S,

 $C_{24}H_{20}O_8N_4S_2$ (Diamingoldgelb) (B. 27, 3358). - IV, 1418.

C₂₄H₂₀N₂Cl₂Hg₂ 1) Chlorid d. Quecksilberammoniumbase C₂₄H₂₂O₂N₂Hg₂. Zers. oberh. 240° (G. 28 [2] 131). — IV, 1707. 1) Diphenyläther d. 4,4-Dichlor-5,5-Dioxy-2-Keto-3,3-Dimethyl-

 $\mathbf{C}_{24}\mathbf{H}_{21}\mathbf{O}_{8}\mathbf{NCl}_{2}$ 1-Phenyltetrahydropyrrol (uns-Dimethyldichlorsuccinanildiphenyl-Sm. $156-157^{\circ}$. + C_6H_6 (A. 295, 71). CoaHoONS

1) Phenylamid d. 1-Phenylamidobenzol-2, 4-Disulfonsäure. 221—222° (B. **24**, 3807). — II, 576.

 $C_{24}H_{21}O_6N_3S_3$ 1) Triphenylamid d. Benzoltrisulfonsäure. Sm. 237° (Am. 9, 346). - II, 425.

 $C_{24}H_{21}O_9N_3S_3$ 1) Trimethyläther d. β -Trithio-3-Nitro-4-Oxybenzaldehyd. Sm. 108° (B. 29, 158). — III, 84.

1) Di[Phenylamid]-Diphenylmonamid d. Phosphorsäure. Sm. 232° $\mathbf{C}_{\mathbf{M}}\mathbf{H}_{\mathbf{M}}\mathbf{O}\mathbf{N}_{\mathbf{M}}\mathbf{P}$ (B. 28, 615).

 $\mathbf{C}_{24}\mathbf{H}_{22}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{Br}_{2}$ 1) Lakton d. α -Oxy- α' -[Dibromtetramethyldiamidodiphenyl]- α^2 -Phenylmethan-a²2-Carbonsäure. HCl, 2HCl, (2HCl, PtCl₄) (B. 10, 1623). — II, 1723.

 $\mathbf{C}_{24}\ddot{\mathbf{H}}_{22}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{H}\mathbf{g}_{2}$ 1) Quecksilberdi[4-Phenylamidophenyl] quecksilberdiammoniumhydrat. Zers. oberh. 200°. Chlorid, Acetat (G. 28 [2] 130). —

IV, 1707. $\mathbf{C}_{24}\mathbf{H}_{22}\mathbf{O}_{2}\mathbf{N}_{4}\mathbf{S}_{2}$ 1) $\alpha \alpha$ -Phtalyldi[β -Benzylthioharnstoff]. Sm. 163° (Soc. 67, 574). 2) $\alpha \alpha$ -Phtalyldi β -Methyl- β -Phenylthioharnstoff]. Sm. 188—1890

(Soc. 67, 574). 3) $\alpha \alpha$ -Phtalyldi[β -2-Methylphenylthioharnstoff]. Sm. 177—178°

(Soc. 67, 574). 1) Phenyl-?-[4-Dimethylamidophenyl]amido-?-Oxynaphtylsulfon.

C24H22O3N2S HCl (B. 28, 1317). — IV, 587. C24H22O5N2S 1) Phenylamid d. 2-Oxynaphtalinäthyläther-1, 6-Disulfonsäure.

Sm. 127° (C. 1895 [1] 1064).

- C₂₄H₂₂O₂Cl₃Br₁₁ 1) Hexamethyläther d. Trichlorxanthogallol. Sm. 86° (A. 245, 337). - II, 1014.
- 1) 9-Chlor-3-Dimethylamido-10-Keto-9-[4-Dimethylamidophenyl]-C24H23ON2Cl 9,10-Dihydroanthracen. 2 + ZnCl₃ (C. 1897 [2] 591). 1) Benzoat d. Verb. C₁₇H₁₉ONBr₂. Sm. 156—158° (B. 28, 2911).
- $\mathbf{C}_{24}\mathbf{H}_{23}\mathbf{O}_{2}\mathbf{NBr}_{2}$ $\mathbf{C}_{24}\mathbf{H}_{23}\mathbf{N}_{3}\mathbf{ClP}$ 1) Phenyltri[Phenylamido]phosphoniumchlorid. Sm. 250°. 2+PtCl₄ (B. 28, 2216). — IV, 1661.
- 1) Phenyltri Phenylamido phosphoniumbromid. Sm. 235° (B. 28, $\mathbf{C}_{24}\mathbf{H}_{23}\mathbf{N}_{3}\mathbf{BrP}$
- 2217). IV, 1661. $\mathbf{C}_{24}\mathbf{H}_{23}\mathbf{N}_{3}\mathbf{JP}$ 1) Phenyltri[Phenylamido]phosphoniumjodid. Sm. 165° (B. 28, 2217). **— IV**, *1661*.
- 1) Phenylurethan d. Verb. C₁₇H₁₉ONBr₂. Sm. 186—189° (B. 28, 2912). $\mathbf{C}_{24}\mathbf{H}_{24}\mathbf{ON}_{2}\mathbf{Br}_{2}$
- Phenyltri [Phenylamido] phosphoniumoxydhydrat. Sm. 216°. Salze, siehe diese (B. 28, 2217). IV, 1661.
 Tri [?-Acetylamidophenyl]arsin. Sm. 230° (B. 19, 1035). IV, 1689. $\mathbf{C}_{24}\mathbf{H}_{24}\mathbf{ON}_{3}\mathbf{P}$
- $\mathbf{C}_{24}\mathbf{H}_{24}\mathbf{O}_3\mathbf{N}_3\mathbf{A}\mathbf{s}$ 1) Tri[4-Acetylamidophenyl] phosphinoxyd + H_2O . Sm. 186—187° $\mathbf{C}_{24}\mathbf{H}_{24}\mathbf{O}_{4}\mathbf{N}_{3}\mathbf{P}$
- wasserfrei (A. **229**, 330). IV, 1660. 1) Di[4,5-Dibrom-3-Keto-1,5-Dimethyl-2-Phenyltetrahydropyra- $\mathbf{C}_{24}\mathbf{H}_{24}\mathbf{O}_{4}\mathbf{N}_{4}\mathbf{Br}_{4}$ zolyl-4-]essigsäure. Sm. 149 — 151° u. Zers. (A. 255, 244). -
- IV, 1266. 1) Phosphat d. anti-Methylbenzhydroxamsäure. $\mathbf{C}_{24}\mathbf{H}_{24}\mathbf{O}_7\mathbf{N}_3\mathbf{P}$
- 29, 1155). 2) Phenylamid d. Phosphorsäuretri [Oxyessigsäure]. Sm. 1960 (B.
- **279**, 57). $\mathbf{C}_{24}\mathbf{H}_{24}\mathbf{N}_4\mathbf{Cl}_3\mathbf{P}$ 1) Chlorphostetraanilid (Am. 19, 357).
- 1) Phenyldi [1, 2, 3, 4-Tetrahydro-1-Chinolyl]phosphinoxyd. Sm. 2160 $\mathbf{C}_{24}\mathbf{H}_{25}\mathbf{ON}_{2}\mathbf{P}$ (B. 31, 1045). — IV, 1682. 1) Verbindung (aus d. Tri[Phenylamid] d. Phosphorsäure u. Amido-
- $\mathbf{C}_{24}\mathbf{H}_{25}\mathbf{ON}_4\mathbf{P}$ benzol). Sm. 180° (B. 29, 722).
- 1) Jodmethylat d. Corycavin $+ \frac{1^{1}}{2} H_{2}O$. Zers. bei 218° (A. 277, 17). $\mathbf{C}_{24}\mathbf{H}_{26}\mathbf{O}_{6}\mathbf{N}\mathbf{J}$ **- III**, 877.
 - 2) Jodallylat d. Hydrastin. Sm. 1930 (B. 23, 2910). II, 2051. 1) Methylchlorid d. Dimethyldihydroamarin. Sm. 168°. 2 + PtCl.
- $\mathbf{C}_{24}\mathbf{H}_{27}\mathbf{ON}_{2}\mathbf{Cl}$ $+ \text{ H}_2\text{O }(B. 15, 2328). - \text{III}, 25.$ 1) Strychninchloraceton. $2 + \text{PtCl}_4 + 2\text{ H}_2\text{O}, \text{ HSO}_4 + 1^{1}/_2\text{ H}_2\text{O}$ (J. $\mathbf{C}_{24}\mathbf{H}_{27}\mathbf{O}_{3}\mathbf{N}_{2}\mathbf{C}\mathbf{I}$
- 1874, 875). III, 939. 1) Triäthyläther d. Tri[4-Oxyphenyl]antimondichlorid. Sm. 84° $\mathbf{C}_{24}\mathbf{H}_{27}\mathbf{O}_{3}\mathbf{Cl}_{2}\mathbf{Sb}$
- (B. 30, 2842). IV, 1696. 1) Triäthyläther d. Tri[4-Oxyphenyl]antimondibromid, Sm. 110 $\mathbf{C}_{24}\mathbf{H}_{27}\mathbf{O}_{3}\mathbf{Br}_{2}\mathbf{Sb}$ bis 111° (B. 30, 2842). — IV, 1696.
- 1) Triäthyläther d. Tri[4-Oxyphenyl]antimondijodid. Sm. 121 bis $\mathbf{C}_{24}\mathbf{H}_{27}\mathbf{O}_3\mathbf{J}_2\mathbf{S}\mathbf{b}$ 122° (B. 30, 2842). — IV, 1696.
- 1) s-d-Cocainphenylthioharnstoff. Sm. 190-1930 (B. 27, 1885). - $\mathbf{C}_{24}\mathbf{H}_{27}\mathbf{O}_4\mathbf{N}_3\mathbf{S}$ III, 868.
- 1) P-Brom α -Oxy 4', 4^2 , 4^3 -Pentamethyltriamidotriphenylmethan. C24H28ON3Br 3 HBr (B. 10, 1845; 11, 698). — II, 1088.
- 1) Aethyläther d. 3,4-Di[Aethylphenylsulfonamido]-l-Oxybenzol. $\mathbf{C}_{24}\mathbf{H}_{28}\mathbf{O_3N_2S}$ Sm. 121°. — II, 723.
- Chloräthylat d. Narkotin. 2 + PtCl₄ (A. 247, 173). III, 915.
 Chloräthylat d. Isonarkotin. 2 + PtCl₄ (B. 30, 1746). $\mathbf{C}_{24}\mathbf{H}_{28}\mathbf{O}_7\mathbf{NCl}$
 - 1) Jodäthylat d. Narkotin. Fl. (Soc. 29, 167; A. 247, 173). -
- $\mathbf{C}_{24}\mathbf{H}_{28}\mathbf{O}_7\mathbf{NJ}$
 - 2) Jodäthylat d. Isonarkotin. Sm. 1830 (B. 30, 1746).
- 1) Chlormethylat d. Brucin $+ 5 H_2O$. $2 + PtCl_4$, $+ AuCl_8$ (J. 1859, $\mathbf{C}_{24}\mathbf{H}_{29}\mathbf{O}_4\mathbf{N}_2\mathbf{C}\mathbf{1}$ 398). — III, 946.
 - 2) α -Chlormethylat d. Concusconin. $(2 + PtCl_4 + 4H_2O)$ (A. 225, 240). — III, *929*.
 - 3) β -Chlormethylat d. Concusconin (2 + PtCl₄ + 5H₂0) (A. 225, 242). — III, *929*.
- 1) Brommethylat d. Brucin $+ 2^{1}/_{2}H_{2}O$ (J. 1859, 398). III, 946. $\mathbf{C}_{24}\mathbf{H}_{29}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{Br}$
- 1) α -Jodmethylat d. Brucin. Sm. 290° u. Zers. $+8\,\mathrm{H}_2\mathrm{O}, +\mathrm{J}_2$ (J. 1859, 398; B. 14, 772; 17, 2267; 18, 779; J. pr. [2] 3, 162). $\mathbf{C}_{24}\mathbf{H}_{29}\mathbf{O}_4\mathbf{N}_2\mathbf{J}$ III, *946*.

 $\mathbf{C}_{24}\mathbf{H}_{40}\mathbf{ON}_{2}\mathbf{S}$

- 2) β -Jodmethylat d. Brucin. Sm. 260° u. Zers. (M. 15, 116). C24H29O4N2J III, 946. 3) α -Jodmethylat d. Concusconin (A. 225, 239). — III, 929. 4) β -Jodmethylat d. Concusconin (A. 225, 242). — III, 929. 1) Jodmethylat d. Narceinimid. Sm. 244-245° (A. 286, 252). -C24H29O6N2J 1) Orthophosphorsäureäthyltriphenylamid. Sm. 149° (B. 26, 574). CaHaONaP - II, 357. 2) Tri[4-Dimethylamidophenyl]phosphinoxyd. Sm. 149-1520 (A. 229, 333). — IV, 1660. 1) αβ-Di[α-Bromisovalerylphenylamido]äthan. Sm. 147° (B. 31, 3246). C₂₄H₈₀O₂N₂Br₂ 2) $\alpha \beta$ -Di[α -Brombutyryl-2-Methylphenylamido] äthan. Sm. 190° (B. 25, 3260). — II, 463. 3) $\alpha \beta$ -Di[α -Brombutyryl-4-Methylphenylamido] äthan. -Sm. 125° (B. 25, 3262). — II, 493. 4) αβ-Di[α-Bromisobutyryl-2-Methylphenylamido]äthan. Sm. 172 bis 173° (B. 25, 3260). — II, 463. 5) αβ-Di[α-Bromisobutyryl-4-Methylphenylamido]äthan. Sm. 175° (B. **25**, 3262). — II, 494. 1) 4-Methoxylbenzaldehyd-2, 4-Dimethylphenylthionaminsaures-C24H30O4N9S 4-Amido-1,3-Dimethylbenzol. Sm. 111° (A. 274, 235). — III, 82. 1) Hexamethyltriamidophenylsulfhydroxyd $+ 7 H_2 O$. $\mathbf{C}_{24}\mathbf{H}_{81}\mathbf{ON}_{3}\mathbf{S}$ Sm. 80-90° (200° wasserfrei). Salze siehe (B. 24, 758). — II, 805. 1) Tri[4-Dimethylamidophenyl]silicol. Sm. 188-189° (C. 1896) C24H81ON8Si [1] 843). 1) Methylester d. Chlormethyl-Methylisostrychninsäure + 2 H₂() (A. 264, 80). — III, 943. $\mathbf{C}_{24}\mathbf{H}_{31}\mathbf{O}_{3}\mathbf{N}_{2}\mathbf{C}\mathbf{1}$ 1) Methylester d. Jodmethyl-Methylstrychninsäure (A. 264, 60). $\mathbf{C}_{24}\mathbf{H}_{31}\mathbf{O}_{3}\mathbf{N}_{2}\mathbf{J}$ **– III**, 942. 2) Methylester d. Jodmethyl-Methylisostrychninsäure + 2 H₂O (A. **264**, 78). — III, 943. 1) Jodmethylat d. Gelseminin (oder C₂₃H₂₉O₃N₂J). Sm. 285° u. Zers. $\mathbf{C}_{24}\mathbf{H}_{81}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{J}$ (B. **26**, 1058). — **III**, 884. 2) Jodmethylat d. Vellosin. Sm. 264° (A. 282, 255). — III, 923.
 1) Jodmethylat d. Brucinsäure + H₂O. Sm. 218° u. Zers. (A. 304, 41). $C_{24}H_{81}O_5N_2J$ 1) Jodmethylat d. Methylcorydalin. Sm. 195-1960 (A. 277, 9). $\mathbf{C}_{24}\mathbf{H}_{32}\mathbf{O}_{4}\mathbf{N}\mathbf{J}$ III, 876. 2) Jodäthylat d. Corydalin (A. 137, 283). — III, 876. 3) Jodathylat d. Butyrylcodein + ½ H₂O (Soc. 28, 321). — III, 905. 1) Verbindung (aus Sinalbin). Hg (B. 30, 2328). $C_{24}H_{92}O_{10}N_2S_2$ $\mathbf{C}_{24}\mathbf{H}_{38}\mathbf{ON}_{2}\mathbf{J}$ 1) Jodmethylat d. Diäthylidencinchonin. Sm. oberh. 105° (A. 269, 290). — III, -834. Sm. 140° (M. 2, 611; 15, 49). — $\mathbf{C}_{24}\mathbf{H}_{84}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{J}_{2}$ 1) Di [Jodäthylat] d. Chinin. III, 814. 2) Di[Jodäthylat] d. Conchinin + H₂O. Sm. 205° u. Zers.; + 3H₂O (Sm. 134°) (A. **269**, 236; M. **15**, 51). — III, 825. $C_{24}H_{84}O_3N_2J_2$ 1) Di [Jodäthylat] d. Cinchotenin. Zers. bei 1540 (M. 15, 792). -III, 841. $\mathbf{C}_{24}\mathbf{H}_{34}\mathbf{N}_{2}\mathbf{JP}$ 1) Benzyl-4-Methylphenyldi[1-Piperidyl]phosphoniumjodid. Sm.
 - 3) α-Palmitylimido-α-Methylphenylamido-α-Merkaptomethan (Palmitylpscudomethylphenylthioharnstoff). Sm. 59-60° (Soc. 69, 1597).

1) s-Palmityl-2-Methylphenylthioharnstoff. Sm. 65,5-66,5° (Soc.

2) s-Palmityl-4-Methylphenylthioharnstoff. Sm. 75-760 (Soc. 69,

 $C_{24}H_{52}O_6N_6Fe$ 1) Imidoferrocyanwasserstoffpropyläther. 2HCl (B. 21, 934). — I, 1489.

C₂₄-Gruppe mit fünf Elementen.

125° (B. 31, 1046). — IV, 1682.

69, 1596).

C₂₅-Gruppe mit einem Element.

C 93.8 - H 6.2 - M. G. 320.C25H20

- 1) Tetraphenylmethan. Sm. 267,5° (272°) (B. 30, 2045; C. 1898 [2]
- 2) Di[?-Biphenyl] methan. Sm. 162°; Sd. 360° (B. 7, 1188; A. ch. [6] 19, 254). — II, 300.

 $\mathbf{C}_{25}\mathbf{H}_{22}$ C 93.2 - H 6.8 - M. G. 322.

- 1) Triphenylmethan + Benzol. Sm. 76° (A. 235, 209; B. 5, 907). -
- 2) Kohlenwasserstoff (aus α-Dypnopinakolin). Sm. 95,5° (B. 25 [2] 427). **- II**, 299.

C 92,6 — H 7,4 — M. G. 324.

1) Kohlenwasserstoff (aus α-Dypnopinakolin). Sm. 145° (B. 25 [2] 427).

C 91,5 -- H 8,5 — M. G. 328. $C_{25}H_{28}$

C25 H24

 $C_{25}H_{44}$

C25 H52

 $C_{25}H_{16}O_{9}$

- 1) Tri[2,5-Dimethylphenyl] methan. Sm. 188° (J. pr. [2] 35, 484).
- 2) 1',3',12-Trimethyl-42-Isopropyltriphenylmethan? Sd. oberh. 360° (J. pr. [2] 35, 498). - II, 291.
- 3) Kohlenwasserstoff (aus Paraldehyd). Sd. 350-360° (B. 7, 1194). -II, 291.

C 87,2 - H 12,8 - M. G. 344.

- 1) 2-Hexadekyl-1,3,5-Trimethylbenzol. Sm. bei 40°; Sd. 258-258,5°₁₅ (154-155°₀) (B. 21, 3184; 29, 1326). II, 40. C 85,2 H 14,8 M. G. 352.
- 1) Pentakosan. Sm. 53,5—54° (C. 1896 [1] 642).

C₂₅-Gruppe mit zwei Elementen.

- $C_{25}H_{14}O_5$ C 76,1 — H 3,6 — O 20,3 — M. G. 394.
 - 1) Verbindung (aus 2,3-Dichlor-1-Ketoinden u. Natriummalonsäurediäthylester). Sm. 194° (A. 247, 151). III, 168.
 C 72,8 H 3,9 O 23,3 M. G. 412.
 1) Diacetat d. Benzoïngelb. Sm. 237° (B. 31, 2976).
 C 65,2 H 3,5 O 31,3 M. G. 460.
- $C_{25}H_{16}O_{6}$
 - 1) Diacetylfluoresceïncarbonsäure (B. 11, 1342). II, 2089.
- C 87,2 -- H 4,6 N 8,1 M. G. 344. $\mathbf{C}_{25}\mathbf{H}_{16}\mathbf{N}_{2}$
 - Chrysotoluazin. Sm. 176° (B. 20, 2443; 23, 2438). IV, 1094.
 C 89,8 H 5,4 O 4,8 M. G. 334.
- $\mathbf{C}_{25}\mathbf{H}_{18}\mathbf{O}$ 1) 4,4'-Dibiphenylketon (4,4'-Diphenylbenzophenon). Sm. 229° (226°) (B. 7, 1189; A. ch. [6] 15, 258). — III, 264. C 85,7 — H 5,1 — O 9,1 — M. G. 350.
- $C_{25}H_{18}O_2$ 1) 9,9 - Di[? - Oxyphenyl] fluoren. Sm. oberh. 300° (A. 247, 285). —
- п, 1008. С 82,0 H 4,9 О 13,1 М. G. 366. $\mathbf{C}_{25}\mathbf{H}_{18}\mathbf{O}_{8}$
 - 1) α, 2-Lakton d. α-Oxy-α-Phenyl-α-[2-Oxy-1-Naphtyl]essigbenzyläthersäure. Sm. 1810 (B. 31, 2825).
- C 75,4 H 4,5 O 20,1 M. G. 398. $C_{25}H_{18}O_5$
 - 1) Anhydroverb. d. $\delta\delta$ -Di[3-Oxy-1,4-Naphtochinonyl-2-]- β -Methylbutan. Sm. oberh. 200° u. Zers. (Soc. 65, 84). — III, 464. C 69.8 - H 4.2 - O 26.0 - M. G. 430.
- C25 H18 O7
- C 56,5 H 4,2 O 26,6 M. G. 430.

 1) Triacetat d. Verb. C₁₉H₁₂O₄ (B. 26, 1143). II, 1044.

 C 67,3 H 4,0 O 28,7 M. G. 446.

 1) Triacetat d. Verb. C₁₉H₁₂O₅. Sm. 177° (B. 26, 1145). II, 1044.

 C 86,7 H 5,2 N 8,1 M. G. 346.

 1) Methylencarbazol. Sm. noch nicht bei 280° (B. 25, 2766). IV, 393.

 2) 3-Phenylamido-5-Phenylakridin. Sm. 196-197° (B. 24, 2045). IV, 1072 $\mathbf{C}_{25}\mathbf{H}_{18}\mathbf{O}_{8}$ $\mathbf{C_{25}H_{18}N_2}$

 - IV, 1072.

 $\mathbf{C}_{25}\mathbf{H}_{20}\mathbf{O}_2$

 $\mathbf{C}_{25}\mathbf{H}_{20}\mathbf{O}_{9}$

C25 H18 N4 C 80,2 - H 4,8 - N 15,0 - M. G. 374

1) Methylphenylfluorindin. HCl, (2HCl, PtCl₄) (B. 28, 1545; 29, 1247).

 $C_{25}H_{18}N_6$

— IV, 1302. C 74,6 — H 4,5 — N 20,9 — M. G. 402. 1) Phenylhydrazon d. Leukonditoluylenchinoxalin (B. 19, 777). —

C25H19N3 C 83.1 - H 5.3 - N 11.6 - M. G. 361.

1) Phenyl-4-Methylphenylindulin. Sm. 227-228° (A. 286, 194).

C 89,3 -- H 5,9 -- O 4,8 -- M. G. 336. C₂₅H₂₀O 1) α-Oxydi[?-Biphenyl] methan. Sm. 151° (B. 7, 1189; Bl. 47, 688). —

II, 1095. 2) Phenyläther d. α-Oxytriphenylmethan. Sm. 95° (C. 1896 [1] 416).

C 85,2 - H 5,7 - O 9,1 - M. G. 3521) 2-[4-Methylphenyl]-4-[4-Methylbenzoyl] methylen-1, 4-Cumaran (Di-

methylphenacylidenflaven). Sm. 145° (B. 31, 713). 2) Benzoat d. α-Phenyl-α-[2-Oxynaphtyl]äthan. Sm. 138° (B. 24, 3900). **- II**, 1149.

 $\mathbf{C}_{25}\mathbf{H}_{20}\mathbf{O}_4$ C 78,1 - H 5,2 - O 16,6 - M. G. 384.

1) Diacetat d. Di[2-Oxynaphtyl]methan. Sm. 211 ° (214°) (B. 25, 3214, 3480; **26**, 84). — II, 1006. 2) **1-Methyl-3,4-Phenylenester d.** β-Phenylakrylsäure. Sm. 145° (B.

25, 3533). — II, 1406. C 75,0 — H 5,0 — O 20,0 — M. G. 400.

 $C_{25}H_{20}O_5$

1) α -Benzoat- β -Aethyläther d. $\alpha\beta$ -Dioxy- $\gamma\delta$ -Diketo- $\alpha\delta$ -Diphenyl- α -Buten. Sm. 147° (B. 27, 713). — III, 317

2) Aethylester d. Tribenzoylessigsäure. Sm. 98° (A. 282, 158). — II, 1989. C 72,1 — H 4,8 — O 23,1 — M. G. 416.

C25H20O6

1) Dicotoïn. Sm. 73-74° (77°) (A. 199, 29; 282, 195; B. 27, 1185; 28, 1553). - III, 202.

2) $\alpha \varepsilon$ -Diketo- $\alpha \gamma \varepsilon$ -Triphenylpentan- $\beta \delta$ -Dicarbonsäure (Benzaldibenzoylessigsäure). Sm. 130° (B. 18, 2374; A. 281, 55). — II, 2038.

C25H2007

C 69,4 — H 4,6 — O 25,9 — M. G. 432. 1) Pseudodicotoin. Sm. 74—76° (A. 282, 199; B. 27, 1185).

C 64.6 - H 4.3 - O 31.0 - M. G. 464.

1) Tetracetat d. 3,4,5-Trioxyphenyl-4-Oxy-1-Naphtylketon. Sm. 129° (A. 269, 314). — III, 256. C 58,6 — H 3,9 — O 37,5 — M. G. 512. 1) Pentaacetat d. Quercetin. Sm. 189—191° (M. 5, 88; 6, 890; A. 196, 319; B. 17, 1682; Soc. 67, 31). — III, 605. 2) Pentaacetat d. Farbstoffs C₁₅H₁₀O₇. Sm. 188—190° (C. 1898 [1] 1306). $\mathbf{C}_{25}\mathbf{H}_{20}\mathbf{O}_{12}$

 $\mathbf{C}_{25}\mathbf{H}_{20}\mathbf{N}_2$ C 86,2 - H 5,7 - N 8,0 - M. G. 348.1) 4-[α -Phenylhydrazonbenzyl] biphenyl. Sm. 144° (M. 12, 508). —

IV, 778. 2) α-Phenylazotriphenylmethan. Sm. 111 ° (B. 30, 2045; C. 1898 [2]

1131). - IV, 1404. 3) Dimethylrosindol. Sm. bei 270°. HCl (B. 20, 815). — IV, 1091.

 $C_{25}H_{20}N_4$ C 79.8 - H 5.3 - N 14.9 - M. G. 376.

1) 4-Phenylformazylbenzol (Formazyldiphenyl). Sm. 174° (B. 31, 480; A. 300, 253). — IV, 1403.

2) 4-Methylphenylamidoaposafranin. Sm. 219—220°. HCl (B. 28, 1716; 29, 365). — IV, 1280. C 74,2 — H 4,9 — N 20,8 — M. G. 404.

 $C_{25}H_{20}N_6$

Verbindung (aus 4-Amidoazobenzol u. Orthoameisenäther). Sm. 191 bis 193° (J. pr. [2] 53, 476). — IV, 1357.
 Diphenyläther d. αα-Dimerkaptodiphenylmethan. Sm. 139° (B. 18, 2002).

 $\mathbf{C}_{25}\mathbf{H}_{20}\mathbf{S}_{2}$ 888). — III, 180. C 89,6 — H 6,2 — N 4,2 — M. G. 335. $\mathbf{C}_{25}\mathbf{H}_{21}\mathbf{N}$

1) α-Phenylamidotriphenylmethan. Sm. 146° (144,5°) (B. 17, 703, 746). **— II**, 642.

 $\mathbf{C}_{25}\mathbf{H}_{21}\mathbf{N}_{3}$ C 82,6 - H 5,8 - N 11,6 - M. G. 363.

1) Tetraphenylguanidin. Sm. 130-131°. HCl + 5H₂O, (2HCl, PtCl₄), HNO_8 (B. 7, 843). — II, 351.

- C25H22O C 88,8 — H 6,5 — O 4,7 — M. G. 338.
 - 1) 4-Keto-6-Methyl-1, 2, 3-Triphenyl-1, 2, 3, 4-Tetrahydrobenzol? Sm. 140° (M. 19, 418).
- C25H22O4 C 77,7 - H 5,7 - O 16,6 - M. G. 386.
 - 1) **M**ethylrosol + H_2O (*M*. 16, 396).
 - 2) Acetat d. αε-Diketo-γ-[2-Oxyphenyl]-αε-Diphenylpentan. Sm. 83 bis
 - 84° (B. 29, 243). III, 307. 3) Diacetat d. 9,10-Dioxy-10-Benzyl-9,10-Dihydroanthracen. Sm. 126° (Bl. [3] **6**, 92). — III, 245. C 74,6 — H 5,5 — O 19,9 — M. G. 402.
- $C_{25}H_{22}O_5$
 - 1) Dibenzoat d. Isobutyl-2, 5-Dioxyphenylketon. Sm. 1050 (B. 24, 1345). - III, 153.
- C 71.8 H 5.3 O 22.9 M. G. 418. $\mathbf{C}_{25}\mathbf{H}_{22}\mathbf{O}_{6}$
 - 1) Triacetat d. s-Trioxytriphenylmethan. Sm. 138-139° (A. 202, 197 B. 11, 1117; M. 15, 80). — II, 1028.
 - 2) Aethylester d. meso- $\alpha\beta$ -Dibenzoxyl- β -Phenylpropionsäure. Sm. 85° (B. 30, 1605).
 - 3) Aethylester d. isom. $\alpha\beta$ -Dibenzoxyl- β -Phenylpropionsäure. Sm. 109° (B. 11, 1221; 12, 539; 16, 1288). — 11, 1761. C 69,1 — H 5,1 — O 25,8 — M. G. 434.
- $\mathbf{C}_{25}\mathbf{H}_{22}\mathbf{O}_{7}$ 1) 4-Triacetat d. α-Oxytri[4-Oxyphenyl]methan (Triacetat d. Aurin). Sm. 171—172° (B. 11, 1122; M. 15, 74; 17, 191; A. 196, 84; 202, 191).
 - II, 1120. 2) isom. Triacetat d. Aurin. Sm. 145—147° (M. 17, 194).
 - 3) Tribenzoat d. Erythrit. Sm. 108-110° (A. 301, 102).
 - 4) Verbindung (aus Leukorosol) (M. 16, 390).
- $\mathbf{C}_{25}\mathbf{H}_{22}\mathbf{O}_{10}$ C 62,2 — H 4,6 — O 33,2 — M. G. 482. 1) **Huminsubstanz** (aus Lävulose) (C. 1895 [2] 593). C 54,9 — H 4,0 — O 41,0 — M. G. 546. $C_{25}H_{22}O_{14}$
 - 1) Pentacetylquercinsäure (A. 238, 369). III, 589.
- C.85,7 H.6,3 N.8,0 M.G.350. $\mathbf{C}_{25}\mathbf{H}_{22}\mathbf{N}_2$ α-Phenylhydrazidotriphenylmethan. Sm. bei 135° (B. 30, 2044). IV, 1044.
 - 2) 2, 4-Di[Cinnamylidenamido]-1-Methylbenzol (A. 239, 384; 253, 332). - IV, 607.
 - 3) 4,5-Dicinnamyl-2-Phenyl-4,5-Dihydroimidazol (Benzenyldicinnylen-
 - diamin). Sm. 207°. (2HČl, PtCl₄ + 2H₂O) (Soc. 49, 469). III, 286. 4) α -Phenyl- α α -Di[3-Methyl-2-Indolyl]methan (Benzylidendiskatol). Sm. $140-142^{\circ}$ (A. 239, 241). — IV, 222.
 - 5) α -Phenyl- $\alpha \alpha$ -Di[1-Methyl-3-Indolyl] methan. Sm. 197° (A. 242, 377; B. 19, 2988). — IV, 219, 1088.
 - 6) α -Phenyl- $\alpha\alpha$ -Di[2-Methyl-3-Indolyl]methan. Sm. 246—247° (A. 242,
 - 373). IV, 1089. 7) 1-Aethyl-2, 3-Diphenyl-1, 2-Dihydro-α-Naphtimidazol. Sm. 108° (B. **26**, 191). — IV, 920.
 - 8) 1-Benzyl-3-[4-Methylphenyl]-1,2-Dihydro-α-Naphtimidazol. Sm. 125° (B. **27**, 2779). — **IV**, 918.
- 1) ?-Triphenylmethyl-2-Aethylthiophen. Sm. 111 (B. 29, 1403). -C25H22S
- C 82,2 H 6,3 N 11,5 M. G. 365. $C_{25}H_{23}N_3$ 1) α -[3-Amidophenyl]- $\alpha \alpha$ -Di[2-Methyl-3-Indolyl]methan (A. 242, 375).
- · IV, 1089. C 84,3 - H 6,7 - O 9,0 - M. G. 356. $C_{25}H_{24}O_{2}$ 1) $\alpha \varepsilon$ -Diketo- γ -Phenyl- $\alpha \varepsilon$ -Di[4-Methylphenyl]pentan (Benzaldi-Methyl
 - p-Tolylketon). Sm. 115-116° (B. 29, 2247).

 2) Lakton d. Dimethylamarsäure. Sm. 137° (J. 1877, 814). II, 1725. C 80,6 H 6,4 O 12,9 M. G. 372.
- $\mathbf{C}_{25}\mathbf{H}_{24}\mathbf{O}_3$ 1) $\alpha \varepsilon$ -Diketo- γ -[2-Oxyphenyl]- $\alpha \varepsilon$ -Di[4-Methylphenyl]pentan. Sm. 131 bis 132° (B. 29, 243). — III, 308.
 - 2) Aethyläther d. $\alpha\varepsilon$ -Diketo- γ -[2-Oxyphenyl]- $\alpha\varepsilon$ -Diphenylpentan. Sm. 95° (B. 29, 1490 Anm.). III, 307.
 - 3) Verbindung (aus Benzylchlorid). Sd. 310-320° (Soc. 37, 722). II, 46. C 77,3 - H 6,2 - 0 16,5 - M. G. 388.
- C25H24O4 1) Methylleukorosol (M. 16, 397).

2) Diäthylätherdi [2-Naphtyläther] d. Tetraoxymethan (Orthokohlensäurediäthyl-2-Dinaphtyläther). Sd. 298—301° (B. 13, 701). — II, 878.
3) Diacetat d. P-Dioxy-P-Dimethyltriphenylmethan. Sm. 94° (A. 257, $C_{25}H_{24}O_4$

71). — II, *1004*.

4) Benzoat d. Ostruthin. Sm. 93°. — III, 639. C 71,4 — H 5,7 — O 22,9 — M. G. 420. C25H24O6

1) Benzoat d. Peruresinotannol (B. 27 [2] 312). C 68,8 - H 5,5 - O 25,7 - M. G. 436. $C_{25}H_{24}O_7$

 $C_{25}H_{24}O_{8}$

C 68,8 = H 5,0 = O 25,7 = M. G. 430.

1) Verbindung (aus Methylrosol) (M. 16, 398).
C 66,4 = H 5,3 = O 28,3 = M. G. 452.

1) Diacetat d. Curcumin. Sm. 170=171° (B. 30, 193).
C 60,0 = H 4,8 = O 35,2 = M. G. 500.

1) Diacetat d. Katechin. Sm. 129=131° (B. 13, 695). = III, 686.
C 58,1 = H 4,6 = O 37,2 = M. G. 516.

1) Pentaacetylvitexin. Sm. 251=256° (Soc. 73, 1022). $\mathbf{C}_{25}\mathbf{H}_{24}\mathbf{O}_{11}$

 $\mathbf{C}_{25}\mathbf{H}_{24}\mathbf{O}_{12}$

C 80,2 - H 6,9 - O 12,8 - M. G. 374. $\mathbf{C}_{25}\mathbf{H}_{26}\mathbf{O}_3$

1) Dimethylamarsäure. Sm. 182° . Ba $+ 2H_2O$, Ag (J. 1877, 814; A. **275**, 69). — IV, 1725.

 $\mathbf{C}_{25}\mathbf{H}_{26}\mathbf{O}_{9}$

C 63,8 — H 5,5 — O 30,6 — M. G. 470. 1) Eupittonsäure. Sm. 200° u. Zers. Na₂, Ba (B. 9, 334; 11, 1457, 2085; **12**, 1377, 2216). — II, 2092. C 61,7 — H 5,4 — O 32,9 — M. G. 486.

 $C_{25}H_{26}O_{10}$

1) Triäthylester d. Dibenzoyldesoxalsäure (J. pr. [2] 20, 155). II, 1155.

2) Verbindung (aus 1,4-Dioxybenzol u. Ameisensäure). Sm. 60° u. Zers. (B. 19, 1003). - II, 941. C 54,5 - H 4,7 - O 40,7 - M. G. 550.

 $\mathbf{C}_{25}\mathbf{H}_{26}\mathbf{O}_{14}$

1) Pentaacetat d. Aeskulin. Sm. 130° (A. 161, 73; B. 13, 1952). -

C 84,7 - H 7,3 - N 7,9 - M. G. 354. $\mathbf{C}_{25}\mathbf{H}_{26}\mathbf{N}_{2}$

1) Diäthylamarin. Sm. 110-115°. HCl, HJ (A. 110, 83). — III, 23. 2) Diäthyllophin + H₂O. (HCl, AuCl₃), HJ, HNO₃ (A. 122, 327). III, 27.

3) Phenyldi [1, 2, 3, 4-Tetrahydrochinolyl] methan. Sm. 152-153° (B. 19,

1243). — IV, 1077. C 81,3 — H 7,3 — N 11,4 — M. G. 369. C25 H27 N2

Valerylidenrosanilin (Z. 1867, 176). — II, 1093.
 Triäthylehrysanilin. (2 HCl, PtCl₄), 2HJ + 1½ H₂O (B. 2, 380). —

IV, 1211. C 87,2 - H 8,1 - O 4,6 - M. G. 344. $\mathbf{C}_{25}\mathbf{H}_{28}\mathbf{O}$

1) Methyläther d. 3-Oxy-?-Dibenzyl-4-Isopropyl-1-Methylbenzol. Sm.

 $\mathbf{C}_{25}\overline{\mathbf{H}_{28}\mathbf{O}_4}$

1) Mechylather d. 3-Oxyg-p-Disensity 1-1-Borropy 1-1

 $\mathbf{C}_{25}\mathbf{H}_{28}\mathbf{O}_{6}$

bis 265°₁₂ (Soc. **75**, 249). C 65,8 — H 6,1 — O 28,1 — M. G. 456.

 $\mathbf{C}_{25}\mathbf{H}_{28}\mathbf{O}_{8}$

1) Tetraäthylätheracetat d. Quercetin. Sm. 151-1530 (M. 9, 542). -III, 605.

 $\mathbf{C}_{25}\mathbf{H}_{28}\mathbf{O}_{11}$ C 59,5 - H 5,5 - O 34,9 - M. G. 504.

 $C_{25}H_{28}O_{13}$

1) Nataloïn. Zers. bei 160° (Bl. 17, 328; 18, 182). — III, 618. C 56,0 — H 5,2 — O 38,8 — M. G. 536.
1) Cyclopin + H₂O (J. 1881, 1019). — III, 629. C 78,1 — H 7,3 — N 14,6 — M. G. 384.

 $C_{25}H_{28}N_4$ Phenylhydrazon d. Cinchotoxin. Sm. 148° (B. 28, 1067). — IV, 798.
 C 68,2 — H 6,4 — N 25,4 — M. G. 440. $C_{25}H_{28}N_8$

1) Carbo-m-Amidotetraimidobenzol. Fl. 8HCl (B. 10, 1719). — IV, 578.

 Carbo-p-Amidotetraimidobenzol. Sm. 138⁶ (B. 10, 1718). — IV, 594.
 C 87,4 — H 8,4 — N 4,1 — M. G. 343. $\mathbf{C}_{25}\mathbf{H}_{29}\mathbf{N}$

1) 3,5-Di[4-Isopropylbenzyl]pyridin. Sm. 76-77°. HCl, (2HCl, PtCl₄), (2 HCl, HgCl₂), (2 HCl, CdCl₂), Acetat + Cu-Acetat, Pikrat (A. 280, 61). IV, 458.

C 80,8 — H 7,8 — N 11,3 — M. G. 371. 1) Triäthylmauvanilin (Z. 1867, 237). — III, 678. $C_{25}H_{29}N_3$ 2) Phenyldi[4-Propylphenyl]guanidin (B. 17, 1226). — II, 549. C 76,1 — H 7,6 — O 16,2 — M. G. 394. $C_{25}H_{30}O_4$ 1) Dibenzylesterd. Hydrocamphocarbonsäure. Sd. 260—290°₁₀. — II, 1052. $C_{25}H_{80}O_{12}$ C 57.5 - H 5.7 - O 36.8 - M. G. 522.1) Pikrotin, siehe C₁₅H₁₈O₇. — III, 643. C 51,2 — H 5,1 — O 43,7 — M. G. 586. 1) Oxyeyelopin (J. 1881, 1019). — III, 629. 2) Robinin + 5½₂H₂O? Sm. 195° (A. Spl. 1, 257). — III, 606. C 83,8 — H 8,3 — N 7,8 — M. G. 358. $\mathbf{C}_{25}\mathbf{H}_{30}\mathbf{O}_{16}$ $\mathbf{C}_{25}\mathbf{H}_{30}\mathbf{N}_{2}$ 1) **2',2**²-Di[Dimethylamido] -4',4²-Dimethyltriphenylmethan. 18m. 123° (109°). (2 HCl, PtCl₄ + 2 H₂0) (B. 13, 809; 24, 557). — IV, 1046. C 80,4 — H 8,3 — N 11,3 — M. G. 373. $\mathbf{C}_{25}\mathbf{H}_{31}\mathbf{N}_3$ 1) Tri[4-Dimethylamidophenyl]methan. Sm. 173°. (6HCl, 3PtCl₄) (B. 6, 361; **12**, 799; **14**, 1952; **16**, 707, 2007; **17**, 99; **18**, 769; **20**, 2421; **31**, 1774). — **IV**, 1195. 2) isom. Tri[4-Dimethylamidophenyl]methan. Sm. 250° (B. 11, 2097). **- IV**, 1195. 3) 4'-Amido-4², 4³-Di[Dimethylamido]-2',6'-Dimethyltriphenylmethan. Sm. 158° (B. 24, 3134). — IV, 1198. 4) 3'-Amido- 2^2 , 2^3 -Di[Dimethylamido]- 4^2 , 4^3 -Dimethyltriphenylmethan. Sm. 131° (B. 24, 560). — IV, 1198. 5) 4'-Amido- 2^2 , 2^3 -Di[Dimethylamido]- 4^2 , 4^3 -Dimethyltriphenylmethan. Sm. 139° (B. **20**, 1564). — **IV**, 1198. C 61,0 — H 6,5 — O 32,5 — M. G. 492. $C_{25}H_{32}O_{10}$ 1) Teträthylester d. $\beta \zeta$ -Diketo- δ -Phenylheptan- $\alpha \gamma \varepsilon \eta$ -Tetracarbonsäure. Sm. 146° (130°) (A. 288, 347; B. 31, 1392). C 54,0 — H 5,7 — O 40,3 — M. G. 556. 1) Diarbutin. Fl. (A. 154, 245). — III, 572. C 77,3 — H 8,2 — N 14,4 — M. G. 388. 1) Asellin. (2 HCl,PtCl₄) (Bl. [3] 2, 226). — III, 888. C 82,0 — H 9,3 — O 8,7 — M. G. 366. $C_{25}H_{32}O_{14}$ $\mathbf{C}_{25}\mathbf{H}_{32}\mathbf{N}_{4}$ C25 H34 O2 1) Sycoccerylester d. Benzolcarbonsäure (J. 1861, 641). — II, 1144. $C_{25}H_{34}O_4$ C 75,4 — H 8,5 — O 16,1 — M. G. 398. 1) Benzoat d. Ammoresitannol (B. 29 [2] 37). C 53,8 — H 6,1 — O 40,1 — M. G. 558.

1) Loganin. Sm. 215° (J. 1884, 1409). — III, 596.
C 82,9 — H 9,4 — N 7,7 — M. G. 362.
1) Diallylönanthylidendiphenyldiamin. Fl. (A. Spl. 3, 365). — II, 445. $C_{25}H_{34}O_{14}$ $C_{25}H_{34}N_2$ C 75,0 — H 9,0 — O 16,0 — M. G. 400. 1) Lupulinsäure. Sm. 92—93°. Cu (J. 1863, 598; Bl. 45, 489; B. 31, $\mathbf{C}_{25}\mathbf{H}_{36}\mathbf{O}_4$ 2022). **— II**, *2110*. C 72.1 - H 8.6 - O 19.2 - M. G. 416. $C_{25}H_{36}O_5$ 1) Methylester d. Dehydrocholsäure (B. 14, 74). — II, 1969. C 64,6 - H 7,8 - O 27,6 - M. G. 464. $C_{25}H_{36}O_8$ C 64,6 — H 7,8 — O 27,6 — M. G. 404.

1) Biliansäure + 2H₂O. Sm. 264° (wasserfrei). K, Ca₃ + 5H₂O, Ba + 2H₂O, Ba₃ + 17H₂O, Pb, Pb₃, Ag₂, Ag₃ (Bl. 25, 379, 429; B. 15, 2366; 19, 480; 20, 1982; 32, 683; H. 25, 304). — II, 2076.

2) Isobiliansäure + H₂O (oder C₂₄H₃₄O₈). Sm. 234—237° u. Zers. K, Ba + 6H₂O, Ag₃ (B. 19, 1530; 20, 1986; 32, 684). — II, 2077. C 62,5 — H 7,5 — O 30,0 — M. G. 480.

1) Biliansäure, siehe C₂₅H₃₆O₈. — II, 2076. C 60,5 — H 7,3 — O 32,2 — M. G. 496. C25 H36 O9 $\mathbf{C}_{25}\mathbf{H}_{36}\mathbf{O}_{10}$ 1) Pseudocholoïdansäure $+4^{1}/_{2}$ H₂O (oder C₁₆H₂₄O₇). Ba + 10 H₂O, Pb₃, Ag_2 , Ag_4 (*Bl.* 38, 135). C 74,6 — H 9,4 — O 15,9 — M. G. 402. 1) β-Copal-Resen. Zers. oberh. 140° (*C.* 1896 [2] 796). $\mathbf{C}_{25}\mathbf{H}_{38}\mathbf{O}_4$ 1) Debydrochole insäure, siehe $C_{24}H_{34}O_4$. C 66,7 — H 8,4 — O 4,9 — M. G. 450. 1) Cholansäure + ${}^{1}/_{4}H_{2}O$ (oder $C_{94}H_{36}O_7$). Sm. 285° u. Zers. $K_3 + 4H_2O$, Ba + $4H_2O$, Ba₃ + $12H_2O$, Pb₃ + H_2O , Ag₃ (A. 194, 231; B. 6, 1282; 11, 2288; 13, 1053; 14, 1492; 15, 713; 18, 3045; 19, 474; Bl. 35, 432; 38, 133; H. 25, 311). — II, 2016. $\mathbf{C}_{25}\mathbf{H}_{38}\mathbf{O}_7$

C25 H38 O7 2) Isocholansäure. Sm. 247—248°. K, K₃, Ba, BaH, Ba₃ + 6 H₂O, Pb₃ + 4 H₂O, Cu₃ + 2 CuO + 6 H₂O, Ag₃ (B. 15, 713; 19, 1529). — 11, 2017. C 53,4 — H 6,8 — O 39,8 — M. G. 562. C25H38O14 Heptaäthylester d. Butan-ααββγγδ-Heptacarbonsäure. Sd. 280 bis 285°₁₃₀ (B. 21, 2116). — I, 873.
 C 82,0 — H 10,4 — N 7,6 — M. G. 366. $\mathbf{C}_{25}\mathbf{H}_{38}\mathbf{N}_2$ 1) Diisoamylamidodibenzylamidomethan (Bl. [3] 13, 158). C 80,6 — H 10,7 — O 8,6 — M. G. 372. 1) Echikautschin (A. 178, 58). — III, 629. C 77,3 — H 10,3 — O 12,4 — M. G. 388. $C_{25}H_{40}O_{2}$ C25 H40 O3 1) Stearinbenzolcarbonsäureanhydrid. Sm. 70° (A. 91, 104). — II, 1158. 2) Verbindung (aus Braunkohle) (J. 1852, 648). — I, 689. C 74,3 — H 9,9 — O 15,8 — M. G. 404. 1) α -Hyocholsäure. Na, Ba, Ag (A. 70, 192; H. 13, 232). — I, 736. 2) Cholestensäure (oder $C_{20}H_{42}O_4$?). Sm. 60—70°. Cu, Ag (J. r. 9, 82). — $\mathbf{C}_{25}\mathbf{H}_{40}\mathbf{O}_4$ II, 1074. $\mathbf{C}_{25}\mathbf{H}_{40}\mathbf{O}_{5}$ C 71,4 -- H 9,5 - O 19,1 - M. G. 420. 1) Oxycholestensäure. Pb, Cu, Ag (J. r. 9, 82). — II, 1074. $C_{25}H_{40}O_6$ C 68.8 - H 9.2 - O 22.0 - M. G. 436.1) Dioxycholestensäure. K, Ca, Pb, Cu, Ag (J. r. 9, 82). — II, 1074. $\mathbf{C}_{25}\mathbf{H}_{40}\mathbf{O}_{10}$ C 60,0 - H 8,0 - O 32,0 - M. G. 500.1) Glykosid (aus Adonis aestivalis) (C. 1896 [2] 590). 2) Tetraäthylester d. $\beta\zeta$ -Diketo- δ -Hexylheptan- $\alpha\gamma\varepsilon\eta$ -Tetracarbonsäure (T. d. Oenanthylidenbisacetondicarbonsäure). Sm. 125° (A. 288, 359). 1) Verbindung (aus Asphalt). - III, 564. C25H40S2 $C_{25}H_{42}O$ C 83.8 - H 11.7 - O 4.5 - M. G. 358.1) Heptadekyl-4-Methylphenylketon. Sm. 67°; Sd. 278°₁₅ (174°₀) (B. 21, 2268; **29**, 1327). — III, 157. 2) Pentadekyl-2,4,6-Trimethylphenylketon. Sm. 35°; Sd. 280°₁₅ (J. pr. [2] 54, 402). $\mathbf{C}_{25}\mathbf{H}_{42}\mathbf{O}_{2}$ C 80.2 - H 11.2 - O 8.6 - M. G. 374.1) 4-Methylphenylester d. Stearinsäure. Sm. 54°; Sd. 276°, (B. 17, 1380). — II, 749. C 76,9 — H 10,8 — O 12,3 — M. G. 390. $C_{25}H_{42}O_{8}$ 1) Trioxycholesterin (J. r. 10, 358). — II, 1074. C 73,9 — H 10,3 — O 15,8 — M. G. 406. $\mathbf{C}_{25}\mathbf{H}_{42}\mathbf{O}_{4}$ Choleïnsäure, siehe C₂₄H₄₀O₄. — I, 735.
 C 71,1 — H 9,9 — O 19,0 — M. G. 422.
 Cholsäure + H₂O (B. 20, 3274) siehe auch C₂₄H₄₀O₅.
 Methylester d. Cholsäure. Sm. 147° (J. pr. [2] 89, 272; H. 10, 193). $\mathbf{C}_{25}\mathbf{H}_{42}\mathbf{O}_{5}$ $C_{25}H_{44}O$ C 83,3 - H 12,2 - O 4,4 - M. G. 360.1) Ilicylalkohol (oder C₂₂H₃₈O). Sm. 175°; Sd. oberh. 350° (Bl. 42, 150; Soc. 53, 676). — II, 1069. 2) Alkohol (aus Sesamöl). Sm. 137,5° (C. 1897 [2] 773). 3) Aethyläther d. ?-Oxy-4-Hexadekyl-1-Methylbenzol. Sm. 26,5-27° (B. **21**, 3183). — **II**, 777 (B. 21, 5183). — 11, 777.
C 63,6 — H 9,3 — O 27,1 — M. G. 472.
1) Tetraäthylester d. βx-Dimethylundekan-δδθθ-Tetracarbonsäure. Sd. 257—263% (Soc. 59, 841). — I, 863.
C 80,6 — H 11,8 — N 7,5 — M. G. 372.
1) δ-Phenylhydrazonnonadekan. Fl. (Bl. [3] 15, 767). — IV, 769.
C 55,8 — H 8,5 — O 35,7 — M. G. 538.
1) Purcinsäure. Pa. (G. 1897 [11] 419. $C_{25}H_{44}O_8$ C25 H44 N2 $\mathbf{C}_{25}\mathbf{H}_{46}\mathbf{O}_{12}$ 1) Purginsäure. Ba (C. 1897 [1] 419). $C_{25}H_{48}O$ C 82,4 - H 13,2 - O 4,4 - M. G. 3641) Ambraïn. Sm. 36° (A. 6, 25). — II, 1076. C 75,7 — H 12,1 — O 12,1 — M. G. 396.

 $C_{25}H_{48}O_{3}$ 1) Valerylarachinsäureanhydrid. Sm. 68° (B. 11, 2031). - I, 464. C 72,8 — H 11,7 — O 15,5 — M. G. 412. 1) Säure (aus d. Glykol $C_{25}H_{52}O_2$). Sm. 10 $C_{25}H_{48}O_4$

Sm. 102,5°. Pb (A. 223, 300). — I, 691. C 82,6 — H 13,5 — N 3,9 — M. G. 363.

 $\mathbf{C}_{25}\mathbf{H}_{49}\mathbf{N}$ 1) Nitril d. Cerotinsäure. Sm. 58° (C. 1896 [1] 642).

- $C_{25}H_{50}O_2$
- C 78,5 H 13,1 O 8,4 M. G. 382.
- 1) Cerotinsäure. Sm. 77,9°. Mg, Ba, Pb, Ag (A. 235, 145; C. 1896 [1] 642). — I, 448.
- Hyaenasäure. Sm. 77—78°. Ca, Pb (A. 129, 168). I, 448.
 Methylester d. Lignocerinsäure. Sm. 56,5—57° (B. 13, 1717). I, 448.
 Isoamylester d. Arachinsäure. Sm. 44,8—45°; Sd. 295—298°₁₀₀ (A. 101, 99; J. 1884, 1193). — I, 447.
- 5) Dilaurylcarbinolester d. Essigsäure. Sm. 34-35° (Soc. 57, 985). I, 411.
- C25H50O8
- C 75,4 H 12,6 O 12,0 M. G. 398.

 1) a-Oxycerotinsäure. Sm. 86,5° (C. 1896 [1] 642).
 C 81,5 H 14,1 O 4,3 M. G. 368.
- $C_{25}H_{52}O$ 1) prim. Alkohol (aus Bienenwachs) (A. 235, 142). — I, 240. C 78,1 — H 13,5 — O 8,3 — M. G. 384.
- C25H52O2 1) Glykol (aus Carnaubawachs). Sm. 103,5-103,8° (J. 1869, 784; A. 223, 299). — I, 267.

C₂₅-Gruppe mit drei Elementen.

- C 57,0 H 2,7 O 24,3 N 16,0 M. G. 526. $C_{25}H_{14}O_8N_6$
- 1) Tetranitromethylencarbazol (B. 25, 2767). IV, 393. C 87,0 - H 4,3 - O 4,6 - N 4,1 - M. G. 345.
- $\mathbf{C}_{25}\mathbf{H}_{15}\mathbf{ON}$ 1) Benzenylamidochrysol. Sm. 259-265° (Soc. 41, 157). — III, 462. C 76.3 - H 3.8 - O 16.3 - N 3.5 - M. G. 393.
- $\mathbf{C}_{25}\mathbf{H}_{15}\mathbf{O}_4\mathbf{N}$ 1) Anhydrobisdiketohydrinden-3-Amidobenzoësäure (B. 30, 3144). 2) Lakton d. Benzoyldiphenylketipinsäuremononitril. Sm. 168 bis
- 168,5° (A. 282, 58). II, 2032. C 76,5 H 4,1 O 12,2 N 7,1 M. G. 392. 1) Benzoylphenylamidoimid d. Naphtalin-1,8-Dicarbonsäure. Sm. $C_{25}H_{16}O_{8}N_{2}$
- 235° (B. 28, 364). IV, 712. C 68,8 H 3,7 O 14,7 N 12,8 M. G. 436. $C_{25}H_{16}O_4N_4$
- 1) 4,5-Diphenylazo-1,7-Dioxyxanthon. Sm. 249—250° u. Zers. (Soc. 73, 672). — IV, 1479. C 60,0 — H 3,2 — O 25,6 — N 11,2 — M. G. 500.
- $\mathbf{C}_{25}\mathbf{H}_{16}\mathbf{O}_{8}\mathbf{N}_{4}$ 1) Tetra[4-Nitrophenyl]methan. Sm. 275° (C. 1898 [2] 1131). C 53,6 — H 2,8 — O 28,6 — N 15,0 — M. G. 560.
- $C_{25}H_{16}O_{10}N_6$ 1) Di[4-Nitrophenylazo]maklurin (Soc. 67, 934). — IV, 1479.
- C₂₅H₁₆O₁₂Br₄ 1) Pentacetat d. Tetrabrommorin. Sm. 192—193° (Soc. 69, 795). C 86.5 - H 4.9 - O 4.6 - N 4.0 - M. G. 347. $\mathbf{C}_{25}\mathbf{H}_{17}\mathbf{ON}$
- 1) Benzoylamidochrysen. Sm. 248° (В. 24, 950). II, 1169. С 80,0 H 4,5 О 4,3 N 11,2 M. G. 375. $\mathbf{C}_{25}\mathbf{H}_{17}\mathbf{ON}_3$
- 1) Benzoylaposafranin. + C₆H₆ (B. 28, 2285). IV, 1177. C 82,6 H 4,7 O 8,8 N 3,9 M. G. 363. $\mathbf{C}_{25}\mathbf{H}_{17}\mathbf{O}_{2}\mathbf{N}$ 1) Anhydrobisdiketohydrinden-4-Toluid (B. 30, 3143).
- C 76,7 H 4,3 O 8,2 N 10,7 M. G. 391. $\mathbf{C}_{25}\mathbf{H}_{17}\mathbf{O}_{2}\mathbf{N}_{3}$ 1) 2-Oxybenzylidenamidobenzolindon (2-Oxybenzylidensafraninon) (B.
 - 30, 400). IV, 1179. 2) Benzoat d. 3-Oxy-5-Phenyl-1-[2-Naphtyl]-1,2,4-Triazol. Sm. 141
 - bis 142° (Soc. 73, 371). IV, 1158. 3) Verbindung (aus 2'-Chlor-4-Oxyazobenzol-3-Carbonsäure) (Soc. 69, 1260).
- IV, 1469. C₂₅H₁₇O₁₂Br₃ 1) Pentaacetat d. Tribromquercetin. Sm. 251-253° (M. 6, 870). III, 605.
- C 82.9 H 5.0 0 4.4 N 7.7 M. G. 362. $\mathbf{C}_{25}\mathbf{H}_{18}\mathbf{ON}_{2}$ 1) 2-Keto-4, 5-Diphenyl-1-[2-Naphtyl]-2, 3-Dihydroimidazol. Zers. bei 280° (A. 284, 35). — III, 224.
 - 2) 2-Naphtylamid d. 3-Methyl-β-Naphtochinolin-l-Carbonsäure. Sm. $230 - \overline{2}32^{\circ}$ (B. **31**, 3325). C 76,9 — H 4,6 — O 4,1 — N 14,4 — M. G. 390.
- C25H18ON4 1) 5-Keto-4-[1-Naphtyl]azo-1,3-Diphenyl-4,5-Dihydropyrazol. Sm. 196° (B. 27, 785). — IV, 1490.

 $C_{25}H_{18}O_6N_4$

 $\mathbf{C}_{25}\mathbf{H}_{19}\mathbf{O}_4\mathbf{N}_3$

C.5 H18 ON4 2) 5-Keto-4-[2-Naphtyl]azo-1, 3-Diphenyl-4, 5-Dihydropyrazol. Sm. 225° (B. **27**, 785). — \overrightarrow{IV} , 1490. C 73,9 — H 4,4 — O 7,9 — N 13,8 — M. G. 406.

 $C_{25}H_{18}O_{2}N_{4}$

1) 6-Phenylamido-2-[2-Nitrophenyl]-1-Phenylbenzimidazol. Sm. 210° (A. 286, 181).

2) Benzoat d. 4-Oxy-1,3-Di[Diphenylazo] benzol. Sm. 138-139° (B. 17, 369). — IV, 1416.

3) Benzoat d. 5-Oxy-1, 3-Di[Phenylazo] benzol. Sm. 148-150° (B. 22, 2194). — IV, 1416.

 $C_{25}H_{18}O_3N_4$

C 71,1 — H 4,2 — O 11,4 — N 13,3 — M. G. 422.

1) Phenylester d. ?-Diphenylazo-4-Oxybenzol-3-Carbonsäure.
148° (A. 263, 229). — IV, 1470.
C 73,2 — H 4,4 — O 15,6 — N 6,8 — M. G. 410.

 $C_{25}H_{18}O_4N_2$

1) 3,5-Di[Phtalylamidomethyl]-1-Methylbenzol. Sm. 244° (B. 25, 3016).

C 68.5 - H 4.1 - O 14.6 - N 12.8 - M. G. 438. $\mathbf{C}_{25}\mathbf{H}_{18}\mathbf{O}_4\mathbf{N}_4$

1) 1-Acetoxyl-2,4-Diphenylazonaphtalin-2³-Carbonsäure. Zers. bei 229–230° (B. **24**, 1602). – IV, 1464. C 66,1 – H 4,0 – O 17,6 – N 12,3 – M. G. 454.

 $C_{25}H_{18}O_5N_4$ 1) 3,3'-Dinitro-4,4'-Di[Phenylamido]diphenylketon. Sm. 2190 (B. 24,

3775). — III, 183. C 63,8 — H 3,8 — O 20,4 — N 11,9 — M. G. 470.

1) Di[Phenylazo]maklurin. Sm. 266-267° u. Zers. (Soc. 67, 933; 71, 187). — IV, 1479. C₂₅H₁₈O₁₁Br₄ 1) Tetracetat d. Tetrabrommorinmonoäthyläther. Sm. 116—120° (M.

18, 710).

C₂₅H₁₈O₁₂Br₂ 1) Pentaacetat d. Dibromquercetin (B. 17, 1683; M. 6, 867). — III, 605. 1) 2-Merkapto-4, 5-Diphenyl-1-[2-Naphtyl]imidazol (A. 284, 32). $\mathbf{C}_{25}\mathbf{H}_{18}\mathbf{N}_{2}\mathbf{S}$ III, 225.

2) s-Phenylchrysylthioharnstoff. Sm. 186° (B. 24, 957). — II, 643. $\mathbf{C}_{95}\mathbf{H}_{18}\mathbf{N}_{4}\mathbf{S}$ 1) Verbindung (aus s-Di[4-Phenylamidophenyl]thioharnstoff). Sm. 1170 (A. 255, 192). — IV, 591. C 85.9 - H 5.4 - O 4.6 - N 4.0 - M. G. 349.

 $C_{25}H_{19}ON$

1) Verbindung (aus 2,3-Dimethylchinolin). Sm. 173° (B. 22, 268). IV, 327.

2) Verbindung (aus d. Verb. C₂₅H₁₉ON aus 2,3-Dimethylchinolin). Sm. 240° (B. **22**, 269). — **IV**, 327. C 79,6 — H 5,0 — O 4,2 — N 11,1 — M. G. 377.

 $\mathbf{C}_{25}\mathbf{H}_{19}\mathbf{ON}_{3}$

1) 6-Phenylamido-2-[2-Oxyphenyl]-1-Phenylbenzimidazol. Sm. 190° (A. 286, 181). - IV, 1124.

C 76,3 - H 4,8 - O 8,1 - N 10,7 - M. G. 393. $C_{25}H_{19}O_{2}N_{3}$

1) α-[2-Nitrophenyl]azotriphenylmethan. Sm. 116° (C. 1898 [2] 1131). - IV, 1404.

2) α-[3-Nitrophenyl]azotriphenylmethan. Sm. 111-112° (C. 1898 [2] 1131). — IV, 1404.

3) α -[4-Nitrophenyl]azotriphenylmethan. Sm. 118,5° (C. 1898 [2] 1131). TV, 1404.
C 71,2 — H 4,5 — O 7,6 — N 16,6 — M. G. 421.

 $C_{25}H_{19}O_2N_5$

1) 6-[2,4-Dioxyphenyl] azo -2,3-Diphenyl-2,3-Dihydro-1,2,4-Benztriazin (B. 30, 2598). - IV, 1492.

2) Phenylamidoformiat d. 4-Oxy-1, 3-Di[Phenylazo] benzol. Sm. 133

bis 135° (B. 23, 497). — IV, 1416. C25H19O2Br $1) \ 6-Brom-2-[4-Methylphenyl]-4-[4-Methylbenzoyl] methylen-1, 4-Methylbenzoyl] \\$

Cumaran (Bromdimethylphenacylidenflaven). Sm. 176—177° (B. 31, 714). C 78,7 — H 5,0 — O 12,6 — N 3,7 — M. G. 381. $C_{25}H_{19}O_3N$ 1) 4-Oxy-5-Keto-3-Cinnamoyl-1, 2-Diphenyl-2, 5-Dihydropyrrol. Sm.

230—231° (B. 31, 1310). C 75,6 — H 4,8 — O 16,1 — N 3,5 — M. G 397. $C_{25}H_{19}O_4N$ 1) 2,5-Diphenyl-1-[4-Methylphenyl]pyrrol-22,52-Dicarbonsaure.

253° (*B.* **20**, 1489). — **IV**, 452. C 70,6 — H 4,5 — O 15,0 — N 9,9 — M. G. 425.

1) 1,4-Dibenzoylamido-3-[2-Methylphenylamido]-2,5-Diketo-1,2,4,5-Tetrahydro-1,4-Diazin (Hippuroflavin-o-Toluid). Sm. 208-2090 (A. **287**, 87).

 $C_{95}H_{19}O_4N_3$ 2) 1, 4-Dibenzoyl-3-[4-Methylphenylamido]-2, 5-Diketo-1, 2, 4, 5-Tetrahydro-1, 4-Diazin (Hippuroflavin-p-Toluid). Sm. 246° (A. 287, 89).

3) 3,5-Di[Phenylamid] d. 6-Oxy-2-Keto-1-Phenyl-1,2-Dihydropyridin-3,5-Dicarbonsäure. Sm. 265° (A. 285, 120). C 69,9 — H 4,4 — O 22,4 — N 3,3 — M. G. 429.

 $C_{25}H_{19}O_6N$ 1) Lakton d. δ -Nitro- γ -Acetoxyl- γ -Oxy- $\alpha\beta\delta$ -Triphenyl- α -Buten- α -Carbonsäure. Sm. 166° (B. 24, 3868). — II, 1729.

 $C_{25}H_{19}O_6P$ 1) Triphenylester d. Phenylphosphorsäure-2-Carbonsäure (Salol-O-Phosphinsäurediphenylester). Sm. 76-77° (B. 31, 2177).

1) α-Diphenylhydrazon-4-Chlordiphenylmethan. Sm. 130° (B. 26, 34). CosH19N,Cl **IV**, 775. 2) α-[3-Chlorphenyl]azotriphenylmethan. Sm. 109° (C. 1898 [2] 1131).

IV, 1404.

 $C_{25}H_{20}O_8N_8$

 $\mathbf{C}_{25}\mathbf{H}_{21}\mathbf{ON}_{3}$

 $C_{25}H_{21}O_2N$

3) α-[4-Chlorphenyl]azotriphenylmethan. Sm. 107° (C. 1898 [2] 1131). - IV, 1404.

1) α -[3-Bromphenyl]azotriphenylmethan, Sm. 110° (C. 1898 [2] 1132). CosHigNoBr IV, 1404.

 $C_{25}H_{20}ON_{2}$

C 82,4 — H 5,5 — O 4,4 — N 7,7 — M. G. 364.

1) Tetraphenylharnstoff. Sm. 183° (B. 9, 710; 12, 1166). — II, 381.

2) α-Phenylnitrosamidotriphenylmethan. Sm. 156° u. Zers. (B. 17, 704). **— II**, 642. C 76.5 - H 5.1 - O 4.1 - N 14.3 - M. G. 392.

 $\mathbf{C}_{25}\mathbf{H}_{20}\mathbf{ON}_{4}$ 1) Methyläther d. 4-Oxyphenylamidoaposafranin. HCl (B. 30, 2490). - IV, 1280. · C 71,4 - H 4,8 - O 3,8 - N 20,0 - M. G. 420.

Cog Hoo ON 1) 4,4'-Carbamidoazobenzol. Sm. 270° u. Zers. (B. 17, 1404). — IV, 1357.

C 73,5 — H 4,9 — O 7,8 — N 13,7 — M. G. 408. $\mathbf{C}_{25}\mathbf{H}_{20}\mathbf{O}_{2}\mathbf{N}_{4}$ 1) Acetat d. 4-Phenylazo-2-[4-Methylphenyl]azo-1-Oxynaphtalin.

- Sm. 150° (B. **25**, 1339). IV, 1437. C 72,8 H 4,8 O 15,5 N 6,8 M. G. 412. $C_{25}H_{20}O_4N_2$
- 1) Verbindung (aus d. Acetat d. Thebaolchinon). Sm. 201-2030 (B. 28, 943; **30**, 1392). — IV, 1087. C 58,1 — H 3,9 — O 21,7 — N 16,3 — M. G. 516. 1) Nitrosoderivat d. Carbo-p-Amidotetraimidobenzol (B. 10, 1719). $C_{25}H_{20}O_7N_6$
 - IV, 594. 2) Verbindung (aus Carbo-3-Amidotetraimidobenzol) (B. 10, 1719). —
 - C = 53.6 H = 3.6 O = 22.8 N = 20.0 M. G. = 560.
 - 1) Carbo-m-Nitrotetraimidobenzol. Sm. 286°. Na. (B. 10, 1719). II, 352.
 - 2) Carbo-p-Nitrotetraimidobenzol. Sm. oberh. 300°. Na. (B. 10, 1718). - II, 352.
- s-?-Diacenaphtylthioharnstoff. Sm. 192° (B. 21, 1458). II, 634.
 Tetraphenylthioharnstoff. Sm. 194,5—195,5° (B. 15, 1530, 1652; 21, $\mathbf{C}_{25}\mathbf{H}_{20}\mathbf{N}_{2}\mathbf{S}$ 340). — **II**, *397*.
- 3) s-Di[4-Biphenyl]thioharnstoff. Sm. 2280 (B. 13, 1963). II, 634. 1) 4,4'-Thiocarbamidoazobenzol. Sm. 199° (B. 17, 1405). — IV, 1357. C25 H20 N6S C 85.5 - H 6.0 - O 4.5 - N 4.0 - M. G. 351. $\mathbf{C}_{25}\mathbf{H}_{21}\mathbf{ON}$
 - 1) γ -[2-Naphtyl]amido- α -Keto- $\alpha\beta$ -Diphenylpropan. Sm. 200° (B. **31**. 353).
 - 2) 2-Keto-1-Allyl-3,3,5-Triphenyl-2,3-Dihydropyrrol. Sm. 110-112° (Soc. 57, 707, 743). — IV, 475.
 - 3) 5-Keto-1-Aethyl-2-Benzyliden-3,4-Diphenyl-2,5-Dihydropyrol. Sm. 144-146° (B. **24**, 3860). — II, 1728. C 79,1 — H 5,5 — O 4,2 — N 11,1 — M. G. 379.
 - 1) 1-[2-Oxybenzyliden]amido-2,4-Di[Phenylamido]benzol (A. 286,
 - 2) ?-Di[Phenylamido]-2-Methyl-1,4-Benzochinonphenylimid. Sm. 172 bis 173° (167°). (2 HCl, PtCl₄) (B. 16, 1560; 20, 678). — III, 360. C 81,7 — H 5,7 — O 8,7 — N 3,8 — M. G. 367.
 - 1) 2,5-Diphenyl-1-[2,4-Dimethylphenyl]pyrrol-3-Carbonsäure. Sm. $253-254^{\circ}$ (B. **22**, 3090). — IV, 449.
 - 2) Aethylester d. 1,2,5-Triphenylpyrrol-3-Carbonsäure. Sm. 169 bis 170° (B. 21, 3061). — IV, 449.

 $\mathbf{C}_{25}\mathbf{H}_{21}\mathbf{O}_4\mathbf{N}_3$

C 75.9 - H 5.3 - O 8.1 - N 10.6 - M. G. 395. $C_{25}H_{21}O_2N_3$

1) α-Triphenylmethyl-β-[2-Nitrophenyl]hydrazin. Sm. 168° (C. 1898) [2] 1131).

2) α -Triphenylmethyl- β -[3-Nitrophenyl]hydrazin. Sm. 165° (C. 1898 [2] 1131).

3) α -Triphenylmethyl- β -[4-Nitrophenyl]hydrazin. Sm. 170° (C. 1898) [2] 1131).

4) α -[3-Nitrophenyl]- $\alpha\alpha$ -Di[2-Methyl-3-Indolyl]methan. Sm. 263° (A. 242, 374). — IV, 1089. C 70,9 — H 5,0 — O 7,6 — N 16,5 — M. G. 423.

C25H21O2N5

1) Aethylester d. 2-Cyan-1, 3-Di[Phenylhydrazon]-2, 3-Dihydroinden-

 $\mathbf{C}_{25}\mathbf{H}_{21}\mathbf{O}_{3}\mathbf{N}$

1) Achylester d. 2-Cyan-1,3-Di[Fnenylhydrazon]-2,3-Dihydroinden-2-Carbonsäure. Sm. 148—149° (A. ch. [7] 1, 484). — IV, 711. C 78,3 — H 5,5 — O 12,5 — N 3,7 — M. G. 383. 1) Achylester d. 2,5-Diphenyl-1-[2-Oxyphenyl]pyrrol-3-Carbonsäure. Sm. 158—159° (B. 22, 3093). — IV, 450. C 73,0 — H 5,1 — O 11,7 — N 10,2 — M. G. 411. $\mathbf{C}_{25}\mathbf{H}_{21}\mathbf{O}_{3}\mathbf{N}_{3}$ 1) 4-Dibenzoylamido - 3-Keto - 1,5-Dimethyl-2-Phenyl-2,3-Dihydro-

pyrazol. Sm. 188° (A. **293**, 64). — IV, 1109. C 70,3 — H 4,9 — O 15,0 — N 9,8 — M. G. 427.

1) Aethylester d. 4,5-Diketo-2-Phenyl-1-Phenylazophenyltetrahydropyrrol-3-Carbonsäure. Sm. 215° (B. 30, 604). - IV, 1357.

1) Acetat d. αε-Diketo-γ-[5-Brom-2-Oxyphenyl]-αε-Diphenylpentan. C25H21O4Br Sm. 107° (B. **29**, 244). — III, 307. C 72,3 — H 5,0 — O 19,3 — N 3,4 — M. G. 415. $C_{25}H_{21}O_5N$

1) α -Phenylamidoformiat d. α -Oxy- β -Aethoxyl- $\gamma\delta$ -Diketo- $\alpha\delta$ -Diphenyl- α -Buten. Sm. 159—160° (B. 27, 714). — III, 317.

 $\mathbf{C}_{25}\mathbf{H}_{21}\mathbf{N}_{2}\mathbf{C}\mathbf{l}$ 1) α-Triphenylmethyl-β-[3-Chlorphenyl]hydrazin. Sm. 150° (C. 1898) [2] 1131). 2) α-Triphenylmethyl-β-[4-Chlorphenyl]hydrazin. Sm. 145° (C. 1898)

[2] 1131).

1) α-Triphenylmethyl-β-[3-Bromphenyl]hydrazin. Sm. 149° (C. 1898) $\mathbf{C}_{25}\mathbf{H}_{21}\mathbf{N}_{2}\mathbf{Br}$ [2] 1132). C 82,0 - H 6,0 - O 4,4 - N 7,6 - M. G. 366. $C_{25}H_{22}ON_2$

1) 6-Oxy-?-Methyl-5-Phenyl-2,4-Dibenzyl-1,3-Diazin. Sm. 135° (J. pr.

[2] **53**, 248). — **IV**, 1089. C 78,5 — H 5,8 — O 8,4 — N 7,3 — M. G. 382. C, H, O, N, 1) 3,4-Di[Cinnamylamido]-1-Methylbenzol. Sm. 205-206° (B. 23,

1879). — IV, 617. 2) Diacetylamarin. Sm. 268° (J. pr. [2] 27, 298). — III, 24. 3) Di[1-Naphtylamid] d. Propan-αβ-Dicarbonsäure. Sm. 243—2440 (B. 27 [2] 514; C. 1896 [1] 109).

1) Diphenyläther d. α -[2-Naphtyl]sulfon- $\beta\beta$ -Dimerkaptopropan. Sm. $C_{25}H_{22}O_2S_3$ 100° (J. pr. [2] 55, 401). 2) Diphenyläther d. α -[2-Naphtyl] sulfon- $\beta\gamma$ -Dimerkaptopropan (J. pr.

[2] **56**, 466). C 75,4 — H 5,5 — O 12,1 — N 7,0 — M. G. 398.

 $C_{25}H_{22}O_8N_2$

1) Benzylester d. $\alpha \delta$ -Di[Phenylimido]- γ -Ketopentan- α -Carbonsäure. Sm. 173—174° (*Bl.* [3] **13**, 483). C 67,3 — H 4,9 — O 21,5 — N 6,3 — M. G. 446.

 $\mathbf{C}_{25}\mathbf{H}_{22}\mathbf{O}_{6}\mathbf{N}_{2}$

1) 3,5-Di[Benzoylamidomethyl]-1-Methylbenzol-32,52-Dicarbonsäure (Mesitylendiphtalamidsäure). Sm. 187°. Ag₂ (B. **25**, 3016). — IV, 645. 2) Triacetat d. α-Phenylhydrazon-2,3,4 oder 3,4,5-Trioxydiphenyl-

methan. Sm. 130° (A. **269**, 303). — IV, 776.

1) Diacetat d. Dichlorkatechin. Sm. 169° (B. 13, 695). — III, 686.

 $\mathbf{C}_{25}\mathbf{H}_{22}\mathbf{O}_{11}\mathbf{Cl}_{2}$ $\mathbf{C}_{25}\mathbf{H}_{22}\mathbf{N_8}\mathbf{Cl}$ 1) 7-Chlor-[4-Methylphenylat] d. 9-Dimethylamido- $\alpha\beta$ -Naphtophenazin. $2 + PtCl_4$ (B. 21, 724). — IV, 1203.

1) s-Di[4-Phenylamidophenyl]thioharnstoff. Sm. 180° (A. 255, 192). $\mathbf{C}_{25}\mathbf{H}_{22}\mathbf{N}_{4}\mathbf{S}$ • IV, 591.

 $\mathbf{C}_{25}\mathbf{H}_{22}\mathbf{ClP}$ 1) Triphenylbenzylphosphoniumchlorid + H₂O. Sm. 287-288° (wasserfrei) (A. **229**, 320). — IV, 1662.

1) Triphenylbenzylphosphoniumbromid. Sm. 274—275° (A. 229, 321). $\mathbf{C}_{25}\mathbf{H}_{22}\mathbf{BrP}$ - IV, 1663.

1) Triphenylbenzylphosphoniumjodid. Sm. 253° (A. 229, 321). $\mathbf{C}_{25}\mathbf{H}_{22}\mathbf{JP}$ IV, 1663.

C25H22S2P2 1) 2 Molec. Diphenylphosphin + 1 Molec. Schwefelkohlenstoff. Sm. 157° (B. 21, 1510). — IV, 1656. C 85,0 — H 6,5 — O 4,5 — N 4,0 — M. G. 353. C25 H23 ON

1) 4-Oximido-6-Methyl-1, 2, 3-Triphenyl-1, 2, 3, 4-Tetrahydrobenzol. Sm. 204° (*M*. **19**, 420).

2) 2-Keto-1-Propyl-3, 3, 5-Triphenyl-2, 3-Dihydropyrrol. Sm. 104 bis

105° (u. 95—98°) (Soc. 57, 706, 741). — IV, 475. 3) 5-Keto-1-Aethyl-2-Benzyl-3, 4-Diphenyl-2, 5-Dihydropyrrol (Benzyldiphenylmaleïnäthylimidin). Sm. 125° (B. 24, 3865). — II, 1727. C 73,4 — H 5,6 — O 3,9 — N 17,1 — M. G. 409.

C25H23ON5

C₂₅H₂₃OP

 $C_{25}H_{25}O_2N$

 $C_{25}H_{23}O_3N$

 $\mathbf{C}_{25}\mathbf{H}_{23}\mathbf{O}_{4}\mathbf{N}$

 $\mathbf{C}_{25}\mathbf{H}_{24}\mathbf{O}_4\mathbf{N}_2$

 $C_{25}H_{24}O_4N_4$

1) 4-[2-Methylphenyl]azo-6-[1-Naphtyl]azo-3-Dimethylamido-1-Oxybenzol. Sm. 132° (B. 31, 2779). — IV, 1418. 2) 4-[2-Methylphenyl]azo-8-[2-Naphtyl] azo-3-Dimethylamido-1-Oxy-

benzol. Sm. 187° (B. 31, 2780). — IV, 1418.

3) 4-[4-Methylphenyl]azo-6-[1-Naphtyl]azo-3-Dimethylamido-1-Oxybenzol. Sm. 154—155° (B. 31, 2781). — IV, 1418.
4) 4-[4-Methylphenyl]azo-6-[2-Naphtyl]azo-3-Dimethylamido-1-Oxybenzol. Sm. 180° (B. 31, 2781). — IV, 1418.

5) 4-[1-Naphtyl]azo-6-[2-Methylphenyl]azo-3-Dimethylamido-1-Oxy-

benzol. Sm. 185—186° (B. 31, 2779). — IV, 1418. 6) 4-[1-Naphtyl]azo-6-[4-Methylphenyl]azo-3-Dimethylamido-1-Oxybenzol. Sm. 1820 (B. 31, 2780). — IV, 1418.

7) 4-[2-Naphtyl]azo-6-[2-Methylphenyl]azo-3-Dimethylamido-1-Oxybenzol. Sm. 1820 (B. 31, 2780). — IV, 1418.

8) 4-[2-Naphtyl]azo-6-[4-Methylphenyl]azo-3-Dimethylamido-1-Oxybenzol. Sm. 153° (B. 31, 2781). — IV, 1418.
9) 2-[4-Dimethylamidophenylazo]-4-[2-Oxy-1-Naphtylazo]-1-Methylbenzol. Sm. bei 244° (A. 234, 358). — IV, 1437.

1) Triphenylbenzylphosphoniumoxydhydrat. Chlorid, Bromid, Jodid, Rhodanid, Nitrat, Bichromat, Pikrat (A. **229**, 320). — **IV**, 1662. C 81,3 — H 6,2 — O 8,7 — N 3,8 — M. G. 369.

1) Aethylamid d. γ -Keto- $\alpha\beta\delta$ -Triphenyl- α -Buten- α -Carbonsäure. Sm. 172—173° (В. 24, 3860). — П, 7728. С 77,9 — Н 6,0 — О 12,5 — N 3,6 — М. G. 385.

1) 4-Methylphenylmonamid d. γ-Truxillsäure. Sm. 268° (B. 27, 1411).

— II, 1903. αε-Diketo-γ-[5-Brom-2-Oxyphenyl]-αε-Di[4-Methylphenyl] pentan. Sm. 158° (B. 31, 714 Anm.).
 C 74,8 — H 5,7 — O 15,9 — N 3,5 — M. G. 401. C,5H,90,Br

1) 1,6-Dibenzoat d. 6-Oxy-3-tert. Butyl-1-Oximidomethylbenzol. Sm.

160° (*Am.* 16, 639). C 71,9 — H 5,5 — O 19,2 — N 3,4 — M. G. 417. $C_{25}H_{23}O_5N$ 1) $\mathbf{Di}[\beta$ -Benzoxyläthyl]amid d. Benzolcarbonsäure (Dibenzoat d. Benzoyldiäthanolamin). Fl. (B. 30, 917).

1) Diacetat d. Bromkatechin. Sm. 120° (B. 13, 696). — III, 686. C 81,5 — H 6,5 — O 4,3 — N 7,6 — M. G. 368. $C_{25}H_{23}O_{11}Br$ $\mathbf{C}_{25}\mathbf{H}_{24}\mathbf{ON}_{2}$

1) Verbindung (aus Cuminol, Anilin u. Brenztraubensäure). Sm. 216° (A. 249, 102). — IV, 451. C 72,1 — H 5,8 — O 15,4 — N 6,7 — M. G. 416. 1) Benzoylcinchotenin. Sm. 85°. HCl + H₂O (M. 15, 798). — III, 841. 2) isom. Benzoylcinchotenin + 3H₂O. Sm. 175—178°. 2 HCl (M. 16,

167): **— III**, 841. C 67.6 - H 5.4 - O 14.4 - N 12.6 - M. G. 444.

1) β -Phenylhydrazon - α - [3 - Methylphenyl]amido- α -[3-Methylphenyl]imidopropan-α^{2,2}-Dicarbonsäure. Sm. 206° u. Zers. (B. 30, 1192). IV, 690.

Pentacetat d. Dibromäskulin. Sm. 203-206° (B. 13, 1594). - III, 567. $\mathbf{C}_{25}\mathbf{H}_{24}\mathbf{O}_{14}\mathbf{Br}_{2}$ 1) Chlormethylat d. 6-Amido-5-Phenyl-2,4-Dibenzyl-1,3-Diazin. 2 + PtCl₄ (*J. pr.* [2] **53**, 248). — IV, 1217.
1) Jodmethylat d. 6-Amido-5-Phenyl-2,4-Dibenzyl-1,3-Diazin (*J. pr.* $\mathbf{C}_{25}\mathbf{H}_{24}\mathbf{N}_{3}\mathbf{C}\mathbf{l}$

 $\mathbf{C}_{25}\mathbf{H}_{24}\mathbf{N}_{3}\mathbf{J}$ [2] **53**, 248). — **IV**, *1217*. C 78,3 — H 6,5 — O 4,2 — N 11,0 — M. G. 383. $\mathbf{C}_{25}\mathbf{H}_{25}\mathbf{ON}_{8}$

1) Nitril d. α -[4-Isopropylbenzyliden]amido- β -Phenylamido- α -Oxyβ-Phenylpropionsäure. Sm. 256° (B. 31, 2703).

 $\mathbf{C}_{25}\mathbf{H}_{26}\mathbf{O}_{3}\mathbf{N}_{2}$

C 80.8 - H 6.7 - O 8.6 - N 3.8 - M. G. 371. $\mathbf{C}_{25}\mathbf{H}_{25}\mathbf{O}_{2}\mathbf{N}$

1) Aethylamid d. γ -Oxy- $\alpha \beta \delta$ -Triphenyl- α -Buten- α -Carbonsäure. Sm. 194—196° (B. **24**, 3864). — **II**, 1727.

C 72.3 - H 6.0 - O 11.6 - N 10.1 - M. G. 415. $C_{25}H_{25}O_3N_3$

1) Tri [4-Acetylamidophenyl] methan. Sm. 177 (B. 16, 1302). — IV, 1196.

C 74.4 - H 6.2 - O 15.9 - N 3.5 - M. G. 403. $\mathbf{C}_{25}\mathbf{H}_{25}\mathbf{O}_{4}\mathbf{N}$

1) Benzoylcodein. HCl + H₂O, (2HCl, PtCl₄) (Soc. 28, 15, 321). -III, 906.

2) Benzoat d. Bebeerin (B. d. Bebirin). Sm. 139-140° (B. 29, 2057). -

 $C_{25}H_{25}O_4N_3$

C 69.6 - H 5.8 - O 14.8 - N 9.7 - M G. 431. 1) 3'-Nitro-5², 5³-Di[Acetylamido]-2², 2³-Dimethyltriphenylmethan. Sm. 103—104° (B. 21, 3210). — IV, 1047. 2) 4'-Nitro-5²,5⁸-Di[Acetylamido]-2², 2⁸-Dimethyltriphenylmethan,

Sm. 136° (B. 21, 3208). — IV, 1048. C 66,5 — H 5,5 — O 24,8 — N 3,1 — M. G. 451. 1) Triacetylbulbocapnin (C. 1896 [2] 793). — III, 877.

 $C_{25}H_{25}O_7N$

1) Jodäthylat d. 1-Aethyl-2,4,5-Triphenylimidazol (J. d. Aethyllophin). $\mathbf{C}_{25}\mathbf{H}_{25}\mathbf{N}_{2}\mathbf{J}$ Sm. 234° u. Zers. (M. 17, 304; A. 122, 326).

1) Dibenzylderivat d. Phenyldithiodi-Methylketuret. Sm. 128° (A. $\mathbf{C}_{25}\mathbf{H}_{25}\mathbf{N}_{3}\mathbf{S}_{2}$ **275**, 36). — II, 401.

C 81,1 - H 7,0 - O 4,3 - N 7,6 - M. G. 370. $\mathbf{C}_{25}\mathbf{H}_{26}\mathbf{ON}_{2}$

Benzoylderivat d. Base C₁₈H₂₂N₂ (aus Anilin n. Propionsäurealdehyd).
 Sm. 144—145° (B. 25, 2034). — II, 444.

C 77,8 — H 6,7 — O 8,3 — N 7,2 — M. G. 386. C25H26O2N2

1) 6', 62-Di[Acetylamido]-3', 32-Dimethyltriphenylmethan. Sm. 217 bis 218° (*J. pr.* [2] **36**, 261). — IV, 1047. 2) 5-Aethyläther d. 7-Phenylamido-8-[2-Oxybenzyliden]amido-5-

Oxy-1,2,3,4-Tetrahydronaphtalin. Sm. 130—131° (B. 31, 903). C 74,6 — H 6,5 — O 11,9 — N 7,0 — M. G. 402.

1) α -[4-Isopropylbenzyliden] amido- β -Phenylamido- α -Oxy- β -Phenyl-

propionsäure. Sm. 208° (Ä. 31, 2703). $C_{69.8} - H_{6.0} - O_{11.2} - N_{13.0} - M_{6.430}$ $\mathbf{C}_{25}\mathbf{H}_{26}\mathbf{O}_{3}\mathbf{N}_{4}$

1) Phenylmonohydrazid d. α-Phenylhydrazon - α-Phenylpentan - γγ-Dicarbonsäure. Sm. 132° (B. 21, 3456). — IV, 719.

C 71,8 — H 6,2 — O 15,3 — N 6,7 — M. G. 418. $\mathbf{C}_{25}\mathbf{H}_{26}\mathbf{O}_4\mathbf{N}_2$ 1) Diacetylstrychnin (Soc. 29, 655; M. 6, 859). — III, 939.

 $C_{25}H_{26}O_5N_2$

C 69,1 - H 6,0 - O 18,4 - N 6,4 - M. G. 434.

1) Dioxybenzylcinchotenin. Sm. 278° u. Zers. 2HCl + H₂O, (2HCl, $HgCl_2$), (2HCl, PtCl₄), $HNO_3 + 2H_2O$, $H_2SO_4 + xH_2O$ (A. 269, 243). III, 842.

2) Dioxybenzyleinchotenidin. Sm. 248°. (2HCl, PtCl₄) (A. 269, 247). - III, 852.

3) Helicindianilid (A. 154, 33). — III, 69.

1) Tetraäthylätheracetat d. Dibromquercetin. Sm. 154-157° (M. 16, C25H26O8Br 317). — III, 605.

 $C_{25}H_{26}O_9J_4$ 1) Jodverbindung d. Eupittonsäure (B. 12, 2220). — II, 2092. C25H27ON5 C 72,6 — H 6,5 — O 3,9 — N 16,9 — M. G. 413.

1) Phenylhydrazon d. Nitrosocinchotoxin. Sm. 149 ° (B. 28, 1070). - IV, 798.

C 74,8 — H 6,7 — O 8,0 — N 10,5 — M. G. 401. $C_{25}H_{27}O_{2}N_{3}$

1) Dibenzylamid d. Benzylamidobernsteinsäure. Sm. 149-150° (C. 1896 [1] 244).

2) Di [2-Methylphenylamid] d. 2-Methylphenylimidodiessigsäure. Sm. 149-150° (B. 23, 1995). — II, 470.
3) Di [4-Methylphenylamid] d. 4-Methylphenylimidodiessigsäure. Sm. 213-115° (B. 25, 2285). — II, 507.
4) isom. Di [4-Methylphenylamid] d. 4-Methylphenylimidodiessigs.

4) isom. Di[4-Methylphenylamid] d. 4-Methylphenylimidodiessigsäure. Sm. 250° u. Zers. (B. 8, 1163). — II, 507.

5) 4-Methylphenylamid d. 4-Methylphenylamidoacetyl-4-Methylphenylamidoessigsäure. Sm. 142-145° (B. 25, 2288). - II, 505.

- CosHo,OAN
- C 74,1 H 6,7 O 15,8 N 3,4 M. G. 405.

 1) Diäthylester d. 2,6-Dimethyl-1,4-Diphenyl-1,4-Dihydropyridin-3,5-Dicarbonsäure. Sm. 159-160° (M. 17, 350; B. 31, 604 Anm.). — IV, 371. C 68,6 — H 6,2 — O 22,0 — N 3,2 — M. G. 437.
- C25H27O6N
 - 1) Diäthylester d. ε -[1,2-Phtalyl]amido- α -Phenylpentan- $\beta\beta$ -Dicarbonsäure. Sm. 108—110° (B. 23, 3695). — II, 1813. 1) Aethyljodid d. Aethylamarin. Sm. 267° (B. 18, 3080).
- $\mathbf{C}_{25}\mathbf{H}_{27}\mathbf{N}_{2}\mathbf{J}$
- $\overline{\mathbf{C}_{25}}\mathbf{H}_{27}\mathbf{N}_{2}\mathbf{P}$ 1) 4-Methylphenyldi[1,2,3,4-Tetrahydro-1-Chinolyl]phosphin. Sm. 140° (B. 31, 1047). — IV, 1683.
- C25H27N8S2 1) α-Aethylpropyltriphenyldithiobiuret. Sm. 165,8° (B. 21, 109). — II, 400.
 - 2) β -Aethylpropyltriphenyldithiobiuret. Sm. 165° (B. 21, 109). — II, 400.
 - 3) α-Aethylpropyltriphenylpseudodithiobiuret. Sm. 68,2° (B. 26, 1687).
 - 4) β-Aethylpropyltriphenylpseudodithiobiuret (B. 26, 1688). II, 401.
- $\mathbf{C}_{25}\mathbf{H}_{28}\mathbf{ON}_{2}$
- C 80,6 H 7,5 O 4,3 N 7,5 M. G. 372.
 1) Diäthylhydrobenzamid (A. 110, 79). HI, 20.
 C 77,3 H 7,2 O 8,2 N 7,2 M. G. 388.
- $C_{25}H_{28}O_2N_2$ 1) Acetat d. P-Tetramethyldiamido-2-Oxytriphenylmethan. Sm. 1440
 - (B. 14, 2523). II, 904. 2) Acetat d. P-Tetramethyldiamido-4-Oxytriphenylmethan. Sm. 146° (B. 14, 2523). — II, 904.
 - 3) Methylester d. ?-Di[Dimethylamido]triphenylmethan-2-Carbonsäure. (2 HCl, ZnCl₂) (B. 27 [2] 665).
- $C_{25}H_{28}O_4N_8$
- $C_{25}H_{28}O_5N_2$
- Saure. (2HC), 2hCl₂) (B. 21 [2] 009).

 C 59,5 H 5,6 O 12,7 N 22,2 M. G. 504.

 1) Tribenzylidentetraureïd. Sm. bei 240° (A. 151, 193). III, 33.

 C 68,8 H 6,4 O 18,3 N 6,4 M. G. 436.

 1) Methylhydrastallylimid. (2HCl, PtCl₄) (B. 23, 2907). II, 2053.

 2) Verbindung (aus Phtalylessigsäure). Sm. 103° (B. 19, 2371). II, 1873.

 C 64,1 H 6,0 O 23,9 N 6,0 M. G. 468.

 1) Triacetylchitenin. (2HCl, PtCl₄ + 3H₂O) (M. 14, 600). III, 820.

 1) Dijadithylat d. Hydrobenzamid (4, 110, 79). III, 20. $\mathbf{C}_{25}\mathbf{H}_{28}\mathbf{O}_{7}\mathbf{N}_{2}$
- 1) Dijodäthylat d. Hydrobenzamid (A. 110, 79). III, 20. C 77,5 H 7,5 O 4,1 N 10,9 M. G. 387. $\mathbf{C}_{25}\mathbf{H}_{28}\mathbf{N}_2\mathbf{J}_2$ $C_{25}H_{29}ON_8$
 - 1) 2'-Acetylamido-22,23-Di [Dimethylamido] triphenylmethan. Sm. 1860 (B. **17**, 1892). — **IV**, *1193*.
 - 2) 4'-Acetylamido-42,43-Di[Dimethylamido]triphenylmethan. Sm. 1080 (B. 16, 708). - IV, 1196.
- C 74,4 H 7,2 O 7,9 N 10,4 M. G. 403. $C_{25}H_{29}O_2N_3$ 1) 2'-Nitro-2², 2³-Di[Dimethylamido]-4², 4³-Dimethyltriphenylmethan. Sm. 146° (B. **24**, 560). — **IV**, 1047.
 - 2) 3'-Nitro-22, 23-Di[Dimethylamido]-42, 43-Dimethyltriphenylmethan. Sm. 170° (B. 24, 560). — IV, 1047.
 - 3) 4'-Nitro-2², 2³-Di [Dimethylamido]-4², 4³-Dimethyltriphenylmethan. Sm. 224⁹. 2 Pikrat (B. 20, 1563; 24, 558). IV, 1047.
- C 69.0 H 6.7 O 14.7 N 9.6 M. G. 435. $C_{25}H_{29}O_4N_3$ 1) Morphinviolet (Bl. [3] 5, 858). — III, 900.
- C 62.1 H 6.0 O 23.2 N 8.7 M. G. 483. $C_{25}H_{29}O_7N_8$
 - 1) Diäthylester d. ζ -Phenylhydrazon- β -Keto- δ -[3-Nitrophenyl]heptany ε -Dicarbonsäure. Sm. 161° (A. 303, 233).
 - 2) Diäthylester d. ζ -Phenylhydrazon- β -Keto- δ -[4-Nitrophenyl]heptan- γ e-Dicarbonsäure. Sm. 214—215° (A. 303, 237).
- Verbindung (aus 4-Isopropylphenylphosphinsäure). Sm. oberh. 2500 (A. $C_{25}H_{29}O_{11}P_3$ **294**, 52).
- C 80,2 H 8,0 ← O 4,3 N 7,5 M. G. 374.

 1) Aethyläther d. α-Oxy-4,4'-Di[Dimethylamido]triphenylmethan. Sm. 162° (A. 206, 132). II, 1085. C25H30ON2
 - 2) Aethyläther d. 2-Oxy-l-Di Aethylphenylamido]methylbenzol. Fl. (A. 150, 195). — III, 73.
- C 74,6 H 7,5 O 4,0 N 13,9 M. G. 402.C25H30ON4 1) 5'-Nitroso-2', 42, 43-Tri [Dimethylamido] triphenylmethan? Sm. 2120 (B. 31, 2352).

 $\mathbf{C}_{25}\mathbf{H}_{34}\mathbf{O}_{11}\mathbf{N}_{4}$

 $\mathbf{C_{25}H_{37}O_{2}N_{5}}$

C 73,9 — H 7,4 — O 11,8 — N 6,9 — M. G. 406. $\mathbf{C}_{25}\mathbf{H}_{30}\mathbf{O}_{3}\mathbf{N}_{2}$ 1) Isoamylester d. $\alpha \delta$ -Di[4-Methylphenylimido]- γ -Ketopentan- α -Carbonsäure. Sm. 140° (Bl. [3] 13, 482). C 66,7 — H 6,7 — O 14,2 — N 12,4 $\mathbf{C}_{25}\mathbf{H}_{30}\mathbf{O}_{4}\mathbf{N}_{4}$ - M. G. 450. 1) d-Cocaïnazodimethylamidobenzol. Sm. 220° (B. 27, 1886). — IV, 1482. C 68,5 - H 6,8 - O 18,3 - N 6,4 - M. G. 438C25H80O5N2 1) β -Oxyäthylbruein. HCl, (2HCl, PtCl₄), HBr, HJ, HNO₃, H₂SO₄ + 3H₂O, H₂Cr₂O₇ + H₂O, CHN, CHNS + H₂O (*R*. 14, 228). — III, 946. 2) Brucinvinyloxydhydrat. Salze siehe (A. 118, 211). - III, 947 C 60,7 - H 6,1 - O 16,2 - N 17,0 - M. G. 494 $\mathbf{C}_{25}\mathbf{H}_{30}\mathbf{O}_{5}\mathbf{N}_{6}$ 1) Verbindung (aus Aceton, Benzaldehyd u. Harnstoff). Sm. 182—183° u. Zers. (G. 23 [1] 405). — III, 38. C 66,1 — H 6,6 — O 21,1 — N 6,2 — M. G. 454. 1) Methylhydrastallylamid. Sm. 158° (B. 23, 2907). — II, 2053. $C_{25}H_{30}O_6N_2$ 1) α -Chlor-4',4°,4°-Tri[Dimethylamido]triphenylmethan. 2 + 3 P(Cl₄ $\mathbf{C}_{25}\mathbf{H}_{30}\mathbf{N}_{3}\mathbf{Cl}$ (B. 18, 768; 19, 1271; 28, 1698, 1704). — II, 1088. 1) α -Jod-4', 4^2 , 4^3 -Tri Dimethylamido triphenylmethan (Bl. [3] 15, 1300). $\mathbf{C}_{25}\mathbf{H}_{30}\mathbf{N}_{3}\mathbf{J}$ 1) α-30d-4, 4, 4, 4-11 [Dimethylamido] ortphenylmethan (26. [5] 10, 1300).

— IV, 1195.

C 77,1 — H 8,0 — O 4,1 — N 10,8 — M. G. 389.

1) Pentamethylrosanilin. 2HCl, (2HCl, PtCl₄), 2HJ + H₂O, Pikrat (B. 2, 444; 6, 965; 12, 2351; 16, 707, 2910; Soc. 51, 175). — II, 1091.

2) α-Oxy-4', 4², 4³-Tri[Dimethylamido] triphenylmethan (Methylviolet). $\mathbf{C}_{25}\mathbf{H}_{31}\mathbf{ON}_3$ Sm. 195°. Chlorid, Jodid, Pikrat (B. 6, 363; 13, 212, 2100; 16, 2005; 18, 767, 1271; 19, 109, 1271; 28, 1704; Bl. [3] 9, 123). — II, 1088. 3) Methyläther d. ?-Tetramethyldiamido-4-Amido-5-Oxytriphenylmethan. Sm. 158—159° (B. **24**, 3142). — **II**, 904. C 70,6 — H 7,3 — O 18,8 — N 3,3 — M. G. 425. 1) Dibutyrylmorphin. HCl, (2HCl, PtCl₄) (Soc. **28**, 18, 322). — **III**, 899. $C_{25}H_{31}O_5N$ 1) Distutylymorphin. 11ch, (211cl, 11ch, 11ch, 12ch, 1cc), 12c, 2cd, 1c, 3cd). 11c, 3cd. 1c, 485. 1) Verbindung (aus Eupittonsäure) (B. 11, 1460; 12, 2222). — II, 2092. 11c 63,4 — H 6,6 — O 27,1 — N 2,9 — M. G. 473. $C_{25}H_{31}O_7N_3$ $\mathbf{C}_{25}\mathbf{H}_{31}\mathbf{O}_{8}\mathbf{N}$ 1) Narceïnäthylester. HCl, (2HCl, PtCl₄), HBr, HJ (A. 277, 50). — II, 2080. C 79,8 — H 8,5 — O 4,2 — N 7,4 — M. G. 376. $\mathbf{C}_{25}\mathbf{H}_{32}\mathbf{ON}_{2}$ 1) Base (aus Cantharsäure u. Dimethylanilin). (2 HCl, PtCl₄) (B. 19, 1088). - III, 624. C25 H32 ON C 69,4 - H 7,4 - O 3,7 - N 19,4 - M. G. 4321) Di[3-Piperidylazo-4-Methylphenyl]keton (A. 271, 8). — IV, 1579. C25H22O4N 1) Benzoylcapsaicin. Sm. 74° (C. 1899 [1] 294). C 68,2 — H 7,3 — O 18,2 — N 6,3 — M. G. 440. $C_{25}H_{32}O_5N_2$ 1) Brueinäthyloxydhydrat. Salze siehe (J. 1856, 546; J. pr. [2] 3, 163). - III, 946. $C_{25}H_{32}N_2J_2$ 1) Dijodmethylat d. 4',42-Di[Dimethylamido]triphenylmethan. 231° (218—222°) u. Zers. (A. 206, 127, 151; 217, 256). — IV, 1042. C 70,3 - H 7,7 - O 18,7 - N 3,3 - M. G. 427. $C_{25}H_{33}O_5N$ 1) Aethyläther d. Papaverinpropyloxydhydrat. Sm. 137° (J. pr. [2] 56, 332). 1) Verbindung (aus α-Oxytri[4-Dimethylamidophenyl]methan) (Bl.[3] 9, 123). C25 H33 N3 Cl4 - II, 1088. $C_{25}H_{33}N_3Br_4$ 1) Verbindung (aus α -Oxytri[4-Dimethylamidophenyl]methan (Bl. [3] 9, 123). — II, 1088. C 79.4 - H 9.0 - O 4.2 - N 7.4 - M. G. 378.C25H34ON2 1) Triäthylidencinchonin. (2HCl, PtCl₄) (A. 269, 287). — III, 834. $C_{25}H_{34}O_5N_2$ C 67,9 - H 7,7 - O 18,1 - N 6,3 - M. G. 442.1) Acetat d. Yohimbin. Sm. 133° (C. 1899 [1] 528). C25 H34 O5 N3 1) Verbindung (aus d. Aethyläther d. 4-Acetylamido-1-Oxynaphtalin). Sm. 218—219° (\tilde{B} . **25**, 3061). $\stackrel{\bullet}{-}$ II, 865.

C 53,0 - H 6,0 - O 31,1 - N 9,9 - M. G. 566.

C 68,3 - H 8,4 - O 7,3 - N 15,9 - M. G. 439.

(G. **23** [1] 398). — **II**, 1954.

102). — II, 335.

1) Verbindung (aus d. Benzuramidoäpfelsäurediäthylester). Sm. 157-158°

1) Verbindung (aus 4-Nitroso-1-Dipropylamidobenzol). Sm. 140° (M. 7,

- $C_{25}H_{37}O_6N_3$ C 63,1 - H 7,8 - O 20,2 - N 8,8 - M. G. 475.
- 1) Trinitrocholesterylen. Zers. bei 180° (J. r. 10, 360). II, 1074. C25H37O14Cl Heptaäthylester d. α-Chlorbutan-α α ββγγδ-Heptacarbonsäure. Fl.
- $C_{25}H_{38}N_2J_2$ $C_{25}H_{39}O_8N$
- 1) Heptaathylester d. a-chloroddan-arppyry respectively.

 (B. 21, 2116). I, 873.

 1) Jodmethylat d. Base C₂₃H₃₂N₂ (Bl. 47, 46). IV, 997.

 C 62,4 H 8,1 O 26,6 N 2,9 M. G. 481.

 1) Pseudoaconin. + Aceton (Sm. 86—87°), HCl, (HCl, AuCl₃), HBr, HNO₃ (B. 29, 856; Soc. 33, 160; 71, 357). III, 775.

 C 39,8 H 5,2 O 53,1 N 1,8 M. G. 753.
- $C_{25}H_{39}O_{25}N$ 1) Verbindung (aus Espartoharz) (Soc. 41, 94). — I, 1080. C 77,5 — H 10,6 — O 8,3 — N 3,6 — M. G. 387.
- $\mathbf{C}_{25}\mathbf{H}_{41}\mathbf{O}_{2}\mathbf{N}$ 1) Phenylformylamid d. Stearinsäure. Sm. 61° (Am. 18, 699).
- $C_{25}H_{42}O_2N_2$
- C 74,6 H 10,4 0 8,0 N 7,0 M. G. 402.

 1) s-Stearylphenylharnstoff. Sm. 92°. II, 382.

 C 52,6 H 7,4 O 25,3 N 14,7 M. G. 570.

 1) Mykoproteïn (J. pr. [2] 20, 454; [2] 23, 302, 419; J. 1879, 1006). $C_{95}H_{49}O_9N_6$
- IV, 1634. C 80,4 H 11,5 O 4,3 N 3,8 M. G. 373. $\mathbf{C}_{25}\mathbf{H}_{43}\mathbf{ON}$
- α-Oximido-α[4-Methylphenyl]oktadekan. Sm. 64° (J. pr. [2] 54, 401).
 C 68,8 H 10,1 O 14,7 N 6,4 M. G. 436. $\mathbf{C}_{25}\mathbf{H}_{44}\mathbf{O}_{4}\mathbf{N}_{2}$
- 1) Diacetyllupinin. Fl. (2HCl, PtCl₄), (2HCl, 2AuCl₃) (A. 224, 314; C. 1897 [2] 361). — III, 892.
- $\mathbf{C}_{25}\mathbf{H}_{44}\mathbf{O}_4\mathbf{N}_8$
- C. 1897 [2] 301]. 111, 632. C 57,7 H 8,5 O 12,3 N 21,5 M. G. 520. 1) Benzylidendiönanthotetraureüd (A. 151, 195). III, 33. 1) Dibromeerotinsäure. Sm. 30° (C. 1896 [1] 642). 1) Chlorid d. Cerotinsäure. Sm. 47° (C. 1896 [1] 642). 1) α-Bromeerotinsäure. Sm. 66,5° (C. 1896 [1] 642). C 78,7 H 13,4 O 4,2 N 3,7 M. G. 381. $\mathbf{C}_{25}\mathbf{H}_{48}\mathbf{O}_{2}\mathbf{Br}_{2}$ $\mathbf{C}_{25}\mathbf{H}_{49}\mathbf{OC1}$ $\mathbf{C}_{25}^{25}\mathbf{H}_{49}^{30}\mathbf{O}_{2}\mathbf{Br}$ $\mathbf{C}_{25}^{25}\mathbf{H}_{51}^{35}\mathbf{ON}$
- 1) Amid d. Cerotinsäure. Sm. 109° (C. 1896 [1] 642). C 75,6 H 12,8 O 8,1 N 3,5 M. G. 397. $C_{25}H_{51}O_2N$
- 1) α-Amidocerotinsäure. Sm. 215° u. Zers. (C. 1896 [1] 642). C 56,8 H 9,8 O 12,1 N 21,2 M. G. 528. 1) Oenanthotetrureïd. Sm. 155° (A. 151, 190). I, 1314. $C_{25}H_{52}O_4N_8$

C_{25} -Gruppe mit vier Elementen.

- 1) Benzoat d. Chloroxyphenylphenazon. Sm. 234-235° (B. 24, 590). $\mathbf{C}_{25}\mathbf{H}_{15}\mathbf{O}_{3}\mathbf{N}_{2}\mathbf{Cl}$ **– IV**, 1004.
- 1) Di[Thiodiphenyl]harnstoff. Sm. 223-225° (231°) (B. 18, 1848; 24, C25H16ON2S 2911). — II, 807.
- 1) αβ-Diphenyl-α-Thiodiphenylharnstoff. Sm. 165° (B. 24, 2913). $\mathbf{C}_{25}\mathbf{H}_{18}\mathbf{ON}_{2}\mathbf{S}$
- II, 806.

 1) Di[4-Sulfophenylazo]maklurin. Na₂ (Soc. 67, 935).

 1) Triacetylresorcinsacchareïn. Sm. 286° (Bl. [3] 17, 695). $\mathbf{C}_{25}\mathbf{H}_{18}\mathbf{O}_{12}\mathbf{N}_{4}\mathbf{S}_{2}$ $\mathbf{C}_{25}\mathbf{H}_{19}\mathbf{O}_{8}\mathbf{NS}$
- 2-Thiocarbonyl-3-[2-β-Naphtolazobenzyl]1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 225° (J. pr. [2] 55, 364). IV, 1492. C25H20N4S
- 1) α-Phenylhydrazon-4-Phenylsulfondiphenylmethan. Sm. 1840 $C_{25}H_{20}O_{2}N_{2}S$ (Am. 20, 312).
- 1) $\alpha\beta$ -Diphenyl- $\alpha\beta$ -Di[Phenylsulfon]harnstoff. Sm. 198° (J. pr. [2]) $\mathbf{C}_{25}\mathbf{H}_{20}\mathbf{O}_5\mathbf{N}_2\mathbf{S}_2$ **51**, 350).
 - 2) Phenylamid d. Diphenylketon-3,3' oder 3,4'-Disulfonsäure. Sm. 177-178° (Soc. 73, 406).
- s-Di[4-p-Chlorphenylamidophenyl]thioharnstoff. Sm. 176° (A. 303, 316).
 2-[β-Phenyläthenyl]chinolin 4-[2-Aethoxylphenyl-P-Sulfon- $\mathbf{C}_{25}\mathbf{H}_{20}\mathbf{N}_4\mathbf{Cl}_2\mathbf{S}$
- $\mathbf{C}_{25}\mathbf{H}_{21}\mathbf{O}_4\mathbf{NS}$
 - säure]. Na (B. 27, 3039). IV, 435. 2) $2 \cdot [\beta$ -Phenyläthenyl] chinolin $4 \cdot [4$ -Aethoxylphenyl-?-Sulfon-
- säure]. Na (B. 27, 912). 1) Di[Phenylamid] d. Phenylphosphorsäure-2-Carbonsäurephenyl- $\mathbf{C}_{25}\mathbf{H}_{21}\mathbf{O}_4\mathbf{N}_2\mathbf{P}$ ester. Sm. 174-175° (B. 31, 2178).
- 1) Tri[Phenylamid] d. Benzol-1-Carbonsäure-3,5-Disulfonsäure. $C_{25}H_{21}O_5N_3S_2$ Sm. 222° (M. 14, 693). — II, 1301.

C25H30O8NJ

- II, 2080.

1) α-Phenylamidotriphenylmethan-?-Tetrasulfonsäure. Ba₂, Cu₂ C25H21O12NS4 (B. 17, 704). — II, 642. 1) Chlorbenzylat d. Diphenylphenoxylphosphin. Sm. 232-236° u. C₂₅H₂₂OClP Zers. (B. 18, 2115). — IV, 1657. 1) Tri[Phenylamid] d. Phenylphosphinsäure-4-Carbonsäure. Sm. $C_{25}H_{22}O_2N_3P$ 2426 (A. 293, 281). — IV, 1673. 1) Chlorbenzylat d. Phosphorigsäuretriphenylester. Fl. (B. 31, 1051). C25H22O3ClP 1) Dibenzoat d. 5-Brom-4-Oxy-3-Oximidomethyl-1-tert. Butylbenzol. Sm. 189° (Am. 16, 644). — III, 91. C₂₅H₂₂O₄NBr α-Phenylsulfon-γ-[2-Naphtyl]sulfon-β-Phenylhydrazonpropan. Sm. 175° (J. pr. [2] 55, 413). — IV, 768.
 Phenylamid d. Diphenylmethan-4,4'-Disulfonsäure. Sm. 178° $C_{25}H_{22}O_4N_2S_2$ (Soc. 73, 409). C₂₅H₂₈O₄N₄P 1) Di Phenylhydrazid d. Phenylphosphorsäure-2-Carbonsäurephenylester. Sm. 170° (B. 31, 2178). 1) $\overline{2}$ -[2,4-Dimethylphenylbenzoylamido]-5-[2,4-Dimethylphenyl- $\mathbf{C}_{25}\mathbf{H}_{24}\mathbf{ON}_{4}\mathbf{S}$ amido]-1,3,4-Thiodiazol. Sm. 211-2120 (B. 23, 369). - IV, 1237. s-Phenylthebenylthioharnstoff. Sm. 85° u. Zers. (B. 30, 1377).
 Mono-4-Methylphenylamid d. Chlor-[4-Methylphenylamido]- $\mathbf{C}_{25}\mathbf{H}_{24}\mathbf{O}_{3}\mathbf{N}_{2}\mathbf{S}$ CosHo4O3N3Cl 4-Methylphenylimido] bernsteinsäure. Sm. 1860 (A. 279, 146). 1) Tri[Phenylamido]-4-Methylphenylphosphoniumchlorid. Sm. 245° $\mathbf{C}_{25}\mathbf{H}_{25}\mathbf{N}_{3}\mathbf{ClP}$ (B. 28, 2213). — IV, 1672.

1) Tri[Phenylamido]-4-Methylphenylphosphoniumbromid. Sm. 238° $\mathbf{C}_{25}\mathbf{H}_{25}\mathbf{N}_{3}\mathbf{BrP}$ (B. 28, 2215). — IV, 1672. 1) Tri[Phenylamido]-4-Methylphenylphosphoniumjodid. Sm. 235° $\mathbf{C}_{25}\mathbf{H}_{25}\mathbf{N}_{3}\mathbf{JP}$ (B. 28, 2215). — IV, 1672. 1) Tri[Phenylamido]-4-Methylphenylphosphoniumhydrat. Sm.240° $\mathbf{C}_{25}\mathbf{H}_{26}\mathbf{ON}_{3}\mathbf{P}$ Salze, siehe diese (B. 28, 2214). - IV, 1672. 1) Alloxanstrychnindisulfit $+ \text{ H}_2\text{O}$ (A. 248, 150). — III, 937. CosHooONS C25 H27 ON2 P 1) 4-Methylphenyldi[1,2,3,4-Tetrahydro-1-Chinolyl]phosphinoxyd. Sm. 181° (B. 31, 1047). 1) Verbindung (aus 3-Dimethylamido-1-Oxybenzol). 2+PtCl₄ (B. 29, 511). $\mathbf{C}_{25}\mathbf{H}_{28}\mathbf{O}_{2}\mathbf{N}_{3}\mathbf{Cl}$ 1) Jodisoamylat d. Berberin (C. 1895 [2] 138). — III, 800. $\mathbf{C}_{25}\mathbf{H}_{28}\mathbf{O}_4\mathbf{NJ}$ 1) Pentamethylen-1, 2-Xylylendiphenylsulfondiamin. Sm. 132° (B. $\mathbf{C}_{25}\mathbf{H}_{28}\mathbf{O}_4\mathbf{N}_2\mathbf{S}_2$ 31, 1704). 1) Methylphenyldi[1,2,3,4-Tetrahydro-1-Chinolyl]phosphonium- $\mathbf{C}_{25}\mathbf{H}_{28}\mathbf{N}_{2}\mathbf{JP}$ jodid. Sm. 136° (B. **31**, 1045). — IV, 1682. $\mathbf{C}_{25}\mathbf{H}_{29}\mathbf{O}_4\mathbf{N}_2\mathbf{C}\mathbf{I}$ 1) Chlorvinylat d. Bruein. 2 + PtCl₄ (R. 14, 231; A. 118, 211). -III, 947. 1) Brueinbromäthyliumbromid $+ 3H_2O$ (A. 118, 209; R. 14, 230). $\mathbf{C}_{25}\mathbf{H}_{30}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{Br}_{2}$ - III, 947. C25H30O8NJ 1) Jodäthylat d. Aethylhydrastin. Zers. bei 241° (B. 23, 412). — II, 2054. $C_{25}H_{31}O_2N_3J_2$ 1) Dijodmethylat d. 3'-Nitro-42,43-Di[Dimethylamido]triphenyl-1) Dijodmethylat d. 3 -Nitro-4-,4-Di Dimethylamidojtriphenylmethan. Sm. 225° u. Zers. (B. 13, 672). — IV, 1043.
2) Dijodmethylat d. 4'-Nitro-4-,4-Di Dimethylamidojtriphenylmethan + H₂O. Sm. 220° u. Zers. (B. 14, 2526). — IV, 1044.
1) Chloräthylat d. Brucin. 2 + PtCl₄ (J. 1856, 546). — III, 946.
1) Jodäthylat d. Brucin. + 1/2 H₂O. + J₂, + J₄ + H₂O (J. 1856,
546. Length 101. 2 1629. $\mathbf{C}_{25}\mathbf{H}_{31}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{C}\mathbf{1}$ $C_{25}H_{31}O_4N_2J$ 546; J. pr. [2] 3, 163). — III, 946. C25H31O5N2Br 1) Brueinbromäthyloxydhydrat. Salze siehe (A. 118, 209; R. 14, 230). **— III**, *947*. Verbindung (aus Benzthiazol) (B. 20, 2264). — II, 797.
 Jodmethylat d. α-Oxy-4',4²-Di[Dimethylamido]triphenylmethan. $C_{25}H_{31}N_2JS_2$ $\mathbf{C}_{25}\mathbf{H}_{32}\mathbf{ON}_{2}\mathbf{J}_{2}$ Sm. 171-172° u. Zers. (B. 13, 2225; 15, 236; A. 217, 254). II, 1058. C25H32O2N2Br2 1) αγ-Di[α-Bromisobutyryl-4-Methylphenylamido] propan. Sm. 1130 (B. 31, 3248). $C_{25}H_{32}O_3N_2S$ 1) Benzaldehyd-2,4,5-Trimethylphenylthionaminsaures-5-Amido-1,2,4-Trimethylbenzol. Sm. 108° (A. 274, 238). — III, 7.

2) Benzaldehyd-2, 4, 6-Trimethylphenylthionaminsaures-2-Amido-1, 3, 5-Trimethylbenzol. Sm. 88° (A. 274, 240). — III, 7.

1) Jodmethylat d. Narceinmethylester. Sm. 193-194° (A. 277, 41).

1) Chloräthylat d. Diäthylidencinchonin. (HCl, PtCl₄) (A. 269, 287). C₂₅H₈₅ON₂Cl **- III**, 834.

1) Di[Chlorathylat] d. Lupinin. $+PtCl_4+H_2O$, $+2AuCl_3$ (B. 14, C25H50O2N2Cl2 1321). **— III**, *892*.

 $C_{25}H_{50}O_{2}N_{2}J_{2}$ 1) Di[Jodäthylat] d. Lupinin (B. 14, 1321). — III, 892.

C₂₅-Gruppe mit fünf Elementen.

 $\mathbf{C}_{25}\mathbf{H}_{31}\mathbf{O}_7\mathbf{N}_3\mathbf{ClP}$ 1) Verbindung (aus d. Di[4-Methylphenylamid] d. Weinsäure). Sm. $220-221^\circ$ (A. $\mathbf{279},\ 147).$

C₂₆-Gruppe mit einem Element.

 $C_{26}H_{14}$ C 95,7 — H 4,3 — M. G. 326.

 $C_{26}H_{20}$

 $C_{26}H_{22}$

 $C_{26}H_{38}$

C26H42

 $C_{26}H_{44}$

 $\mathbf{C}_{26}\mathbf{H}_{16}\mathbf{O}$

1) Kohlenwasserstoff (aus Fluoren). Sm. 270° (B. 8, 1049). — II, 303. $C_{26}H_{16}$

C 95,1 — H 4,9 — M. G. 328.

1) Dibiphenylenäthen (Tetraphenylenäthylen). Sm. 189-190°; Sd. über 360°. Pikrat (B. 8, 1049; 25, 3146; 29, 2157; J. 1877, 383; A. 290, 240; 291, 1). — II, 303. C 94,6 — H 5,4 — M. G. 330.

 $C_{26}H_{18}$

9-Diphenylmethylenfluoren (Biphenylendiphenyläthen). Sm. 229,5°. Pikrat (Sm. 198°) (B. 29, 73, 739, 2157).
 Dibiphenylenäthan. Sm. 241—242° (246°) (B. 8, 1049; A. 290, 243;

291, 6). — **II**, 303. C 94,0 — H 6,0 — M. G. 332.

1) 9,10-Diphenyl-9,10-Dihydroanthracen. Sm. 164,2°; Sd. 437° (Am. 13, 557). — II, 302.

2) 9-Diphenylmethylfluoren (Biphenylendiphenyläthan). Sm. 217-218°. $+ 2 C_6 H_6$ (B. **29**, 75).

3) 9-Phenyl-9-Benzylfluoren? Sm. 233—234° (A. 296, 257).
4) Tetraphenyläthen. Sm. 221°; Sd. 415—425° (A. 194, 311; 235, 222; 296, 229; 298, 237; B. 3, 752; 5, 277; 7, 1128; 9, 562; 14, 1526; 21, 780; 29, 1790; J. r. 12, 426). — II, 302.

C 93,4 — H 6,6 — M. G. 334.

1) $\alpha \alpha \beta \beta$ -Tetraphenyläthan. Sm. 209°; Sd. 358—362° (379—383°). $+ C_a H_a$. Lit. bedeutend. — II, 300.

2) αααβ-Triphenyläthan? Sm. 140° (Bl. [3] 1, 778). — II, 301.
 3) Dibenzylbiphenyl. Sm. 113° (B. 14, 2032). — II, 301.
 C 89,6 — H 10,4 — M. G. 348.

 $C_{26}H_{36}$

1) Kohlenwasserstoff (aus Oenocarpol). $2 + H_2O$ (Sm. 75°) (B. 25 [2] 216). · III, *638*.

C 89,1 - H 10,9 - M.G. 350.

1) Carotin. Sm. 167,8° (Berz. J. 12, 277; A. 62, 380; 117, 200; 271, 229; Bl. 46, 487). — II, 243; III, 625. C 88,1 — \dot{H} 11,9 — \dot{M} . \dot{G} . 354.

Cholesterilen, siehe C₂₇H₄₂. — II, 176.
 C 87,7 — H 12,3 — M. G. 356.

1) Kohlenwasserstoff (aus Cholesterin) (B. 18, 1809). — II, 1072.

Kohlenwasserstoff (aus japan. Vogelleim) (Soc. 53, 277). — II, 173.
 C 87,2 — H 12,8 — M. G. 358.

 $\mathbf{C}_{26}\mathbf{H}_{46}$

Sm. $89 - 90^{\circ}$ (J. r. 8, 237; M. 15, 86). 1) Cholesten (Hydrocholesterilen). - II, 173.

 $\mathbf{C}_{26}\mathbf{H}_{54}$ C 85,2 — H 14,8 — M. G. 366.

1) Hexakosan. Sm. 44° (A. 224, 236; B. 16, 391). — I, 107.

C₂₆-Gruppe mit zwei Elementen.

C 55,1 - H 2,5 - O 42,4 - M. G. 566.C26H14O15

1) Verbindung (aus Maklurin) (A. 143, 309). — III, 208.

C 90.7 - H 4.6 - O 4.6 - M. G. 344.

1) Dibiphenylenäthanoxyd. Sm. 2580 (A. 291, 5).

 $\mathbf{C}_{26}\mathbf{H}_{18}\mathbf{O}_{12}$

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C 86,7 - H 4,4 - O 8,9 - M. G. 360.
 C26H16O2
                   1) Dioxyxanthylen (Tetraphenyläthylendioxyd). Sm. 315° (B. 28, 2310).
                         - III, 197.
                       C 83,0 - H 4,2 - O 12,8 - M. G. 376.
 \mathbf{C}_{26}\mathbf{H}_{16}\mathbf{O}_{8}
                   1) Dihydrodiphenylenoxyanthrachinon. Sm. 266° (B. 23, 321).—III, 464.
 \mathbf{C}_{26}\mathbf{H}_{16}\mathbf{O}_{6}
                      C 73,6 — H 3,8 — O 22,6 — M. G. 414.
                   1) Acetat d. Naphtalfluorescein + H<sub>2</sub>O. Sm. 191<sup>o</sup> (wasserfrei) (A. 227,
                       138). — II, 2039.
                       C 70,9 - H 3,6 - O 25,4 -
 C26H16O7
                                                               - M. G. 440.
                   1) Verbindung (aus Pyrogallol u. Benzaldehyd) (B. 5, 26). - III, 11.
                   C 66,1 — H 3,4 — O 30,5 — M. G. 472.

1) Triacetat d. Cörulein (A. 209, 273).—

C 61,9 — H 3,2 — O 34,9 — M. G. 504.
 C_{26}H_{16}O_{9}
                                                                              - II, 2088.
 \mathbf{C}_{26}\mathbf{H}_{16}\mathbf{O}_{11}
                   1) Verbindung (aus Laccainsäure) (B. 29, 1298). — II, 2082.
                      C 81,3 - H 4,1 - N 14,6 - M. G. 384.
 C_{26}H_{16}N_4
                   1) Verbindung (aus αβ-Dinaphtylamindisazobenzol). Sm. 287° (B. 22, 3347).
                        IV, 1401.
                  2) Verbindung (aus 2,3-Diamido 5,10-Naphtdiazin) (B. 23, 842). — IV, 1281.
 \mathbf{C}_{26}\mathbf{H}_{16}\mathbf{Cl}_{2}
                  1) \alpha\beta-Dichlordibiphenylenäthan. Sm. 234° (A. 290, 243).
 \mathbf{C}_{26}\mathbf{H}_{16}\mathbf{Br}_{2}
                  1) \alpha\beta-Dibromdibiphenylenäthan (\alpha\beta-Dibromtetraphenylenäthan). Sm. 235°
                      u. Zers. (A. 290, 242).
                  1) Tetra[4-Bromphenyl]äthen. Sm. 248-249° (253-255° cor.) (A. 296, 231).
 \mathbf{C}_{26}\mathbf{H}_{16}\mathbf{Br}_{4}
                      C 90.9 - H 4.9 - N 4.1 - M. G. 343.
 \mathbf{C}_{26}\mathbf{H}_{17}\mathbf{N}
                  1) Phenyl-\beta\beta-Dinaphtylenamin. Sm. 144°. Pikrat (B. 15, 2176). —
                      IV, 473.
C 84,1 — H 4,6 — N 11,3 — M. G. 371.
 C_{26}H_{17}N_3
                  1) Phenylamido-s-\alpha\beta-Naphtazin. Sm. 280° (A. 272, 348). — IV, 1215. 2) s-\alpha\beta-Naphtindulin. Sm. 248—250° (A. 272, 322; B. 31, 2487). —
                      IV, 1214.
                      C 90,2 - H 5,2 - O 4,6 - M. G. 346.
\mathbf{C}_{26}\mathbf{H}_{18}\mathbf{O}
                  1) Fluorenäther (aus 7-Oxyfluoren). Sm. 270° (A. ch. [5] 7, 507). —
                      II, 1082.
                  2) 9-Benzoyl-9-Phenylfluoren (Diphenylmethylenbenzophenon?). Sm. 172°
                      (Bl. [3] 1, 779; A. 296, 258). — III, 266.
                  3) 10-Keto-9,9-Diphenyl-9,10-Dihydroanthracen. Sm. 1920. + 1/2 Nitro-
                  benzol (A. 202, 65; C. 1895 [2] 363; Bl. [3] 17, 876). — III, 260.
4) Verbindung (aus d. Aldehyd d. 1-Phenylbenzol-2-Carbonsäure). Sm. 111°
                  (M. 19, 590).

C 86,2 — H 5,0 — O 8,8 — M. G. 362.

1) Dibenzoylbiphenyl. Sm. 218° (B. 14, 2031). — III, 309.
\mathbf{C}_{26}\mathbf{H}_{18}\mathbf{O}_2
                  C 82,5 — H 4,8 — O 12,7 — M. G. 378.

1) Verbindung (aus Xanthydrol). Sm. bei 200° (J. pr. [2] 28, 290; B. 26, 1278). — II, 1114.
C_{26}H_{18}O_{8}
C_{26}H_{18}O_4
                     C 79.1 - H 4.6 - O 16.2 - M. G. 394.
                 1) Anhydrotetra[P-Oxyphenyl]äthen + ^{1}/_{2}H<sub>2</sub>O? (B. 5, 279). — II, 1040. 2) 9,9-Di[P-Oxyphenyl]fluoren-P-Carbonsäure. Sm. 165°. Ag (A. 247,
                     286). — II, 1916.
                 3) Diacetat d. 2,2-Binaphtylenglykol. Sm. 192,5° (A. ch. [5] 28, 178).
                      — II, 1105.
                 4) Dibenzoat d. γ-Dioxybiphenyl (Z. 1871, 261). — II, 1151.
                  5) Verbindung (aus Resorcin u. Benzylchlorid). Sm. noch nicht bei 320°
                     (B. 31, 310).
C 73,3 — H 4,2 — O 32,5 — M. G. 426.
\mathbf{C}_{26}\mathbf{H}_{18}\mathbf{O}_{6}
                 1) 9, 9-Di [?-Dióxyphenyl] fluoren-?-Carbonsäure (A. 247, 288). —
                 1) 9, 9-Bi [ - Bloxypholy ] 11. 11. 2039.

C 70,6 — H 4,1 — O 25,3 — M. G. 442.

1) Norrhizocarpsäure. Sm. 92°. K<sub>2</sub> + 5H<sub>2</sub>O (J. pr. [2] 58, 513).

2) Benzoylchrysocetrarsäure. Sm. 156° (J. pr. [2] 57, 312).

3) Verbindung (aus Euxanthon) (A. 290, 162).
C_{26}H_{18}O_{7}
C26H18O9
                     C 65,8 - H 3,8 - O 30,4 - M G 474.
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1) Triacetat d. Resoreinoxaleïnanhydrid (B. 14, 2566). — II, 937.

C 59,8 — H 3,4 — O 36,8 — M. G. 522. 1) Filixroth (A. 143, 277). — III, 590.

- C26H18O14
- $C_{26}H_{18}N_2$

 $C_{26}H_{18}N_4$

C26H18Br2

 $C_{26}H_{19}N$

C26H20

 $\mathbf{C}_{26}\mathbf{H}_{20}\mathbf{O}_{3}$

 $\mathbf{C}_{26}\mathbf{H}_{20}\mathbf{O}_{5}$

- C 56,3 H 3,2 O 40,5 M. G. 554.

 1) Morindin + H₂O (J. 1847/48, 748; Z. 1866, 342; Soc. 51, 52). III, 455. C 87,1 H 5,0 N 7,8 M. G. 358.

 1) Diphenylphenhomazin. Sm. 190° (B. 29, 1273). III, 182.
- 2) N-Phenyldihydrophenanthrophenazin. Sm. 230° (A. 292, 268). -IV, 1080.
- 3) Verbindung (aus 2,2'-Diamidobiphenyl u. Benzil). Sm. 238° (B. 25, 3288). — IV, 1094. C 80,8 — H 4,7 — N 14,5 — M. G. 386.
- 1) Naphtylroth. HCl, (2 HCl, PtCl₄) (B. 26, 2235; A. 286, 227). —
- 1) 9,10-Dibrom-9,10-Diphenyl-9,10-Dihydroanthracen. Sm. 127° u. Zers. (Am. 13, 558). — II, 302
- 90.5 H 5.5 N 4.0 M. G. 3451) 2,5-Diphenyl-1-[1-Naphtyl]pyrrol. Sm. 148—149° (B. 22, 3092). — IV, 438.
- 2) 2,5-Diphenyl-1-[2-Naphtyl]pyrrol. Sm. 207—208° (B. 22, 3093). IV, 438.
- $\mathbf{C}_{26}\mathbf{H}_{19}\mathbf{N}_3$ C 83,6 - H 5,1 - N 11,2 - M. G. 373.1) 2 - Phenylamido - 1, 1' - Azonaphtalin. Sm. 140° (B. 23, 1330). —
 - 2) 2-Phenylamido-1,2'-Azonaphtalin. Sm. 154-155° (B. 23, 1332). IV, 1401.
 - 3) 2-[1-Naphtyl]amido-1-Phenylazonaphtalin. Sm. 1670 (B. 22, 3346).
 - · IV, 1398. 4) 2-[2-Naphtyl]amido-1-Phenylazonaphtalin. Sm. 139° (B. 23, 1333).
 - IV, 1398. 5) 4-[1-Naphtyl] amido-1-Phenylazonaphtalin. Sm. 128° (A. 256, 257).
 - **IV**, *1397*.
 - 6) 4-[2-Naphtyl]amido-l-Phenylazonaphtalin. Sm. 137° (B. 22, 3345;
 23, 1329). IV, 1398.
 C 89,7 H 5,7 O 4,6 M. G. 348.
 - α-Benzpinakolin. Sm. 204—205° (B. 5, 277; 11, 68, 1396; 17, 911; 29, 1790, 2160). III, 264.
 - 2) β-Benzpinakolin. Sm. 181° (178-179°) (A. 133, 29; B. 10, 1475; 11, 66; 17, 911; 29, 1790, 2160; J. r. 12, 429). — III, 265.
 - 3) Tetraphenyl-Aethylenoxyd, siehe C₂₆H₂₂O Benzhydroläther.
 - 4) 4-Benzoyltriphenylmethan. Sm. 164° (Bl. [3] 15, 950).
 C 85,7 H 5,5 O 8,8 M. G. 364.
- $\mathbf{C}_{26}\mathbf{H}_{20}\mathbf{O}_{2}$ 1) α -Oxy-4-Benzoyltriphenylmethan. Sm. 158° (Bl. [3] 15, 951).
 - 2) Acetat d. P-Oxy-1,2,3-Triphenylbenzol + 2H₂O. Sm. 189° (E. 26, 68). - II, 905.
 - 3) Verbindung (aus Phenol u. Benzaldehyd] (Am. 9, 130). III, 10. C 82,1 H 5,3 O 12,6 M. G. 380.
 - 1) β -Keto- $\alpha\beta$ -Diphenyl- $\alpha\alpha$ -Di[?-Oxyphenyl] äthan (Bl. [3] 7, 609). III, 265.
- $C_{26}H_{20}O_4$ C 78,8 - H 5,1 - O 16,1 - M. G. 396.1) Tetra[?-Oxyphenyl]äthen (B. 5, 278). — II, 1039.
 - 2) α -Verbindung (aus Resorcin u. Benzaldehyd). $+3 H_2 O$? (Am. 5, 340).
 - 3) β -Verbindung (aus d. α -Verb. $C_{26}H_{20}O_4) + 4H_2O$. Sm. oberh. 330° u. Zers. (Am. 5, 344). — III, 10.
 - 4) Verbindung (aus 1,4-Benzochinon u. 2 Molec. 2-Oxynaphtalin). Sm. 82° Na₂ (Am. 18, 19). — III, 344. C 75,7 — H 4,8 — O 19,4 — M. G. 412.
 - 1) α -Keto- $\alpha\beta\varepsilon$ -Triphenyl- $\beta\delta$ -Hexadiën- $\gamma\delta$ -Dicarbonsäure (α -Desylen- γ -Methylphenylitakonsäure). Sm. $227-230^\circ$ u. Zers. K_2 , Piperidinsalz
- (B. **30**, 96). C 72,9 H 4,6 O 22,5 M. G. 428. $\mathbf{C}_{26}\mathbf{H}_{20}\mathbf{O}_{6}$
 - 1) Auron (M. 5, 111). III, 79.
 - Rhizocarpsäure (oder C₂₈H₂₂O₇). Sm. 177—179°. K+H₂O (A. 284, 114; 295, 236; B. 30, 362; J. pr. [2] 57, 446; [2] 58, 511). II, 2039.
 Verbindung (aus Pyrogallol u. Benzaldehyd) (B. 5, 281; Am. 9, 131).
 - **III**, 11.

26 II. 2138 $C_{26}H_{20}O_7$ C 70,3 — H 4,5 — O 25,2 — M. G. 444. 1) Diacetat d. Kresorcinphtalein. Sm. 200° (B. 15, 1069; A. 215, 96). **- II**, 2066. 11, 2000.
2) Diacetat d. Orcinphtaleïn. Sm. 219—220° (A. 183, 66). — II, 2066.
3) Diacetat d. β-Orcinphtaleïn. Sm. 227—228° (B. 29, 2636).
4) Diacetat d. γ-Orcinphtaleïn. Sm. 207—208° (B. 29, 2639).
C 67,8 — H 4,3 — O 27,8 — M. G. 460.
1) Triacetat d. Benzoylpyrogallolphtaleïn. Sm. 231° (B. 14, 1864). — $\mathbf{C}_{26}\mathbf{H}_{20}\mathbf{O}_{8}$ II, 2037. C 65,6 -- H 4,2 - O 30,2 -- M. G. 476. $\mathbf{C}_{26}\mathbf{H}_{20}\mathbf{O}_{9}$ 1) Hymatomelansäure (H. 13, 90). C 59,5 — H 3,8 — O 36,6 — M. G. 524. 1) Cetrarsäure. (NH₄)₂, Ba, Pb (A. 55, 156; 300, 356; B. 23, 464; J. pr. [2] 57, 301; [2] 58, 502). — II, 2082. C 56,1 — H 3,6 — O 40,3 — M. G. 556. $\mathbf{C}_{26}\mathbf{H}_{20}\mathbf{O}_{12}$ $\mathbf{C}_{26}\mathbf{H}_{20}\mathbf{O}_{14}$ 1) Hexaacetat d. 1,2,3,5,6,7-Hexaoxy-9,10-Anthrachinon (A. 170,

83; B. 9, 1257; 10, 883). — III, 439. C 86,7 — H 5,5 — N 7,8 — M. G. 360. $C_{26}H_{20}N_2$

1) $\alpha\beta$ -Diphenylimido - $\alpha\beta$ -Diphenyläthan (Benzildianil). Sm. 141—142° (B. 25, 2601). — III, 284. 2) 1,3-Di[2-Naphtylamido] benzol. Sm. 192°; Sd. oberh. 460°₄₅. 2HCl

(B. 26, 977, 3087). — IV, 573. 3) 1,4-Di[2-Naphtylamido]benzol. Sm. 235°; Sd. oberh. 400° u. Zers. Pikrat (B. 22, 1080). — IV, 587.

4) 4,4-Dibenzylidenamidobiphenyl. Sm. 239—240° (231—232°) (B. 11, 832; J. r. 17, 366; 23, 48; A. 258, 375). — IV, 967.
5) Di[4-Phenylbenzyliden]hydrazin. Sm. 245° (Bl. [3] 17, 810).
6) s-Di[Diphenylmethylen]hydrazin (Diphenylketazin; Bisdiphenylazi-

methylen). Sm. 162° (J. pr. [2] 44, 207). — III, 188.

7) 1,2,3-Triphenyl-1,2-Dihydro-1,4-Benzdiazin. Sm. 116-1170 (B. 24, 1875). — IV, 1075.

C 80,4 - H 5,2 - N 14,4 - M. G. 388. $C_{26}H_{20}N_4$

1) Di[Diphenylmethylen]tetrazon (J. pr. [2] 44, 200). — III, 188.

2) 2,4-Diphenylimido-3-Phenyl-1,2,3,4-Tetrahydro-1,3-Benzdiazin. α-Modif. Sm. 171°; β-Modif. Sm. 184° (B. 30, 1092, 1686; Am. 21, 139). • IV, 1269.

C 89.9 - H 6.1 - N 4.0 - M. G. 347. $C_{26}H_{21}N$

1) 4-Benzylidenamidotriphenylmethan. Sm. 135-136° (B. 26, 3082).

C 83.2 - H 5.6 - N 11.2 - M. G. 375. $C_{26}H_{21}N_3$

 $C_{26}H_{22}O_{2}$

C26H22O4

1) 4,4'-Di[Benzylidenamido]diphenylamin. Sm. 1820 (A. 303, 366). $\mathbf{C}_{26}\mathbf{H}_{21}\mathbf{N}_{5}$ C 77,4 - H 5,2 - N 17,4 - M. G. 403.

1) 1,3-Di[Amidophenyl]methylen-2-Phenylimido-2,3-Dihydrobenzimidazol. Sm. 188º (B. 24, 2506). — IV, 567.

1) β - Brom - $\alpha \alpha \alpha \beta$ - Tetraphenyläthan. Sm. 177° (Bl. [3] 1, 778). $\mathbf{C}_{26}\mathbf{H}_{21}\mathbf{Br}$ II, 301. $C_{26}H_{22}O$

C 89,1 - H 6,3 - O 4,6 - M. G. 350.

 α-Οxy-ααββ-Tetraphenyläthan. Sm. 151°. — II, 1095.
 Di[Diphenylmethyl]äther (Benzhydroläther). Sm. 111° (109°; 118°); Sd. $^{315^{\circ}_{745}}$ (267° $_{15}$) (A. 133, 14; 184, 176; 278, 362; 298, 234; Bl. 33, 341; J. r. 12, 431; B. 11, 1398; 29, 2159; C. 1897 [2] 662). — II, 1078.

3) Benzyläther d. α-Oxytriphenylmethan. Sm. 93° (C. 1896 [1] 416). C 85,2 - H 6,0 - O 8,7 - M. G. 366.

1) $\alpha \alpha$ -Diphenyl- $\beta \beta$ -Di[P-Oxyphenyl] athan. Sm. 230—2320 (A. 279, 331). - II, 1008.

2) $\alpha\beta$ -Dioxy- $\alpha\alpha\beta\beta$ -Tetraphenyläthan (Benzpinakon). Sm. 168° (A. 133, 27; B. 10, 1473; J. r. 12, 426). — II, 1105.
3) 4-Keto-3-Acetyl-1,2,6-Triphenyl-1,2,3,4-Tetrahydrobenzol. Sm.

221° (A. 281, 90). — III, 309. C 78.4 - H 5.5 - O 16.1 - M. G. 398.

1) $\alpha \alpha \beta \beta$ -Tetra[P-Oxyphenyl]äthan (A. 202, 133). — II, 1039. 2) $\alpha \alpha \beta \beta$ -Tetra[?-Oxyphenyl]äthan. Sm. 2480 (B. 11, 930). — II, 1039.

3) Verbindung (aus d. β -Verb. $C_{26}H_{20}O_4$) (Am. 5, 345). — III, 11.

 $C_{26}H_{22}O_5$

 $C_{26}H_{22}O_6$

 $C_{26}H_{22}O_7$

 $C_{26}H_{22}O_8$

 $C_{26}H_{22}O_9$

 $\mathbf{C}_{26}\mathbf{H}_{22}\mathbf{O}_{10}$

 $\mathbf{C}_{26}\mathbf{H}_{22}\mathbf{O}_{11}$

 $C_{26}H_{22}O_{13}$

C26H22N2

C 75,4 — H 5,3 — O 19,3 — M. G. 414.

1) $\alpha - [4 - Methylbenzoat] - \beta - Aethyläther d. <math>\alpha \beta - Dioxy - \gamma \delta - Diketo - \alpha \delta - Di$ phenyl- α -Buten. Sm. 125—126° (B. 27, 713). — III, 317. C 72,6 - H 5,1 - O 22,3 - M. G. 430.

1) Diacetat d. o-Kresolphtaleïn. Sm. 73-75° (A. 202, 156). — II, 1987.

2) α 2-Lakton d. α -Oxytriphenylmethan- α^2 , α^4 , α^4 -Tricarbonsäurediäthylester. Sm. 138—139° (A. 299, 298).

C 70,0 — H 4,9 — O 25,1 — M. G. 446.

1) Verbindung (aus Pyrogallol u. Benzaldehyd). kryst. (B. 5, 281; Am. 9, 131). — III, 11.

2) Verbindung (aus Pyrogallol u. Benzaldehyd). amorph (B. 5, 281). -III, 11.

C 67,6 - H 4,7 - O 27,7 - M. G. 462.

1) Diäthylester d. 2,5-Dibenzoxylbenzol-1,4-Dicarbonsäure. Sm. 1740 (A. 258, 308). — II, 2003. 2) Diäthylester d. Disalicylsäurephtalid. Sm. 144° (A. 303, 287).

- 3) Diäthylester d. Phtalyldi-3-Oxybenzol-1-Carbonsäure. Sm. 66° (A.
- 4) Diäthylester d. Phtalyldi-4-Oxybenzol-1-Carbonsäure. Sm. 97° (A. 303, 276).

C 65.3 - H 4.6 - O 30.1 - M. G. 478.

- 1) Hymatomelansäure (oder $C_{26}H_{20}O_9$) (H. 13, 90). I, 1109. C 63,1 - H 4,5 - O 32,4 - M. G. 494.
- 1) Huminsäure. BaO (H. 13, 108). I, 1108. C 61,2 - H 4,3 - O 34,5 - M. G. 510.
- 1) Ratanhiaroth (A. 143, 275). III, 590. 2) Tormentillgerbstoff (A. 145, 8). — III, 688.
- 3) Tormentillroth (A. 145, 7). III, 688.
- 4) Verbindung (aus Kastaniengerbsäure). III, 685. C 57,6 — H 4,0 — O 38,4 — M. G. 542.

1) Hexaacetat d. Verb. C₁₄H₁₀O₇ (B. 9, 1257). — III, 439.

2) Verbindung (aus Kastaniengerbsäure). — III, 685. C 86,2 - H 6,1 - N 7,7 - M. G. 362.

1) α -Phenylimido- α -Phenylbenzylamido- α -Phenylmethan. Sm. 111° (A. 273, 11). - IV, 843

2) β -Phenylhydrazon- $\alpha \alpha \beta$ -Triphenyläthan. Sm. 156° (C. 1897 [2] 661). IV, 778.

3) α-Diphenylhydrazon-4-Methyldiphenylmethan. Sm. 122° (B. 26, 32). **- IV**, 777.

4) isom. α-Diphenylhydrazon-4-Methyldiphenylmethan. Sm. 95-96° (B. **26**, 33). — **IV**, 777.

5) α-[4-Methylphenyl]azotriphenylmethan. Sm. 103,5° u. Zers. (C. 1898) [2] 1131). — IV, 1404.

6) 3-Phenyl-2-[4-Isopropylphenyl]-α-Naphtimidazol. Sm. 136° (B. 25, 2831). — IV, 1065.

7) Base (aus Benzylidenamidobenzol). (2HCl, PtCl₄) (A. 148, 336; A. Spl. 3, 357). — III, 29.

8) Base (aus d. Base $C_{26}H_{18}N_2$). Sm. 154° (B. 25, 3289). — IV, 1091. C 80,0 - H 5,6 - N 14,3 - M. G. 390.

1) anti- $\alpha\beta$ -Di[Phenylhydrazon]- $\alpha\beta$ -Diphenyläthan. Sm. 225° (228 bis 229°) (A. 232, 230; 305, 173; G. 22 [2] 611; 23 [2] 225; 27 [2] 284; Soc. 67, 612; Am. 16, 111). — IV, 785.

2) $syn-\alpha\beta$ -Di[Phenylhydrazon]- $\alpha\beta$ -Diphenyläthan. Sm. 208° (Soc. 67, 611; B. 31, 1251; A. 305, 172). — IV, 785.

3) $\alpha\beta$ -Di[Benzylidenamido]- $\alpha\beta$ -Diphenylhydrazin. Sm. 186° (190°) (Soc. 67, 611; B. 26, 1045; G. 22 [2] 228; 26 [1] 441; 27 [2] 261; A. 305, 174) 174). — IV, 749.

4) Dehydrobenzalphenylhydrazon. Sm. 198-200° (202°) (Soc. 67, 615; G. 26 [1] 448; 27 [2] 261). — IV, 749.

5) 2,8-Di[Benzylamido]-5,10-Naphtdiazin + 3H₂O. (2HCl, PtCl₄) (Soc. **55**, 599). — IV, 1283. 6) Dimethylamidophenylindulin (Indazin). Sm. $218-220^{\circ}$. $+ C_6H_6$ (A.

262, 263). — **IV**, 1285.

 $C_{26}H_{22}N_4$

 $\mathbf{C}_{26}\mathbf{H}_{24}\mathbf{N}_{4}$

IV, 1362.

7) Base (aus 1,3-Di[Phenylamido]benzol u. 4-Nitroso-1-Dimethylamidobenzol). $C_{26}H_{22}N_4$ Sm. $218-220^{\circ}$. $+ C_6H_6$ (A. **262**, 263; **286**, 204). C 74,6 — H 5,3 — N 20,1 — M. G. 418. $\mathbf{C}_{26}\mathbf{H}_{22}\mathbf{N}_{6}$ 1) 4,4'-Di[4-Methylphenylazo]azobenzol. Sm. 201-202° (B. 31, 996). **— IV**, *1385*. C 70,0 — H 4,9 — N 25,1 — M. G. 446. $C_{26}H_{22}N_8$ 1) $\alpha \beta$ -Diphenylazo- $\alpha \beta$ -Di[Phenylhydrazon]äthan (Diformazyl). Sm. 226°. HCl, H_2SO_4 (B. **26**, 2979). — IV, 1372. 1) $\alpha\beta$ -Dimerkapto- $\alpha\alpha\beta\beta$ -Tetraphenyläthan (Dithiobenzpinakon). Sm. 151° C,6H,2S, (B. 5, 970; 11, 925; Soc. 49, 479). — II, 1105.

1) Tetraphenyläther d. ααββ-Tetramerkaptoäthan. Sm. 115° (B. 23, $C_{26}H_{22}S_4$ 3243). — II, 790. C 89,4 — H 6,6 — N 4,0 — M. G. 349. $C_{26}H_{23}N$ 1) α -[2-Methylphenyl]amidotriphenylmethan. Sm. 142° (B. 17, 705). **— II**, 642. 2) α -[4-Methylphenyl]amidotriphenylmethan. Sm. 177° (B. 17, 706). - II, 642. 3) α-Benzylamidotriphenylmethan. Sm. 110°. HCl (B. 17, 703). — II, 642. 4) Di[Diphenylmethyl]amin (Dibenzhydrylamin). Sm. 136°. Pikrat (Bl. **33**, 587). — **II**, *635*. 5) 2-Phenylbenzylamidodiphenylmethan (Soc. 41, 198). — II, 635. P-Tribenzylpyridin. Sm. 278—280° (A. 280, 46). — IV, 477.
 C 84,7 — H 6,5 — O 8,7 — M. G. 368.
 Diäthyläther d. Di[1-Oxy-P-Naphtyl]äthen. 2 Modifikationen. Sm. 185—186°. Pikrat (J. pr. [2] 47, 71). — II, 1008.
 Diäthyläther d. Di[2-Oxy-P-Naphtyl]äthen. Sm. 186° (J. pr. [2] 47, 71). $C_{26}H_{24}O_{2}$ 76). — II, 1008. · C 81,2 — H 6,2 — O 12,5 — M. G. 384. $C_{26}H_{24}O_{8}$ 1) $\gamma\gamma$ -Diacetyl- α -Benzoyl- $\alpha\beta$ -Diphenylpropan. Sm. 191—192° (A. 281, 88). **— III**, 322. $\mathbf{C}_{26}\mathbf{H}_{24}\mathbf{O}_{6}$ $C^{72,2} - H_{5,5} - O_{22,2} - M.G.$ 432. 1) Triacetat d. Phenolphtalol. Sm. 40° (A. 202, 90). — II, 1115. 2) Triacetat d. $\alpha\beta\beta$ -Tri[P-Oxyphenyl]äthen (A. 243, 161). — II, 1028. 3) Triacetat d. Di[?-Dioxyphenyl]-[?-Oxy-?-Methylphenyl]methan. Sm. 148—149° (A. 179, 199). — II, 1028. 4) Tribenzoat d. ααα-Tri[Oxymethyl]äthan (A. 276, 78). — II, 1142.
 5) Diacetyl-o-Kresolphtalinsäure. Sm. 138 — 140° (A. 202, 169). — II, 1912. $C_{26}H_{24}O_{8}$ C 67,2 -- H 5,2 - O 27,6 - M. G. 464. 1) Diäthylester d. 2,5-Dibenzoxyl-1,4-Dihydrobenzol-1,4-Dicarbonsäure. α-Derivat Sm. 105°; β-Derivat Sm. 138°; γ-Derivat Sm. 102,5° (A. 258, 310). — II, 1992. C26H24O10 C 62.9 - H'4.8 - O 32.2 - M. G. 496.1) Quebrachogerbsäure (J. 1879, 906). — III, 590. C26 H24 O11 C 60.9 - H 4.7 - O 34.4 - M. G. 512.1) Pentaacetat d. Hämatoxylin. Sm. 165—166° (B. 4, 331; A. 216, 234). - III, 665. $\mathbf{C}_{26}\mathbf{H}_{24}\mathbf{O}_{12}$ C 59,1 - H 4,5 - O 36,4 - M. G. 528.1) Eichenroth (H. 13, 89). — III, 588. C 57,3 — H 4,4 — O 38,2 — M. G. 544. $\mathbf{C}_{26}\mathbf{H}_{24}\mathbf{O}_{18}$ Verbindung (aus Kastaniengerbsäure). — III, 685.
 Phylläscitannin + H₂O (Z. 1867, 84). — III, 685.
 C 52,7 — H 4,0 — O 43,2 — M. G. 592.
 β-Ampelochroïnsäure (B. 25 [2] 478; Bl. [3] 7, 827).
 C 85,7 — H 6,6 — N 7,7 — M. G. 364. $\mathbf{C}_{26}\mathbf{H}_{24}\mathbf{O}_{16}$ $C_{26}H_{24}N_{2}$ 1) α -Triphenylmethyl- β -[4-Methylphenyl]hydrazin. Sm. 157° u. Zers. (C. 1898 [2] 1131).

2) 1,2,4,5-Tetraphenylhexahydro-1,2,4,5-Tetrazin. Sm. 200° (B. 31, 3250). — IV, 1496.

Sm. 150° (M. 4, 798). —

C 79,6 — H 6,1 — N 14,3 — M. G. 392. 1) 4,4'-Di[Methylphenylamido]azobenzol.

3) Diphenyldibenzyltetrazon. Sm. 141—142° (109°) (A. 252, 290; G. 22 [2] 225). — IV, 1309.

C26H26O4

C26H26O5

 $C_{26}H_{26}O_8$

 $\mathbf{C}_{26}\mathbf{H}_{26}\mathbf{N}_{2}$

 $\mathbf{C}_{26}\mathbf{H}_{26}\mathbf{N}_4$

 $C_{26}H_{27}N_{8}$

 $C_{26}H_{28}O_{2}$

 $\mathbf{C}_{26}\mathbf{H}_{28}\mathbf{O}_{6}$

 $C_{26}H_{28}O_{14}$

 $\mathbf{C}_{26}\mathbf{H}_{28}\mathbf{O}_{16}$

 $C_{26}H_{28}N_6$

C26 H30 O7

- C 77,6 H 6,4 O 15,9 M G 402.
- 1) Diäthylester d. $\alpha\alpha\alpha$ -Triphenyläthan- $\beta\beta$ -Dicarbonsäure. Sm. 133° (Soc. 51, 225). — II, 1913.
- 2) Di[2,4,5-Trimethylphenylester] d. Benzol-1,2-Dicarbonsäure. Sm. 118—119° (B. **26**, 208). — II, 1794. C 74,6 — H 6,2 — O 19,1 — M. G. 418.
- 1) Triäthyläther d. Fluorescin. Sm. 110° (B. 28, 51). II, 2038. C 71,9 - H 6,0 - O 22,1 - M. G. 434.C26 H26 O6
 - 1) Baphiniton (J. 1876, 896). III, 620.
 - Diäthylester d. 2,5-Dioxybenzoldibenzyläther-1,4-Dicarbonsäure. Sm. 96,5° (A. 258, 299). II, 2002. C 67,0 H 5,6 O 27,4 M. G. 466.
 Diäthylester d. βε-Dibenzoxyl-βδ-Hexadiën-γδ-Dicarbonsäure. Sm.
 - 111° (B. 30, 1994).
 - 2) Diäthylester d. $\alpha\delta$ -Diacetoxyl- $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadiën- $\beta\gamma$ -Dicarbonsäure. Sm. 106° (B. 30, 1996).
- C 55.5 H 4.6 O 49.9 M. G. 562.C26H26O14
 - 1) Rheumgerbsäure. 2PbO (Z. 1868, 308). III, 591. C 85,2 H 7,1 N 7,6 M. G. 366.
 - 1) Bi[Tetrahydro-α-Naphtochinolin]. Sm. 282° (B. 24, 2495). IV, 1082. C 79,2 — H 6,6 — N 14,2 — M. G. 394.
 - 1) $\alpha \alpha \beta \beta$ -Tetra [4-Amidophenyl] äthan. Sm. 264° (272° cor.). (4 HCl, SnCl₂)
 - (A. 296, 227). 2) 4,4'-Di[2-Amidobenzylamido] biphenyl. Sm. 185° (B. 29, 1452). -
 - IV, 964. C 81.9 - H 7.1 - N 11.0 - M. G. 381.
 - 1) $\alpha \alpha$ -Di[4-Dimethylamidophenyl]- α -[6-Chinolyl]methan. Sm. 165°. 3HCl (B. 24, 3141). — IV, 1213. C 83.8 - H 7.5 - O 8.6 - M. G. 372.
 - 1) bim. Methylphenylcyklohexenon. Sm. 159° (B. 32, 426).
 - 2) Acetat d. 3-Oxy-?-Dibenzyl-4-Isopropyl-1-Methylbenzol. Sm. 82 bis 85° (G. 11, 349). — II, 905. C 71,5 — H 6,4 — O 22,0 — M. G. 436.
 - 1) Diäthylester d. 2,5-Dioxy-1,4-Dihydrobenzoldibenzyläther-1,4-Di-1) Diathylester d. 2,5-Dioxy-1,4-Dihydrobenzoldibenzylather-1,4-Dicarbonsäure. α-Derivat Sm. 169° (A. 258, 301); β-Derivat Sm. 148,5° (A. 258, 302); γ-Derivat Sm. 140,5° (A. 258, 305); π-Derivat Sm. 272° = (C₂₈H₂₈O₈)_x (A. 258, 304). — II, 1991. C 55,3 — H 4,9 — O 39,7 — M. G. 564.

 1) Ruberythrinsäure. Sm. 258-260°. K, Ba+H₂O, Pb₄+2H₂O? (A. 66, 176; 80, 324; A. Spl. 7, 296; J. 1855, 666; 1861, 938; B. 20, 2241; Soc. 63, 1180). — III, 607. C 52,3 — H 4,7 — O 42,9 — M. G. 596.

 - Säure (aus Sordidin).
 Sm. 182-183° (G. 24 [2] 334).
 II, 2059.
 73,6 H 6,6 N 19,8 M. G. 424.
 - 1) $\beta \varepsilon \zeta$ -Tri[Phenylhydrazon]- γ -Methyl- γ -Hepten. Sm. 204—205° (B. 21, 1420). — IV, 787.
 - 2) $5 Methyl 3, 5 Di[\alpha Phenylhydrazonäthyl] 1 Phenyl 4, 5 Dihydro$ pyrazol. Sm. 204-205° (B. 21, 1420; 28, 1846). $C_{68,7} - H_{6,6} - O_{24,7} - M_{6,6}$ G. 454.
 - Anhydrid d. β-Acetoxyl-β-Phenyl-αα-Dimethylpropionsäure. Sm. 155° (A. 227, 69). II, 1591.
 C 66,4 H 6,4 O 27,2 M. G. 470.
- C26 H30 O8 1) Tetracetylnorguajakharzsäure. Sm. 100-102° (M. 18, 721).
 - 2) Dipropylester d. Diphenylessigweinsäure. Fl. (A. ch. [7] 3, 476). -II, 1310.
 - 3) Diisobutylester d. Dibenzoylweinsäure (B. 15, 2243). II, 1155. C 64.2 - H 6.2 - O 29.6 - M. G. 486.
- C26 H30 O9 1) Isobutyraldehydphloroglucid (C. 1896 [2] 486). $\mathbf{C}_{26}\mathbf{H}_{30}\mathbf{O}_{12}$ C 58.4 - H 5.6 - O 36.0 - M. G. 534
- 1) Verbindung (aus Holzsulfitlauge oder C₂₆H₃₂O₁₂) (A. 267, 357). C 56,7 — H 5,4 — O 37,8 — M. G. 550. $\mathbf{C}_{26}\mathbf{H}_{30}\mathbf{O}_{13}$

 - Pentaacetat d. Kolatannin (C. 1898 [1] 579).
 Anhydrid d. Fraxinusgerbsäure (M. 3, 750). III, 681.

 $C_{26}H_{38}O_5$

 $C_{26}H_{38}O_7$

- II, 1969.

C 67,5 - H 8,2 - O 24,2 - M. G. 462

1) Strophantidin $+ \frac{11}{2} H_2 O$. Sm. 169–170° (B. 31, 538).

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C 53.6 - H 5.1 - O 41.2 - M. G. 582.
C_{26}H_{30}O_{15}
                  1) 2-Oxybenzol-1-Carbonsaureglykosid. Sm. 184-1850 (Am. 5, 173). -
                  2) Verbindung (aus Fraxinus excelsior) (M. 3, 757). — III, 682.
C 78,4 — H 7,5 — N 14,1 — M. G. 398.
C_{26}H_{30}N_4
                  1) 1,4-Di[4-Aethylamido-3-Methylbenzylidenamido]benzol. Sm. 234
                      bis 235° (B. 31, 2256).
                  2) Tetraäthylphenosafranin. (2 HCl, PtCl<sub>4</sub>) (B. 16, 472). — IV, 1283.
                  3) Phenylhydrazon d. Methylcinchonin. Sm. 151,5° (B. 27, 1187).

IV, 798.
C 66,1 — H 6,8 — O 27,1 — M. G. 472.
Hexaäthyläther d. 1,2,3,5,6,7-Hexaoxy-9,10-Anthrachinon. Sm.

C_{26}H_{32}O_{8}
                      bei etwa 40° (B. 10, 886). — III, 439.
C 63,9 — H 6,6 — O 29,5 — M. G. 488.
C_{26}H_{32}O_{9}
                  1) Säure (aus Myrrhe) (B. 23 [2] 494). — III, 560. C 60,0 — H 6,2 — O 33,8 — M. G. 520.
C 26 H 32 O 11
                  1) Glykosid (aus Olea fragans). Sm. 1840 (R. 5, 127). — III, 600.
\mathbf{C}_{26}\mathbf{H}_{32}\mathbf{O}_{14}
                      C 54.9 - H 5.6 - O 39.4 - M. G. 568
                  1) Baptisin + 9 H<sub>2</sub>O. Sm. 240° (wasserfrei) (C. 1897 [2] 429, 709), 2) Fraxinusgerbsäure (M. 3, 750). — III, 681.
                      C 52,0 — H 5,3 — O 42,7 — M. G. 600.
C26H32O16

    Verbindung (aus Fraxinus excelsior) (M. 3, 757). — III, 682.
    C 83,9 — H 8,6 — N 7,4 — M. G. 372.

C_{26}H_{32}N_2
                  1) 1,2-Di[2,4,5-Trimethylphenylamidomethyl]benzol (B. 31, 422).
                  2) 41,42-Di[Dimethylamido]-43-Isopropyltriphenylmethan. Sm. 118 bis
                      119°. 2HCl, (2HCl, PtCl,), Pikrat (B. 13, 786; A. 206, 139). — IV, 1048. C 80.6 - H 8.5 - N 10.9 - M. G. 387.
C_{26}H_{33}N_3
                  1) \alpha \alpha \beta-Tri[4-Dimethylamidophenyl]äthan. Sm. 125° (B. 20, 2424).
                      IV, 1198.
                  2) 3'-Amido -4^2, 4^3-Di[Dimethylamido] -2', 4', 6'-Trimethyltriphenyl-
                      methan. Sm. 142° (B. 24, 3135). — IV, 1199.
                 3) 4',4',5'3-Tri[Dimethylamido]-2'3-Methyltriphenylmethan. Sm. bei 100° (B. 24, 3139). — IV, 1197. C 86,2 — H 9,4 — O 4,4 — M. G. 362.
C26H34O
                  1) Di[3-Methyl-5-Phenylhexahydrophenyl]äther. Sm. 80-100°; Sd.
                      oberh. 300^{\circ}_{10} (A. 303, 262).
C 76,1 — H 8,3 — O 15,6 — M. G. 410.
C_{26}H_{34}O_4

    Diacetat d. Dithymolathan. Sm. 100° (B. 11, 288). — II, 997.
    C 73,2 — H 8,0 — O 18,8 — M. G. 426.

\mathbf{C}_{26}\mathbf{H}_{34}\mathbf{O}_{5}
                  1) Harz (aus Myrrhe) (B. 23 [2] 494). — III, 560.
                      C 61,6 - H 6,7 - O 31,6 - M. G. 506.
\mathbf{C}_{26}\mathbf{H}_{34}\mathbf{O}_{10}
                  1) Kosotoxin (B. 27 [2] 311).
                  C 54,7 — H 5,9 — O 39,3 — M. G. 570.
1) Helicoïdin (4. 56, 69; 154, 14). — III, 69.
C26H34O14
C_{26}H_{34}O_{16}
                       C 51.8 - H 5.6 - O 42.5 - M. G. 602.
                 1) Verbindung (aus Jute) (Soc. 41, 92). — I, 1080. C 50,5 — H 5,5 — O 34,0 — M. G. 618. 1) Heptacetylinulin (A. 160, 85). — I, 1096. C 78,8 — H 9,1 — O 12,1 — M. G. 396.
\mathbf{C}_{26}\mathbf{H}_{34}\mathbf{O}_{17}
\mathbf{C}_{26}\mathbf{H}_{36}\mathbf{O}_{8}
                  1) Verbindung (aus Benzolcarbonsäureäthylester). Sd. 2170 (J. pr. [2] 4,
                      448). — II, 1139.
                      C 49,1 - H 5,6 - O 45,3 - M. G. 636.
\mathbf{C}_{26}\mathbf{H}_{36}\mathbf{O}_{18}
                  1) Heptacetat d. Rohrzucker (Bl. 12, 207). — I, 1070.
\mathbf{C}_{26}\mathbf{H}_{36}\mathbf{N}_2
                      C 83,0 - H 9,6 - N 7,4 - M. G. 376.

    Diönanthylidenbenzidin. Sm. 113—115° (A. 258, 377). — IV, 967. C 81,7 — H 9,9 — O 8,4 — M. G. 382.
    Diäthyläther d. Dithymoläthan. Sm. 72° (B. 11, 288). — II, 997. C 75,4 — H 9,2 — O 15,4 — M. G. 414.

C_{26}H_{38}O_{2}
\mathbf{C}_{26}\mathbf{H}_{88}\mathbf{O}_4

    Resorcinbicampher (Bl. [3] 4, 726). — III, 487.
    C 72,6 — H 8,8 — O 18,6 — M. G. 430.
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1) Aethylester d. Dehydrocholsäure. Sm. 221° (H. 16, 495; B. 14, 74).

C 82,5 - H 10,1 - N 7,4 - M. G. 378. $\mathbf{C}_{26}\mathbf{H}_{38}\mathbf{N}_{2}$ 1) Diönanthylidendiphenyldiamin. Fl. (A. Spl. 3, 352; A. 148, 336). — II, 445. 1) Carotindijodid (Bl. 46, 488; 48, 65). — II, 243; III, 626. C 84,8 — H 10,9 — O 4,3 — M. G. 368. 1) Ergosterin + H₂O. Sm. 154°; Sd. 185°₂₀ (A. ch. [6] 20, 289). — II, 1076. C 81,3 — H 10,4 — O 8,3 — M. G. 384. 1) Onoketon. Sm. 186—187° (B. 29, 2987). $\mathbf{C}_{26}\overline{\mathbf{H}_{38}\mathbf{J}_{2}}$ $C_{26}H_{40}O$ $C_{26}H_{40}O_{2}$ C 67,2 - H 8,6 - O 24,1 - M. G. 464. $\mathbf{C}_{26}\mathbf{H}_{40}\mathbf{O}_7$ 1) Monomethylester d. Cholansäure $+\frac{1}{4}H_2O$. Sm. 206—207°. Ba (B. **19**, 479). — **II**, 2017. 2) Monomethylester d. Isocholansäure. Ba (B. 19, 1530). — II, 2017. $\mathbf{C}_{26}\mathbf{H}_{40}\mathbf{N}_2$ C 82,1 — H 10,5 — N 7,4 — M. G. 380. Hydrazon d. α-Jonon. Sm. 99° (B. 31, 877).
 Hydrazon d. β-Jonon. Sm. 104—105° (B. 31, 872).
 C 84,3 — H 11,3 — O 4,3 — M. G. 370. $C_{26}H_{42}O$ 1) Lupeol. Sm. 2040 (H. 15, 415). — II, 1077. C 77,6 — H 10,4 — O 11,9 — M. G. 402. $C_{26}H_{42}O_3$ 1) Oenocarpol + H_2O . Sm. 304° ; Sd. 405° u. Zers. $K + 2H_2O$, (2 + $3PbO + H_2O$), $(2 + 3AgOH + 4H_2O)$ (B. 25 [2] 215). — III, 638. C 71,9 — H 9,7 — O 18,4 — M. G. 434. $\mathbf{C}_{26}\mathbf{H}_{42}\mathbf{O}_{5}$ 1) Säure (aus Oenocarpol) (B. 25 [2] 216). — III, 638. C 67,0 — H 9,0 — O 24,0 — M. G. 466. $C_{26}H_{42}O_7$ Chologlykolsäure. Na, Ba + 3H₂O, Ag (Bl. 25, 182).
 C 60,7 - H 8,2 - O 31,1 - M. G. 514. $C_{26}H_{42}O_{10}$ Quercitpentabutyrat (A. ch. [5] 15, 51). — I, 424.
 Cholesterylchlorid (oder C₂₇H₄₅Cl). Sm. 97° (A. 112, 359; 118, 26; J. r. 8, 236; Bl. 47, 899; M. 15, 87, 368; 17, 46). — II, 1073.
 Isocholesterylchlorid (J. pr. [2] 7, 175). — II, 1075. $\mathbf{C}_{26}\mathbf{H}_{43}\mathbf{C}\mathbf{1}$ C 83.8 - H 11.8 - O 4.3 - M. G. 372.C26 H44O 1) Cholesterin + H_2O , siehe $C_{97}H_{46}O$. — II, 1071. 2) Isocholesterin . Sm. 137—138° (J. pr. [2] 7, 172; [2] 25, 459; B. 12, 249; 31, 99, 1126, 1200; H. 14, 522). — II, 1075. 3) Paracholesterin + H_2O (oder $C_{28}H_{46}O + H_2O$). Sm. 134—134,5° (A. $C_{28}O_{28$ 207, 229; 211, 283; J. pr. [2] 25, 459). — II, 1075. 4) Caulosterin + H₂O. Sm. 158—159° (J. pr. [2] 25, 166). — II, 1076. 5) Phytosterin + H₂O. Sm. 132—133° (J. 1863, 542; 1866, 698; J. 122, 249; 192, 175; 211, 283; J. 8, 356; J. 29 [2] 38). — II, 1075. 6) Paraphytosterin $+ H_2O$ (oder $C_{24}H_{40}O$). Sm. $149-150^{\circ}$ (H. 15, 150). - II, 1075. 7) Heptadekyl-2,4-Dimethylphenylketon. Sm. 139° (*J. pr.* [2] 54, 393). 8) Heptadekyl-2,5-Dimethylphenylketon. Sm. 57° (*J. pr.* [2] 54, 400). 9) Verbindung (Cholesterol aus Hygroptila spinosa). Sm. 184° (*B.* 25 [2] 685). C 80,4 — H 11,3 — O 8,2 — M. G. 388. $C_{26}H_{44}O_{2}$ 1) Dracoresen. Sm. 74° (C. 1896 [2] 713). 1) Diacotesia Gin. 12 (2) Onocerin (Onocel). Sm. 232° (J. 1855, 717; B. 29, 2985). — III, 638.
 C 71,5 — H 10,1 — O 8,3 — M. G. 436.
 1) Aethylester d. Cholsäure. Sm. 158° (B. 6, 1285; J. pr. [1] 89, 272; $C_{26}H_{44}O_5$ H. 10, 194; 16, 497; 22, 196). — I, 782. C 69,0 — H 9,7 — O 21,2 — M. G. 452. $\mathbf{C}_{26}\mathbf{H}_{44}\mathbf{O}_{6}$ Sm. 278—280° (Bl. 35, 231). 1) Verbindung (aus d. Glykosid C₈₂H₅₄O₁₁). · III, 582. C 60.5 - H 8.5 - O 31.0 - M. G. 516. $\mathbf{C}_{26}\mathbf{H}_{44}\mathbf{O}_{10}$ 1) Tetracetylsativinsäure. Fl. (M. 8, 154). — I, 787. C 52,3 — H 7,4 — O 40,3 — M. G. 596. C26H44O15 1) Helleborein (siehe auch $C_{37}H_{56}O_{18}$). Zers. bei 220—230° (A. 135, 55; C. 1897 [2] 764). — III, 593. C 84,1 — H 12,1 — N 3,8 — M. G. 371. $\mathbf{C}_{26}\mathbf{H}_{45}\mathbf{N}$ 1) Cholesterylamin. Sm. 104° (B. 5, 513). — II, 590. C 83,4 - H 12,3 - O 4,3 - M. G. 374. $\mathbf{C}_{26}\mathbf{H}_{46}\mathbf{O}$ Mochylalkohol. Sm. 234° (Soc. 53, 274). — II, 1069.
 C 62,2 — H 9,1 — O 28,7 — M. G. 502.

1) Paridol (J. 1860, 543). — III, 599.

 $\mathbf{C}_{26}\mathbf{H}_{46}\mathbf{O}_{9}$

 $\mathbf{C}_{26}\mathbf{H}_{17}\mathbf{ON}_{3}$

 $\mathbf{C}_{26}\mathbf{H}_{48}\mathbf{O}_{2}$

C 83,0 — H 12,8 — O 4,2 — M. G. 376. 1) Palmitat d. Geraniol (P. d. Rhodinol). Sd. bei 260°_{12} (B. 31, 357). C 52,0 - H 8,0 - O 40,0 - M. G. 600.

C26H48O15 1) Chiratin (J. 1869, 772). — III, 576. C 73,2 — H 11,7 — O 15,0 — M. G. 426.

C26H50O4 1) Tetrakosan-αα-Dicarbonsäure. Sm. 114° (C. 1896 [1] 643).

C 78,8 — H 13,1 — O 8,1 — M. G. 396. $C_{26}H_{52}O_2$

1) Cerotinsäure (siehe $C_{95}H_{50}O_2$ u. $C_{27}H_{54}O_2$). Sm. $78,5^{\circ}$ (B. 30, 1416). 2) Methylester d. Carotinsäure. Sm. $62,5^{\circ}$ (C. 1896 [1] 642).

3) Aethylester d. Lignocerinsäure. Sm. 55°; Sd. 305-310°, 223 (B. 13, 1715). — **I**, 448.

4) Oktylester d. Stearinsäure. Sm. -4,5° (J. 1858, 301). - I, 445. C 81,7 - H 14,1 - O 4,2 - M. G. 382.

 $C_{26}H_{54}O$

1) Cerylalkohol (siehe auch C₂₇H₅₆O). Sm. 79° (B. 30, 1418).

C₂₆-Gruppe mit drei Elementen.

 $\mathbf{C}_{26}\mathbf{H}_{15}\mathbf{O}_{2}\mathbf{Br}_{5}$ 1) Verbindung (aus Diphenylketon). Sm. 125° (A. 133, 6). — III, 180. C 71.4 - H 3.4 - O 22.0 - N 3.2 - M. G. 437. $C_{26}H_{15}O_6N$

 $\mathbf{C}_{26}\mathbf{H}_{16}\mathbf{ON}_{2}$

1) Galleinanilid. Sm. über 300° (B. **27**, 2794). — II, 2088. C 83,9 — H 4,3 — O 4,3 — N 7,5 — M. G. 372. 1) Naphtindon. Sm. 295° (A. **256**, 249; **272**, 333; B. **31**, 2487). —

IV, 1084.
2) 7-[2-Naphtyl]rosindon [9] (ms-2-Naphtylisorosindon). HCl, HBr, HJ (B. 31, 2481)

 $\mathbf{C}_{28}\mathbf{H}_{16}\mathbf{O}_{2}\mathbf{N}_{2}$ C 80,4 - H 4,1 - O 8,2 - N 7,2 - M. G. 388.

1) 4-Oxynaphtindon. Zers. bei 300°. HCl (A. 262, 239; 272, 337; 286, 230). — IV, 1085.

2) 10,10'-Biakridonyl. Sm. 251° (A. 276, 52). — IV, 407. C 74,3 — H 3,8 — O 15,2 — N 6,7 — M. G. 420. $C_{26}H_{16}O_4N_2$

1) $\alpha\beta$ -Dinitrodibiphenylenäthan. Sm. 184—185° (A. 291, 4).

2) Phenylhydrazonderivat d. 4,4'-Di[1,2-Naphtochinon]oxyd. Sm. 264° (B. 30, 2202). — IV, 795.

3) 2,8-Diphenylphenanthrolin-4,10-Dicarbonsäure. Sm. 235°. Mg+ MgO, Ba, $Zn + H_2O$, Ag_2 (A. 281, 16). — IV, 1093.

C 65,6 — H 3,4 — O 13,4 — N 17,6 — M. G. 476. $C_{26}H_{16}O_4N_6$

1) peri-Naphtylendi-m-Nitroisobenzalazin. Sm. 246° (C. 1899 [1] 115). $C_{26}H_{16}O_6N_4$ C 65,0 — H 3,3 — O 20,0 — N 11,7 — M. G. 480.

1) Di[2,4-Dioxyphenylazo]phenanthrenchinon (B. 26,850). — IV, 1481.

C 64,5 - H 3,3 - O 26,4 - N 5,8 - M. G. 484. $C_{26}H_{16}O_8N_2$ 1) Dibenzoat d. 3,3'-Dinitro-4,4'-Dioxybiphenyl. Sm. 206° (B. 21,

3531). — II, 988.

2) Dibenzoat d. P-Dinitro-P-Dioxybiphenyl. Sm. 1910 (J. r. 10, 318).

C 60,9 - H 3,1 - O 25,0 - N 10,9 - M. G. 512. $C_{26}H_{16}O_8N_4$

1) Tetranitro [4-Nitrophenyl] äthen. Sm. 100° (A. 296, 235). 1) Dibenzolsulfonat d. 1,2-Dioxy-9,10-Anthrachinon. Sm. 182—184°.

 $C_{26}H_{16}O_8S_2$ — III, 422. C 59,1 — H 3,0 — O 27,3 — N 10,6 — M. G. 528. $\mathbf{C}_{26}\mathbf{H}_{16}\mathbf{O}_{9}\mathbf{N}_{4}$

1) $\alpha \alpha \beta \beta$ -Tetra[4-Nitrophenyl]äthanoxyd. Sm. 294° (298 – 299°) (A. **296**, 236).

2) β-Keto-αααβ-Tetra[4-Nitrophenyl]äthan (Tetranitro-β-Benzpinakolin). Sm. 120—140° (A. **296**, 237, 239). C 57,3 — H 2,9 — O 29,4 — N 10,3 — M. G. 544.

 $\mathbf{C}_{26}\mathbf{H}_{16}\mathbf{O}_{10}\mathbf{N}_{4}$

1) $\alpha \alpha \beta \beta$ -Tetra[4-Nitrophenyl]äthandioxyd. Sm. 183° (A. 296, 238).

C 80,6 — H 4,4 — O 4,1 — N 10,9 — M. G. 387. 1) 4-Amidonaphtindon. HCl (A. 286, 230). — IV, 1215.

C 83.2 - H 4.5 - O 8.5 - N 3.7 - M. G. 375.1) 3,3-Anhydroderivat d. 1-Keto-2-Phenyl-3,3-Di[?-Oxyphenyl]-1,3- $\mathbf{C}_{26}\mathbf{H}_{17}\mathbf{O}_{2}\mathbf{N}$ Dihydroisoindol (Phenolphtaleïnanhydridanilid). Sm. 2420 (B. 27, 2794). - II, 1984.

2) ?-Oxy-?-Phenyl-1, 4-Naphtochinonnaphtylimid. Sm. 148° (A. 226, 41). $C_{26}H_{17}O_{2}N$ - III, 460.

3) **2-Naphtylimid d.** $\alpha\beta$ -Diphenyläthen- $\alpha\beta$ -Dicarbonsäure (2-N. d. Di-

phenylmaleïnsäure). Sm. 192° (B. **26**, 2479). — II, 1898. Verbindung (aus 2-Methylchinolin). Sm. 153° (B. **26**, 2480). — IV, 309.

5) Verbindung (aus Phenanthrenchinon). Sm. noch nicht bei 250° (B. 21, 2366). — III, 445. C 69,8 — H 3,8 — O 10,7 — N 15,7 — M. G. 447.

 $C_{26}H_{17}O_3N_5$

1) 2-Oxy-4'-[3-Nitrophenyl]azo-1,1'-Azonaphtalin. Zers. bei 245° (Soc. 45, 115). — IV, 1439.

2) 4-Oxy-4'-[3-Nitrophenyl]azo-1,1'-Azonaphtalin (Soc. 45, 116). — IV, 1439. C 76,7 — H 4,2 -

 $C_{26}H_{17}O_4N$

C 76,7 — H 4,2 — O 15,7 — N 3,4 — M. G. 407.

1) Fluoresceïnanilid (B. 26, 2236). — II, 2062.

2) 2-Diphtalidylmethylchinolin. Sm. 192° (B. 29, 189). — IV, 309. C 64,6 — H 3,5 — O 23,2 — N 8,7 — M. G. 483. $C_{26}H_{17}O_7N_3$ 1) ?-Trinitro-4-Benzoyltriphenylmethan. Sm. 74-75° (Bl. [3] 17, 81).

2) Benzoat d. 4-[?-Dinitrophenyl] benzoylamido-1-Oxybenzol. Sm. 194 bis 195° (B. 17, 2437). — II, 1177.

C 62,5 - H 3,4 - O 25,6 - N 8,4 - M. G. 499. $C_{26}H_{17}O_8N_3$

1) α-Oxy-?-Trinitro-4-Benzoyltriphenylmethan. Sm. 85-88° (Bl. [3] 17, 82).

1) Phenylphenanthrophenazoniumchlorid (Flavindulin) (B. 31, 3074). $\mathbf{C}_{26}\mathbf{H}_{17}\mathbf{N}_{2}\mathbf{Cl} \\ \mathbf{C}_{26}\mathbf{H}_{17}\mathbf{N}_{2}\mathbf{Br}$ 1) Phenylphenanthrophenazoniumbromid (A. 292, 267). — IV, 1086.

 $\mathbf{C}_{26}\mathbf{H}_{18}\mathbf{ON}_{2}$ C 83.4 - H 4.8 - O 4.3 - N 7.5 - M. G. 374.

1) Phenylphenanthrophenazoniumhydrat. Zers. oberh. 100°. Bromid (A. **292**, 266). — IV, 1086.

2) Phenylhydrazonderivat d. 2-Phenylbenzoylbenzol-1-Carbonsäure. Sm. 192-194° (A. 257, 98). - IV, 699.

 $\mathbf{C}_{26}\mathbf{H}_{18}\mathbf{O}_{2}\mathbf{N}_{2}$

 $\mathbf{C}_{26}\mathbf{H}_{18}\mathbf{O}_4\mathbf{N}_4$

 $C_{26}H_{18}O_5N_4$

 $C_{26}H_{18}O_6N_4$

C 80,0 — H 4,6 — O 8,2 — N 7,2 — M. G. 390. 1) Fluoranphenylhydrazid. Sm. 285—287° u. Zers. (B. 26, 1272). — IV, 719.

2) 2, 3-Difuranyl-4-Phenyl-1, 4-Dihydro-1, 4-Naphtisodiazin. Sm. 176°. HCl (B. 25, 2845). — IV, 1080. 3) 2-Phenylamido-5-Phenylakridin-5²-Carbonsäure (B. 24, 2047). —

IV, 1077. C 76,8 — H 4,4 — O 11,8 — N 6,9 — M. G. 406.

 $\mathbf{C}_{26}\mathbf{H}_{18}\mathbf{O}_{3}\mathbf{N}_{2}$ 1) 4-Phenyloxydhydrat d. 2, 3-Difuranyl-1, 4-Naphtisodiazin. Sm. 160° (B. 25, 2845). - IV, 1080.

C 69.3 - H 4.0 - O 14.2 - N 12.4 - M. G. 450.

1) **2,4'-Di**[3-Nitrobenzylidenamido] biphenyl. Sm. 184—185° (B. **22**, 3011). — IV, 960. 2) 2,4'-Di[4-Nitrobenzylidenamido]biphenyl. Sm. 208° (B. 22, 3012).

– IV, 960.

3) 4, 4'- $\dot{\mathbf{D}}i[2$ -Nitrobenzylidenamido] biphenyl. Sm. $221-222^{\circ}$ (J. r. 23, 77). - IV, 967.

4) 4, 4'-Di[3-Nitrobenzylidenamido] biphenyl. Sm. 237° (J. r. 23, 76). - IV, 968.

5) 4,4'-Di[4-Nitrobenzylidenamido] biphenyl. Sm. 242° (J. r. 23, 68). · IV, 968.

1) Thiosuperoxyd d. 1-Acetoxylnaphtalin-2-Dithiocarbonsäure (J. pr. $C_{26}H_{18}O_4S_4$

C = 66.9 - H = 3.9 - O = 17.2 - N = 12.0 - M. G. = 466.

1) 6, 4'-Di[4-Nitrobenzylidenamido]-3-Oxybiphenyl. Sm. 218° (A. **303**, 346).

2) 3-Methyläther d. 4,5-Diphenylazo-1,3,7-Trioxyxanthon. Sm. 251 bis 252° u. Zers. (*Soc.*, **73**, 673). — **IV**, *1479*. C 68,7 — H 3,9 — O 21,1 — N 6,2 — M. G. 454.

 $C_{26}H_{18}O_6N_2$ 1) Phenylhydrazinderivat d. Säure C₂₀H₁₄O₈. Sm. 175° u. Zers. (B. 21,

1615). — II, 2087. C 64,7 — H 3,7 — O 19,9 — N 11,6 — M. G. 482. 1) 4,4'-Di[4-Oxyphenylazo] biphenyl-3,3'-Dicarbonsäure $+2H_2O$ (B.

31, 2578). — IV, 1557. 1) Dibenzoat d. 2,5-Dioxydiphenylsulfon. Sm. 186° (B. 27, 3260). $C_{26}H_{18}O_6S$ RICHTER, Lex. d. Kohlenstoffverb.

C 60,7 — H 3,5 — O 24,9 — N 10,9 — M. G. 514. 1) $\alpha\alpha\beta\beta$ -Tetra[4-Nitrophenyl]äthan. Sm. 300° u. Zers. (337,5—338,5° C26 H18 O8 N4

cor.) (B. 11, 930; A. 296, 223). — II, 301.

C 86,4 - H 5,3 - O 4,4 - N 3,9 - M. G. 361. $\mathbf{C}_{26}\mathbf{H}_{19}\mathbf{ON}$

1) 3-Keto-1, 1, 2-Triphenyl-1, 3-Dihydroisoindol. Sm. 1890 (B. 27, 2793). **- II**, *1722*

C 80,2 - H 4,9 - O 4,1 - N 10,8 - M. G. 389.C26H19ON3

1) Base (aus 2-Phenylamido-1, 1'-Azonaphtalin). 2Chlorid + PtCl₄, Nitrat, Pikrat (B. 23, 1331). — IV, 1400.

2) Base (aus 2-Phenylamido-1, 2'-Azonaphtalin). Nitrat, Pikrat (B. 23, 1322).

— IV, 1401.

3) Base (aus 2-α-Naphtylamido-1-Phenylazonaphtalin). 2 Chlorid + PtCl₄, Nitrat (B. 23, 1330). — IV, 1398.

 $C_{26}H_{19}O_{2}N$ C 82.8 - H 5.0 - O 8.5 - N 3.7 - M. G. 377.

1) Benzoat d. 4-Benzoylbiphenyloxim. Sm. 193 ° (M. 12, 506). — III, 257.

 $C_{26}H_{19}O_3N$

C 79.4 - H 4.8 - O 12.2 - N 3.6 - M. G. 393.1) 1-Keto-2-Phenyl-3, 3-Di[?-Oxyphenyl]-1, 3-Dihydroisoindol (Phenolphtaleïnanilid). Sm. 279° (B. 26, 3077). — II, 1984.

2) Benzoat d. 2-Benzoylphenylamido-1-Oxybenzol (J. pr. [2] 50, 90). **– II**, 1146.

3) Benzoat d. 4-Benzoylphenylamido-1-Oxybenzol. Sm. 175° (B. 17, 2437). — II, 1177.

 $C_{26}H_{19}O_3N_3$

C 74,1 - H 4,5 - O 11,4 - N 10,0 - M. G. 421.1) β -[5-Nitro-2-Phenylamidophenyl]imido- α -Keto- $\alpha\beta$ -Diphenyläthan. Sm. bei 200° (B. 31, 2427).

2) 1-Phenyloxydhydrat d. 6-Nitro-2,3-Diphenyl-1,4-Benzdiazin. Sm. 161° (B. 31, 2427).

3) 1-Phenyloxydhydrat d. 2-[4-Nitrophenyl]-3-Phenyl-1,4-Benz-

diazin. Sm. 169°. Chlorid + FeCl, (B. 31, 2426).
4) isom. 1-Phenyloxydhydrat d. 2-[4-Nitrophenyl]-3-Phenyl-1,4-Benzdiazin $+ \frac{1}{2}$ H₂O (B. 31, 2427).

C 76.3 - H 4.6 - O 15.6 - N 3.4 - M. G. 409. $\mathbf{C}_{26}\mathbf{H}_{19}\mathbf{O}_{4}\mathbf{N}$

1) Dibenzoat d. 2,6-Dioxy-3-Benzylpyridin. Sm. 164° (Soc. 63, 260). - IV, 377.

1) Diacetat d. $\beta\beta\beta$ -Trichlor- $\alpha\alpha$ -Di[l-Oxynaphtyl]äthan. Sm. 176° (J. r. C26H19O4Cl3 **23**, 219). — II, 1007.

1) 5-Chlor-2, 4'-Dibenzylidenamidobiphenyl. Sm. 104° (A. 303, 319). $\mathbf{C}_{26}\mathbf{H}_{19}\mathbf{N}_{2}\mathbf{C}\mathbf{I}$ 2) Chlorphenylat d. 2,3-Diphenyl-1,4-Benzdiazin. + FeCl₃, 2 + PtCl₄

(B. 24, 1240). — IV, 1075. 3) Isochinolinroth. 2 + PtCl₄ (B. 20, 9). — IV, 1093. C 83,0 — H 5,3 — O 4,3 — N 7,4 — M. G. 376. C26H20ON2

1) β -Diphenylhydrazon- α -Keto- $\alpha\beta$ -Diphenyläthan. Sm. 108° (B. 26, 34). **- IV**, 785.

2) Phenylhydrazonderivat d. Diphenylphtalid. Sm. 230-231° (B. 26, 1273). — IV, 699.

3) Phenyloxydhydrat d. 2, 3-Diphenyl-1, 4-Benzdiazin. Sm. 134—135°. Chlorid + FeCl₃, 2 Chlorid + PtCl₄, Nitrat (B. 24, 1240; 31, 2425; 32, 1042). — IV, 1075.

C 77,2 - H 5,0 - O 4,0 - N 13,8 - M. G. 404. $\mathbf{C}_{26}\mathbf{H}_{20}\mathbf{ON}_{4}$

1) 6-Benzoylamido - 2, 3-Diphenyl - 2, 3-Dihydro - 1, 2, 4-Benztriazin. Sm. 221° u. Zers. (B. 30, 2597). — IV, 1286.

 $\mathbf{C}_{26}\mathbf{H}_{20}\mathbf{O}_{2}\mathbf{N}_{2}$ C 79.6 - H 5.1 - O 8.2 - N 7.1 - M. G. 392.

1) 4-[2-Nitrobenzyliden]amidotriphenylmethan. Sm. 114—115° (B. **26**, 3082). — **III**, *31*.

2) 4-[4-Nitrobenzyliden]amidotriphenylmethan. Sm. 126-1270 (B. 26, 3082). — III, 31.

3) 2,4'-Di[2-Oxybenzylidenamido] biphenyl. Sm. 145° (B. 22,3012).

– IV, 960. 4) 4,4'-Di[2-Oxybenzylidenamido] biphenyl. Sm. 260° (A. 258, 375).

- IV, 968. 5) 4,4'-Di[Benzoylamido] biphenyl. subl. (B. 17, 379). — IV, 966.

6) Phtalyl-1-Methylindol. Sm. 300° (A. 242, 382). — IV, 219.

 $C_{26}H_{20}O_2N_4$

 $C_{26}H_{20}O_3N_2$

 $\mathbf{C}_{26}\mathbf{H}_{20}\mathbf{O}_4\mathbf{N}_6$

 $\mathbf{C}_{26}\mathbf{H}_{20}\mathbf{O}_{6}\mathbf{N}_{6}$

 $\mathbf{C}_{26}\mathbf{H}_{21}\mathbf{O}_{4}\mathbf{N}_{3}$

C 74,3 - H 4,8 - O 7,6 - N 13,3 - M. G. 420.

1) 3,3'-Di[Benzoylamido]azobenzol. Sm. 284-285° (Soc. 69, 12). IV, 1361.

2) 1,2-Diacetyl-3,6-Di[2-Naphtyl]-1,2-Dihydro-1,2,4,5-Tetrazin.

Sm. 210° (B. 30, 1885; A. 298, 44). — IV, 1304. 3) 5,7-Anhydrid d. 5,10-Di[Acetylamido]- $\alpha\beta$ -Naphtophenazin-7-Phenyloxydhydrat (B. 31, 3082).

4) Dinitrosoderivat d. Base C₂₆H₂₂N₂. Sm. 208° (B. 25, 3290; 26, 1704). **– IV**, 1091.

5) Diphenylester d. Biphenylen-4,4'-Diamidoameisensäure. Sm. 240° (Soc. **49**, 256). — IV, 964. C 76,5 — H 4,9 — O 11,8 — N 6,8 — M. G. 408.

1) 6,4'-Di[2-Oxybenzylidenamido]-3-Oxybiphenyl. Sm. 206-207° (A. 303, 345).

C 71.6 - H 4.6 - O 11.0 - N 12.8 - M. G. 436. $C_{26}H_{20}O_3N_4$

- 1) 2, 2'-Di[Benzoylamido]azoxybenzol. Sm. 195° (Am. 6, 26). IV,
- 2) 3, 3'-Di[Benzoylamido]azoxybenzol. Sm. bei 272° (Am. 5, 5). IV, 1337.
 3) 4,4'-Di[Benzoylamido]azoxybenzol. Sm. 310° (Am. 5, 284). IV,
- 1338.

C 73.6 - H 4.7 - O 15.1 - N 6.6 - M. G. 424. $C_{26}H_{20}O_4N_2$

- 1) 1-Naphtylamid-1-Naphtylimid d. Citronensäure. Sm. 194° (B. 19, 2617). — II, 612
- 2) 2-Naphtylamid-2-Naphtylimid d. Citronensäure. Sm. 2330 (235 bis 236°) (B. 19, 2615; C. 1896 [1] 997). — II, 621. C 65,0 — H 4,2 — O 13,2 — N 17,5 — M. G. 480.
- 1) Di-3-Nitrobenzaldiphenylhydrotetrazon. Sm. 1480 (G. 27 [2] 222).
- IV, 752. 2) Dehydro-3-Nitrobenzalphenylhydrazon. Sm. 190—194° (G. 27 [2]
- 224). IV, 752. 3) isom. Dehydro-3-Nitrobenzalphenylhydrazon. Sm. 244—245° u. Zers. (*G.* **27** [2] 225). — IV, 752. C 60,9 — H 3,9 — O 18,7 — N 16,4 — M. G. 512.

1) **4, 4'-Di[2-Nitrobenzylnitrosamido]**biphenyl. Sm. 204° (B. **29**, 1452). **– IV**, 963.

1) Aethylester d. ?-Tetrabrom-4', 42-Diacetoxyltriphenylmethan-C26 H20 O6 Br4 23-Carbonsäure. Sm. 231° (B. 30, 176). C 66,1 — H 4,2 — O 23,7 — N 5,9 — M. G. 472. 1) Resorceïn (M. 11, 241). — II, 966. $\mathbf{C}_{26}\mathbf{H}_{20}\mathbf{O}_7\mathbf{N}_2$

- C₂₈H₂₀O₁₁Br₄ 1) Pentaacetat d. Tetrabromhämatoxylin. Zers. oberh. 180° (B. 17, 374). - III, 665.
- 1) Tetraphenyläthentetrasulfonsäure. Ba₂ (B. 5, 278). II, 302. $\mathbf{C}_{26}\mathbf{H}_{20}\mathbf{O}_{12}\mathbf{S}_{4}$ 1) 1-Chlorphenylat d. 6-Amido-2, 3-Diphenyl-1, 4-Benzdiazin. + FeCl₂ $\mathbf{C}_{26}\mathbf{H}_{20}\mathbf{N}_{3}\mathbf{Cl}$ $+2^{1}/_{2}$ H₂O (B. **25**, 1633; **31**, 2425). — IV, 1124.
- 1) $\alpha\beta$ -Di[Phenylhydrazon]- $\alpha\beta$ -Di[3-Chlorphenyl]äthan. Sm. 127—128°. $\mathbf{C}_{26}\mathbf{H}_{20}\mathbf{N}_{4}\mathbf{Cl}_{2}$ **IV**, 785.
- 1) 2, 5 Diphenylimido 3, 4 Diphenyltetrahydro 1, 3, 4 Thiodiazol. $\mathbf{C}_{26}\mathbf{H}_{20}\mathbf{N}_{4}\mathbf{S}$ Sm. 131° (B. 23, 358). — IV, 1236.
- 1) Verbindung (aus Benzophenon). Sm. 226 227° (Soc. 49, 480). C26H20S5P2 п, 1105. С 86,0 — H 5,8 — О 4,4 — N 3,8 — М. G. 363. C26H21ON
 - 1) 4-[2-Oxybenzyliden]amidotriphenylmethan. Sm. 138° (B. 26, 3082). - III, *73*.
- C 79,8 H 5,4 O 4,1 N 10,7 M. G. 391.

 1) 1-Phenyloxydhydrat d. 6-Amido-2,3-Diphenyl-1,4-Benzdiazin. $\mathbf{C}_{26}\mathbf{H}_{21}\mathbf{ON}_{3}$ Chlorid + FeCl₃ + $2\frac{1}{3}$ H₂O (B. **25**, 1633). — IV, 1124. C 76,7 — H 5,2 — O 7,8 — N 10,3 — M. G. 407.
- $C_{26}H_{21}O_2N_3$ 1) 1,3-Diacetyl-2,5-Di[2-Naphtyl]-2,3-Dihydro-1,3,4-Triazol. Sm. 138° (B. 30, 1886; A. 298, 47). — IV, 1216. C 71,1 — H 4,8 — O 14,6 — N 9,5 — M. G. 439.
 - 1) 1,4-Dibenzoyl-3-[2,4-Dimethylphenylamido]-2,5-Diketo-1,2,4,5-Tetrahydro-1,4-Diazin (Hippuroflavin-m-Xylid). Sm. 223-2250 (A. **287**, 90).

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- 2) o-Diphtalyldiäthylenphenyltriamin. Sm. 210-211° (B. 22, 2224). $\mathbf{C}_{26}\mathbf{H}_{21}\mathbf{O}_{4}\mathbf{N}_{8}$ - II, 1800.
- 1) 1-[4-Amidochlorphenylat] d. 6-Amido-2,3-Diphenyl-1,4-Benz- $\mathbf{C}_{26}\mathbf{H}_{21}\mathbf{N}_{4}\mathbf{C}\mathbf{1}$ diazin $+ 2 H_2 O$ (B. 25, 1635). - IV, 1124.
- C 82.5 H 5.8 O 4.2 N 7.4 M. G. 378. $\mathbf{C}_{26}\mathbf{H}_{22}\mathbf{ON}_{2}$ 1) α -[4-Methylphenyl]nitrosamidotriphenylmethan. Sm. 145—148° u.
 - Zers. (B. 17, 706). II, 642. 2) β -Phenylhydrazon- α -Oxy- $\alpha \alpha \beta$ -Triphenyläthan. Sm. 144° (C. 1897)
 - 3) Methyläther d. α-Diphenylhydrazon-4-Oxydiphenylmethan. Sm.
 - 151-152° (B. 26, 30). IV, 776.
 4) Methyläther d. isom. α-Diphenylhydrazon-4-Oxydiphenylmethan.
- Sm. 115° (B. 26, 30). IV, 776. C 76,8 H 5,4 O 3,9 N 13,8 M. G. 406. $\mathbf{C}_{26}\mathbf{H}_{22}\mathbf{ON}_4$
 - 1) β -Benzoyl- β -Phenylamidophenylimidomethyl- α -Phenylhydrazin. Sm. 110—111° (J. pr. [2] 58, 463).
 - 2) 1-[4-Amidophenyl] oxydhydrat d. 6-Amido-2, 3-Diphenyl-1,4-Benzdiazin. Chlorid + 2H₂O (B. 25, 1634). - IV, 1124. C 71,9 - H 5,1 - O 3,7 - N 19,3 - M. G. 434.
- $\mathbf{C}_{26}\mathbf{H}_{22}\mathbf{ON}_{6}$ 1) 4,4'-Di[Phenylhydrazonmethyl]azoxybenzol. Sm. 230° u. Zers. (B. 30, 1598). — IV, 1345. C 79,2 - H 5,6 - O 8,1 - N 7,1 - M. G. 394
- $\mathbf{C}_{26}\mathbf{H}_{22}\mathbf{O}_2\mathbf{N}_2$ 1) 2,7-Di[Acetylphenylamido]naphtalin. Sm. 197,5° (B. 23, 528). IV. 925.
 - 2) 3,6-Diketo-2,5-Dimethyl-1,4-Di[1-Naphtyl]hexahydro-1,4-Diazin. Sm. 220—224° (B. 25, 2922). — II, 614.
 - 3) 3, 6-Diketo-2, 5-Dimethyl-1, 4-Di [2-Naphtyl]hexahydro-1, 4-Diazin. Sm. 269° (B. 25, 2313, 2923). — II, 621.
 - 4) Acetat d. 6-Oxy-5-Phenyl-2, 4-Dibenzyl-1, 3-Diazin. Sm. 84-85° (J. pr. [2] **39**, 258). — IV, 1089. 5) Bisnitrosylbenzhydryl. Sm. 118—120° (A. **278**, 367).

 - 6) Aethylester d. γ-[9-Phenylhydrazon-9,10-Dihydro-10-Phenanthrylen] propen-γ-Carbonsäure. Zers. bei 195° (Soc. 59, 8). — II, 1721.
- C 73,9 H 5,2 O 7,6 N 13,3 M G 422. $C_{96}H_{99}O_{9}N_{4}$ 1) $\alpha\beta$ -Di[Phenylhydrazon]- $\alpha\beta$ -Di[2-Oxyphenyl]äthan. Sm. 227—228° (A. 305, 179).
 - 2) isom. $\alpha\beta$ -Di[Phenylhydrazon]- $\alpha\beta$ -Di[2-Oxyphenyl]äthan. Sm. 281 bis 282° (A. 305, 180; B. 27, 2290). — IV, 759.
 - 3) $\alpha\beta$ -Di[Phenylamidoformyl]-s-Diphenylhydrazin. Sm. $218-220^{\circ}$ (B. 23, 490). — IV, 1496.
 - 4) Phenylamid d. Biphenylen-4,4'-Diamidoameisensäure (s-Diphenyl-4,4'-Biphenylendiharnstoff'). Sm. oberh. 300° (B. 18, 1478; C. 1896 [1] 489). - IV, 964.
- $C_{26}H_{22}O_2S$ 1) Di[4-Benzylphenyl]sulfon. Sm. 162° (Bl. [3] 11, 501). — II, 897. $C_{26}H_{22}O_3N_2$ C 76,1 - H 5,4 - O 11,7 - N 6,8 - M. G. 410.1) Aethylester d. Phenylhydrazonisophenanthroxylenacetessigsäure.
- Sm. 210-2120 u. Zers. (Soc. 59, 7). IV, 712. $\mathbf{C}_{26}\mathbf{H}_{22}\mathbf{O}_{4}\mathbf{N}_{2}$ C 73,2 - H 5,2 - O 15,0 - N 6,6 - M. G. 426.
- 1) Lignonblau (B. 30, 239). 2) Di[1-Naphtylester] d. Hexahydro-1,4-Diazin-1,4-Dicarbonsäure (α-Naphtolpiperazindiurethan). Sm. 190-191° (Bl. [3] 19, 187).
 - 3) Di[2-Naphtylester] d. Hexahydro-1,4-Diazin-1,4-Dicarbonsäure. Sm. 220° (Bl. [3] 19, 187). 4) 1,1-Dinaphtylamid d. Acetyläpfelsäure (B. 23, 2046; 24, 2005). —
 - 5) polym. 1-Naphtylamid d. Acetylameisensäure. Sm. 202-2030 (A.
- **279**, 98). $\mathbf{C}_{26}\mathbf{H}_{22}\mathbf{O}_4\mathbf{N}_4$ C 68,7 - H 4,8 - O 14,1 - N 12,3 - M. G. 454.
 - 1) 4,4' Di[2 Nitrobenzylamido] biphenyl. Sm. $226-227^{\circ}$ u. Zers. 2H₂SO₄ (B. **29**, 1451). — IV, 963. 2) **4**,4'-Di[**2**,5-Dioxyphenylazo]-**3**,3'-Dimethylbiphenyl (B. **26**, 1911).
 - IV, 1447.

C26H22O5N2

 $C_{26}H_{22}O_6N_4$

 $C_{26}H_{22}O_7N_2$

C26H22O8S3

 $C_{26}H_{23}O_3N_3$

 $C_{26}H_{23}O_6N_3$

 $\mathbf{C}_{26}\mathbf{H}_{23}\mathbf{O}_{11}\mathbf{Br}$ $\mathbf{C}_{26}\mathbf{H}_{24}\mathbf{ON}_{2}$

 $\mathbf{C}_{26}\mathbf{H}_{24}\mathbf{O}_{2}\mathbf{N}_{2}$

 $\mathbf{C}_{26}\mathbf{H}_{24}\mathbf{O}_{2}\mathbf{N}_{6}$

 $C_{26}H_{24}O_3N_2$

C 70.5 - H 5.0 - O 18.1 - N 6.3 - M. G. 442.

1) 1,1-Dinaphtylamid d. Citronensäure. Sm. 149°. Ag (B. 19, 2617; C. 1896 [1] 109). — II, 612.

2) 2,2-Dinaphtylamid d. Citronensäure. Sm. 172° (B. 19, 2615). -

II, 620.

3) Verbindung (aus d. Jodmethylat d. Methylhydrasteinphenylhydrazon).
 Sm. 162-164° (A. 271, 398). — IV, 800.
 C 64,2 — H 4,5 — O 19,7 — N 11,5 — M. G. 486.

1) Diäthylester d. 1,4-Dioxybenzol-2,3,5,6-Tetracarbonsäureanhydrodiphenylhydrazid (Am. 11, 8). — IV, 733. C 65,8 — H 4,6 — O 23,6 — N 5,9 — M. G. 474.

1) Phenylamid d. Anhydroberberilsäure. Sm. 1990 (Soc. 57, 1046).

– III, 802. 1) Di[4-Methylphenylester] d. Diphenylsulfon-P-Disulfonsäure. Sm. 171—172° (J. pr. [2] 47, 373). — II, 840.

1) $\alpha \alpha \beta \beta$ -Tetraphenyläthan-?-Tetrasulfonsäure. Ba₂ (B. 11, 929). — C26H22O12S4

1) Di[4-Benzylidenhydrazidophenyl]sulfid. Sm. 1850 (A. 270, 152). — $C_{26}H_{22}N_4S$

IV, 816. C 79,4 — H 5,8 — O 4,1 — N 10,7 — M. G. 393. $C_{26}H_{23}ON_3$

 P-Triamido-4-Benzoyltriphenylmethan. Zers. bei 115° (Bl. [3] 17, 84).
 C 81,9 — H 6,0 — O 8,4 — N 3,7 — M. G. 381. $C_{26}H_{23}O_2N$

1) Aethylester d. 2,5-Diphenyl-1-[2-Methylphenyl]pyrrol-3-Carbon-

säure. Sm. 134-135° (B. 22, 3088). — IV, 449.
2) Aethylester d. 2,5-Diphenyl-1-[4-Methylphenyl]pyrrol-3-Carbonsäure. Sm. 145° (B. 22, 3089). — IV, 449.
C 76,3 — H 5,6 — O 7,8 — N 10,3 — M. G. 409.

 $C_{26}H_{23}O_2N_3$

1) Aethylester d. 1-Benzolazo-2-Methyl-5-Phenylpyrrol-3-Carbon-

 Acthylester d. 1-Benzolazo-2-Methyl-5-Thehylpytrol-5-Carbon-säure. Sm. 123° (B. 19, 3162). — IV, 1487.
 Diäthyläther d. βββ-Trichlor-αα-Di[1-Naphtyl]äthan. Sm. 198 bis 200° (J. pr. [2] 47, 69). — II, 1007.
 Diäthyläther d. βββ-Trichlor-αα-Di[2-Oxynaphtyl]äthan. Sm. 206° u. Zers. (J. pr. [2] 47, 75). — II, 1007.
 C 73,3 — H 5,4 — O 11,3 — N 9,9 — M. G. 425.
 Varkindung (us. 4 - Mido-1, Methylkanzol). Sm. 196° (B. 25, 2233) $\mathbf{C}_{26}\mathbf{H}_{23}\mathbf{O}_{2}\mathbf{Cl}_{3}$

1) Verbindung (aus 4-Amido-1-Methylbenzol). Sm. 196° (B. 25, 2233).

C 66.0 - H 4.8 - O 20.3 - N 8.9 - M. G. 473.1) Pentaacetyloxyamidoamidodiindyl. Sm. 176°; Zers. bei 180° (B.

31, 1253). 1) Pentacetat d. Bromhämatoxylin. Sm. 210° (B. 17, 685). — III, 665. C 82,1 — H 6,3 — O 4,2 — N 7,4 — M. G. 380.

1) ?-Acetyl-1-Benzylamido-2-[4-Methylphenyl]amidonaphtalin. Sm.

 162° (B. 27, 2779). — IV, 918. C 78,8 — H 6,0 — O 8,1 — N 7,1 — M. G. 396.

1) $\alpha \beta$ -Di[Acetyl-1-Naphtylamido]äthan. Sm. 239 – 241° (B. 25, 3263).

- II, 605. 2) αβ-Di[Acetyl-2-Naphtylamido]äthan. Sm. 175—176° (B. 25, 3268). II, 615.

3) Diäthyläther d. Di [4-Oxy-1-Naphtyliden]hydrazin. Sm. 2040 (Bl. [3] **17**, 812).

4) 1,10-Dibenzoyloktohydro-α-Chinochinolin. Sm. 160° (B. 28, 129). — IV, 889. C 69,0 — H 5,3 — O 7,1 — N 18,6 — M. G. 452.

1) Anhydro-1, 4-Di[2, 5-Diacetyldiamidophenyl]-1, 4-Azophenylen.

Sm. oberh. 300° (B. 27, 485). — IV, 596. 2) Di[Phenylhydrazid] d. Biphenylen - 4,4' - Diamidoameisensäure (Diphenylendiphenylsemicarbazid) (*C.* 1898 [1] 945). C 75,7 — H 5,8 — O 11,6 — N 6,8 — M. G. 412.

1) 2-Chinolyläther d. Morphin. Sm. 158°. (2 HCl, PtCl₄), H₂SO₄+

3H₂O, H₂Cr₂O₇, Tartrat, Pikrat (M. 19, 107). 2) Monacetat d. Bis-2-Nitroso-1,4-Dimethylnaphtalin. Sm. 182^o (G. **26** [1] 34).

3) Aethylester d. 1-Naphtylamidoacetyl-1-Naphtylamidoessigsäure. Sm. 180° (B. 25, 2292). — II, 613.

CoeHo4OeNo 4) 1-Naphtylmonamid d. 1-Naphtylamidobernsteinsäuremonoäthylester. Sm. 223° u. Zers. (B. 25, 968). — II, 614.
5) 2-Naphtylmonamid d. 2-Naphtylamidobernsteinsäuremonoäthyl-

ester. Sm. 215° u. Zers. (B. 25, 971). — II, 622. C 72,9 — H 5,6 — O 15,0 — N 6,5 — M. G. 428.

C26H24O4N2

1) $\alpha\beta$ -Di[2-Methyl-5-Phenyl-1-Pyrazolyl]äthan- $\alpha^3\beta^3$ -Dicarbonsäure. Sm. 181° (B. 19, 3158). — IV, 357. C 70,3 — H 5,4 — O 18,0 — N 6,3 — M. G. 444.

 $\mathbf{C}_{26}\mathbf{H}_{24}\mathbf{O}_{5}\mathbf{N}_{2}$

1) Verbindung (aus Aethylacetessigester u. Anthranilsäure). Sm. 286° (B. 27, 1401). — II, 1252.

 $C_{68,8} - H_{5,2} - O_{20,9} - N_{6,1} - M.G.$ 460. $C_{26}H_{24}O_6N_2$

1) Diäthyläther d. 1,2-Phtalylbenzhydroxamsäure. Sm. 54° (A. 281, 266). — II, 1815. 2) Diäthylester d. Phtalyldi-3-Amidobenzol-1-Carbonsäure. Sm. 1910

(A. 303, 278). 3) Diäthylester d. Phtalyldi-4-Amidobenzol-1-Carbonsäure. Sm. 1880

(A. 303, 279).

 $\mathbf{C}_{26}\mathbf{H}_{24}\mathbf{N}_{2}\mathbf{S}$ 1) $Di[\alpha-Phenyl-4-Amidobenzyl]$ sulfid. 2HCl (B. 30, 1139).

 $\mathbf{C}_{26}\mathbf{H}_{24}\mathbf{N}_{2}\mathbf{H}\mathbf{g}$ 1) Quecksilberdi [4-Methylphenylamidophenyl]. Sm. 138-139° (G. 28, [2] 134). — IV, 1707. 2) Quecksilberdi [4-Benzylamidophenyl] (G. 27 [1] 15). — IV, 1708.

C26H24N6S 1) Sulfid d. α-[4-Merkaptophenyl]amido-β-Phenylthioharnstoff. Sm. 180—182° u. Zers. (A. 270, 154). — IV, 816.

1) **4,4'-Biphenylendi[Phenylsemicarbazid]** (B. **27**, 1560). — IV, 965. C 79,0 — H 6,3 — O 4,0 — N 10,6 — M. G. 395. $\mathbf{C}_{26}\mathbf{H}_{24}\mathbf{N}_{6}\mathbf{S}_{2}$ C26H25ON

Phenylrosanilin (N. Handw. d. Ch. 1, 626). — II, 1092.
 C 73,8 — H 5,9 — O 3,8 — N 16,5 — M. G. 423.

C26H25ON5 1) 4-[2,4-Dimethylphenyl]azo-6-[1-Naphtyl]azo-3-Dimethylamido-1-Oxybenzol. Sm. 141° (B. 31, 2782). — IV, 1418.
2) 4-[2,4-Dimethylphenyl]azo-6-[2-Naphtyl]azo-3-Dimethylamido-1-Oxybenzol. Sm. 171—172° (B. 31, 2783). — IV, 1418.

3) 4-[1-Naphtyl]azo-6-[2,4-Dimethylphenyl]azo-3-Dimethylamido-1-Oxybenzol. Sm. 147-148° (B. 31, 2782). - IV, 1418.

4) 4-[2-Naphtyl]azo-6-[2,4-Dimethylphenyl]azo-3-Dimethylamido-1-Oxybenzol. Sm. 175⁶ (B. 31, 2783). — IV, 1418. C 78,2 — H 6,3 — O 12,0 — N 3,5 — M. G. 399.

 $\mathbf{C}_{26}\mathbf{H}_{25}\mathbf{O_8N}$

α-Monoxim d. γγ-Diacetyl-αBenzoyl-αβ-Diphenylpropan. Sm. 205 bis 206° (A. 281, 89). — III, 322.
 C 73,1 — H 5,8 — O 11,2 — N 9,9 — M. G. 427.
 Diäthyläther d. 1-Acetylamido-4-Oxy-2-[4-Oxy-1-Naphtyl]azo-

C26H25O3N3

naphtalin. Sm. 224,5° (B. **25**, 3066). — IV, 1427. C 70,4 — H 5,6 — O 14,4 — N 9,5 — M. G. 443.

 $\mathbf{C}_{28}\mathbf{H}_{25}\mathbf{O}_{4}\mathbf{N}_{3}$

1) Phenylhydrazon d. Papaveraldin. Sm. 80-81° (M. 6, 962). -IV, 443.

 $C_{26}H_{25}O_5N$ C 72,4 - H 5,8 - O 18,6 - N 3,2 - M. G. 431.

1) Acetylbenzoylmorphin. HCl, (2 HCl, PtCl₄) (Soc. 28, 25). — III, 900. 1) Pentaacetat d. Pentabromkolatannin (C. 1898 [1] 579).

 $\mathbf{C}_{26}\mathbf{H}_{25}\mathbf{O}_{13}\mathbf{Br}_{5}$ $C_{26}H_{26}O_{2}N_{2}$

C 78,4 — H 6,5 — O 8,0 — N 7,0 — M. G. 398 1) Benzoyleinchonin. Sm. $105-106^{\circ}$ (75°). $HCl+2^{1}/_{2}H_{2}O$, 2HCl, (2HCl, $PtCl_{4}$), HBr, $H_{2}SO_{4}+1^{1}/_{2}H_{2}O$ (A. 108, 351; M. 16, 163; Bl. [3] 9, 714).

- III, 834.

 $\mathbf{C}_{26}\mathbf{H}_{26}\mathbf{O}_{2}\mathbf{N}_{4}$ C 73,2 - H 6,1 - O 7,5 - N 13,1 - M. G. 426.

1) Cyanamin. HCl (B. 23, 2249). — III, 676. C 70,6 — H 5,9 — O 10,8 — N 12,7 — M. G. 442. $\mathbf{C}_{26}\mathbf{H}_{26}\mathbf{O}_{3}\mathbf{N}_{4}$

1) Phenylmonohydrazon d. 4,4'-Di[β-Ketobutyrylamido]biphenyl (M. 19, 699).

 $\mathbf{C}_{26}\mathbf{H}_{26}\mathbf{O}_{4}\mathbf{N}_{6}$ C 64,2 - H 5,3 - O 13,2 - N 17,3 - M. G. 486.

1) 1,4-Di[2,5-Diacetyldiamidophenyl]-1,4-Azophenylen $+2H_2O$. Sm. 294° (B. 27, 483). — IV, 595. C 69,9 — H 5,8 — O 17,9 — N 6,3 — M. G. 446.

 $C_{26}H_{26}O_5N_2$

1) Benzoylchitenin. Sm. 85°. (2HCl, PtCl₄) (M. 14, 598). — III, 820. C 58,4 — H 4,9 — O 21,0 — N 15,7 — M. G. 534. C26H26O7N6

1) Tetramethyldialloxanyl-2-Amidodi[4-Methylphenyl]amin. Sm. bei 260° u. Zers. (B. 26, 544). — IV, 616.

 $C_{26}H_{26}O_{10}N_4$ C 56,3 - H 4,7 - O 28,9 - N 10,1 - M. G. 554.

l) 4,4'-Di[Acetessigsäureäthylesterazo] biphenyl-3,3'-Dicarbonsäure

 $\begin{array}{c} + \text{ H}_2\text{O}. \text{ Sm. } 275-278^{\circ} \text{ (B. 31, 2579)}. & -\text{ IV, } 1557. \\ \textbf{C}_{26}\textbf{H}_{26}\textbf{O}_{13}\textbf{Br}_4 \text{ 1) Pentaacetat d. Tetrabromkolatannin (C. 1898 [1] 579)}. \\ \textbf{C}_{26}\textbf{H}_{26}\textbf{N}_{6}\textbf{S}_2 \text{ 1) 4,4'-Biphenyldi[phenylthiosemicarbazid] (B. 27, 1560)}. \end{array}$ $\mathbf{C}_{26}\mathbf{H}_{27}\mathbf{O}_7\mathbf{N}$

C 67,1 - H 5,8 - O 24,1 - N 3,0 - M. G. 465

1) Di[2-Oxy-α-Oxybenzyl]dihydrocotarnin. (2HCl, PtCl₄) (B. 31, 2100). $\begin{array}{c} \textbf{C}_{26}\textbf{H}_{27}\textbf{O}_{13}\textbf{Br}_3 & \textbf{1)} & \textbf{Pentacetat d. Tribromkolatannin} & (\textit{C. 1898} [1] 579). \\ \textbf{C}_{26}\textbf{H}_{28}\textbf{ON}_2 & \textbf{C.} & 81,2 - \textbf{H.} 7,3 - \textbf{O.} 4,2 - \textbf{N.} 7,3 - \textbf{M.} G. 384. \\ \textbf{1)} & \textbf{Benzyleinchonin.} & \textbf{Sm. 117}^{\circ}. & \textbf{HCl, (2HCl, PtCl}_4 + 2\text{H}_2\text{O})} & (\textit{B. 13, 2295}). \end{array}$

- III, 834.

2) Benzyleinehonidin. Fl. (2HCl, PtCl₄ + 3H₂O) (A. 269, 252). — III, 852.
C 70,9 — H 6,4 — O 3,6 — N 19,1 — M. G. 440.
1) Acetylderivat d. Verb. C₂₄H₂₆N₆. Sm. 220° (B. 21, 2497). —

IV, 766. C 78,0 — H 7,0 — O 8,0 — N 7,0 — M. G. 400.

1) Bis- α_1 -Keto- γ_1 -Methyljulolidyl. Sm. 257,5° (B. 25, 113). — IV, 194. 2) Di[2,3,5-Trimethylphenylamid] d. Benzol-1, 2-Dicarbonsäure. Sm.

227° (B. 30, 1443).

 $C_{26}H_{28}ON_{6}$

 $\mathbf{C}_{26}\mathbf{H}_{28}\mathbf{O}_2\mathbf{N}_2$

 $\mathbf{C}_{26}\mathbf{H}_{28}\mathbf{O}_4\mathbf{N}_2$

 $C_{26}H_{28}O_5N_2$ $\mathbf{C}_{26}\mathbf{H}_{29}\mathbf{O}_{2}\mathbf{N}$

 $C_{26}H_{29}O_2N_3$

 $C_{26}H_{29}O_3N_3$

 $C_{26}H_{29}O_4N$

 $C_{26}H_{29}N_3S_2$ $\mathbf{C}_{26}\mathbf{H}_{30}\mathbf{O}_{2}\mathbf{N}_{2}$

 $C_{26}H_{30}O_{2}N_{4}$

 $\mathbf{C}_{26}\mathbf{H}_{30}\mathbf{O}_{3}\mathbf{N}_{2}$

 $\mathbf{C}_{26}\mathbf{H}_{30}\mathbf{O}_{4}\mathbf{N}_{2}$

3) Di[Aethyltolylamid] d. Benzol-1,2-Dicarbonsäure (Aethyltoluidin-

 $\mathbf{C}_{26}\mathbf{H}_{28}\mathbf{O}_{2}\mathbf{N}_{6}$

bhtalein) (A. 227, 188). — II, 1808.

C 68,4 — H 6,1 — O 7,0 — N 18,4 — M. G. 456.

Verbindung (aus Chinolin u. Nitrosodimethylanilinhydrocyanid) (M. 6, 543). — IV, 250.

C 72,2 — H 6,5 — O 14,8 — N 6,5 — M. G. 432.

1) Di-Diphenylmethylaminoxyd. Sm. 118—120° (A. 278, 367). — II, 636. C 63.9 - H 5.7 - O 13.1 - N 17.2 - M. G. 488. $\mathbf{C}_{26}\mathbf{H}_{28}\mathbf{O}_4\mathbf{N}_6$

1) 1,4-Di[2,5-Di(Acetylamido)phenylamido]benzol. 2HCl (B. 27, 484). - IV, 596. C 69,6 — H 6,2 — O 17,9 — N 6,2 — M. G. 448. 1) Helicinanilidtoluid (A. 154, 33). — III, 69. C 80,6 — H 7,5 — O 8,3 — N 3,6 — M. G. 387.

1) Oxim d. bim. Methylphenylcyklohexenon. Sm. 207° (B. 32, 426). C 75,2 — H 7,0 — O 7,7 — N 10,1 — M. G. 415. 1) 4', 4^2 - Di [Acetylamido] - 4^3 - Dimethylamido - 2' - Methyltriphenyl-

methan. Sm. bei 130° (B. 24, 555). — IV, 1198.

2) 2-Dimethylamido-1, 4-Di[?-Dimethylamidobenzoyl]benzol? Sm. 1220 (B. 9, 717, 1898). — III, 305. 3) Phenyldi[2,4,5-Trimethylphenyl]biuret. Sm. 123°. — II, 552.

C 72,4 — H 6,7 — O 11,1 — N 9,7 — M. G. 431. 1) $4',4^2,4^3$ -Tri[Acetylamido]-?-Methyltriphenylmethan. Sm. 168° (B. 16, 1303). — IV, 1198. C 74,4 — H 6,9 — O 15,3 — N 3,3 — M. G. 419. 1) Diäthylester d. 2,6-Dimethyl-4-Phenyl-1-[4-Methylphenyl]-1,4-

Dihydropyridin-3, 5-Dicarbonsäure. Sm. 1336 (M. 17, 353). — IV, 371.

1) Dipropyltriphenyldithiobiuret. Sm. 153,7° (B. 21, 109). — II, 400. C 77,6 — H 7,4 — O 8,0 — N 7,0 — M. G. 402.

1) 2,5-Dimethylhexahydro-1,4-Diazin + 2 Molec. α-Naphtol. Sm. 1470 (Bl. [3] 19, 620).

2) 2,5-Dimethylhexahydro-1,4-Diazin + 2 Molec. β -Naphtol. Sm. 93° (*Bl.* [3] **19**, 621).

3) Cinchoninbenzyloxydhydrat. Salze siehe (B. 13, 2294; A. 269, 262). **– III**, 834.

4) Verbindung (aus Chinin u. Benzol) (J. 1874, 867). — III, 812. C 72,6 — H 7,0 — O 7,4 — N 13,0 — M. G. 430.

1) Diacetylderivat d. Base C₂₂H₂₈N₄ (G. 23 [1] 337). — IV, 796.

C 74,6 — H 7,2 — O 11,5 — N 6,7 — M. G. 418.

1) Verbindung (aus Chinin u. Phenol). 2 HCl + 2 H₂O (J. 1875, 769; A. 180, 250; Bl. 24, 535). — III, 812.

C 71,9 — H 6,9 — O 14,7 — N 6,4 — M. G. 434.

1) Brenzkatechinchinin. H₂SO₄ + H₂O (Sm. 167° wasserfrei) (Bl. [3] 9,

147). — III, *813*.

2) dimolec. 4-Methylphenylimid d. Butan-αγ-Dicarbonsäure. Sm. 170° (A. 292, 212).

 ${}^{\mathbf{C}}_{26}\mathbf{H}_{30}\mathbf{O}_{4}\mathbf{N}_{8}$

C26 H34 O4 N4

C 60,2 - H 5,8 - O 12,4 - N 21,6 - M. G. 518.

1) Dibenzoacetophenontetraureïd. Zers. 176—180° (G. 23 [1] 409). — III, 127. C 63,1 - H 6,1 - O 19,4 - N 11,3 - M. G. 494. $\mathbf{C}_{26}\mathbf{H}_{80}\mathbf{O}_{6}\mathbf{N}_{4}$ 1) Triäthylester d. 4,5-Di[Phenylhydrazon]-R-Pentamethylen-1,2,3-Tricarbonsäure. Sm. 163—164° (A. 297, 109). — IV, 731. C 59,3 — H 5,7 — O 24,3 — N 10,6 — M. G. 526. $C_{26}H_{30}O_8N_4$ 1) Phenylhydrazinverbindung d. Dioxalbernsteinsäurelaktontriäthylester. Sm. 138° (A. 285, 26). — IV, 733.

1) Verbindung (aus Holzsulfitlauge) (A. 267, 361).

1) Verbindung (aus Holzsulfitlauge) (A. 267, 358).

1) Dijodäthylat d. 2,4,2',4'-Tetramethyl-6,6'-Bichinolyl. Sm. 158° C26H30O10S $\mathbf{C}_{26}\mathbf{H}_{30}\mathbf{O}_{12}\mathbf{S}$ $\mathbf{C}_{26}\mathbf{H}_{30}\mathbf{N}_{2}\mathbf{J}_{2}$ u. Zers. (B. 20, 2508). — IV, 1077. C 77,8 — H 7,7 — O 4,0 — N 10,5 — M. G. 401. $C_{26}H_{31}ON_3$ 1) 4'- Methylacetylamido - 42, 43-Di[Dimethylamido] triphenylmethan. Sm. 142—143° (128° aus Alkohol) (B. 16, 2906). — IV, 1196. C 74,8 — H 7,4 — O 7,7 — N 10,1 — M. G. 417. C26H81O2N3 1) 4'-Nitro-42-Dimethylamido-43-Diathylamido-23-Methyltriphenyl- 4'-Nitro-4²-Dimethylamido-4³-Diathylamido-2³-Methyltriphenylmethan. Sm. 165—166° (B. 24, 556). — IV, 1045.
 C 74,1 — H 7,4 — O 15,2 — N 3,3 — M. G. 421.
 Codeïnviolet. (2HCl, PtCl₄) (Bl. [3] 6, 905). — III, 906.
 C 49,6 — H 4,9 — O 43,2 — N 2,2 — M. G. 629.
 Indikan (J. 1855, 660; 1858, 465; B. 12, 2311). — III, 595.
 C 69,0 — H 7,1 — O 17,7 — N 6,2 — M. G. 452.
 Brucinallyloxydhydrat. Salze siche (J. pr. [2] 3, 171). — III, 947. $\mathbf{C}_{26}\mathbf{H}_{31}\mathbf{O}_4\mathbf{N}$ $\mathbf{C}_{26}\mathbf{H}_{31}\mathbf{O}_{17}\mathbf{N}$ $C_{26}H_{32}O_5N_2$ 2) Anhydrid d. α-Benzoylamido-norm. Capronsäure. Sm. 85° (Bl. 30, 561). — II, 1191. 501). — 13, 1131. C 62,4 — H 6,4 — O 25,6 — N 5,6 — M. G. 500. 1) o-Phtalyldi-d-Eegonin. Fl. 2 HJ (B. 24, 12). — III, 870. 1) Chlormethylat d. 3,5-Di[4-Isopropylbenzyl]pyridin. 2 + PtCl₄ (A. 280, 65). — IV, 458. $C_{26}H_{32}O_8N_2$ $\mathbf{C}_{26}\mathbf{H}_{32}\mathbf{NCl}$ 1) Jodmethylat d. 3,5-Di[4-Isopropylbenzyl]pyridin. Sm. 173-1740 $\mathbf{C}_{26}\mathbf{H}_{32}\mathbf{NJ}$ (A. 280, 64). — IV, 458. $\mathbf{C}_{26}\mathbf{H}_{32}\mathbf{JAs}$ 1) İsamyltribenzylarsoniumjodid. Sm. 146° (A. 233, 78). — IV, 1691. C26H33ON3 C 77.4 - H 8.2 - O 4.0 - N 10.4 - M. G. 403.1) Triäthylrosanilin. Chlorid, Jodid (A. 132, 163; J. 1863, 419). — II, 1092. 2) Hexamethylrosanilin. Jodid (B. 6, 364). — II, 1092. 1) Jodmethylat d. α-Jodtri [4-Dimethylamidophenyl] methan + H₂0. $C_{26}H_{33}N_3J_2$ Zers. unterh. 100° (Bl. [3] 13, 573). — IV, 1195.

1) Verbindung (aus Phenylhydrazoncarbodiphenylamin). Sm. 175° (B. 21, $C_{26}H_{33}N_5S$ 2277). — IV, 1224. C 80,0 — H 8,7 — O 4,1 — N 7,2 — M. G. 390. $\mathbf{C}_{26}\mathbf{H}_{34}\mathbf{ON}_{2}$ 1) Dicamphanhexan-1-on-4-Phenylhydrazon. Sm. 117-1180 (G. 27 [1] 171). — IV, 784. 2) Isodicamphanhexan-1-on-4-Phenylhydrazon. Sm. 177-178° (G. 27 [1] 172). — IV, 784. C 76,8 — H 8,4 — O 7,9 — N 6,9 — M. G. 406. 1) Loxopterygin. Sm. 81° (A. 211, 278). — III, 890. C 73,9 — H 8,1 — O 11,4 — N 6,6 — M. G. 422. $C_{26}H_{34}O_{2}N_{2}$ $\mathbf{C}_{26}\mathbf{H}_{34}\mathbf{O_3N_2}$ 1) Strychninisoamyloxydhydrat. Salze siehe (A. 92, 343; J. pr. [2] 3, 159). — III, 938. C 71,2 — H 7,7 — O 14,6 — N 6,4 — M. G. 438. $\mathbf{C}_{26}\mathbf{H}_{34}\mathbf{O}_{4}\mathbf{N}_{2}$ 1) Di[2-Methyl-5-Isopropylphenylester] d. Hexahydro-1,4-Diazin-1,4-Dicarbonsäure. Sm. 139–140° (Bl. [3] 19, 765). C 67,0 — H 7,3 — O 13,7 — N 12,0 — M. G. 466.

1) Diäthylester d. $\gamma\zeta$ -Diphenylhydrazonoktan- $\alpha\vartheta$ -Dicarbonsäure. Sm. 104—105° (A. 294, 172). — IV, 722. 2) Diäthylester d. βη-Di[Phenylhydrazon]oktan-ηζ-Dicarbonsäure. Sm. 143—145° (Soc. 57, 221). — IV, 723.
 1) Jodmethylat d. α-Oxytri[4-Dimethylamidophenyl]methan (B. 6,

 $C_{26}H_{34}N_3J_3$ 365). — II, 1089. C = 68.3 - H = 7.6 - O = 21.0 - N = 3.1 - M. G. 457. $\mathbf{C}_{26}\mathbf{H}_{35}\mathbf{O}_{6}\mathbf{N}$

1) 1-Benzoat d. 1-Oximido-3-Hexyl-5-Methyl-1, 2, 3, 4-Tetrahydrobenzol-2,4-Dicarbonsäurediäthylester. Sm. 165-166° (A. 288, 342).

C 79,6 — H 9,2 — O 4,1 — N 7,1 — M. G. 392. C26H36ON2 1) Monophenylhydrazon d. $\beta\beta$ -Dicampher. Sm. 142—145° (G. 27 [1] 163). — IV, 784. C 79,6 — H 9,2 C 79,6 — H 9,2 — O 4,1 — N 7,1 — M. G. 392. 1) Diacetylderivat d. Base $C_{22}H_{32}N_2$. Sm. 132° (B. 25, 2044). — II, 445. C 62,4 — H 7,2 — O 19,2 — N 11,2 — M. G. 500. $C_{26}H_{36}O_2N_2$ $C_{26}H_{36}O_6N_4$ 1) $\text{Di}[\beta\beta\text{-Di\"{a}thoxyl\"{a}thylamid}]$ d. Azobenzol-4,4'-Dicarbons\"{a}ure (p-Azobenzoylamidoacetal). Sm. 202,5° (B. 27, 3097). — IV, 1459. C 56,1 — H 6,5 — O 17,3 — N 20,1 — M. G. 556. $\mathbf{C}_{26}\mathbf{H}_{36}\mathbf{O}_{6}\mathbf{N}_{8}$ Verbindung (aus Benzaldehyd, Harnstoff u. Aethylacetessigsäureäthylester). Zers. bei 181–183° (G. 23 [1] 410). — III, 35.
 C 60,5 — H 7,0 — O 21,7 — N 10,8 — M. G. 516.
 Di[ββ-Diäthoxyläthylamid] d. Azoxybenzol-4,4′-Dicarbonsäure (p-Azoxybenzoylamidoacetal). Sm. 182° (B. 27, 3096). — IV, 1344.
 C 61,9 — H 7,1 — O 25,4 — N 5,6 — M. G. 504.
 Voorbindung (aus at Birnick at Direction of $C_{26}H_{36}O_7N_4$ $\mathbf{C}_{26}\mathbf{H}_{36}\mathbf{O}_{8}\mathbf{N}_{2}$ Verbindung (aus αβ-Diamido-αβ-Diphenyläthan u. Oxalsäurediäthylester). Sm. 164° u. Zers. (B. 28, 3179). — IV, 978.
 Trijodmethylat d. 2'-Amido-4²,4³-Di[Dimethylamido] triphenylmethan. Sm. 172° (B. 22, 1887). — IV, 1194.
 Heptachlorcholesterin. Sm. 60° (A. 59, 110). — II, 1073. $C_{26}H_{36}N_3J_3$ $\mathbf{C}_{26}\mathbf{H}_{37}\mathbf{OCl}_{7}$ C 75,9 — H 9,0 — O 11,7 — N 3,4 — M. G. 411. 1) $Jervin + 2H_2O$. Sm. 231—237° (238—240°). (2 IICl, $PtCl_4$), (HCl, $AuCl_3$) C26H37O3N (A. 35, 116; Soc. 35, 405; B. 23 [2] 699). — III, 950. C 81,9 - H 10,2 - O 4,2 - N 3,7 - M. G. 381. $\mathbf{C}_{26}\mathbf{H}_{39}\mathbf{ON}$ 1) Solanicin. Sm. oberh. 250° u. Zers. HCl, (2HCl, PtCl₄) (A. 123, 344). · III, 613. C 72,7 - H 9,1 - O 14,9 - N 3,3 - M. G. 429. $C_{26}H_{39}O_4N$ 1) Glykodyslysin (Bl. 25, 182). — I, 1193.
1) Bromlupeol. Sm. 165° (H. 15, 424). — II, 1077.
C 69,8 — H 9,2 — O 17,9 — N 3,1 — M. G. 447.
1) Glykocholonsäure. Na, Ba (A. 67, 26; 70, 166; J. 1847/48, 907). $C_{26}H_{41}OBr$ C26H41O5N — I, 1193. C 59,2 — H 7,8 — O 30,4 — N 2,6 — M. G. 527. $\mathbf{C}_{26}\mathbf{H}_{41}\mathbf{O}_{10}\mathbf{N}$ 1) Japaconin. HJ, HgJ₂ (Soc. 35, 387). — III, 776. C 75,4 — H 10,1 — O 7,7 — N 6,8 — M. G. 414. $\mathbf{C}_{26}\mathbf{H}_{42}\mathbf{O}_{2}\mathbf{N}_{2}$ 1) Onoketondioxim (B. 29, 2988). C 67,5 — H 9,1 — O 17,3 — N 6,1 — M. G. 462. 1) Dinitrocholesterin. Sm. 120—121° (B. 12, 225; M. 15, 110). $C_{26}H_{42}O_5N_2$ II, 1073. C 77,8 — H 10,7 — O 8,0 — N 3,5 — M. G. 401. $\mathbf{C}_{26}\mathbf{H}_{43}\mathbf{O}_{2}\mathbf{N}$ 1) Rubijervin. Sm. 236° ($240-246^{\circ}$) (Soc. 35, 405). — III, 950. $C_{26}H_{43}O_4N$ C 72,1 - H 9,9 - O 14,8 - N 3,2 - M. G. 433.1) Diäthylester d. 2,6-Dimethyl-4-Tridekylpyridin-3,5-Dicarbonsäure. Sd. 265°₁₀. HCl (B. **22**, 1758). — IV, 171. C 69,5 - H 9,6 - O 17,8 - N 3,1 - M. G. 449. $\mathbf{C}_{26}\mathbf{H}_{43}\mathbf{O}_{5}\mathbf{N}$ 1) α -Hyoglykocholsäure. Na + H₂O, K + $^{1}/_{2}$ H₂O, Mg, Ba + 2H₂O (A. 62, 215; J. 1858, 568; H. 12, 512; 13, 209). — I, 1193. 2) β -Hyoglykocholsäure. Na, K, Mg + 7H₂O, Ca, Ba + 4H₂O, Cu, Ag (A. 62, 205; H. 12, 512, 548). — I, 1194. C 67,1 — H 9,2 — O 20,6 — N 3,0 — M. G. 465. $C_{26}H_{43}O_6N$ 1) Glykocholsäure. Sm. 132-134°. Na, Ba, Pb. Lit. bedeutend. -I, 1192. 2) Paraglykocholsäure. Sm. 183—184° (A. 65, 12; M. 3, 340). — I, 1193.
 1) Dibromid d. Cholesterylchlorid. Sm. 128° (Bl. 47, 900). — II, 1073. $\mathbf{C}_{26}\mathbf{H}_{43}\mathbf{ClBr}_{2}$ 1) Cholesterinbromid (A. 146, 179). — II, 1072. $\mathbf{C}_{26}^{\mathbf{H}_{44}^{\mathbf{H}}}\mathbf{OBr}_{2}^{\mathbf{I}}$ $\mathbf{C}_{26}^{\mathbf{H}_{44}^{\mathbf{H}}}\mathbf{O}_{2}\mathbf{N}_{2}^{\mathbf{I}}$ 1) s-Stearyl-2-Methylphenylharnstoff. Sm. 94—95° (Soc. 69, 1600). C 80,6 - H 11,6 - O 4,1 - N 3,6 - M. G. 387. $\mathbf{C}_{26}\mathbf{H}_{45}\mathbf{ON}$ 1) α -Oximido- α -[2,4-Dimethylphenyl] oktadekan. Sm. 45° (J. pr. [2] 2) α -Oximido- α -[2,5-Dimethylphenyl]oktadekan. Sm. 50° (J. pr. [2]

3) Phenylamid d. Arachinsäure. Sm. 96° (M. 17, 545).

4) 2,4-Dimethylphenylamid d. Stearinsäure. Sm. 95° (J. pr. [2] 54, 396).

54, 400).

 $C_{26}H_{45}O_{2}N$

C 77,4 — H 11,2 — O 7,9 — N 3,5 — M. G. 403.
1) α-Phenylamidoarachinsäure. Sm. 138—139° (M. 17, 542).
C 71,7 — H 10,3 — O 14,7 — N 3,2 — M. G. 435.
1) Diäthylester d. Tridekyldihydrolutidindicarbonsäure. Sm. 60° (B. C26H45O4N

22, 1757). — IV, 96. C 62,5 - H 9,0 - O 25,6 - N 2,8 - M. G. 499. 1) Protoveratridin. Sm. 265° (B. 23 [2] 699). - III, 951. $C_{26}H_{45}O_8N$

1) Diisoamyläther d. 3,6-Dichlor-2,5-Dioxy-1,4-Benzochinondiiso-C₂₆H₄₆O₆Cl₂

amylacetal. Na₂ (Am. 18, 7). — III, 351. 1) Di[Chlormethylat] d. Connessin + 5 H₂O (B. 19, 84). — III, 875. $\mathbf{C_{26}H_{46}N_{2}Cl_{2}}$

 $\mathbf{C}_{26}\mathbf{H}_{46}\mathbf{N}_{2}\mathbf{J}_{2}$

 $C_{26}H_{49}O_{2}N$

 Di[Jodmethylat] d. Connessin + 5 H₂O (B. 19, 84). —
 Di[Jodmethylat] d. Connessin (B. 19, 82). — III, 875. C 76,6 — H 12,0 — O 7,9 — N 3,4 — M. G. 407.
 α-Cyancerotinsäure. Sm. 88° (C. 1896 [1] 643). C 60,6 — H 9,5 — O 21,7 — N 8,2 — M. G. 515.
 Tri[Acetylamido]dracoalban (C. 1896 [2] 713). C 73,4 — H 12,0 — O 11,3 — N 3,3 — M. G. 425.
 Monard d. Motalessan and Disselventians (C. 1896 [1] 1896 [1] 1896 [1] $C_{26}H_{49}O_7N_3$

 $C_{26}H_{51}O_3N$

Monamid d. Tetrakosan-αα-Dicarbonsäure (C. 1896 [1] 643).
 C 73,6 — H 12,3 — O 7,5 — N 6,6 — M. G. 424.

 $C_{26}H_{52}O_2N_2$

1) s-Dodekyltridekoxylharnstoff. Sm. 100,5° (B. 19, 1440). — I, 1304.

C₂₆-Gruppe mit vier Elementen.

1) Tribrom-4-Oxynaphtindon (A. 272, 345). — IV, 1085. $C_{26}H_{13}O_{2}N_{2}Br_{3}$

 $\mathbf{C}_{26}\mathbf{H}_{17}\mathbf{O}_{4}\mathbf{N}_{4}\mathbf{J}$ 1) 5-Jod-2,4'-Di[4-Nitrobenzylidenamido]biphenyl. Sm. 2130 (A. 303, 333)

CosH17OsNBr 1) 1-Keto-2-Acetyl-3,3-Di[?-Dibrom-?-Acetoxylphenyl]-1,3-Dihydroisoindol (Triacetyltetrabromimidophenolphtalein). Sm. 176 bis 178° (G. 24 [1] 80). — II, 1985.

1) 2-Nitro-1,4-Di[3,6-Disulfo-2-Oxy-?-Naphtylazo]benzol. Na₄ (B. 30, 986). — IV, 1551. $C_{26}H_{17}O_{16}N_5S_4$

C₂₆H₁₈O₂N₂Br₂ 1) ?-Dibrom-4, 4'-Di|Benzoylamido|biphenyl. Sm. 1950 (u. 990) (B. 15, 2835, 2838). — IV, 966.

 $\mathbf{C}_{26}\mathbf{H}_{18}\mathbf{O}_{2}\mathbf{N}_{3}\mathbf{C}\mathbf{I}$ 1) 1-Chlorphenylat d. 2-[4-Nitrophenyl]-3-Phenyl-1,4-Benzdiazin. + FeCl₃ (B. 31, 2427).

1) 1-Chlorphenylat d. 6-Brom-2,3-Diphenyl-1,4-Benzdiazin (A.

 $\mathbf{C}_{26}\mathbf{H}_{18}\mathbf{N}_{2}\mathbf{ClJ}$ **303**, 336),

C₉₆H₁₉ON₉Cl 1) 1-Phenyloxydhydrat d. 7-Chlor-2, 3-Diphenyl-1, 4-Benzdiazin. Sm. 164—166° (A. 303, 310).

C26H19O2N2Cl 1) 5-Chlor-2, 4'-Di[2-Oxybenzylidenamido] biphenyl. Sm. 166—167° (A. 303, 318).

 $\mathbf{C}_{26}\mathbf{H}_{19}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{Br}$ 1) 5-Brom-2, 4'-Di[2-Oxybenzylidenamido] biphenyl. Sm. 154—156° (A. 303, 327).

 $\mathbf{C}_{26}\mathbf{H}_{19}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{J}$ 1) 5-Jod-2, $4'-Di[2-Oxybenzylidenamido] biphenyl. Sm. <math>151^{\circ}$ (A. 303, 333). $\mathbf{C}_{26}\mathbf{H}_{20}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{S}$

1) Di [2-Benzoylamidophenyl]sulfid. Sm. 162—163° (B. 29, 2774). 2) Di [4-Benzoylamidophenyl]sulfid. Sm. 255° (B. 27, 2812). 3) Di [7-Benzoylamidophenyl]sulfid. Sm. 234° (255°) (B. 27, 2812;

29, 2775). 1) m-Dichlorlignonblau (B. 30, 240).

 $\mathbf{C}_{26}\mathbf{H}_{20}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{Cl}_{2}$ $\mathbf{C}_{26}\mathbf{H}_{20}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{Br}_{2}$ 1) p-Dibromlignonblau (B. 30, 240).

 $\mathbf{C}_{26}\mathbf{H}_{20}\mathbf{O}_{4}\mathbf{N}_{5}\mathbf{C}\mathbf{I}$ 1) 7-[4-Acetylamidochlorphenylat] d. 10-Nitro-5-Acetylamido- $\alpha\beta$ -Naphtophenazin. Sm. 260—261° (B. 31, 3086).

1) Stilbendisulfonsäuredisazophenol. Na₂ (Brillantgelb) (B. 27, 3357). C26H20O8N4S2 IV, 1418.
 7-Chlorphenylat d. 5,10-Di[Acetylamido]-αβ-Naphtophenazin.

C₂₆H₂₁O₂N₄Cl $2 + \text{PtCl}_4$ (B. 31, 3081). 1) Lakton d. Di[s-Benzoylphenylhydrazido]phosphorsäure. Sm. $\mathbf{C}_{26}\mathbf{H}_{21}\mathbf{O}_{3}\mathbf{N}_{4}\mathbf{P}$

 $164,5^{\circ}$ (B. **27**, 2124). — **IV**, 668. $\mathbf{C}_{26}\mathbf{H}_{21}\mathbf{O}_{6}\mathbf{N}_{2}\mathbf{Cl}_{3}$ 1) Verbindung (aus Resazurin) (B. 17, 1855). — II, 933.

C₂₆H₂₂O₂N₂Br₂ 1) $\alpha\beta$ -Di[Bromacetyl-l-Naphtylamido] äthan. Sm. 215° u. Zers. (B. **25**, 3264). — II, 605. 2) $\alpha \beta$ -Di[Bromacetyl-2-Naphtylamido] äthan. Sm. 144° (B. 25, 3269).

· II, 615.

- $C_{26}H_{22}O_2N_4S_2$ 1) $\alpha \alpha$ -Succinyldi[β -1-Naphtylthioharnstoff]. Sm. 224—225° (Soc.
- 1) Di 4-(2,4-Dioxyphenyl)azobenzyl sulfid. Sm. 211° u. Zers. (B. $\mathbf{C}_{26}\mathbf{H}_{22}\mathbf{O}_4\mathbf{N}_4\mathbf{S}$ 28, 1340). — IV, 1444.
- 1) Diäthylester d. Dicarbanilidodichlorhydrochinondicarbonsäure. $\mathbf{C}_{26}\mathbf{H}_{22}\mathbf{O}_{8}\mathbf{N}_{2}\mathbf{Cl}_{2}$ Sm. 195° (B. 23, 260). — II, 2003.
- 1) Diäthylester d. Dicarbanilidodibromhydrochinondicarbonsäure. $\mathbf{C}_{26}\mathbf{H}_{22}\mathbf{O}_{8}\mathbf{N}_{2}\mathbf{Br}_{2}$ Sm. gegen 200° (B. 23, 264). — II, 2004.
- 1) Lignonblau-p-Disulfonsäure. Na₂ (B. 30, 241). $C_{26}H_{22}O_{10}N_2S_2$
- $\mathbf{C}_{26}\mathbf{H}_{22}\mathbf{NSP}$ 1) Triphenylbenzylphosphoniumrhodanid. Sm. 1890 (A. 229, 323). **IV**, 1663.
- 1) Dibenzaldiphenylhydrazonantimonoxydsalz (Bl. [3] 17, 484). $C_{26}H_{23}ON_4Sb$ IV, 748.
- 1) Di[s-Benzoylphenylhydrazido]phosphorsäure. Sm. 131—132° (B. $\mathbf{C}_{26}\mathbf{H}_{22}\mathbf{O}_{4}\mathbf{N}_{4}\mathbf{P}$ 27, 2123). — IV, 668.
- 1) Verbindung (aus Acetylchlorid u. Kyanbenzylin). Sm. 1160 (J. pr. $C_{26}H_{24}ON_3Cl$
- [2] **53**, 249). IV, 1217. $\mathbf{C}_{26}\mathbf{H}_{24}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{S}_{2}$ 1) Di [5-Propionylamido-1-Naphtyl] disulfid. Sm. 2420 (B. 23, 1123).
- II. 869. $\mathbf{C}_{26}\mathbf{H}_{24}\mathbf{O}_{2}\mathbf{N}_{4}\mathbf{A}\mathbf{s}_{2}$ 1) Dibenzaldiphenylhydrazonarsenit (Bl. [3] 17, 484). — IV, 748.
- $\mathbf{C}_{26}\mathbf{H}_{24}\mathbf{O}_{3}\mathbf{NP}$ 1) Diphenylmonamid d. Phosphorsäuredi 4-Methylphenylester]. Sm. 178° (B. 28, 615). 1) 4,4'-Di[Methylphenylsulfonamido] biphenyl. Sm. 179—180° (A.
- $\mathbf{C}_{26}\mathbf{H}_{24}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{S}_{2}$ **272**, 232). — IV, 966.
 - 2) α-[4-Methylphenyl]sulfon-γ-[2-Naphtyl]sulfon-β-Phenylhydrazonpropan. Sm. 186° (J. pr. [2] 55, 410). IV, 768.
 1) Di[2-Methylphenylamid]-Diphenylmonamid d. Phosphorsäure.
- C26H26ON3P Sm. 219° (B. 28, 615).
- $\mathbf{C}_{26}\mathbf{H}_{26}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{H}\mathbf{g}_{2}$ 1) Diquecksilberbenzylanilin. Sm. 215.5° u. Zers. Salze siehe (G. **27** [1] 15). — **IV**, 1708.
 - 2) Quecksilberdi [4 Methylphenylamidophenyl] quecksilberdiammoniumhydrat $+ 3 H_2 O$. Salze siehe (G. 28 [2] 133).
- $\mathbf{C}_{26}\mathbf{H}_{27}\mathbf{ON}_{2}\mathbf{Br}_{3}$ 1) Verbindung (aus Chinin u. Tribromphenol) (G. 16, 528). — III, 812. C26H27ON6P 1) Tri[4-Methylphenylhydrazid] d. Phosphorsäure. Sm. 189° (A. **270**, 136). — IV, 805. $\begin{array}{l} \mathbf{C}_{26}\mathbf{H}_{28}\mathbf{O}_{3}\mathbf{N}_{4}\mathbf{P}_{2} \\ \mathbf{C}_{26}\mathbf{H}_{28}\mathbf{O}_{11}\mathbf{Br}_{4}\mathbf{S} \end{array}$
 - Verbindung (aus d. Oxyphosphazobenzolanilid). Sm. 220° (B. 29, 718).
 - Verbindung (aus Holzsulfitlauge) (A. 267, 362).
 Chlorbenzylat d. Cinchonin. Sm. 248°. (HCl, PtCl₄), + Hg(CN)₂
 - (B. 13, 2295; A. 269, 262). III, 834. 2) Chlorbenzylat d. Cinchonidin + H₂O. Sm. 198° u. Zers. (HCl, HgCl₂), (HCl, PtCl₄ + H₂O) (A. 269, 250). — III, 852.
- 1) Jodmethylat d. Lakton d. α-Oxy-α'-[Tetramethyldiamidodiphe- $\mathbf{C}_{26}\mathbf{H}_{30}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{J}_{2}$ nyl] - α^2 - Phenylmethan - α^2 2 - Carbonsäure. Sm. 185° u. Zers. (A.

 $\mathbf{C}_{26}\mathbf{H}_{29}\mathbf{ON}_{2}\mathbf{Cl}$

 $\mathbf{C}_{26}\mathbf{H}_{34}\mathbf{O}_{8}\mathbf{NJ}$

- **206**, 98). **II**, 1723.
- $\mathbf{C}_{26}\mathbf{H}_{30}\mathbf{O}_{7}\mathbf{N}_{2}\mathbf{S}$ $C_{26}H_{30}O_8N_2S$
- 1) Resorcinchininsulfat + 1½, H₂O (A. 138, 77). III, 813.
 1) Phloroglucinchininsulfat + 3H₂O (J. 1865, 594). III, 813.
 1) Chlorallylat d. Brucin. 2 + PtCl₄ (J. pr. [2] 3, 171). III, 947.
 1) Jodallylat d. Brucin + H₂O. + J₂, + J₄ + H₂O (J. pr. [2] 3, 171). $\mathbf{C}_{26}\mathbf{H}_{31}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{C}\mathbf{I}$ $\mathbf{C}_{26}\mathbf{H}_{31}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{J}$
 - III, 947. 1) Base (aus Cocaïnalkaloïden). Sm. 220,5°. 3 HBr (B. 22, 399). -
- $\mathbf{C}_{26}\mathbf{H}_{32}\mathbf{ON}_{3}\mathbf{Cl}$ III, 869.
- 1) Chlorisoamylat d. Strychnin $+ 4H_2O$ (A. 92, 343). III, 938. $\mathbf{C}_{26}\mathbf{H}_{33}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{Cl}$ 1) $\alpha\beta$ -Di[α -Bromisovaleryl-2-Methylphenylamido]äthan. Sm. 203° $\mathbf{C}_{26}\mathbf{H}_{34}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{Br}_{2}$
 - (B. **31**, 3246). 2) $\alpha \beta$ -Di[α -Bromisovaleryl-4-Methylphenylamido] äthan. Sm. 109°
 - (B. 31, 3246). 1) Jodmethylat-Methyläther d. α -Oxy-4,4'-Di[Dimethylamido]triphenylmethan (B. 15, 236; A. 206, 134). — II, 1085.
- $\mathbf{C}_{26}\mathbf{H}_{34}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{J}_{2}$ 1) 4-Methoxylbenzaldehyd-2,4,6-Trimethylphenylthionaminsaures $\mathbf{C}_{26}\mathbf{H}_{34}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{S}$
 - **2-A**mido-1,3,5-**T**rimethylbenzol. Sm. 79,5° (A. **274**, 240). III, 82. 1) Jodmethylat d. Narceinäthylester. Sm. 203° (A. 277, 40). II, 2080.
 - 2) Jodäthylat d. Narceinmethylester. Sm. 203° (A. 277, 41). II, 2080.

C27 H44

1) Oenantholanilinsulfit (A. 140, 129). - II, 445. $\mathbf{C}_{26}\mathbf{H}_{42}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{S}$

C26H44ON2S 1) s-Stearyl-2-Methylphenylthioharnstoff. Sm. 67-68° (Soc. 69,

1) 3,6-Dichlor-2,5-Di[Diisoamylamido]-1,4-Benzochinon. Sm. 77 $\mathbf{C}_{26}\mathbf{H}_{44}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{Cl}_{2}$ bis 78° (Am. 20, 420).

C26H45ON6Cl 1) Verbindung (aus Acetylchlorid u. Kyanpropin). Sm. 210° (J. pr. [2] 53, 249). — IV, 1135.

1) Taurocholsäure. Na, K (A. 60, 109; 65, 194; 67, 1; 70, 169; 102, 93; M. 4, 96; J. 1886, 752; J. pr. [2] 25, 99). — I, 1180. C26H45O7NS

C₂₆-Gruppe mit fünf Elementen.

 $\mathbf{C}_{26}\mathbf{H}_{24}\mathbf{O}_{3}\mathbf{N}_{4}\mathbf{Br}_{4}\mathbf{P}_{2}$ 1) Verbindung (aus d. Oxyphosphazo-m-Brombenzol-m-Bromanilid). Sm. 203° (B. 29, 723).

C₂₇-Gruppe mit einem Element.

 $C_{27}H_{18}$ C 94.7 - H 5.3 - M. G. 342.

1) Truxen. Sm. 365—368° (B. **22**, 786, 2024; **23**, 317; **27**, 1416). C 94,2 — H 5,8 — M. G. 344.

 $C_{27}H_{20}$

1) Phenyl-1,1-Dinaphtylmethan. Sm. bei 180° (J. pr. [2] 35, 507). — II, 303, $\mathbf{C}_{27}\mathbf{H}_{24}$ C 93,1 — H 6,9 — M. G. 348.

1) P-Tri[4-Methylphenyl] benzol. Sm. 171° (J. pr. [2] 41, 405). — II, 301. 2) Kohlenwasserstoff (aus Phenylaceton u. Benzaldehyd). Sm. 1206 (M.

18, 445). C 88,5 — H 11,5 — M. G. 366. $C_{27}H_{42}$

1) α-Cholesterilen. Sm. 240° (260°) u. Zers. (A. 66, 7; M. 17, 32). — II, 176. 2) β-Cholesterilen. Sm. 255° (A. 66, 8; M. 17, 31). — II, 177. 3) γ-Cholesterilen, siehe $C_{54}H_{84}$. — II, 177. 4) isom. Cholesterilen (a-Cholesteron). Sm. 80° (J. r. 8, 237; M. 17, 33, 34; C. r. 92, 195; A. 69, 348). — II, 177. 5) b-Cholesteron. Sm. 192° (175°) (A. 69, 349; M. 17, 33 Anm.). — II, 177. C. 880 — H. 120 — M. C. 268

C 88,0 — H 12,0 — M. G. 368,

1) Sitosten. Sm. 61—63° (M. 18, 563). C 85,7 — H 14,3 — M. G. 378. C .. H ..

Ceroten (aus Wachs). Sm. 59,5°; Sd. 270°, [B. 15, 1714). — I, 124.
 Ceroten (aus Wiesenheu). Sm. 65—66° (B. 6, 500). — I, 124.
 C 85,3 — H 14,7 — M. G. 380.

C27 H56

1) norm. Heptakosan. Sm. 59,5°; Sd. 270°₁₅ (172°₀) (B. **15**, 1714; **29**, 1323; A. **235**, 117; C. **1897** [1] 338). — I, 107.

C₂₇-Gruppe mit zwei Elementen.

C 84,4 — H 3,1 — O 12,5 — M. G. 384. $C_{27}H_{12}O_{8}$

1) o-Tribenzoylenbenzol. Sm. oberh. 360° (B. 10, 1557; 11, 1007; 14, 925, 927; **22**, 2023; **23**, 318; **30**, 2143; **31**, 2936; Soc. **65**, 285, 503). **-11**, 2040.

2) Verbindung (aus 1,4-Naphtochinon). Sm. oberh. 360° (Soc. 39, 221). -III, 371.

 $C_{97}H_{13}N_3$ C 85,5 - H 3,4 - N 11,1 - M. G. 379.

1) Benzylidenrosanilin. (2HCl, PtCl₄) (A. 140, 110; Z. 1867, 176). — III, 9. C 77,5 — H 3,3 — O 19,1 — M. G. 418. $C_{27}H_{14}O_5$

1) Anhydroverb. d. Di[3-Oxy-1,4-Naphtochinolyl-2-]methylbenzol.

Zers. bei 245° (Soc. 65, 81). — III, 464. C 74,3 — H 3,7 — O 12,0 — M. G. 436. $\mathbf{C}_{27}\mathbf{H}_{16}\mathbf{O}_{6}$

1) Di[3-Oxy-1,4-Naphtochinonyl-2-]methylbenzol. Sm. 2300 (Soc. 65, 79). — III, 464.

2) Dibenzoat d. 1,7-Dioxyxanthon. Sm. 214° (B. 15, 1678). — III, 206.

- C 69,2 H 3,4 O 27,4 M. G. 468. $\mathbf{C}_{27}\mathbf{H}_{16}\mathbf{O}_{8}$
- 1) Tribenzoat d. 2,3,5-Trioxy-1,4-Benzochinon (B. 12, 2043). III, 354. C 91.3 - H 4.8 - N 3.9 - M. G. 355. $C_{27}H_{17}N$
 - 1) Phenyl-β-Naphtoakridin. Sm. 297° (294°). HCl, (2 HCl, PtCl₄) (B. 17, 1595, 2030; **18**, 1586). — **IV**, 478. C 84,6 — H 4,4 — N 11,0 — M. G. 383.
- $\mathbf{C}_{27}\mathbf{H}_{17}\mathbf{N}_3$
 - 1) 2-[4-Chinolyl]-3-[2-Chinolyl]chinolin. Sm. 150-151°. 3HCl, (6HCl, 3 PtCl₄), (3 HCl, AuCl₃) (*M*. 17, 414). C 90,5 — H 5,0 — O 4,5 — M. G. 358.
- $C_{27}H_{18}O$ 1) Anhydrid d. Phenyldi [2-Oxynaphtyl] methan. Sm. 189-190° (B. 17,
- 499; A. **237**, 265). II, 1009. C 83,1 H 4,6 O 12,3 M. G. 390. $\mathbf{C}_{27}\mathbf{H}_{18}\mathbf{O}_3$ Monobenzoat d. β-Dioxybinaphtyl. Sm. 204° (J. r. 6, 192). — II, 1152.
 C 79,8 — H 4,4 — O 15,8 — M. G. 406. $C_{27}H_{18}O_4$
 - 1) Anhydrid d. α-Oxyphenyldi[1,2-Dioxynaphtyl]methan (J. pr. [2]
- **49**, 551). III, 6. C 76.8 - H 4.3 - O 18.9 - M. G. 422.1) Dibenzoat d. 2,4-Dioxydiphenylketon. Sm. 141° (A. 210, 258; B. $C_{27}H_{18}O_5$
 - 27, 1998). III, 199.
 - 2) Dibenzoat d. 2,5-Dioxydiphenylketon (D. d. Benzohydrochinon). Sm. 118° (B. **24**, 1343). — **III**, 199.
 - 3) Dibenzoat d. 3,4[P]-Dioxydiphenylketon (D. d. Benzobrenzkatechin). Sm. 95° (A. 210, 262). — III, 199.
 - 4) Dibenzoat d. 2,2'-Dioxydiphenylketon. Sm. 104° (J. pr. [2] 28, 288). - III, 195.
 - 5) Dibenzoat d. 3,3'-Dioxydiphenylketon. Sm. 101—102° (B. 13, 836;
 - A. 218, 357). III, 198. 6) Dibenzoat d. 4,4'-Dioxydiphenylketon. Sm. 181—182° (A. 194, 335). · **II**, 199.
- C 74.0 H 4.1 O 21.9 M. G. 438. $C_{27}H_{18}O_6$ 1) Tribenzoat d. 1,2,3-Trioxybenzol. Sm. 89-90 (M. 10, 391; A. 301, 106). — II, *1152*.
 - 2) Tribenzoat d. 1,3,5-Trioxybenzol. Sm. 172° (173—174°) (A. 119, 201; *M.* 10, 722; *B.* 26, 2026). — II, 1152.
 - 3) 1,3,5-Triphenylbenzol-2,4,6-Tricarbonsäure (Phenenyltribenzoësäure).
 - Sm. 259—261° (257—259°). Na₃, Ag₃ (B. 11, 1008; **32**, 2478). II, 2040. 4) Triphenylbenzol-4', 4², 4³-Tricarbonsäure. subl. bei 280° ohne Sm.
 - K, K₂, K₃ (J. pr. [2] 41, 408). II, 2040. 5) Verbindung (aus Benzoylessigsäureäthylester). Sm. 273—275° (Soc. 47, 280). II, 1643.
- C 87.6 H 4.8 N 7.6 M. G. 370. $C_{27}H_{18}N_2$ 1) 2-Phenyl-3-[2-Naphtyl]- α -Naphtimidazol. Sm. 163°. $+ C_6H_6$ (Sm.
- 113—114°). subl. $(\vec{B}.$ 20, 2626). IV, 1062. C 76,0 H 4,2 N 19,7 M. G. 426. $C_{27}H_{18}N_6$
 - Benzotritolazin. + CHCl₃ (B. 20, 324). IV, 621.
 C 84,1 H 4,9 N 10,9 M. G. 385.
- $C_{27}H_{19}N_3$ 1) 3-Phenyl-2-[2-Naphtyl]-2,3-Dihydronaphttriazin. Sm. 204—205°.
- $+ \frac{1}{2}$ CH₄O (Soc. **59**, 698). IV, 1390. C 90,0 H 5,5 O 4,4 M. G. 360. C27H20 1) Isolepiden. Sm. 150° (J. 1877, 394; J. r. 5, 20; Soc. 57, 689). —
 - III, 696. 2) α -Oxyphenyldi[1-Naphtyl]methan (J. pr. [2] 35, 506). — II, 1096.
 - 3) 10-Keto-9-Phenyl-9-[4-Methylphenyl]-9,10-Dihydroanthracen. Sm. 209° (Bl. [3] 15, 392; [3] 17, 983).
- C 86,2 H 5,3 O 8,5 M. G. 376. $C_{27}H_{20}O_2$ 1) Di[2-Naphtyläther] d. Dioxymethylbenzol. Sm. 204-205° (A. 237,
 - 269). III, 10. 2) Benzoat d. β-Oxy-ααβ-Triphenyläthen. Sm. 151° (153°) (C. 1897 [2] 661; B. 32, 655).
- C 82,7 H 5,1 O 12,2 M. G. 392. $\mathbf{C}_{27}\mathbf{H}_{20}\mathbf{O}_{3}$ 1) Benzoat d. α-Oxy-β-Keto-ααβ-Triphenyläthan. Sm. 169° (C. 1897 2| 661).
 - 2) Diphenylmethenylester d. α-Oxydiphenylessigsäure (Benzilsäurebenzhydroläther). Sm. 100° (B. 22, 1214). — II, 1697.

C27 H20 N2

 $C_{27}H_{22}N_6$

C27H28N8

C 79.4 - H 4.9 - O 15.7 - M. G. 408.C27 H20 O4 1) Dibenzoat d. Di[4-Oxyphenyl]methan. Sm. 156° (A. 194, 325). -

II, 1151. C 87,1 - H 5,4 - N 7,5 - M. G. 372.

1) α -[2-Naphtyl]imido- α -[2-Naphtyl]amido- α -Phenylmethan. Sm. 155° (J. 1886, 868). — IV, 845.

 $\mathbf{C}_{27}\mathbf{H}_{20}\mathbf{N}_4$ C 81,0 - H 5,0 - N 14,0 - M. G. 400.

1) 4-Phenylazo-1, 3, 5-Triphenylpyrazol. Sm. 156-157° (B. 21, 1703; 23, 3383). — IV, 1480.

2) Verbindung (aus Tetrabromdibenzylketon u. Phenylhydrazin). Sm. 65 bis 70° (B. 22, 1369). — IV, 777.

 Di[1-Naphtyläther] d. Dimerkaptomethylbenzol. Sm. 136—137° (B. 27 [2] 881). — III, 10. C .7 H .0 S .

27 [2] 881). — III, 10. 2) Di[2-Naphtyläther] d. Dimerkaptomethylbenzol. Sm. 137° (B. 27 [2] 881). — III, 10. C 83,7 — H 5,4 — N 10,8 — M. G. 387.

 $C_{27}H_{21}N_3$

1) 4-[4-Methylphenyl]amido-1,1'-Azonaphtalin. HCl (B. 7, 1292). IV, 1390.

2) 2, 2, 4, 6-Tetraphenyl-1, 2-Dihydro-1, 3, 5-Triazin. Sm. 190-191°. $+ C_2 H_6 O$, HCl, $(2 HCl, PtCl_4 + H_2 O)$, HNO₈, $H_2 SO_4$, $H_2 CrO_4$ (J. pr. [2])

54, 135). — IV, 1219. 1) ?-Tribromtri[4-Methylphenyl]benzol. Sm. 212° (J. pr. [2] 41, 406). C27 H21 Br **— II**, 301.

C27 H22 O C 89.5 - H 6.1 - O 4.4 - M. G. 362.

1) α -Keto- α -Acenaphtenyl- $\beta\gamma$ -Diphenylpropan. Sm. 1040 (B. 21, 1343). - III, 265.

2) α -Keto- α -Biphenyl- $\beta\gamma$ -Diphenylpropan. Sm. 158° (B. 21, 1339). — III, 265.

3) Dihydroisolepiden. Sm. 182° (J. 1877, 394). — III, 696. C 85,7 — H 5,8 — O 8,5 — M. G. 378.

C27H22O2

1) Benzoat d. β -Oxy- $\alpha \alpha \beta$ -Triphenyläthan. Sm. 145° (C. 1897 [2] 661).

C 68,4 — H 4,6 — O 27,0 — M. G. 474.

1) Tribenzoyllävoglukosan. Sm. 194° (*Bl.* [3] 11, 953).
C 58,5 — H 4,0 — O 37,5 — M. G. 554. C27 H22O8 C27 H22 O18

1) Quercetagetin $+ 4 H_2 O$ (Bl. 28, 337). — III, 647.

C 56,9 — H 3,8 — O 39,3 — M. G. 570. C27 H22 O14

1) Hexacetat d. Myricetin. Sm. 203-204° (204-206°) (Soc. 69, 1291; 73, 375). — III, 606. C 52,4 - H 3,6 - O 44,0 - M. G. 620.

C27 H22 O17 1) Glykotannin, siehe C₃₄H₂₈O₂₂. — II, 1926. C 86,6 - H 5,9 - N 7,5 - M. G. 374.C27 H22 N2

1) α -Phenylimido - β -[4-Methylphenyl]imido - $\alpha\beta$ -Diphenyläthan. Sm. 135° (M. 14, 287). — III, 284.

2) Di[4-Benzylidenamidophenyl]methan. Sm. 125° (B. 25, 303).

IV, 975.
3) 4,4'-Di[Benzylidenamido]-2-Methylbiphenyl. Sm. 111—112° (B. 28, 2550). - IV, 975.

4) 4,4'-Di[Benzylidenamido]-3-Methylbiphenyl. Sm. 134° (B. 28, 2545).

- IV, 975.
5) isom.?-4,4'-Di[Benzylidenamido]-3-Methylbiphenyl. Sm. 217° (B. 23, 3225). — IV, 975.

6) γ -Phenylhydrazon- $\alpha\beta\gamma$ -Triphenylpropen. Sm. 163—164° (B. 26, 443). **- IV**, 779.

7) 1,3,4,5-Tetraphenyl-2,3-Dihydropyrazol? Sm. 212-2130 (A. 269,

123). **— IV**, 787. 8) Phenylhydrazon d. Verb. C₂₁H₁₆O (aus Benzamaron). Sm. 164° (A.

275, 64). — III, *314*. C 75,4 — H 5,1 — N 19,5 — M. G. 430.

1) Tetraphenylmelamin. Sm. 217°. HCl, (2HCl, PtCl₄) (B. 7, 1736; 8, 912; **20**, 1066). — II, 353.

C 83,3 — H 5,9 — N 10,8 — M. G. 389. 1) α -Phenyl- β -Benzyliden- α -[2-Benzylidenamidobenzyl]hydrazin. Sm. 148—150° (B. **27**, 2903). — **IV**, 1130.

- C 77.7 H 5,5 N 16,8 M. G. 417. $\mathbf{C}_{27}\mathbf{H}_{23}\mathbf{N}_{5}$
 - 1) 2-Phenylimido-1,3-Di[Phenylamido]methylen-5-Methyl-2,3-Dihydrobenzimidazol. Sm. 199-200° (B. 24, 2517). - IV, 624.
- C 89,0 H 6,6 O 4,4 M. G. 364. 1) Tetrahydroisolepiden? Sm. 132° (J. 1877, 395). III, 696. $C_{27}H_{24}O$
- $\mathbf{C}_{27}\mathbf{H}_{24}\mathbf{O}_{2}$ $C_{85,3} - H_{6,3} - O_{8,4} - M_{6,3}$
 - 1) $\beta\beta$ -Di[?-Oxyphenyl]- $\alpha\gamma$ -Diphenylpropan (B. 25, 1274). II, 1008. 2) Dibenzyläther d. $\alpha\alpha$ -Dioxydiphenylmethan. Sm. 104—105° (Soc.
- C 81.8 H 6.0 O 12.1 M. G. 396. $\mathbf{C}_{27}\mathbf{H}_{24}\mathbf{O}_{3}$

 $C_{27}H_{24}N_4$

- 1) Aethylester d. 4-Keto-1, 2, 6-Triphenyl-1, 2, 3, 4-Tetrahydrobenzol-3-Carbonsäure. Sm. 184° (A. 281, 68). — II, 1730. C27 H24 O5 C 75,7 - H 5,6 - O 18,7 - M G. 428.
 - 1) α -[4-Isopropylbenzoat]- β -Methyläther d. $\alpha\beta$ -Dioxy- $\gamma\delta$ -Diketo- $\alpha\delta$ -Di
 - phenyl-α-Buten. Sm. 112° (B. 27, 715). III, 317.

 2) Verbindung (aus 3,5-Dioxy-1-Methylbenzol) (J. pr. [2] 26, 56). II, 960. C 72,9 H 5,4 O 21,6 M. G. 444.
- $\mathbf{C}_{27}\mathbf{H}_{24}\mathbf{O}_{6}$ 1) Dimethylester d. $\alpha \varepsilon$ -Diketo- $\alpha \gamma \varepsilon$ -Triphenylpentan- $\beta \delta$ -Dicarbonsäure. Sm. 113° (B. 18, 2376). — II, 2039.
- C 68.1 H 5.0 O 26.9 M. G. 476. $C_{27}H_{24}O_{8}$ Erythrocentaurin. Sm. 136° (Z. 1866, 336; J. 1870, 877). — III, 631.
 C 65,8 — H 4,9 — O 29,2 — M. G. 492.
- $C_{27}H_{24}O_{9}$ 1) Tribenzoat d. Glykose (H. 14, 345). — II, 1143.
- C 86,2 H 6,4 N 7,4 M. G. 376.

 1) Hydrocinnamid + ½ H₂O. Sm. 106° (131° wasserfrei). HCl + 3 H₂O, (2 HCl, PtCl₄), HNO₃, H₂SO₄, Laktat, 2 + AgNO₃ (J. pr. [1] 27, 309; A. 34, 173; B. 17, 2110; Bl. [3] 19, 270). III, 60. $\mathbf{C}_{27}\mathbf{H}_{24}\mathbf{N}_{2}$
 - 2) ε-Phenylhydrazon-αι-Diphenyl-αγζθ-Nonatetraën. Sm. 1660 (B. 18,
 - 2325). IV, 779.
 3) 2,3-Diphenyl-1-Benzyl-1,2,3,4-Tetrahydro-1,3-Benzdiazin. Sm. 120° (B. 27, 3244). - IV, 637.
 - 4) Diphenylaminakrolein (B. 15, 1158). II, 445. C 80,2 - H 5,9 - N 13,8 - M. G. 404.
 - 1) $Di[\beta$ -Benzyliden- α -Phenylhydrazido]methan. Sm. 134—135° (Soc.
- $C_{27}H_{24}S_3$
- $\mathbf{C}_{27}\mathbf{H}_{25}\mathbf{N}$
- 1) ?-Dibenzylamidodiphenylmethan (Soc. 41, 198). II, 635. C 82,9 - H 6,4 - N 10,7 - M. G. 391. $\mathbf{C}_{27}\mathbf{H}_{25}\mathbf{N}_{3}$
 - 1) α-Phenyl-β-Benzyliden-α-[2-Benzylamidobenzyl]hydrazin. Sm. 140 bis 142° (B. 27, 3243). — IV, 1130. C 88,5 — H 7,1 — O 4,4 — M. G. 366.
- $C_{27}H_{26}O$ 1) Keton (aus Methyl-4-Methylphenylketon). Sm. 168° (J. pr. [2] 41, 405). — III, 264. C 78,2 — H 6,3 — O 15,5 — M. G. 414.
- $\mathbf{C}_{27}\mathbf{H}_{26}\mathbf{O}_{4}$ 1) Acetat d. $\alpha \varepsilon$ -Diketo- γ -[2-Oxyphenyl]- $\alpha \varepsilon$ -Di[4-Methylphenyl]pentan. Sm. 95° (B. **29**, 243). — III, 308.
 - 2) Aethylester d. α -Acetyl- γ -Benzoyl- $\beta\gamma$ -Diphenylbuttersäure. Sm. 1230 (A. 281, 65). - II, 1915. \dot{C} 72,6 - \dot{H} 5,8 - 0 21,5 - M. G. 446.
- $C_{27}H_{26}O_{6}$
 - 1) Tribenzyliden-d-Idit. Sm. 224—228° (cor.) (B. 28, 1982). 2) Tribenzyliden-l-Idit. Sm. 224—228° (cor.) (B. 28, 1979). III, 9. 3) Tribenzyliden-d-Mannit. Sm. 207° u. Zers. (218—222°) (A. ch. [6] 22,
 - 420; B. **28**, 1979). III, 9.
 - 4) Tribenzyliden-i-Mannit. Sm. 190—192° (B. 27, 1530). III, 9. 5) Tribenzyliden-d-Talit. Sm. 210° (cor.) (B. 27, 1528). III, 9. 6) Tribenzyliden-i-Talit. Sm. 210° (cor.) (B. 27, 1529). III, 9. C 70,1 H 5,6 O 24,3 M. G. 462.
- $C_{27}H_{28}O_7$
- 1) Verbindung (aus Phloretinsäure) (A. 172, 358). II, 1570. C 65,6 H 5,3 O 29,1 M. G. 494.
- C27H26O9 1) Dibenzoat d. Salicin (A. 154, 7). — III, 609.

 $\mathbf{C}_{27}\mathbf{H}_{31}\mathbf{N}_{3}$

 $C_{27}H_{32}O_{3}$

 $C_{27}H_{32}N_4$

2) Tri[4-Methoxylbenzoat] d. $\alpha\beta\gamma$ -Trioxypropan. Sm. 103,5° (B. 24, C27 H26 O2 779). **— II**, *1526*. 3) Tri[6-Oxy-3-Methylbenzoat] d. $\alpha\beta\gamma$ -Trioxypropan. Sm. 118° (B. 24, 779). — II, *1546*. C 61,6 - H 4,9 - O 33,5 - M. G. 526. $C_{27}H_{26}O_{11}$ 1) Verbindung + $\frac{1}{2}$ H₂O (aus Fuscophlobaphen) (Z. **1870**, 179). — III, 689. C 59,8 — H 4,8 — O 35,4 — M. G. 542. $\mathbf{C}_{27}\mathbf{H}_{26}\mathbf{O}_{12}$ 1) Fuscophlobaphen (Z. 1870, 177). — III, 689. 2) Glaukophansäure. Sm. 188—189°. Na (A. 297, 55). C 54.9 — H 4.4 — O 40.7 — M. G. 590. 1) Violaquercitrin (oder $C_{27}H_{28}O_{16}$) (J. 1883, 1369; Soc. 73, 700). — $\mathbf{C}_{27}\mathbf{H}_{26}\mathbf{O}_{15}$ III; 615. C 88.8 - H 7.4 - N 3.8 - M. G. 365. $\mathbf{C}_{27}\mathbf{H}_{27}\mathbf{N}$ 1) Tri[\(\gamma\)-Phenylpropenyl]amin. Sm. 89°. HCl (B. 26, 1864). — II, 585. C 82,4 — H 6,9 — N 10,7 — M. G. 393. $\mathbf{C}_{27}\mathbf{H}_{27}\mathbf{N}_3$ 1) 1,3,5-Tri[4-Methylphenylamido] benzol. Sm. 186-187°. HCl, 2HCl, (2HCl, PtCl₄) (G. 20, 323). — IV, 1125. 2) trimolec. Dihydrochinolin. Sm. unterh. 80° (C. 1896 [1] 1126).
 C 77,9 — H 6,7 — O 15,4 — M. G. 416. C27 H28 O4 1) Diäthylester d. $\alpha\beta\gamma$ -Triphenylpropan- $\alpha\gamma$ -Dicarbonsäure. Sm. bei 95° (B. 31, 3064). C 74,0 — H 6,5 — O 18,5 — M. G. 432. $C_{27}H_{28}O_{5}$ 1) Benzoylguajakharzsäure (oder C₃₄H₃₄O₆). Sm. 131° (C. 1897 [1] 167; M. 18, 718). Benzoat d. Bidurochinon. Sm. 142—143° (B. 29, 2183).
 C 67.5 — H 5,8 — O 26,7 — M. G. 480. $C_{27}H_{28}O_{8}$ 1) Verbindung (aus d. Verb. $C_{27}H_{30}O_9$) + H_2O . Sm. 142—143° wasserfrei (G. **24** [1] 303). C 61,4 — H 5,3 — O 33,3 — M. G. 528. $C_{27}H_{28}O_{11}$ Gerbstoff (aus Erlenholz). Pb, 2 Cu + Cu(OH)₂ (J. 1870, 858). — III, 590.
 C 53,3 — H 4,6 — O 42,1 — M. G. 608. $\mathbf{C}_{27}\mathbf{H}_{28}\mathbf{O}_{16}$ 1) Myrticolorin. Sm. 179° (Soc. 73, 698). C 65,1 — H 6,0 — O 28,9 — M. G. 498. 1) Lecanorol + H₂O. Sm. 90—95° (A. 295, 259). 2) Dimethylester d. Eupittonsäure. Sm. 242° (B. 12, 2219). — II, 2092. C27H30O9 3) Verbindung (aus d. Flechte Lecanora sulphurea) + H₂O. Sm. 92—93° (123—124° wasserfrei). Ag (G. 24 [1] 298). C 57,6 — H 5,3 — O 37,0 — M. G. 562. $\mathbf{C}_{27}\mathbf{H}_{30}\mathbf{O}_{13}$ Triacetylphloridzin + H₂O (A. 156, 5). - III, 600.
 C 56,1 - H 5,2 - O 38,7 - M. G. 578. $C_{27}H_{30}O_{14}$ 1) Pseudobaptisin + $7\frac{1}{2}$ H₂O. Sm. 247 – 248°. + CH₄O + $1\frac{1}{2}$ H₂O (C. 1897 [2] 1077). C 51,7 — H 4,8 — O 43,5 — M. G. 626. 1) Osyritrin. Sm. 180—185° (Soc. 71, 1132; 73, 700). C 84,8 — H 7,9 — N 7,3 — M. G. 382. $C_{27}H_{30}O_{17}$

 $C_{27}H_{30}N_2$

1) 2,4-Di[4-Isopropylbenzylidenamido]-1-Methylbenzol. Sm. oberh. 99° u. Zers. (A. **253**, 331). — IV, 607. C 81,6 — H 7,8 — N 10,6 — M. G. 397.

1) Oenanthylidenrosanilin. (2 HCl, PtCl₄), HAsO₃ (Z. 1867, 176).

II, 1093. 2) α -[4-Amidophenyl]- $\alpha \alpha$ -Di[2-Methyl-1,2,3,4-Tetrahydrochinolyl-6]-

methan (B. 24, 1717). — IV, 1212. C 83,5 — H 8,2 — O 8,2 — M. G. 388.

1) Phenyldithymolmethan. Sm. 165,5-166,5° (B. 22, 1947). — II, 1004. C 52,9 — H 5,2 — O 41,8 — M. G. 610. $C_{27}H_{32}O_{16}$

1) Apiin. Sm. 228° (A. 48, 349; 74, 262; B. 9, 1121, 1124; Soc. 71, 806).

- III, 571. 2) Rutin + 2H₂O. Sm. oberh. 190°. Pb₂ (A. 53, 385; 82, 200; 96, 123; 123, 145; J. 1859, 528; 1862, 498; 1863, 594; 1865, 587; J. pr. [1] 58, 399; [1] 85, 351; [1] 88, 280; B. 15, 217; Soc. 53, 264; 67, 31; C. 1896 [2] 591). — III, 607. C 78,6 — H 7,8 — N 13,6 — M. G. 412.

1) Phenylhydrazon d. Aethylcinchonin. Sm. 152-153 (B. 27, 1187). - IV, 798.

 $C_{27}H_{33}N_3$ C 81,2 - H 8,3 - N 10.5 - M. G. 399.1) Triäthylentri 4-Methylphenyl triamin. Sm. 186° (J. 1873, 698). — II, 488. 1) Verbindung (aus Wachs) (A. 67, 211). $\mathbf{C}_{27}\mathbf{H}_{33}\mathbf{Cl}_{21}$ $\mathbf{C}_{27}\mathbf{H}_{33}\mathbf{Bi}$ 1) Wismuthtri [4-Isopropylphenyl]. Sm. 159° (B. 30, 2847). — IV, 1699. C 60,7 - H 6,3 - O 33,0 - M. G. 534 $C_{27}H_{34}O_{11}$ 1) Phillyrin + 1¹/₂H₂O. Sm. 160° (A. 92, 109; 108, 124). — III, 600. C 83,9 — H 8,8 — N 7,3 — M. G. 386. $C_{27}H_{34}N_2$ 1) 4',42-Di[Diäthylamido]triphenylmethan. Sm. 62°. (2HCl, PtCl₄+ 3 H₂O) (A. 217, 263). — IV, 1042. 1) 2'-Amido-2², 2³-Di[Diäthylamido]triphenylmethan. Sm. 136° (B. 17, C27 H25 N3 1894). — IV, 1193.
2) 4'-Amido-4², 4³-Di[Diäthylamido] triphenylmethan. Sm. 118^o (B. 19, 747). — IV, 1195. 3) ?-Tri[Dimethylamido]-?-Dimethyltriphenylmethan (B. 24, 561). — IV, 1198. 1) Verbindung (aus Wachs) (A. 67, 211). $\mathbf{C}_{27}\mathbf{H}_{35}\mathbf{Cl}_{9}$ C27 H37 Cl11 1) Undekachlorcholestan (M. 15, 101). $C_{27}H_{38}O_5$ C 73.3 - H 8.6 - O 18.1 - M. G. 442.1) Salicylsäurecampher. Sm. 60° (Bl. [3] 4, 727). — III, 488. C 68,4 — H 8,0 — O 23,6 — M. G. 474. $C_{27}H_{38}O_7$ 1) Anhydrid d. Erythrophleïnsäure (oder $C_{27}H_{40}O_7$) (C. 1897 [1] 301). C 56.9 - H 6.6 - O 36.5 - M. G. 570. $C_{27}H_{38}O_{13}$ 1) Cyclamin (C. 1697 [1] 230). C 85,3 — H 10,5 — O 4,2 — M. G. 380. $\mathbf{C}_{27}\mathbf{H}_{40}\mathbf{O}$ 1) Oxycholesterylen. Sm. 112° (M. 17, 596). C 81,8 — H 10,1 — O 8,1 — M. G. 396. 1) Oxycholestenon. Sm. 122—123° (M. 17, 584). $C_{27}H_{40}O_{2}$ Formiat d. Ergosterin. Sm. 154^o (A. ch. [6] 20, 294). — II, 1075.
 C 73,0 — H 9,0 — O 18,0 — M. G. 444. $\mathbf{C}_{27}\mathbf{H}_{40}\mathbf{O}_{5}$ Verbindung (aus Cholesterin). Sm. 171° (M. 17, 593).
 C 65,9 — H 8,1 — O 26,0 — M. G. 492. C27H40O8 1) Cerberin. Sm. 191—1920 u. Zers. (R. 12, 26). — III, 573. 2) Tanginin. Ba (J. 1889, 2031). — III, 649. 3) Erythrophleïnsäure (oder $C_{27}H_{42}O_8$) (C. 1897 [1] 301). C27 H40 O10 C 61.8 - H 7.6 - O 30.5 - M. G. 524.1) Dimethylester d. Pseudocholoïdansäure C₂₅H₃₆O₁₀. Sm. 194—196° (B. 19, 1528). — I, 727. C 81,4 — H 10,5 — O 8,0 — M. G. 398.

1) α-Oxycholestenol. Sm. bei 180° (M. 17, 582).

2) β-Oxycholestenol. Sm. 157° (M. 17, 595).

C 78,2 — H 10,1 — O 11,6 — M. G. 414.

1) Oxycholestendiol. Sm. 231° (M. 17, 590). C27 H42 O2 $C_{27}H_{42}O_3$ 2) Verbindung (aus Diacetylcapronsäureäthylester). Sd. 320-330 % (Soc. **57**, 26). — **I**, 694. C 72,6 — H 9,4 — O 17,9 — M. G. 446. $C_{27}H_{42}O_5$ 1) Säure (aus Cholesterin). Cu (M. 17, 590). $\mathbf{C}_{27}\mathbf{H}_{42}\mathbf{O}_{7}$ C 67.8 - H 8.8 - O 23.4 - M. G. 478.1) Dimethylester d. Cholansäure $+ \frac{1}{4}H_2O$. Sm. 174—176°. Pb (B. 19, 477). — II, 2017. Monäthylester d. Cholansäure + 1/4 H₂O. Sm. 188—190°. Ba, Pb (B. 19, 478). — II, 2017. C 61,6 — H 8,0 — O 30,4 — M. G. 526. 1) **Antiarin** + 4H₂O. Sm. 225° (A. **28**, 304; Z. **1869**, 351; C. **1896** [2] $\mathbf{C}_{27}\mathbf{H}_{42}\mathbf{O}_{10}$ 591). — III, 570. 2) Leukoglykodrin (oder $C_{27}H_{44}O_{10}$) (C. 1896 [1] 561). C 58,0 - H 7,5 - O 35,4 - M. G. 558. $C_{27}H_{42}O_{12}$ 1) Argyräsein (J. 1862, 489; 1867, 751). — II
1) Sitosterylchlorid. Sm. 87,5° (M. 18, 561).
C 84,4 — H 11,4 — O 4,2 — M. G. 384.
1) Sitosterin + H₂O. Sm. 137,5° (M. 18, 553).
2) Parasitosterin. Sm. 127,5° (M. 18, 566).
C 77,9 — H 10,6 — O 11,5 — M. G. 416. $\mathbf{C}_{27}\mathbf{H}_{43}\mathbf{C}\mathbf{1}$ $C_{27}H_{44}O$

C 77,9 — H 10,6 — O 11,5 — M. G. 416.
1) Verbindung (aus Cholesterylacetat). Sm. 217—218° u. Zers. (M. 17, 598).

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C 75,0 — H 10,2 — O 14,8 — M. G. 432. C27H44O4 1) Chenocholsäure. Ba (J. 1859, 635; A. 149, 198). 1) Sitostendibromid. Sm. 105-110° (M. 18, 565). $\mathbf{C}_{27}\mathbf{H}_{44}\mathbf{Br}_{2}$ 1) Digitalin = (C₂₇H₄₅O₁₅)_x (J. 1875, 776). — III, 581.

1) Trichlorcholestan. Sm. 106° (M. 15, 100).

C 83,9 — H 11,9 — O 4,1 — M. G. 386.

1) Cholesterin + H₂O (oder C₂₇H₄₄O). Sm. 148,5° (145—146°). Na, K. Lit. bedeutend. — II, 1071. $\mathbf{C}_{27}\mathbf{H}_{45}\mathbf{O}_{15}$ $\mathbf{C}_{27}\mathbf{H}_{45}\mathbf{Cl}_{3}$ $C_{27}H_{46}O$ 2) Verbindung (Keton aus Isovaleriansäure). Sd. 240-260° (A. 202, 329). C 80,6 — H 11,4 — O 8,0 — M. G. 402. 1) Acetat d. Ilicylalkohol. Sm. 204—206° (Bl. 42, 152). — II, 1069. $C_{27}H_{43}O_{2}$ 2) Acetat d. Alkohol C₂₅H₄₄O (aus Sesamöl). Sm. 130—131° (C. 1897) [2] 773). C 72,0 — H 10,2 — O 17,8 — M. G. 450. $C_{27}H_{46}O_5$ α-Seymnol. Sm. 100—101° (H. 24, 340).
 C 54,5 — H 7,7 — O 37,7 — M. G. 594. C27 H46 O14 1) Digitonin. Sm. 235° (B. 24, 339, 3954; 26 [2] 686; 32, 341). — III, 581. 1) Dichlorcholestan. Sm. 119—120° (M. 15, 95). 1) α -Dibromcholestan. Sm. 141—142° (M. 15, 90). 2) β -Dibromcholestan. Sm. 106° (M. 15, 90). C 83,5 — H 12,4 — O 4,1 — M. G. 388. $\mathbf{C}_{27}\mathbf{H}_{46}\mathbf{Cl}_2$ C27 H46 Br $C_{27}H_{48}O$ 1) Koprosterin (Stercorin). Sm. 95-96° (B. 29, 476; H. 22, 397; 23, 363; **24**, 395). $C_{27}H_{52}O_{2}$ C 79,4 — H 12,7 — O 7,8 — M. G. 408. 1) Cerotolsäure. Sm. 70° (A. 271, 223). $C_{27}\overline{H}_{54}O$ C 82,2 - H 13,7 - O 4,1 - M. G. 394.1) Myriston (Tridekylketon). Sm. 76,3° (75°) (A. 84, 290; B. 15, 1713; Soc. 63, 458). — I, 1006. Hippokoprosterin (oder C₂₇H₅₆O). Sm. 74—75° (H. 22, 409).
 C 79,0 — H 13,2 — O 7,8 — M. G. 410. $C_{27}H_{54}O_{2}$ 1) Cerotinsäure (siehe auch $C_{25}H_{50}O_2$ u. $C_{26}H_{52}O_2$). Sm. 78°. Na, K, Mg, Cu, Pb, Ag (A. 67, 180; 224, 237; 271, 225; Z. 1868, 415; 1869, 65; Bl. 42, 201; [3] 11, 908; M. 3, 677; B. 7, 1453; 27 [2] 79; 29, 2897). **- I**, 448. 2) Säure (aus Bienenwachs). Sm. 78,5°. Pb (A. 235, 143). — I, 449. 3) Säure (aus Wollfettwachs). Sm. 79°. Mg (B. 31, 103). 4) Aethylester d. Cerotinsäure. Sm. 60,5° (C. 1896 [1] 642). C 76,0 — H 12,7 — O 11,3 — M. G. 426. $\mathbf{C}_{27}\mathbf{H}_{54}\mathbf{O}_3$

 $C_{27}H_{56}O$

C 76,0 — H 12,7 — O 11,3 — M. G. 420.

1) Oxycerotinsäure. Sm. 82° (A. 271, 222).
C 81,8 — H 14,1 — O 4,0 — M. G. 396.

1) Cerylalkohol (siehe auch C₂₆H₅₄O). Sm. 79° (A. 67, 201; 271, 224; Soc. 57, 198; G. 25 [1] 44; B. 3, 639; 29, 2895). — I, 241.

2) Isocerylalkohol. Sm. 62° (B. 11, 2113). — I, 241.

3) Dimyristylcarbinol (Ditridekylcarbinol). Sm. 80,5—81,5° (Soc. 63, 459).

4) Alkohol (aus Bienenwachs) (A. 235, 142). — I, 241.

5) Alkohol (aus Carnaubawachs) (A. 223, 293). — I, 241.

C_{27} -Gruppe mit drei Elementen.

 $C_{27}H_{15}O_6Br_3$ 1) Tri[4-Brombenzoat] d. 1,2,3-Trioxybenzol. Sm. 140° (Am. 9, 86). **- II**, 1223.

C₂₇H₁₆O₆Cl₂ 1) Tribenzoat d. ?-Dichlor-1, 2, 3-Trioxybenzol. Sm. 165° (G. 28 [1] 225). $C_{27}H_{17}O_3N$ C 70.4 - H 4.2 - O 11.9 - N 3.5 - M. G. 403.

1) Anhydrid d. 2-Nitrophenyldi[2-Oxynaphtyl]methan. Zers. oberh. 250° (G. 23 [2] 216). — II, 1009.

2) Anhydrid d. 3-Nitrophenyldi[2-Oxynaphtyl]methan. Sm. 220° (G. 23 [2] 218). — II, 1009.
3) Anhydrid d. 4-Nitrophenyldi[2-Oxynaphtyl]methan. Zers. bei 260%

(G. 23 [2] 221). — II, 1009. C 77,3 — H 4,1 — O 15,3 — N 3,3 — M. G. 419.

 $\mathbf{C}_{27}\mathbf{H}_{17}\mathbf{O_4N}$ 1) Dibenzoat d. 2,4-Dioxyakridin. Sm. 163° (B. 25, 1759). — IV, 407.

- C 67,6 H 3,6 O 20,0 N 8,8 M. G. 479. 1) $\alpha\beta\gamma$ -Tri[1,2-Phtalylamido]propan. Sm. 226—227° (B. 25, 3057). C27H17O6N8 II, 1807.
- 1) Tribenzoat d. P-Chlor-1, 2, 3-Trioxybenzol. Sm. 140 $^{\circ}$ (G. 28 [1] 225). C 78,3 H 4,3 O 3,9 N 13,5 M. G. 414. $\mathbf{C}_{27}\mathbf{H}_{17}\mathbf{O}_6\mathbf{C}\mathbf{1}$ $\mathbf{C}_{27}\mathbf{H}_{18}\mathbf{ON}_{4}$
- 1) Verbindung (aus 2-Phenylbenzimidazol-24-Carbonsäure). Sm. 277°. 2HCl $+ 2 H_2 O$, (2 HCl, PtCl₄) (A. 205, 121; 210, 340; B. 11, 297). — IV, 1021. C 80,6 - H 4,5 - O 8,0 - N 6,9 - M. G. 402. $C_{27}H_{18}O_{2}N_{2}$
- 1) Methyläther d. 4-Oxynaphtindon. Sm. oberh. 330° (A. 272, 345). —
- IV, 1085. $C_{27}H_{18}O_2Cl_2$ 1) Di[2-Naphtyläther] d. 2,5-Dichlor-1-Dioxymethylbenzol. Sm. bei 205° u. Zers. (A. 299, 348). C 77,5 — H 4,3 — O 11,5 — N 6,7 — M. G. 418.
- $\mathbf{C}_{27}\mathbf{H}_{18}\mathbf{O}_{3}\mathbf{N}_{2}$ 1) 1-Nitro-2, 2-Dinaphtylamid d. Benzolcarbonsäure. Sm. 168°. + C₆H₆
- (Sm. 95°) (B. **20**, 2625). II, 1168. C 70,1 H 3,9 O 13,8 N 12,1 M. G. 462. $C_{27}H_{18}O_4N_4$
- 1) 6,8-Diphenylazo-5,7-Dioxy-2-Phenyl-1,4-Benzpyron (Diphenylazochrysin). Sm. 251—252° (*Soc.* 73, 669). — IV, *1482*. C 67,8 — H 3,8 — O 16,7 — N 11,7 — M. G. 478. $C_{27}H_{18}O_5N_4$
- $\mathbf{C}_{27}\mathbf{H}_{18}\mathbf{O}_{6}\mathbf{N}_{6}$
- C 67,8 H 5,6 O 10,7 N 11,7 M. G. 476.

 1) 6,8-Diphenylazo-5,7-Dioxy-2-[4-Oxyphenyl]-1,4-Benzpyron (Diphenylazoapigenin). Sm. 290—292° (Soc. 71, 808; 73, 667). IV, 1482. C 62,1 H 3,4 O 18,4 N 16,1 M. G. 522.

 1) Dinitroderivat d. Verbindung C₂₇H₂₀O₂N₄. Sm. 200°. + C₂H₄O₂ (Sm. 130°) (B. 26, 1188). IV, 1225. C 67,2 H 3,7 O 23,2 N 5,8 M. G. 482.
- $\mathbf{C}_{27}\mathbf{H}_{18}\mathbf{O}_7\mathbf{N}_2$ 1) Lycoctoninsäure. Sm. 146,1—148,6° (J. 1884, 1394). — III, 776. C 63.5 - H 3.5 - O 22.0 - N 11.0 - M. G. 510. $\mathbf{C}_{27}\mathbf{H}_{18}\mathbf{O}_7\mathbf{N}_4$
- 1) Diphenylazomorin (Soc. 73, 670). IV, 1482. C 86,9 - H 5,1 - O 4,3 - N 3,7 - M. G. 373. $\mathbf{C}_{27}\mathbf{H}_{19}\mathbf{ON}$
- 1) 2,2-Dinaphtylamid d. Benzolcarbonsäure. Sm. 173° (B. 17, 1593, 2030). — Π , 1168. C 80,8 — H 4,7 — O 4,0 — N 10,5 — M. G. 401.
- C27H19ON3 1) 4-Benzoylamido-1,1'-Azonaphtalin (A. 129, 112). — IV, 1390.
- 2) Benzoylamido-β-Azonaphtalin. Sm. 177° (B. 18, 2423). II, 1391.
 C 83,3 H 4,9 O 8,2 N 3,6 M. G. 389. $C_{27}H_{19}O_{2}N$
- 1) 2,5-Diphenyl-l-[l-Naphtyl]pyrrol-3-Carbonsäure. Sm. 271,5-2720 (B. 22, 3091). - IV, 449.2) **2,5-Diphenyl-1-[2-Naphtyl]pyrrol-3-Carbonsäure.** Sm. 350° (B. **22**,
- 3032). IV, 450. C 77,7 H 4,6 O 7,7 N 10,0 M. G. 417. $\mathbf{C}_{27}\mathbf{H}_{19}\mathbf{O}_{2}\mathbf{N}_{3}$
- 1) 1,3-Dibenzoyl-2-Phenylimido-2,3-Dihydrobenzimidazol. Sm. 1710 (B. 24, 2502). - IV, 566.
- C 80.0 H 4.7 O 11.8 N 3.5 M. G. 405. $\mathbf{C}_{27}\mathbf{H}_{19}\mathbf{O}_{3}\mathbf{N}$ 1) 4-Oxy-5-Keto-3-Benzoyl-2-Phenyl-1-[2-Naphtyl]-2,5-Dihydropyrrol. Zers. bei 252-254° (B. 31, 1308).
- C 74,8 H 4,4 O 11,1 N 9,7 M. G. 433. $C_{27}H_{19}O_3N_3$ 1) Benzoat d. 6-Phenylhydrazon-5-Oxy-3-Methyl-1-Phenylbenzoxazol. Sm. 171° (M. 19, 505). — IV, 1448.
- C 76,9 H 4,5 O 15,2 N 3,3 M. G. 421. $\mathbf{C}_{27}\mathbf{H}_{19}\mathbf{O}_4\mathbf{N}$ 1) **2-Nitrophenyldi[2-Oxynaphtyl]methan.** Sm. 2070 (G. **23** [2] 216). **– II**, 1009.
 - 2) 3-Nitrophenyldi[2-Oxynaphtyl]methan. Sm. 1840 (G. 23 [2] 218). II, 1009.
- 3) Methyläther d. Fluoresceïnanilid. Sm. 280° (B. 28, 397). II, 2062. $\mathbf{C}_{27}\mathbf{H}_{19}\mathbf{O}_4\mathbf{Cl}$ 1) Verbindung + $\mathbf{H}_2\mathbf{O}$ (aus Benzaldehyd u. α -Hydronaphtochinon) (J. pr. [2] 49, 551). — III, $\hat{\mathbf{G}}$.
- C 65,2 H 3,8 O 22,5 N 8,4 M. G. 497. $C_{27}H_{19}O_7N_3$ 1) Benzoat d. 3-[?-Dinitro-4-Methylphenyl]benzoylamido-1-Oxybenzol. Sm. 110° (J. pr. [2] 33, 215). — II, 1177.
 - 2) 1,4-Benzochinonimidobenzol-3-Carbonsäuredi Amidobenzol-3-Carbonsäure] (Bl. [3] 15, 1027).
 - 3) Verbindung (aus 1,4-Benzochinondiamidobenzoesäure). Sm. bei 145° u. Zers. (Bl. [3] 13, 748). — III, 343.

C 83,5 — H 5,2 — O 4,1 — N 7,2 — M. G. 388. $\mathbf{C}_{27}\mathbf{H}_{20}\mathbf{ON}_2$ 1) α -Phenyl- $\beta\beta$ -Di[2-Naphtyl]harnstoff. Sm. 179° (181-182°) (B. 17,

3039; **23**, 429). — II, 618. C 80,2 — H 4,9 — O 7,9 — N 6,9 — M. G. 404. $\mathbf{C}_{27}\mathbf{H}_{20}\mathbf{O}_{2}\mathbf{N}_{2}$

1) 2,3-Difuranyl-4-[4-Methylphenyl]-1,4-Dihydro-1,4-Naphtisodiazin. Sm. 186° (B. **25**, 2846). — IV, 1080. C 75,0 — H 4,6 — O 7,4 — N 13,0 — M. G. 432.

 $\mathbf{C}_{27}\mathbf{H}_{20}\mathbf{O}_{2}\mathbf{N}_{4}$

1) Benzoylderivat d. Verb. C₂₀H₁₆ON₄. Sm. 172° (B. 26, 1187). — IV. 1225. 2) Verbindung (aus 2-Phenylimido-4-Keto-3-Phenyl-1,2,3,4-Tetrahydro-

1,3-Benzdiazin). Sm. 127° (Am. 21, 154).

C 74,3 — H 4,6 — O 14,7 — N 6,4 — M. G. 436. $\mathbf{C}_{27}\mathbf{H}_{20}\mathbf{O}_4\mathbf{N}_2$

1) Benzoat d. 2,4-Di[Benzoylamido]-1-Oxybenzol.
(A. 205, 69). — II, 1178.
2) Benzoat d. 2,6-Di[Benzoylamido]-1-Oxybenzol.
(A. 205, 83). — II, 1178. Sm. $231 - 233^{\circ}$ Sm. 183—184°

C 71,7 — H 4,4 — O 17,7 — N 6,2 — M. G. 452. C27H20O5N2

1) Di [4-Benzoylamidophenylester] d. Kohlensäure. Sm. 220° u. Zers.

(C. 1897 [1] 469).

1) Phenyldi[1-Oxy-?-Naphtyl] methan-3-Sulfonsäure. Ba (B. 24, 795). C27H20O5S · II, 1009.

C 65.3 - H 4.0 - O 19.3 - N 11.3 - M. G. 496. $C_{27}H_{20}O_6N_4$

1) Diphenylazocyanomaklurin (Soc. 67, 942). — III, 684.

C 80,4 - H 5,2 - O 4,0 - N 10,4 - M. G. 403. $C_{27}H_{21}ON_3$

1) α - Phenyl - β - Benzylidenhydrazid d. 2 - Benzylidenamidobenzol-1-Carbonsaure. Sm. 150-151° (A. 301, 92).

C 82.8 - H 5.4 - O 8.2 - N 3.6 - M. G. 391. $C_{27}H_{21}O_2N$

1) Anhydrobisdiketohydrindenpseudocumidid (B. 30, 3143).

C 77,3 — H 5,0 — O 7,6 — \bar{N} 10,0 — M. G. $\dot{4}$ 19. $C_{27}H_{21}O_2N_3$

1) Diphenyldibenzoylguanidin. Sm. 102° (B. 8, 384). — II, 1173.

C 79.6 - H 5.2 - O 11.8 - N 3.4 - M. G. 407. $\mathbf{C}_{27}\mathbf{H}_{21}\mathbf{O_3N}$

1) Benzoat d. α-Benzoylamido-2-Oxydiphenylmethan. Sm. 1760 (M. **15**, 663; **16**, 269).

2) Benzoat d. 4-[2-Methylphenyl]benzoylamido-1-Oxybenzol. Sm. 171° (J. pr. [2] 34, 61). — II, 1177.
3) Benzoat d. 3-[4-Methylphenyl]benzoylamido-1-Oxybenzol. Sm. 105°

(J. pr. [2] 33, 215). - II, 1177.

4) Benzoat d. 4-[4-Methylphenyl]benzoylamido-1-Oxybenzol. Sm. 169° (J. pr. [2] 33, 228). — II, 1177.

C 74.5 — H 4.8 — O 11.0 — N 9.7 — M. G. 435. $C_{27}H_{21}O_{3}N_{3}$

1) 1.2.4-Tri Benzovlamido benzol. Sm. 260° (A. 254, 256). — IV, 1124. 2) β -[3-Nitrobenzyliden]hydrazon- α -Oxy- $\alpha \alpha \beta$ -Triphenyläthan. Sm. 1230

C 67.1 - H 4.3 - O 19.9 - N 8.7 - M. G. 483. $C_{27}H_{21}O_6N_3$

1) ?-Trinitrotri[4-Methylphenyl]benzol. Sm. oberh. 160° u. Zers. (J. pr. 2] **41**, 406). — II, 301.

2) Tri[Phenylamidoformiat] d. 1,2,3-Trioxybenzol. Sm. 1730 (B. 18, 2430). — II, 1013.

3) Tri[Phenylamidoformiat] d. 1,3,5-Trioxybenzol. Sm. 123° (B. 23, 269). — II, 1019.

1) Aethylester d. 3[oder 5]-Chlor-4,5[oder 4,6]-Dibenzoxyl-1,6[oder 1,3]- $\mathbf{C}_{27}\mathbf{H}_{21}\mathbf{O}_{7}\mathbf{Cl}$ Dimethylbenzfuran-2-Carbonsäure. Sm. 174-175° (A. 283, 264).

C 61,0 - H 3,9 - O 27,1 - N 7,9 - M. G. 531. $C_{27}H_{21}O_9N_3$

1) Tribenzyläther d. 2,4,6-Trinitro-1,3,5-Trioxybenzol. Sm. 1710 (Am. 15, 632). — II, 1022.

C 79.8 - H 5.4 - O 7.9 - N 6.9 - M. G. 406. $\mathbf{C}_{27}\mathbf{H}_{22}\mathbf{O}_{2}\mathbf{N}_{2}$

1) $\alpha \gamma$ -Di[Phenylimido]- $\beta \beta$ -Dioxy- $\alpha \gamma$ -Diphenylpropan. Sm. 148° (B. 23, 3387). — III, 316.

2) 4,4'-Di[2-Oxybenzylidenamido]-2-Methylbiphenyl. Sm. 160-165° (B. 28, 2550). — IV, 975.
3) 3-Benzoylamido-1-[Benzoylbenzylamido]benzol. Sm. 178° (Soc. 55,

597). — IV, 573.

- $\mathbf{C}_{27}\mathbf{H}_{22}\mathbf{O}_{2}\mathbf{N}_{2}$ 4) **4-Benzoy**lamido-**1-**[Benzoylbenzylamido]benzol. Sm. 124 $^{\circ}$ (Soc. 55, 591). **— IV**, 586.
 - 5) 7-Methyläther d. 1,7-Dioxy-1,2,3-Triphenyl-1,1-Dihydro-1,4-Benzdiazin. Sm. 163-165° (B. **29**, 2682). — IV, 1079. C 76,8 — H 5,2 — O 11,4 — N 6,6 — M. G. 422.
- $\mathbf{C}_{27}\mathbf{H}_{22}\mathbf{O}_{3}\mathbf{N}_{2}$ 1) α -Benzoylamido- β -[Benzoyl-l-Naphtoyl]amidoäthan. Sm. 161° (B.
- **25**, 2141). II, *1445*. C 74,0 H 5,0 O 14,6 N 6,4 M. G. 438.
- $\mathbf{C}_{27}\mathbf{H}_{22}\mathbf{O}_4\mathbf{N}_2$
- $\mathbf{C}_{27}\mathbf{H}_{22}\mathbf{O}_5\mathbf{N}_4$
- 1) Methylenlignonblau (B. 31, 621). C 67,2 H 4,6 O 16,6 N 11,6 M. G. 482. 1) Phloretindisazobenzol. Sm. 254 256° u. Zers. (Soc. 71, 1151). IV, 1479.
- C 65,1 H 4,4 O 19,3 N 11,2 M. G. 498. $C_{27}H_{22}O_6N_4$
 - 1) Di[2-Methylphenylazo]maklurin (Soc. 67, 934). IV, 1479.
 - 2) Di 4-Methylphenylazo maklurin (Soc. 67, 934).
- $\mathbf{C}_{27}\mathbf{H}_{22}\mathbf{N}_{3}\mathbf{Cl}$ 1) α -Benzyliden- β -[4-Chlorphenyl]- β -[2-Benzylidenamidobenzyl]hydrazin. Sm. 150° (J. pr. [2] **52**, 388). — IV, 1130.
- - 1) α -Oximido- α -Biphenyl- $\beta\gamma$ -Diphenylpropan. Sm. 175° (B. 21, 1340). - III, 265.
 - 2) Benzyläther d. 5-Phenylakridin-10-Methyloxydhydrat. Sm. 133° (*J. pr.* [2] **45**, 200). — IV, 468. C 77,0 — H 5,5 — O 7,6 — N 9,9 — M. G. 421.
- $\mathbf{C}_{27}\mathbf{H}_{23}\mathbf{O}_2\mathbf{N}_3$ 1) $\alpha\beta$ -Diphenyl- α -[2-Benzoylamidobenzyl]harnstoff. Sm. 170° (J. pr. [2]
- 55, 242). IV, 633.
 C 76,2 H 5,4 O 15,1 N 3,3 M. G. 425.
 Diisoamylester d. α-Cyan-αβ-Diphenyläthan-αβ-Dicarbonsäure. Fl.
- $\mathbf{C}_{27}\mathbf{H}_{28}\mathbf{O}_4\mathbf{N}$ (B. 23, 115). — II, 1891. C 71,5 — H 5,1 — O 14,1 — N 9,3 — M. G. 453.
- $C_{27}H_{23}O_4N_3$ 1) o-Diphtalyldiäthylen-p-Tolyltriamin, Sm. 200° (B. 24, 2195). — II, 1800.
- C'70,9 H 5,0 O 21,0 N 3,1 M. G. 457. $\mathbf{C}_{27}\mathbf{H}_{23}\mathbf{O}_{6}\mathbf{N}$ Triacetylhydrocyanrosolsäure. Sm. 143° (A. 179, 200). — II, 1122.
 C 82,6 — H 6,1 — O 4,1 — N 7,1 — M. G. 392.
- $\mathbf{C}_{27}\mathbf{H}_{24}\mathbf{ON}_{2}$ 1) 1-Benzyl-2-[2-Oxyphenyl]-3-Phenyl-1, 2, 3, 4-Tetrahydro-1, 3-Benz**diazin.** Sm. 172° (*B.* **27**, 3244). — **IV**, 638. **C** 74,3 — **H** 5,5 — **O** 7,3 — **N** 12,8 — **M**. G. 436.
- $\mathbf{C}_{27}\mathbf{H}_{24}\mathbf{O}_{2}\mathbf{N}_{4}$ 1) $\alpha\beta$ -Diphenyl- α -[2-Phenylureïdobenzyl] harnstoff. Sm. 139—140°
 - (J. pr. [2] 55, 242). II, 633. 2) α -Phenyl- $\alpha\alpha$ -Di [5-Keto-3-Methyl-1-Phenyl-4, 5-Dihydropyrazolyl-4] methan. Sm. 154°. $+ CH_4O$, $+ \frac{1}{2}C_2H_5O$, $+ CI + C_2H_6O$, $+ NH_3 + \frac{1}{2}H_2O$, Piperidinsalz $+ \frac{1}{2}C_2H_6O$ (M. 17, 356) - IV, 1288. C 71,7 - H 5,3 - O 10,6 - N 12,4 - M. G. 452.
- $C_{27}H_{24}O_3N_4$ 1) α -Phenylhydrazon- α -Phenyl- α -[3,4,5-Trioxy-2- α -Phenylhydrazonäthyl]phenylmethan (Gallacetobenzophenonbisphenylhydrazon). Sm. 233
- bis 234° (J. r. **25**, 117). IV, 785. C 67,5 H 5,0 O 10,0 N 17,5 M. G. 480. $C_{27}H_{24}O_3N_6$ 1) 1, 3, 5-Tri [4-Methylphenylnitrosamido] benzol. Sm. $233-234^{\circ}$ (G. 20,
- 329). IV, 1125. 2) trimolec. P-Nitroso-P-Dihydrochinolin (C. 1896 [1] 1126).
- 1) Verbindung (aus s-Diphenylsulfonaceton u. Phenylmerkaptan). $\mathbf{C}_{27}\mathbf{H}_{24}\mathbf{O}_4\mathbf{S}_4$
- bis 191° (J. pr. [2] 36, 422). II, 791. C 68,6 H 5,1 O 20,3 N 5,9 M. G. 472. l) Phenylhydrazid (aus Narceonsäure). Sm. 181 182° (A. 286, 253). $\mathbf{C}_{27}\mathbf{H}_{24}\mathbf{O}_{6}\mathbf{N}_{2}$ II, 2082.
- C 61,3 H 4,5 O 18,2 N 15,9 M. G. 528. 1) **2,4,6-Trimethyläther d. 2,4,6-Tri[2-Oxyphenylazo]-1,3,5-Trioxy-** $\mathbf{C}_{27}\mathbf{H}_{24}\mathbf{O}_{6}\mathbf{N}_{6}$ benzol. Sm. oberh. 300° (Soc. 71, 1155). — IV, 1451. C 54,4 — H 4,0 — O 32,2 — N 9,4 — M. G. 596.
- $\mathbf{C}_{27}\mathbf{H}_{24}\mathbf{O}_{12}\mathbf{N}_4$ 1) 5 oder 6-Methyl-2-[?-Nitro-3,4-Dimethoxylphenyl]-1-[?-Nitro-3,4-Dimethoxylbenzyl]benzimidazol-1², 2²-Dicarbonsäure. Sm. 205 bis 206° u. Zers. (B. **25**, 1987). — IV, 619.

 $C_{27}H_{27}O_6N$

1) s-Di[2-Benzylphenyl]thioharnstoff. Sm. 147° (B. 27, 2786). $\mathbf{C}_{27}\mathbf{H}_{24}\mathbf{N}_{2}\mathbf{S}$

1) $\alpha \beta$ - Di[4 - Phenylhydrazonmethylphenyl]thioharnstoff. Sm. 220° Co, HoAN, S (f, pr. [2] **56**, 108). — **IV**, 753. C 78,8 — H 6,1 — O 11,7 — N 3,4 — M. G. 411.

C27H25O3N

1) Aethylester d. 4-Oximido-1,2,6-Triphenyl-1,2,3,4-Tetrahydrobenzol-3-Carbonsäure. Sm. 150-155° u. Zers. (A. 281, 67). — II, 1915.

C 67,1 - H 5,2 - O 13,2 - N 14,5 - M. G. 483. $\mathbf{C}_{27}\mathbf{H}_{25}\mathbf{O}_{4}\mathbf{N}_{5}$

1) 2,4-Dinitro-1,3,5-Tri[2-Methylphenylamido] benzol. Sm. 2430 (Am. 16, 42). — IV, 1125. 2) 2,4 - Dinitro - 1,3,5 - Tri[4 - Methylphenylamido] benzol. Sm. 197°. + CHCl₃ (Am. 16, 40). — IV, 1125. C 82,2 — H 6,6 — O 4,1 — N 7,1 — M. G. 394.

 $\mathbf{C}_{27}\mathbf{H}_{28}\mathbf{ON}_{2}$

1) 4-Amido-1-Dibenzylamidobenzol + Benzaldehyd. Sm. 130° (B. 20, 1615). — IV, 586. C 79,0 — H 6,3 — O 7,8 — N 6,8 — M. G. 410.

 $\mathbf{C}_{27}\mathbf{H}_{26}\mathbf{O}_{2}\mathbf{N}_{2}$

1) 2-[4,4'-Tetramethyldiamidodiphenyl] methyl-1,4-Naphtochinon. Sm. 167° (B. 31, 2351).

C 73,3 — H 5,9 — O 14,5 — N 6,3 — M. G. 442. 1) Dicarboxäthylamarin (*J. pr.* [2] **27**, 303). — III, 24. C 81,6 — H 6,8 — O 8,1 — N 3,5 — M. G. 397. $C_{27}H_{26}O_4N_2$

C27 H27 O2 N

1) Aethylester d. 6-Methyl-2,3,4-Triphenyl-1,4-Dihydropyridin-5-Carbonsäure. Sm. 170° (A. **281**, 75). — II, 1681. C 73,5 — H 6,1 — O 10,9 — N 9,5 — M. G. 441.

 $\mathbf{C}_{27}\mathbf{H}_{27}\mathbf{O}_{3}\mathbf{N}_{3}$

1) Dicarboxathylamidamarin. HCl, (2 HCl, PtCl₄ + H₂O), H₂SO₄ (J. pr. [2] **27**, 304). — III, 25. C 75,5 — H 6,3 — O 14,9 — N 3,3 — M. G. 429.

 $\mathbf{C}_{27}\mathbf{H}_{27}\mathbf{O}_{4}\mathbf{N}$

1) 3-Nitrophenyl-Dianetholmethan. Sm. 165-1700 (G. 21, 186). -II, 1008.

2) Benzylidenpapaverinium. Sm. 130° (J. pr. [2] 56, 324).
 C 70,3 — H 5,9 — O 20,8 — N 3,0 — M. G. 461.
 1) Tribenzoat d. Tri [β-Oxyäthyl]amin. Fl. (B. 30, 920).

2) Verbindung (aus Papaverinbenzylchlorid) oder C₅₄H₅₂O₁₁N₂. Sm. 153 bis 154° (M. 9, 332). — $\overline{1V}$, 442. C 64,1 — H 5,3 — O 22,2 — N 8,3 — M. G. 505.

C27H27O7N3

1) Verbindung (aus-α-Oximido-β-Keto α-Phenylpropan). Sm. 117—118° (A. **291**, 293). — III, 268.

 $\mathbf{C}_{27}\mathbf{H}_{28}\mathbf{O}_{3}\mathbf{N}_{2}$

C 75,7 — H 6,5 — O 11,2 — N 6,5 — M. G. 428.

1) Benzoylchinin. Sm. 139°. HCl + ½, H₂O, 2 HCl, (2 HCl, PtCl₄), HBr + ½, H₂O, Tartrat, Bitartrat, Succinat, Salicylat (A. 108, 352; A. ch. [7] 7, 127; Bl. [3] 11, 1100). — III, 815.

C 73,0 — H 6,3 — O 14,4 — N 6,3 — M. G. 444.

1) Activalithm of Parameter of the Activalian and Computer (M. 12, 170).

 $\mathbf{C}_{27}\mathbf{H}_{28}\mathbf{O_4N_2}$

1) Aethyläther d. Benzoylcinchotenin. HCl, 2HCl (M. 16, 170). — III, 842.

C 68,7 - H 5,9 - O 13,6 - N 11,8 - M. G. 472. $\mathbf{C}_{27}\mathbf{H}_{28}\mathbf{O}_{4}\mathbf{N}_{4}$

1) d-Cocaïnazo-l-Amidonaphtalin (B. 27, 1887). — IV, 1482.

 $\mathbf{C}_{27}\mathbf{H}_{28}\mathbf{O}_7\mathbf{N}_2$

 Disazobenzolsantonsäure. Sm. 125—130° (B. 31, 1681). — IV, 1474. C 65,9 — H 5,7 — O 22,7 — N 5,7 — M. G. 492.
 2-Nitrobenzyloxydhydrat d. Papaverin. Chlorid, Nitrat + 1½ H₂O, Bichromat, Pikrat (M. 9, 857). — IV, 441. $C_{27}H_{28}O_{10}Br_41$) Verbindung (aus Espartoharz) (Soc. 41, 94). — I, 1080.

1) Dijodäthylat d. Di 2-Methylenamido-2-Naphtyl] methan (J. pr. [2] ${}^{\cdot}\mathbf{C}_{27}\mathbf{H}_{28}\mathbf{N}_{2}\mathbf{J}_{2}$ **35**, 320). — **IV**, 1076. C 70,6 — H 6,3 — O 13,9 — N 9,2 — M. G. 459.

 $C_{27}H_{29}O_4N_8$

1) 3'-Nitro- 2^2 , 2^3 -Di[Acetylamido]- 3^2 , 5^2 , 3^3 , 5^3 -Tetramethyltriphenylmethan? Sm. 131—132° (B. 21, 3217). — IV, 1048. 2) 4'-Nitro-2', 2's-Di[Acetylamido]-3', 5', 3', 5's-Tetramethyltriphenyl-

methan. Sm. 88° (B. 21, 3216). — IV, 1049.

3) 4-Nitrophenyldi[Acetylamidodimethylphenyl]methan (aus 2-Amido-1,3-Dimethylbenzol). Zers. bei 260° (M. 19, 641). 4) Tri[4-Methylphenylamid] d. Citronensäure. Sm. 1890 (B. 19, 2352).

- II, 503.

C 72,5 — H 6,5 — O 17,9 — N 3,1 — M. G. 447. $\mathbf{C}_{27}\mathbf{H}_{29}\mathbf{O}_5\mathbf{N}$ Benzyloxydhýdrat d. Papaverin. Chlorid, Bichromat, Pikrat (B. 18, 1578; M. 9, 330, 756; J. pr. [2] 56, 324, 337; J. 1886, 1718). — IV, 441.

C 68,2 - H 6,1 - O 16,8 - N 8,8 - M. G. 475. $C_{27}H_{29}O_5N_3$

1) 3-Nitrobenzaldehydchinin. Sm. 113—118° (G. 13, 368). — III, 813. C 61,5 — H 5,5 — O 30,3 — N 2,6 — M. G. 527. $\mathbf{C}_{27}\mathbf{H}_{29}\mathbf{O}_{10}\mathbf{N}$

1) Tetracetylhelicinmonanilid (A. 154, 34). — III, 69.

 $C_{27}H_{30}O_{2}N_{2}$ C 78,3 — H 7,2 — O 7,7 — N 6,8 — M. G. 414. 1) 2-Methylphenylchinin. 2 Modif. $(2 \text{HCl}, \text{PtCl}_4 + \text{H}_2\text{O})$ (B. 14, 80). —

2) 4-Methylphenylchinin. 2 Modif. $(2 \text{HCl}, \text{PtCl}_4 + \text{H}_2\text{O})$ (B. 14, 80). —

C 73,3 - H 6,8 - O 7,2 - N 12,7 - M. G. 442. $C_{27}H_{30}O_2N_4$

1) α -[4-Diacetylamidophenyl]imidodi[4-Dimethylamidophenyl]methan. Sm. $194-195^{\circ}$ (J. pr. [2] 50, 407). — IV, 1174. C 75,4 - H 7,0 - O 11,1 - N 6,5 - M. G. 430

 $C_{27}H_{30}O_3N_2$ 1) Aethylsalidin. (2 HCl, PtCl₄) (A. 145, 309). — III, 72.

2) Triäthyläther d. Hydrosalicylamid (A. 145, 308). — III, 72.

C 70,7 — H 6,5 — O 10,5 — N 12,2 — M. G. 458. $C_{27}H_{30}O_3N_4$ 1) $Tri[\beta$ -Benzoylamidoäthyl]amin. Sm. 148—149° (B. 29, 2532).

C 68,4 - H 6,3 - O 13,5 - N 11,8 - M. G. 474 $\mathbf{C}_{27}\mathbf{H}_{30}\mathbf{O}_4\mathbf{N}_4$

1) Diäthylester d. 4-[3-p-Dimethylamidophenylazophenyl]-2,6-Dimethylpyridin-3,5-Dicarbonsäure. Sm. 107°. (2HCl, PtCl₄) (G. 17, 467). — IV, 1487.

C 64.5 - H 6.0 - O 12.7 - N 16.7 - M. G. 502. $C_{27}H_{30}O_4N_6$

1) Verbindung (aus Aceton, Benzaldehyd u. Harnstoff). Sm. 270° u. Zers. (G. 23 [1] 406). - III, 38.

1) Trimethyltribenzyl-R-Trimethylentrisulfon. Sm. 2680 (B. 27, 1676). $\mathbf{C}_{27}\mathbf{H}_{30}\mathbf{O}_{6}\mathbf{S}_{3}$ - III, *144*.

2) Hexamethyläther d. α-Trithio-2, 5-Dioxybenzaldehyd. Sm. 95-96° (B. **29**, 148). — III, 99.

3) Hexamethyläther d. β -Trithio-2,5-Dioxybenzaldehyd. Sm. 180°. $+2 C_6 H_6$ (B. **29**, 149). — III, 99.

4) Hexamethyläther d. α-Trithio-3,4-Dioxybenzaldehyd. (B. **29**, 145). — III, 102.

5) Hexamethyläther d. β -Trithio-3,4-Dioxybenzaldehyd. Sm. 220°. $+2C_{6}H_{6}$, +2 Thiophen (B. 29, 146). - III, 102.

1) Tri[1,2,3,4-Tetrahydro-1-Chinolyl]phosphin. Sm. 202-2040 (B. 31, $C_{27}H_{30}N_3P$ 1038). — IV, 1683. 1) Diäthyljodid d. Aribin. — III, 780.

 $C_{27}H_{30}N_4J_2$

 $\mathbf{C}_{27}^{11}\mathbf{H}_{32}^{00}\mathbf{\tilde{N}}_{4}$

C 75,7 — H 7,5 — O 3,7 — N 13,1 — M. G. 428.

1) Phenylhydrazon d. Methylchinin. Sm. 135—136° (B. 27, 1187). — IV, 798. C 77,9 — H 7,7 — O 7,7 — N 6,7 — M. G. 416.

 $\mathbf{C}_{27}\mathbf{H}_{32}\mathbf{O}_{2}\mathbf{N}_{2}$

 $\mathbf{C}_{27}\mathbf{H}_{32}\mathbf{O_4N_2}$

1) Verbindung (aus Chinin u. Toluol) (J. 1874, 867). — III, 812. C 72,3 — H 7,1 — O 14,3 — N 6,2 — M. G. 448. 1) Homobrenzkatechinchinin. H₂SO₄ + H₂O (Sm. 157° wasserfrei) (Bl.

[3] 9, 147). — III, 813. C₂₇H₃₂O₁₁Cl₂1) Diehlorphillyrin (A. 118, 128). — III, 600. C₂₇H₃₂O₁₁Br₂1) Dibromphillyrin (A. 118, 128). — III, 600. C 51.9 - H 5.1 - O 38.4 - N 4.5 - M. G. 624. $\mathbf{C}_{27}\mathbf{H}_{32}\mathbf{O}_{15}\mathbf{N}_{2}$

 $C_{27}H_{33}O_{3}P$

1) Dinitrophillyrin (A. 118, 128). — III, 600. C 75,2 — H 7,6 — O 7,4 — N 9,7 — M. G. 431.

 ${}^{\mathbf{C}}_{27}\mathbf{H}_{33}\mathbf{O}_{2}\mathbf{N}_{3}$ 1) 2'-Nitro-4²,4³-Di[Diäthylamido]triphenylmethan. Sm. 109—110⁰ (B. **17**, 1893). — **IV**, 1044.

2) 3'-Nitro- 4^2 , 4^3 -Di[Diäthylamido] triphenylmethan. Sm. 95— 96° (A.

294, 379). — IV, 1044. 3) 4'-Nitro-4², 4³-Di[Diäthylamido] triphenylmethan. Sm. 113° (B. 19,

746). — IV, 1044. 4) 3'-Nitro-5², 5³-Diamido-2², 2³-Diisobutyltriphenylmethan. Sm. 64 bis

65° (B. 21, 3214). — IV, 1049. 5) 4'-Nitro-5², 5³-Diamido-2², 2³-Diisobutyltriphenylmethan. Sm. 125 bis 126°. 2 HCl, (2 HCl, PtCl₄) (B. 21, 3213). — IV, 1049.

1) Phosphorigsäuretri-2, 4, 5-Trimethylphenylester. Sd. 270-274°16 (B. 31, 1052).

1) Tri[2-Isopropylphenylester] d. Phosphorsäure. Sd. 375-380°₂₈₀ (G. $C_{27}H_{33}O_4P$ **16**, 130). — **II**, 762.

 $\mathbf{C}_{27}\mathbf{H}_{53}\mathbf{O}_{2}\mathbf{Br}$

C 69,4 — H 7,0 — O 20,6 — N 3,0 — M. G. 467. 1) Camphorylmorphin. (2HCl, PtCl₄) (Soc. 28, 694). — III, 900. $C_{27}H_{33}O_6N$ $\mathbf{C}_{27}\mathbf{H}_{33}\mathbf{O}_{12}\mathbf{Cl}_{4}$ 1) Verbindung (aus Espartoharz) (Soc. 41, 94). — I, 1080. $\mathbf{C}_{27}\mathbf{H}_{33}\mathbf{O}_{13}\mathbf{N}$ C 56,0 — H 5,7 — O 35,9 — N 2,4 — M. G. 579.) Nitrophillyrin (A. 118, 128). — III, 600. 1) 43-Chlor-4', 42-Di Diäthylamido triphenylmethan. Sm. 1100 (B. 19, $\mathbf{C}_{27}\mathbf{H}_{33}\mathbf{N}_{2}\mathbf{C}1$ 745). — IV, 1043. C₂₇H₃₃Cl₂Bi 1) Tri[4-Isopropylphenyl]wismuthdichlorid. Sm. 208° (B. 30, 2848). - IV, 1699. $C_{27}H_{33}Br_2Bi$ 1) Tri[4-Isopropylphenyl]wismuthdibromid. Sm. 150° (B. 30, 2848). — TV, 1699. C 80,6 — H 8,4 — O 4,0 — N 7,0 — M. G. 402. $\mathbf{C}_{27}\mathbf{H}_{34}\mathbf{ON}_{2}$ 1) α -Oxy-4', 42-Di[Diäthylamido] triphenylmethan. (2HCl, ZnCl_2 +2H₂O), H_2SO_4 , Oxalat (B. 14, 2521; A. 217, 262; J. 1884, 760). — II, 1085. C 77,5 — H 8,1 — O 7,6 — N 6,7 — M. G. 418. $\mathbf{C}_{27}\mathbf{H}_{34}\mathbf{O}_{2}\mathbf{N}_{2}$ 1) α -Oxy-3'-Oxy-4²,4³-Di[Diäthylamido] triphenylmethan (A. 294, 377). 1) Methylhydrastisoamylimid. (2 HCl, PtCl₄) (B. 23, 2905). — II, 2053. C 67,2 — H 7,1 — O 19,9 — N 5,8 — M. G. 482.

1) Lycaconitin + 2H₂O. Sm. 111—114°. (2 HCl, PtCl₄) (HCl, AuCl₃), HNO₃ + 2H₂O (J. 1884, 1394). — III, 776.

2) Myoctonin + 5H₂O. Sm. 143,5—144° (J. 1884, 1394). — III, 776. $\mathbf{C}_{27}\mathbf{H}_{34}\mathbf{O}_{5}\mathbf{N}_{2}$ $C_{27}H_{34}O_6N_2$ 1) Jodäthylat d. 3,5-Di[4-Isopropylbenzyl]pyridin. Sm. 168-1690 $\mathbf{C}_{27}\mathbf{H}_{34}\mathbf{NJ}$ (A. **280**, 65). — **IV**, 458. C 66,9 — H 7,4 — O 19,8 — N 5,8 — M. G. 484. $C_{27}H_{36}O_6N_2$ Methylhydrastisoamylamid. Sm. 171° (B. 23, 2906). — II, 2053.
 C 82,9 — H 9,4 — O 4,1 — N 3,6 — M. G. 391.
 Phenylamidoformiat d. Oxycampherpinakonan. Sm. 161° (B. 27, $\mathbf{C}_{27}\mathbf{H}_{37}\mathbf{O}_{2}\mathbf{N}$ 2350; A. 292, 15). $\begin{array}{c} \textbf{C}_{27}\textbf{H}_{38}\textbf{O}_2\textbf{Br}_2 & \textbf{1} & \textbf{Dibromoxycholestenon?} & (\text{oder } \textbf{C}_{27}\textbf{H}_{40}\textbf{O}_2\textbf{Br}_2). & \text{Sm. } 167-168^{\circ} \\ \textbf{M. 17}, & 588). \\ \textbf{C}_{27}\textbf{H}_{39}\textbf{O}_5\textbf{N}_3 & \textbf{C} & 66,8 & \textbf{H} & 8,0 & \textbf{O} & 16,5 & \textbf{N} & 8,7 & \textbf{M}. & \textbf{G}. & 485. \\ & & \textbf{1}) & \textbf{Pikrorocellin.} & \text{Sm. } 192-194^{\circ} & (\textbf{A. 185}, & 14). & \textbf{II}, & 1752. \\ \textbf{C}_{27}\textbf{H}_{39}\textbf{O}_5\textbf{N}_5 & \textbf{C} & 63,1 & \textbf{H} & 7,6 & \textbf{O} & 15,6 & \textbf{N} & 13,6 & \textbf{M}. & \textbf{G}. & 513. \\ \end{array}$ 1) Paucin $+ \frac{61}{2} \text{H}_2\text{O}$. Sm. 126° . $2\text{HCl} + 6\text{H}_2\text{O}$, $(2\text{HCl}, \text{PtCl}_4 + 6\text{H}_2\text{O})$ (C. (B. 19, 760). — IV, 1295. 1) Oxycholesterylendibromid. Sm. 91-92° u. Zers. (M. 17, 597). $\mathbf{C}_{27}\mathbf{H}_{40}\mathbf{OBr}_{2}$ 1) Oxychlorcholesten. Sm. 121—122° (M. 17, 599). $\mathbf{C}_{27}\mathbf{H}_{41}\mathbf{OCl}$ $\mathbf{C}_{27}\mathbf{H}_{41}\mathbf{OCl}_{13}$ 1) Verbindung (aus Cerylalkohol) (A. 67, 206). — I, 241. $\mathbf{C}_{27}\mathbf{H}_{42}\mathbf{ON}_2$ C 79,0 — H 10,2 — O 3,9 — N 6,8 — M. G. 410. 1) 6-Oxy-2-Heptadekyl-4-Phenyl-1, 3-Diazin. Sm. 1170 (Pinner, Imidoäther 234). — IV, 986. 1) Cevin. Sm. 145°. (HJ, HgJ_2) (Soc. 33, 338). — III, 949. Cevin. Sm. 146°. (HJ, HgJ₂) (80c. 33, 338). — III, 94:
 Dichlorcholesterindichlorid (M. 15, 103). — II, 1072.
 Sitosterindibromid. Sm. 98° u. Zers. (M. 18, 556).
 C 63,4 — H 8,8 — O 25,0 — N 2,7 — M. G. 511.
 Sabadinin. HCl, (HCl, AuCl₃), H₂SO₄ + 3H₂O. — III, 8
 Cholesterindichlorid + H₂O (M. 15, 101). — II, 1072.
 Cholesterindibromid. Sm. 109° (H. 22, 408).
 C 75,4 — H 10,7 — O 7,4 — N 6,5 — M. G. 430.
 S. Stornyl. 24. Dimethylphony $\mathbf{C}_{27}\mathbf{H}_{44}\mathbf{OCl}_4$ $\mathbf{C}_{27}\mathbf{H}_{44}\mathbf{OBr}_{2}$ $\mathbf{C}_{27}\mathbf{H}_{45}\mathbf{O}_{8}\mathbf{N}$ $\mathbf{C}_{27}\mathbf{H}_{46}\mathbf{OCl}_2$ $\mathbf{C}_{27}\mathbf{H}_{46}\mathbf{OBr}_{2}$ $\mathbf{C}_{27}\mathbf{H}_{46}\mathbf{O}_2\mathbf{N}_2$ 1) s - Stearyl - 2,4 - Dimethylphenylharnstoff. Sm. 92-93° (Soc. 69, 1601). C 70,1 — H 10,0 — O 13,8 — N 6,1 — M. G. 462.

1) Delphisin (J. 1877, 897). — III, 880.

1) α-Seymnolschwefelsäure. Na, Ba + 2C₂H₆O (H. 24, 335).

1) Bromcerotinsäure. Sm. 65—66° (Bl. [3] 7, 111). — I, 489.

2) Aethylester d. α-Bromcerotinsäure. Sm. 46,5° (C. 1896 [1] 642). $\mathbf{C}_{27}\mathbf{H}_{46}\mathbf{O}_4\mathbf{N}_2$ $C_{27}H_{46}O_8S$

C 79.2 - H 13.4 - O 3.9 - N 3.4 - M. G. 409. $\mathbf{C}_{27}\mathbf{H}_{55}\mathbf{ON}$

1) Oxim d. Myriston. Sm. 51° (47-48°) (M. 5, 242; Soc. 63, 458). —

1) Cerylschwefelsäure. Na, Ca, Ba (C. 1897 [1] 1037). C27H56O4S

C_{27} -Gruppe mit vier Elementen.

1) 2,2-Di[?-Chlornaphtyl]amid d. Benzolcarbonsäure. Sm. 2030 $\mathbf{C}_{27}\mathbf{H}_{17}\mathbf{ONCl}_{2}$ (B. 17, 1593). — II, 1168.

C27 H17 ONS 1) Benzoylthio-2-Dinaphtylamin. Sm. 196-197° (B. 23, 2459). — II, 1180.

 Phenylester d. Thio-β-Dinaphtylamidoameisensäure. Sm. 215° C,7H,7O,NS (B. **24**, 2916). — II, 869.

1) Benzoat d. 5-Chlor-6-Oxy-2, 3-Diphenyl-1, 4-Benzdiazin. Sm. C, H, O, N, Cl 192° (C. 1895 [1] 855).

1) α -Phenyl- β -[Thio- β -Dinaphtyl]harnstoff. Zers. bei 215—220° (B. 24, 2917). — II, 870. 1) Bromderivat d. Verbindung $\mathbf{C}_{27}\mathbf{H}_{20}\mathbf{O}_{2}\mathbf{N}_{4}$. Sm. 154° (B. 26, 1188). C27H18ON2S

 $\mathbf{C}_{27}\mathbf{H}_{19}\mathbf{O}_{2}\mathbf{N}_{4}\mathbf{Br}$ **– IV**, 1225. $\mathbf{C}_{27}\mathbf{H}_{20}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{S}$ 1) $\alpha \beta$ -Dibenzoyl- $\alpha \beta$ -Diphenylthioharnstoff. Sm. 160,5° (B. 28, 1322).

2) s-Di[4-Benzoylphenyl]thioharnstoff. Sm. 166° (A. 210, 273; B. **14**, 1839). — **III**, 184. 1) Tri[Benzoylamid] d. Benzol-1, 3, 5-Trisulfonsäure. Na₈, Ba₃ + C27 H21 O2 N3 S3

 $12 H_2 O (Am. 9, 343)$. — II, 1174. $\mathbf{C}_{27}\mathbf{H}_{22}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{S}_{2}$ 1) Benzaldehydphtalimidomerkaptal. Sm. 155—156° (B. 25, 3053)

 $C_{27}H_{24}ON_4S$ 1) $\alpha\beta$ -Diphenyl- α -[2-Phenylthioureidobenzyl]harnstoff. Sm. 222° (J. pr. [2] 55, 244). - IV, 635.

 $\mathbf{C}_{27}\mathbf{H}_{24}\mathbf{O}_{3}\mathbf{N}_{2}\mathbf{S}$ 1) Benzaldehyd-l-Naphtylthionaminsaures l-Amidonaphtalin. Sm. 84° (A. **274**, 255). — III, 7.

1) $\alpha\beta$ -Diphenyl- $\alpha\beta$ -Di[4-Methylphenylsulfon]harnstoff. Sm. 210° C,7H,4O,N,S, (J. pr. [2] 51, 350).

 $\mathbf{C}_{27}\mathbf{H}_{24}\mathbf{O}_{8}\mathbf{N}_{2}\mathbf{Br}_{2}$ 1) 5 oder 6-Methyl-2-[?-Brom-3,4-Dimethoxylphenyl]-1-[?-Brom-3,4-Dimethoxylbenzyl] benzimidazol- $1^2,2^2$ -Dicarbonsäure. Sm. 213° u. Zers. (B. **25**, 1988). — IV, 619.

1) Di[4-Methylphenylamid] d. Phenylphosphorsäure-2-Carbon- $C_{27}H_{25}O_4N_9P$ säurephenylester. Sm. 146° (B. 31, 2178).

1) α -[1-Naphtylamido]- β -[α -Bromisovaleryl-1-Naphtylamido] äthan. C27H27ON2Br Sm. 223° (B. 31, 3247).

1) Tri[3, 6-Dibrom-4-Oxy-2, 5-Dimethylbenzyl]amin. Sm. 218—219° $\mathbf{C}_{27}\mathbf{H}_{27}\mathbf{O}_{3}\mathbf{N}\mathbf{Br}_{6}$ (223–224°). HBr (B. 29, 1110; A. 301, 278). 1) **2-Nitrochlorbenzyl**at d. Papaverin $+4(6 \text{ u. 9})\text{H}_2\text{O}$. $2+\text{PtCl}_4$ (M.

 $\mathbf{C}_{27}\mathbf{H}_{27}\mathbf{O}_{6}\mathbf{N}_{2}\mathbf{C}\mathbf{I}$ **9**, 857). — **IV**, 441. 1) Trinitrotrimethyltribenzyl-R-Trimethylentrisulfon. Zers. oberh. $\mathbf{C}_{27}\mathbf{H}_{27}\mathbf{O}_{12}\mathbf{N}_{3}\mathbf{S}_{3}$

C₉₇H₉₈O₄NCl

132° (B. 27, 1677). — III, 145.

1) Chlorbenzylat d. Papaverin + 7H₂O. 2 + PtCl₄ (B. 18, 1578; M. 9, 330; J. 1886, 1718; J. pr. [2] 56, 323). — IV, 441.

1) Brommethylat d. Benzoyleinehonin (Bl. [3] 9, 714). — III, 835.

1) Jodmethylat d. Benzoyleinehonin (Bl. [3] 9, 714). — III, 835. $\mathbf{C}_{27}\mathbf{H}_{29}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{Br}$ $\mathbf{C}_{27}\mathbf{H}_{29}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{J}$

1) Tri[Phenylamido]-2,4,5-Trimethylphenylphosphoniumchlorid. $\mathbf{C}_{27}\mathbf{H}_{29}\mathbf{N}_{3}\mathbf{ClP}$ Sm. 247° (A. 294, 11). — IV, 1678.

1) Tri[Phenylamido]-2,4,5-Trimethylphenylphosphoniumbromid. $\mathbf{C}_{27}\mathbf{H}_{29}\mathbf{N}_{3}\mathbf{BrP}$

Sm. 259° (A. 294, 13). — IV, 1678.

1) Tri [Phenylamido] - 2, 4, 5 - Trimethylphenylphosphoniumjodid. Sm. 220° (A. 294, 13). — IV, 1678.

1) Tri [Phenylamido] - 2, 4, 5 - Trimethylphenylphosphoniumhydrat. C₂₇H₂₉N₃JP $\mathbf{C}_{27}\mathbf{H}_{30}\mathbf{ON}_{3}\mathbf{P}$

Sm. 203,5°. Salze siehe (A. 294, 11). - IV, 1678. 2) Tri[1,2,3,4-Tetrahydro-1-Chinolyl]phosphinoxyd. Sm. 90-91°

(B. **31**, 1039). — **IV**, 1683. 1) Jodäthylat d. Benzoylcodein $+ \frac{1}{2}H_2O$ (Soc. 28, 15, 321). -

III, 906. 1) Jodallylat d. Allylhydrastin. Sm. 180° (A. 271, 351). — II, 2054. $\mathbf{C}_{27}\mathbf{H}_{30}\mathbf{O}_{6}\mathbf{NJ}$

 $\mathbf{C}_{27}\mathbf{H}_{30}\mathbf{O}_{4}\mathbf{NJ}$

 $\cdot \mathbf{C}_{27}\mathbf{H}_{42}\mathbf{ON}_{2}\mathbf{Br}_{2}$

C27 H44 O2 NC1

 $\mathbf{C}_{27}\mathbf{H}_{45}\mathbf{O}_{6}\mathbf{NS}$

 $\mathbf{C}_{27}\mathbf{H}_{46}\mathbf{ON}_{2}\mathbf{S}$

1) Phenylamid d. Phosphorsäuretri [α-Oxypropionsäure]. Sm. 2050 ${}^{t}C_{97}H_{80}O_{7}N_{3}P$ (A. 279, 81). 2) 2-Methylphenylamid d. Phosphorsäuretri Oxyessigsäure]. 143º (A. 279, 61). 3) 4-Methylphenylamid d. Phosphorsäuretri [Oxyessigsäure]. 188° (A. **279**, 65). 4) Phosphat d. β -Aethylbenzhydroxamsäure. Sm. 130—131° (B. 25, 40; 26, 1566). — II, 1198. 1) Alloxanbrucindisulfit + 1¹/₂ H₂O (A. 248, 150). — III, 946. 1) Verbindung (aus Cincholoiponsäure) (M. 17, 375). — III, 842. $\begin{array}{c} {}^{\mathbf{C}_{27}\mathbf{H}_{30}\mathbf{O}_{11}\mathbf{N}_{4}\mathbf{S}} \\ {}^{\mathbf{C}_{27}\mathbf{H}_{30}\mathbf{N}_{3}\mathbf{Cl}_{11}\mathbf{P}_{5}} \\ {}^{\mathbf{C}_{27}\mathbf{H}_{30}\mathbf{N}_{3}\mathbf{SP}} \end{array}$ 1) Tri[1,2,3,4-Tetrahydro-1-Chinolyl]phosphinsulfid. Sm. 1920 (B. **31**, 1039). — **IV**, 1683. $^{4}C_{27}H_{31}O_{2}N_{2}Cl$ 1) Chlorbenzylat d. Chinin. (HCl, PtCl₄ + H_2O) (G. 13, 530). -III, 814. 2) Chlorbenzylat d. Conchinin. Sm. 190-195°. (HCl, PtCl₄) (A. 269, 235). — III, *825*. 1) 3,3'-Di[Diäthylamido]phenolsacchareïn. Sm. 243° (Bl. [3] 17, 697).
1) Jodallylat d. Allylhydrastimid. Sm. 207° (B. 23, 2913). C27H31O3N3S $C_{27}H_{31}O_5N_2J$ II, 2054. 1) 2,5-Dichlorphenyldi [4-Diäthylamido-2-Oxyphenyl] methan (A. C₂₇H₃₂O₂N₂Cl₂ **299**, 356). ${}^{\cdot}C_{27}H_{32}O_{3}N_{2}S$ 1) Diäthylanilinsulfonphtalein (Am. 20, 129). $\mathbf{C}_{27}\mathbf{H}_{32}\mathbf{O}_{5}\mathbf{N}_{2}\mathbf{J}_{2}$ 1) Di[Jodmethylat] d. Dioxybenzylcinchotenin. Sm. 205° u. Zers. $+3\frac{1}{2}H_2O$ (Sm. 198° u. Zers.) (A. 269, 246). — III, 842. 1) Oreinchininsulfat $+2H_2O$ (A. 130, 33; 134, 290; 138, 77). — $C_{27}H_{32}O_7N_2S$ III, 813. 1) Patentblau. $Mg + 3H_2O$, CaOH (A. 294, 376; B. 29, 2290; Bl. [3] $C_{27}H_{32}O_7N_2S_2$ **13**, 905). $\mathbf{C}_{27}\mathbf{H}_{32}\mathbf{O}_{13}\mathbf{NCl}$ 1) Chlornitrophillyrin (A. 118, 128). — III, 600. $\mathbf{C}_{27}\mathbf{H}_{32}\mathbf{O}_{13}\mathbf{NBr}$ 1) Bromnitrophillyrin (A. 118, 128). — III, 600. $\mathbf{C}_{27}\mathbf{H}_{33}\mathbf{ON}_{2}\mathbf{Cl}$ 1) α-Oxy-4-Chlor-4', 42-Di [Diäthylamido] triphenylmethan. Sm. 120 bis 121° (B. 19, 745). — II, 1086. $C_{27}H_{88}O_6N_6P$ 1) Phosphortrihydrobrenztraubensäurephenylhydrazid. Sm. 132° (B. 21, 2921). — IV, 689. Verbindung (aus β -Phenylakrylsäurealdehyd u. 5-Thionylamido-1,2,4-Trimethylbenzol). Sm. 68° (A. 274, 238). — III, 59. $C_{27}H_{34}O_3N_2S$ $C_{27}H_{34}O_4N_2S$ 1) 3'-Oxy-42,43-Di[Diathylamido]triphenylmethan-4'-Sulfonsäure (A. **294**, 385). 1) 3'-Amido-42, 43-Di[Diäthylamido] triphenylmethan-41-Sulfon- ${}^{\mathsf{C}}_{27}\mathbf{H}_{35}\mathbf{O}_{3}\mathbf{N}_{3}\mathbf{S}$ säure (A. 294, 383). - IV, 1196. $\mathbf{C}_{27}\mathbf{H}_{36}\mathbf{ON}_{3}\mathbf{J}$ 1) Jodmethylat - α - Methyläther d. α-Oxytri[? - Dimethylamidophenyl]methan (B. 28 [2] 179). Jodäthylat d. Dibutyrylmorphin (Soc. 28, 322). — III, 899.
 Jodäthylat d. Narceïnäthylester. Sm. 131—132° (A. 277, 41). — $C_{27}H_{86}O_5NJ$ $\mathbf{C}_{27}\mathbf{H}_{36}\mathbf{O}_{8}\mathbf{NJ}$ II, 2080. $\mathbf{C}_{27}\mathbf{H}_{38}\mathbf{O}_{9}\mathbf{N}_{6}\mathbf{Br}_{2}$ 1) Di[Bromäthylat] d. Diäthyltetranitrodihydrocinchonin (J. pr. [2]

C₂₇-Gruppe mit fünf Elementen.

1) Hyotaurocholsäure (A. 70, 187). — I, 1181.

1) s-Stearyl-2,4-Dimethylphenylthioharnstoff.

1) Di[Bromäthylat] d. Diäthylhydrocinchonin (J. pr. [2] 8, 306). —

1) Nitrocholesterylchlorid. Sm. 148-1490 (B. 12, 225; M. 15, 105;

Sm. 71—72° (Soc.

8, 307). — III, 836.

17, 46). — **II**, 1074.

III, 836.

69, 1601).

 $\mathbf{C}_{27}\mathbf{H}_{18}\mathbf{O}_{6}\mathbf{N}_{3}\mathbf{Cl}_{3}\mathbf{S}_{3}$ 1) Verbindung (aus d. Tri[Benzoylamid] d. 1,3,5-Benzoltrisulfonsäure) (Am. 9, 345). — II, 1175. $\mathbf{C}_{27}\mathbf{H}_{46}\mathbf{O}_{10}\mathbf{N}_{8}\mathbf{Br}_{2}\mathbf{S}_{x}$ 1) Verbindung (aus Seide) (J. 1879, 871). — IV, 1585.

C₂₈-Gruppe mit einem Element.

C 94,9 — H 5,1 — M. G. 354. 1) 9,9'-Bianthryl. Sm. 300° (B. 18, 3035; 20, 1855; 21, 2512). — II, 303. $\mathbf{C}_{28}\mathbf{H}_{18}$ C 94,5 — H 4,5 — M. G. 356. $C_{28}H_{20}$

1) Paranthracen. Sm. 272-274° (244°) (Z. 1867, 290; A. Spl. 7, 264; J. pr. [2] 9, 248; [2] 44, 467; Am. 14, 599; 17, 658). — II, 259. C 93,9 — H 6,1 — M. G. 358.

1) Tetrahydro-9,9'-Bianthryl. Sm. 248—249° (B. 21, 2512). — II, 303. C 93,3 — H 6,7 — M. G. 360.

1) 9,9-Dibenzyl-9,10-Dihydroanthracen. Sm. 115° (B. 21, 2509). C 92,8 — H 7,2 — M. G. 362.

1) αβγδ-Tetraphenylbutan. Fl. (C. 1898 [2] 284).

2) $\alpha \alpha \alpha \beta$ -Tetraphenyl- β -Methylpropan. Sd. 272° (J. pr. [2] 41, 524). — II, 301.

3) Kohlenwasserstoff (aus d. Pinakolin C₂₈H₂₄O). Sm. 213—213,5° (A. 189, 119). — II, 301. C 90,3 — H 9,7

C 90,3 — H 9,7 — M. G. 372. 1) Kohlenwasserstoff (aus Santonin). Sm. 93° (B. 26, 2507). C 88,5 — H 11,5 — M. G. 380.

1) Kohlenwasserstoff (aus Cholesterin). Sd. 240° (A. 76, 368). C 85,3 — H 14,7 — M. G. 394.

1) Oktokosan (B. 16, 391).

 $\mathbf{C}_{28}\mathbf{H}_{22}$

 $C_{28}H_{24}$

 $\mathbf{C}_{28}\mathbf{H}_{26}$

 $C_{28}H_{36}$

 $C_{28}H_{44}$

 $\mathbf{C}_{28}\mathbf{H}_{58}$

 $C_{28}H_{14}O_{6}$

 $\mathbf{C}_{28}\mathbf{H}_{16}\mathsf{O}_{6}$

 $\mathbf{C}_{28}\mathbf{H}_{16}\mathbf{O}_7$

 $\mathbf{C}_{28}\mathbf{H}_{16}\mathbf{O}_{8}$

 $C_{28}H_{16}N_2$

C₂₈-Gruppe mit zwei Elementen.

 $\mathbf{C}_{28}\mathbf{H}_{10}\mathbf{O}_{15}$ C 57,3 — H 1,7 — O 40,9 — M. G. 586. 1) Graphitoxyd + $\frac{1}{2}$ H₂O (Am. ch. [6] 20, 23). — II, 2021.

1) Hexachlor-9,9'-Bianthryl. Sm. 308-310° (B. 21, 1183). — II, 304. $\mathbf{C}_{28}\mathbf{H}_{12}\mathbf{Cl}_{6}$ $\mathbf{C}_{28}\mathbf{H}_{14}\mathbf{O}_{5}$

C 78,2 — H 3,2 — O 18,6 — M. G. 430. 1) Verbindung (aus d. Verb. $C_{28}H_{14}O_{7}$) (Soc. 53, 838). — III, 416. C 75,3 — H 3,1 — O 21,5 — M. G. 446.

1) Verbindung (aus 9,10-Anthrachinon-2-Sulfonsäure). Sm. oberh. 300° (B. 18, 1724; Soc. 53, 836). — III, 415. C 72,7 — H 3,0 — O 24,3 — M. G. 462. 1) Verbindung (aus d. Verb. C₂₈H₁₄O₆) (Soc. 53, 834). — III, 415. C 91,3 — H 4,3 — O 4,3 — M. G. 368.

 $C_{28}H_{14}O_7$ $\mathbf{C}_{28}\mathbf{H}_{16}\mathbf{O}$

1) Tetraphenylenfuran. Sm. 295—297° (Soc. 63, 772; 71, 1120). — II, 1000. C 84,0 — H 4,0 — O 12,0 — M. G. 400. C28H16O3 1) α -Naphtofluoran (α -Naphtolphtaleïn). Sm. 300° (B. 4, 661; 26, 207).

— II, 1989.

2) β-Naphtofluoran (β-Naphtolphtaleïn). Sm. 293° (B. 26, 206). — II, 1989. C 75,0 — H 3,6 — O 21,4 — M. G. 448.

1) Dibenzoat d. 1,2-Dioxy-9,10-Anthrachinon. — III, 422.

2) Dibenzoat d. 2,6-Dioxy-9,10-Anthrachinon. Sm. 275° (J. 1873, 450). **- III**, 430.

C 72,4 — H 3,4 — O 24,1 — M. G. 464.

1) Dibenzoat d. 1,2,6-Trioxy-9,10-Naphtochinon. Sm. 208-210° (B. 10, 1822). — III, 435. C 70,0 — H 3,3 — O 26,7 — M. G. 480.

1) Tetrasalicylid (siehe auch C₂₈H₁₈O₉). Sm. 260—261° (A. 273, 77; B. 25, 3507). **— II**, *1498*.

2) Verbindung (aus Benzaldehyd u. Gallussäure) (B. 31, 151).
 C 88,4 — H 4,2 — N 7,4 — M. G. 380.

1) Diphenanthrylenazotid. subl.; Sm. oberh. 400° (M. 1, 159; J. pr. [2] 41, 335; Soc. 49, 845; 55, 109). — III, 444.
2) Chrysonaphtazin (B. 20, 2443). — IV, 1096.
1) P-Dichlor-9,9'-Bianthryl (B. 21, 2513). — II, 303.
1) Dekachloroktohydro-9,9'-Bianthryl. Zers. bei 80° (B. 21, 1183). —

 $\mathbf{C}_{28}\mathbf{H}_{16}\mathbf{Cl}_2$ $\mathbf{C}_{28}\mathbf{H}_{16}\mathbf{Cl}_{10}$ II, 303.

1) P-Dibrom-9,9'-Bianthryl. Sm. oberh. 300° (B. 20, 1855; 21, 2513). $\mathbf{C}_{28}\mathbf{H}_{16}\mathbf{Br}_{2}$ **- II**, 304.

1) Dekabromoktohydro-9,9'-Bianthryl. Sm. 156-160° u. Zers. (B. 21, $C_{28}H_{16}Br_{10}$ 1184). — II, 304.

C 90.8 - H 4.9 - O 4.3 - M. G. 370. $\mathbf{C}_{28}\mathbf{H}_{18}\mathbf{O}$

1) 9,9'-Diphenanthryläther (β-Phenanthryloxyd). Sm. 210°. Pikrat (Soc. **71**, 1119).

 $C_{28}H_{18}O_3$ C 83,6 - H 4,5 - O 11,9 - M. G. 402.

1) 9-Oxy-9,9'-Bi[10-Keto-9,10-Dihydrophenanthryl]. Sm. 155° (156 bis 157°) (Soc. 63, 773; 71, 1121). — II, 1000. C 80,4 — H 4,3 — O 15,3 — M. G. 418. 1) \(\alpha\)-Naphtolphtalein + \(^1/2\)H₂O (B. 4, 726). — II, 1989.

C28H18O4

 $C_{28}H_{18}O_{9}$

 $C_{28}H_{19}N_{3}$

 $\mathbf{C}_{28}\mathbf{H}_{20}\mathbf{O}_{2}$

2) Phenanthrenchinhydron. Sm. 167-169° (A. 211, 69; B. 19, 1870). -III, 442.

3) Dilakton d. $\alpha \beta$ -Dioxy- $\alpha \alpha \beta \beta$ -Tetraphenyläthan- α^2 , β^2 -Dicarbonsäure. Sm. 265° (A. 291, 20).

4) Acetat d. Dihydrodiphenylenoxyanthrachinon. Sm. 180° (B. 23, 321). · III, 464.

5) Dibenzoat d. β -Dioxyanthracen (D. d. Rufol). Sm. 263° (B. 11, 1616). II, 1152. C 77,4 — H 4,1 — O 18,4 — M. G. 434.

 $\mathbf{C}_{28}\overline{\mathbf{H}_{18}}\mathbf{O}_{5}$

1) Anhydrid d. 2-Benzoylbenzol-1-Carbonsäure. Sm. 120° (B. 14, 1866; C. 1895 [2] 443). — II, 1704. C 74,7 — H 4,0 — O 21,3 — M. G. 450.

 $C_{28}H_{18}O_6$

1) 1,3-Phenylenester d. 3-Oxynaphtalin-2-Carbonsäure. Sm. 232—233° (\dot{B} , **26**, 81). — II, 1691. C 72,1 — H 3,8 — O 24,0 — M. G. 466.

 $C_{28}H_{18}O_7$ 1) Dibenzoat d. 1, 3, 7-Trioxyxanthonmonomethyläther (D. d. Gentisin).

Sm. 192° (*M.* **15**, 8). — **III**, 210. C 69,7 — H 3,7 — O 26,6 — M. G. 482.

 $\mathbf{C}_{28}\mathbf{H}_{18}\mathbf{O}_{8}$ 1) Hydrisalizarin (B. 3, 395). — III, 425.

2) 3,4,5-Tribenzoxylbenzol-1-Carbonsäure. Sm. 191—192° (A. 163, 212; **301**, 110). — **II**, 1922.

C 67,5 — H 3,6 — O 28,9 — M. G. 498.

1) Trisalicylosalicylsäure. Fl. (A. 150, 15; M. 4, 128). — II, 1498.

2) Tetrasalicylid. Sm. 205—230° (A. 163, 221; M. 4, 125). — II, 1498.

3) Tetra-4-Oxybenzoïd (A. 172, 360; B. 15, 2588). — II, 1529.

C 59,8 — H 3,2 — O 37,0 — M. G. 562. $\mathbf{C}_{28}\mathbf{H}_{18}\mathbf{O}_{13}$

1) Tetra-3,4-Dioxybenzol-1-Carbonsäure (Tetraprotokatechusäure) (B. 15, 2590). — II, 1744. C 88,0 — H 4,7 — N 7,3 — M. G. 382.

 $C_{28}H_{18}N_{2}$

 2,3-Diphenylphenanthrendiazin. Sm. 265° (B. 28, 3180). — IV, 1096.
 C 91,0 — H 5,1 — N 3,8 — M. G. 369. $\mathbf{C}_{28}\mathbf{H}_{19}\mathbf{N}$

1) Dianthracylamin (Dianthramin). Sm. noch nicht bei 320° (B. 16, 1636). · II, 639.

Di[9-Phenanthryl]amin. Sm. 237° (Soc. 71, 1124).
 C 84,6 — H 4,8 — N 10,6 — M. G. 397.

1) 1-Phenyl-3, 5-Di[1-Naphtyl]-1, 2, 4-Triazol. Sm. 75-78°? (J. pr. [2])

54, 162). — IV, 1217. 2) 1-Phenyl-3,5-Di[2-Naphtyl]-1,2,4-Triazol. Sm. bei 160° (J. pr. [2]

54, 163). — IV, 1217. 3) Tri[?-Chinolyl]methan. Sm. 202°. 3 HCl, (3 HCl, 3 PtCl₄ + 3 H₂O), Pikrat

(B. 24, 1606). — IV, 1221. 4) Phenylrosindulin. Sm. 236°. HCl + 1½H₂O, (2HCl, PtCl₄), HNO₈, H₂SO₄ + H₂O, Pikrat (B. 21, 2621; 30, 1829; 31, 2431; A. 256, 241, 352). — IV, 1206.

5) Phenylisorosindulin. Sm. 169-171°. HCl, HNO₃ (B. 29, 2754; 31, 304). — IV, 1202. C 90,3 — H 5,4 — O 4,3 — M. G. 372.

C28H20

Tetraphenylfuran(Lepiden). Sm. 175° (Z. 1867, 314; G. 19, 269).—III, 695.
 C 86,6 — H 5,1 — O 8,2 — M. G. 388.
 Dianthranol. Sm. 246—251° (Am. 18, 455).

2) αδ-Diketo-αβγδ-Tetraphenyl-β-Buten (Oxylepiden, nadelförmiges). Sm. 220° (A. 153, 131, 353; Z. 1871, 315; B. 4, 337). — III, 311.

2173 28 II. 3) Lakton d. α -Oxy- $\alpha\beta\gamma\gamma$ -Tetraphenylpropen- γ -Carbonsäure (Oxylepiden, tafelförmiges). Sm. 136° (*J. r.* 5, 16). — III, 312. $\mathbf{C}_{28}\mathbf{H}_{20}\mathbf{O}_{2}$ 4) Oxylepiden (oktaëdrisches). Sm. 232° (J. r. 5, 16; 7, 186; J. 1875, 409). - III, 312. 5) Oxyisolepiden. Sm. 161° (J. 1877, 395). — III, 312. 6) isom. Oxyisolepiden. Sm. 162° (J. 1877, 396). — III, 312. 7) isom. Oxyisolepiden. Sm. 152,5° (J. 1877, 396). — III, 312. C 83.2 - H 4.9 - O 11.9 - M. G. 404. $\mathbf{C}_{28}\mathbf{H}_{20}\mathbf{O}_{8}$ 1) Dioxylepiden. Sm. 157° (Z. 1871, 483). — III, 310. 2) Isodioxylepiden. Sm. 164° (J. 1875, 410; J. r. 7, 190). — III, 310. C 80,0 — H 4,8 — O 15,2 — M. G. 420. $C_{28}H_{20}O_4$ Dibenzoat d. αβ-Dioxy-αβ-Diphenyläthen (Isobenzil). Sm. 159° (A. 135, 172; 155, 104; B. 16, 994; 19, 1862; 24, 1265, 1276).
 α-Dibenzoat d. αβ-Di[2-Oxyphenyl]äthen. Sm. 107—108° (B. 24, 3179). **- II**, 1152. 3) β -Dibenzoat d. $\alpha\beta$ -Di[2-Oxyphenyl] athen. Sm. 174° (A. 277, 356). **- II**, 1152. 4) Dibenzoat d. $\alpha\beta$ -Di[3-Oxyphenyl]äthen. Sm. 160° (A. 277, 359). — II, 1152. 5) Dibenzoat d. $\alpha\beta$ -Di[4-Oxyphenyl]äthen. Sm. 238° (A. 277, 360). — II, 1152. 6) Inn. Anhydrid d. α-Oxydiphenylessigsäure (Benzilid). Sm. 196° (B. **22**, 1213). — **II**, *1697*. C 77,1 — H 4,6 — O 18,3 — M. G. 436. C28 H20 O5 1) Dibenzoat d. ?-Dioxy-?-Methyldiphenylketon (D. d. Benzomethylresorcin). Sm. 149° (B. 28, 2306 Anm.). — III, 216. C 74,3 — H 4,4 — O 21,2 — M. G. 452. $\mathbf{C}_{28}\mathbf{H}_{20}\mathbf{O}_{6}$ 1) Dibenzoat d. Cotoïn (D. d. 2,4,6-Trioxydiphenylketonmonomethyläther). Sm. 134—135° (A. 282, 194). — III, 203. 2) Tribenzoat d. 2,4,6-Trioxy-1-Methylbenzol. Sm.111—112° (A. 302, 179). C 71,7 — H 4,3 — O 23,9 — M. G. 468. 1) 1,3,5-Tribenzoat d. 1,2,3,5-Tetraoxybenzol-2-Methyläther. Fl. $C_{28}H_{20}O_7$ (B. **26**, 2025). — II, 1152. C 65,1 — H 3,9 — O 31,0 — M. G. 516. $C_{28}H_{20}O_{10}$ 1) Anhydrid d. Kinoroth (B. 11, 1881). — III, 687. 2) Tetracetat d. Cörulin. Sm. 256° (A. 209, 276). — II, 2088. C 63,2 — H 3,7 — O 33,1 — M. G. 532. $\mathbf{C}_{28}\mathbf{H}_{20}\mathbf{O}_{11}$ 1) Tetracetat d. Hydrogallein. Sm. 247—248° (A. 209, 263). — II, 2093. C 87,5 — H 5,2 — N 7,3 — M. G. 384. $\mathbf{C}_{28}\mathbf{H}_{20}\mathbf{N}_2$ 1) P-Diamidobianthryl. Sm. 307—3090 u. Zers. Pikrat (B. 20, 2433). — IV, 1095. 2) Tetraphenyl-1,4-Diazin (Amaron; Benzoïnimid; Ditolanazotid). Sm. 245 bis 246° (*Berx. J.* 25, 635; *A.* 135, 185; *B.* 21, 489, 1269; 22, 2302; 26, 1973; 28, 3180; *Soc.* 49, 826; 71, 35, 527, 531; *J. pr.* [2] 41, 333; [2] 52, 125). — III, 37; IV, 1095. 3) Nitril d. $\alpha \alpha \beta \beta$ -Tetraphenyläthan- $\alpha \beta$ -Dicarbonsäure (B. 22, 1227; A. 233, 349; 250, 148). — II, 1916. C 81,6 — H 4,8 — N 13,6 — M. G. 412. $C_{28}H_{20}N_4$ 1) 9-Amido-5-Phenylrosindulin[5]. Sm. 147° u. Zers. (A. 272, 320). — IV, 1296. 2) 5-p-Amidophenylrosindulin[5]. (2HCl, PtCl₄), H₂SO₄ (B. 31, 2432). 3) 2-Phenylamidorosindulin[9]. 2HCl, (2HCl, PtCl₄) (A. 272, 325). 4) 9-p-Amidophenylrosindulin[9]. Sm. 247° (B. 23, 840). — IV, 1202. 5) 10-Phenylamidorosindulin[9]. Sm. 151-152° u. Zers. HCl (B. 29, 2757). — IV, 1297., C 76,4 — H 4,5 — N 19,1 — M. G. 440. $C_{28}H_{20}N_6$ 1) 1,5,1',5'-Tetraphenyl-3,3'-Bi-1,2,4-Triazol. Sm. 257-258° (B. 22, α α β γ δδ-Hexachlor-α β γ δ-Tetraphenylbutan (Ditolanhexachlorid). Sm. 150° (B. 4, 379; A. 248, 28). — II, 272.
 Tetraphenylthiophen (Thiolepidin; Thionessal). Sm. 184° (A. 52, 354; 136, 94; 140, 239; 144, 192; 153, 349; 178, 376; B. 23, 2473; 24, 3311). — III, 750. 3115). — IV, 1332. C28H20Cl6

C28 H20 S

 $\mathbf{C}_{28}\mathbf{H}_{20}\mathbf{S}$ $\mathbf{C}_{28}\mathbf{H}_{21}\mathbf{N}$

- 2) Verbindung (aus Stilben). Sm. 240-250° (B. 24, 3312). III, 751.
 - C 90,6 H 5,6 N 3,8 M. G. 371.

 1) 1,2,3,5-Tetraphenylpyrrol. Sm. 196-197° (Soc. 57, 646). IV, 474. 2) 2, 3, 4, 5-Tetraphenylpyrrol. Sm. 214,5° (211-212°) (B. 21, 3107; 22,

855; A. **269**, 121). — **IV**, 478. C 84,2 — H 5,3 — N 10,5 — M. G. 399.

 $C_{28}H_{21}N_{3}$

1) 1,4-Diphenylimido-2-Phenylamido-1,4-Dihydronaphtalin. Sm. 159°. 1,4-Dipliedy final course 1,4-Diplied for 1

2) ms-Aethyldinaphtophenylaposafranin. HCl 31, 2487).

3) Verbindung (aus Hydrobenzamid). subl. bei 300° (A. 111, 153). — III, 21.

4) Verbindung (aus α-Naphtalinazosalicylsäure). Sm. 1970 (A. 251, 196). **– IV**, 1470.

5) Verbindung (aus β -Naphtalinazosalicylsäure). Sm. 236° (A. 251, 196). — IV, 1470. C 90,8 — H 5,9 — O 4,3 — M. G. 374.

C28 H29 O

- 1) 10-Keto-9, 9-Dibenzyl-9, 10-Dihydroanthracen. Sm. 217° (B. 21, 2509). **- III**, 266.
- 2) 10-Keto-9,9-Di[4-Methylphenyl]-9,10-Dihydroanthracen. Sm. 2350 (Bl. [3] **15**, 392; [3] **17**, 985).

3) 10-Keto-3-Methyl-9-Phenyl-9-[4-Methylphenyl]-9,10-Dihydro-Sm. 176° (Bl. [3] 15, 392; [3] 17, 987). anthracen.

4) α -Keto- $\beta \gamma$ -Diphenyl- α -Fluorenylpropan. Sm. 149—150° (B. 21, 1342). - III, 266.

5) Verbindung (aus d. Aethylester d. Anhydrodibenzilacetessigsäure). Sm. 187—188° (Soc. 69, 744).

isom. Verbindung (aus d. Aethylester d. Anhydrodibenzilacetessigsäure).
 Sm. 155—159° (Soc. 69, 746).

 $C_{28}H_{22}O_2$

C 86,1 - H 5,6 - O 38,2 - M.G. 390.1) $\alpha \delta$ -Diketo- $\alpha \beta \gamma \delta$ -Tetraphenylbutan (Bidesyl; Hydrooxylepiden). Sm. 260-261° (254-255°) (J. 1875, 409; J. r. 7, 188; B. 21, 1356; 22, 553, 855; A. 289, 327). — III, 309. 2) Isobidesyl. Sm. 160—161° (B. 21, 1358). — III, 310.

3) Anthrapinakon (9,9'-Dioxy-9,10 Dihydrobianthracyl). Sm. 182° u. Zers. (B. 18, 3034). — II, 1106.

4) Dibenzyläther d. 9,10-Dioxyanthracen. Sm. 220° (B. 18, 3038). — II, 1000.

5) Verbindung (aus d. Aethylester d. Anhydrodibenzilacetessigsäure). Sm. 221° (Soc. 69, 744). C 82,7 — H 5,4 — O 11,8 — M. G. 406. I) Benzoïnäther. Sm. 157° (A. 155, 94). — III, 223.

 $\mathbf{C}_{28}\mathbf{H}_{22}\mathbf{O}_{3}$

β-Benzoyl-ααβ-Triphenylpropionsäure (Oxylepidensäure). Sm. 196° u. Zers. (J. r. 5, 18; Soc. 57, 747; J. 1877, 397). — III, 310.
 Verbindung (aus d. Anhydro-αβ-Dioxy-αβ-Diphenyläthan). Sm. 154,5

bis 155° (A. **198**, 169). — II, 1101. C 79,6 — H 5,2 — O 15,2 — M. G. 422.

 $C_{28}H_{22}O_4$

- 1) Dibenzoat d. 4,4'-Dioxy-3,3'-Dimethylbiphenyl. Sm. 185° (B. 21, 1067). — II, *993*.
- 2) Dibenzoat d. αα-Di[4-Oxyphenyl]äthan. Sm. 152° (B. 11, 286). II, 1151.
- 3) Dibenzoat d. $\alpha\beta$ -Dioxy- $\alpha\beta$ -Diphenyläthan. Sm. 247° (A. 182, 278). **- II**, 1145.
- 4) Dibenzoat d. Isohydrobenzoin. Sm. 155-156° (A. 182, 287; B. 17, 910). — II, *1145*.
- 5) ααββ-Tetraphenyläthan-αβ-Dicarbonsäure. Sm. 260—262° u. Zers.
 (B. 22, 1538). II, 1916.
 C 76,7 H 5,0 O 18,3 M. G. 438.

C28H22O5

1) Anhydrid d. α-Oxydiphenylessigsäure (Dibenzilsäure). Sm. 196° (B. **2**, 385; **22**, 1213). — II, 1697. C 71,5 — H 4,7 — O 23,8 — M. G. 470.

C28H29O7

- 1) Rhizocarpsäure (oder $C_{26}H_{20}O_6$). Sm. 177—178°. $K + H_2O$ (*J. pr.* [2] **58**, 511).
- 2) Diacetat d. Verb. $C_{24}H_{18}O_5$ (B. 10, 1469). II, 917.

 $C_{28}H_{22}O_{8}$ C 69,1 — H 4,5 — O 26,3 — M. G. 486. 1) Tetracetat d. Binaphtyldihydrochinon. Sm. 165-166° u. Zers. (B. 17, 3025). — III, 397. C 66.9 - H 4.4 - O 28.7 - M. G. 502. $\mathbf{C}_{28}\mathbf{H}_{22}\mathbf{O}_{9}$

1) Tetracetat d. Di[3,4-Dioxy-1-Naphtyl] äther. Sm. 164—165° (B. C 62.9 - H 4.1 - O 33.0 - M. G. 534.

 Kinoroth. Sm. 160—170° (B. 11, 1880). — III, 687.
 Lakton d. Eichengerbsäure (Fr. 20, 217). — III, 587.
 Tetracetat d. Gallin. Sm. 220° (A. 209, 269; B. 14, 1327). — II, 2086. C 59.4 - H 3.9 - O 36.7 - M. G. 566.

1) Thujetinsäure (J. 1858, 514). — III, 614. C 57,7 — H 3,8 — O 38,5 — M. G. 582.

 $C_{28}H_{22}O_{11}$

C28H22O13

C28H22O14

 $C_{28}H_{22}N_2$

 $C_{28}H_{22}N_4$

 $\mathbf{C}_{28}\mathbf{H}_{28}\mathbf{N}_{3}$

 $\mathbf{C}_{28}\mathbf{H}_{24}\mathbf{O}$

C28H24O2

 $C_{28}H_{24}O_{8}$

 $C_{28}H_{24}O_{12}$

 $\mathbf{C}_{28}\mathbf{H}_{24}\mathbf{O}_{13}$

C28H24O19

1) Chinaroth. Ca, Ba (A. 143, 271). — III, 586. C 87,0 — H 5,7 — N 7,2 — M. G. 386.

1) 1-Phenylamido-2, 3, 5-Triphenylpyrrol. Sm. bei 230° u. Zers. (B. 21, 551). — **IV**, 786.

2) 1, 3, 4, 6-Tetraphenyl-1, 2-Dihydro-1, 2-Diazin. Sm. 149° (Soc. 57, 647; A. 289, 325). — IV, 1082. 3) Benzyllophin. Sm. 165°. (2 HCl, PtCl₄ + 3 C₂H₆0) (Soc. 67, 39). —

4) Verbindung (aus Benzil u. 6,6'-Diamido-3,3'-Dimethylbiphenyl). Sm. 235° (B. **26**, 1705). — IV., 1095. C 81,1 — H 5,3 — N 13,5 — M. G. 414.

1) 2,7-Di[Phenylamido]-1-Phenylazobenzol? (B. 23, 528). — IV, 1397.

2) Di[Phenylhydrazon] d. Diphensuccindon. Sm. bei 260-270° u. Zers. (A. 247, 156). — IV, 786.
3) Di[Benzylidenamido]dimethyldiphenylenazon. Sm. 239° u. Zers. (B.

26, 2241). — **IV**, 1288. C 83,8 — H 5,7 — N 10,5 — M. G. 401.

1) 1, 2, 4 - Tri [Phenylamido] naphtalin. Sm. 148° (A. 256, 251) -IV, 1162.

2) Verbindung (aus Benzoïnhydrazin). Sm. 261° (J. pr. [2] 52, 126). — C 89.4 - H 6.4 - O 4.2 - M. G. 376.

1) α-Phenyl-4-Methylphenylpinakolin. Sm. 214-215° (A. 189, 108; B. 10, 1477; 11, 71). — III, 265.

2) β -Phenyl-4-Methylphenylpinakolin. Sm. 136—137° (A. 189, 110; B. 10, 1477). — III, 266. C 85.7 - H 6.1 - O 8.2 - M. G. 392.

1) Anhydrid d. Hydrobenzoin. Sm. 131-132° (A. 160, 186; 198, 158; B. **24**, 1782). — **II**, 1100. 2) Anhydrid d. Isohydrobenzoin. Sm. 101-102,50 (A. 198, 159). -

II, 1102. 3) Acetat d. α -Oxy- $\alpha \alpha \beta \beta$ -Tetraphenyläthan. Sm. 131°. — II, 1095.

C 68.8 - H 4.9 - O 26.2 - M. G. 488.1) Verbindung (aus s-Di[2,5-Dioxy-1-Methyl]biphenyl). Sm. 217 - 220° (M. 10, 180). — II, 956.

C 60.9 - H 4.3 - O 34.8 - M. G. 552.1) Eichenroth (Fr. 20, 219). — III, 587. C 59,2 - H 4,2 - O 36,6 - M. G. 568.

1) Tetracetat d. Purpurogallin. Sm. 186° (J. 1882, 683; B. 20, 1279). - III, 346.

C 50.6 - H 3.6 - O 45.8 - M. G. 664.1) Chebulinsäure $+ H_2O$ (B. 26 [2] 245). C 86.6 - H 6.2 - N 7.2 - M. G. 388.

 $\mathbf{C}_{28}\mathbf{H}_{24}\mathbf{N}_{2}$ αβ-Di[Benzylidenamido]-αβ-Diphenyläthan. Sm. 152° (164°) (B. 22, 2301; 28, 3179; A. 245, 285). — IV, 979.
 4,4'-Di[Benzylidenamido]-2,2'-Dimethylbiphenyl. Sm. 172—173° Sm. 172-1730

(B. 28, 2554). — IV, 980. 3) 1,2-Di[l-Naphtylamidomethyl]benzol. Sm. 148° (B. 31, 1158).

4) 1,4-Di[Methyl-2-Naphtylamido] benzol. Sm. 180° (B. 22, 1081). — IV, 587.

C28H26O2

 $\mathbf{C}_{28}\mathbf{H}_{26}\mathbf{O}_{3}$

 $\mathbf{C}_{28}\mathbf{H}_{26}\mathbf{O_6}$

 $C_{28}H_{26}O_7$

 $\mathbf{C}_{28}\mathbf{H}_{26}\mathbf{N}_{2}$

 $\mathbf{C}_{28}\mathbf{H}_{26}\mathbf{N}_{4}$

- $\mathbf{C}_{28}\mathbf{H}_{24}\mathbf{N}_{2}$ 5) $\alpha\beta$ -Di[4-Methylphenylimido]- $\alpha\beta$ -Diphenyläthan. Sm. 161° (M. 9, 691). - III, 284. 6) Di[Phenylbenzylmethylen]hydrazin (Benzylphenylketazin). Sm. 1640 (J. pr. [2] 52, 137). - III, 218.7) α-Dibenzilazin (Biphenylbenzylazimethylen). Sm. 161-162° (J. pr. [2] 44, 184). — III, 288.

 8) Benzylamarin. Sm. 123—124°. HCl, (2HCl, PtCl₄ + 2¹/₂H₂O), H₂Cr₂O₇, Oxalat, (Ag, HCl) (B. 13, 1418, 1419; 16, 1273; 18, 1851, 3079). — III, 24.

 9) 6-Methyl-2, 3-Diphenyl-1-[4-Methylphenyl]-1, 2-Dihydro-1, 4-Benzdiazin (B. 24, 721). — IV, 1076.

 10) Base (aus Hydrobenzamid) (A. III, 153). — III, 21.

 $\mathbf{C}_{28}\mathbf{H}_{24}\mathbf{N}_{4}$ C 80.8 - H 5.8 - N 13.4 - M. G. 416.

1) Tetraphenyltetracarbazon. Sm. 137° (A. 232, 235). - IV, 1291. 2) p-Diphenylenbisdihydrochinazolin. Sm. oberh. 300°. 2 HCl, (2 HCl,

PtCl₄) (B. **29**, 1452). — **IV**, 1306. 3) Verbindung (aus Anilin u. Glyoxal). (2 HCl, PtCl₄) (B. **11**, 831; A. **140**,

124). — II, 446. C 75,7 — H 5,4 — N 18,9 — M. G. 444. $C_{28}H_{24}N_6$ 1) 2,3,5,6-Tetra[P-Amidophenyl]-1,4-Diazin. Sm. oberh. 260° u. Zers. $4 \, \mathrm{HCl} + 5 \, \mathrm{H_2O}$, $(4 \, \mathrm{HCl}, \, \mathrm{PtCl_4} + 11 \, \mathrm{H_2O})$ (C. 1896 [1] 702). C 83,4 — H 6,2 — N 10,4 — M. G. 403.

 $C_{28}H_{25}N_3$ 1) 5-Dimethylamido-2, 4'-Di Benzylidenamido biphenyl. Sm. 146—147° (A. 303, 357). $C_{28}H_{25}N_5$

H 5,8 - N 16,2 - M. G. 431.

1.3-Di[4-Methylphenylamido]methylen-2-Phenylimido 2,3-Dihydrobenzimidazol. Sm. 187° (B. 24, 2508). — IV, 567.
 2.2-[4-Methylphenyl]imido-1,3-Di[Phenylamido]methylen-5-Methyl-2,3-Dihydrobenzimidazol. Sm. 176° (B. 24, 2522). — IV, 624.
 C. 85,3 — H. 6,6 — O. 8,1 — M. G. 394.

1) $\alpha\beta$ -Dioxy- $\alpha\beta$ -Diphenyl- $\alpha\beta$ -Di[4-Methylphenyl]äthan (Phenyltolylpinakon). Sm. 164-165° (B. 10, 1476). - II, 1106.

2) α -Desoxybenzoinpinakon. Sm. 213 $^{\circ}$ (A. 155, 62; 174, 332; J. r. 4, 353; **7**, 46). — **II**, 1106.

3) β-Desoxybenzoïnpinakon. Sm. 172° (A. 248, 9). — II, 1106.
 4) Isodesoxybenzoïnpinakon. Sm. 61° (A. 155, 98). — II, 1106.
 C 82,0 — H 6,3 — O 11,7 — M. G. 410.

1) $\alpha\beta\delta$ -Trioxy- $\alpha\beta\gamma\delta$ -Tetraphenylbutan. 8 C 78,9 — H 6,1 — O 15,0 — M. G. 426. Sm. 175° (C. 1898 [1] 1232). $\mathbf{C}_{28}\mathbf{H}_{26}\mathbf{O}_{4}$

1) $\alpha\beta\gamma\delta$ -Tetraoxy- $\alpha\beta\gamma\delta$ -Tetraphenylbutan (Benzoïnpinakon; Tetraphenylerythrit). Sm. bei 235° u. Zers. (C, 1898 [1] 1232). C28H26O5 $C^{7}6,0 - H 5,9 - 0 18,1 - M. G. 442.$

Saliretin (siehe C₁₄H₁₄O₃) (A. ch. [3] 7, 215). — II, 1109.
 α-[4-Isopropylbenzoat]-β-Aethyläther d. αβ-Dioxy-γδ-Diketo-αδ-Diphenyl-α-Buten. Sm. 108—109° (B. 27, 714). — III, 318.
 C 73,4 — H 5,7 — O 20,9 — M. G. 458.
 1,2-Phtalat d. 3,4-Dioxy-1-Allylbenzol-3-Methyläther (Pht. d. Eygenzol) (2000

Eugenol). Sm. 98,5—99° (C. 1897 [2] 275; B. 30, 1796). C 70,9 — H 5,5 — O 23,6 — M. G. 474.

1) Verbindung (aus 1,3-Dioxybenzol) (A. ch. [7] 1, 99). — II, 919. C28 H26 O12 C 60,7 - H 4,7 - O 34,6 - M. G. 554.

1) Chinovaroth (A. 79, 138; 143, 273). — III, 586. C 86,1 — H 6,7 — N 7,2 — M. G. 390. 1) 1,2-Di[Diphenylamido]-R-Tetramethylen? Sm. 50° (B. 14, 2095). — IV, 1091.

2) Base (aus d. Base $C_{28}H_{22}N_2$). Sm. 163° (B. **26**, 1705). — IV, 1091. C 80,4 — H 6,2 — N 13,4 — M. G. 418. 1) $\alpha\beta$ -Di[4-Benzylidenamidophenylamido]äthan. Sm. 226—227° (Soc.

71, 424). — IV, 587. 2) $\alpha \beta$ -Di[β -Benzyliden- α -Phenylhydrazido] äthan. Sm. 194,5° (A. 254,

126). — IV, 750. 3) $\alpha \delta$ -Di[Phenylhydrazon] - $\alpha \delta$ -Diphenylbutan. Sm. bei 180° (B. 21, 3056).

— IV, 786. 4) $\alpha\beta$ -Di[Methylphenylhydrazon]- $\alpha\beta$ -Diphenyläthan. Sm. 179—180° (A. 253, 16). - IV, 785.

 $C_{28}H_{26}N_6$ C 75,3 — H 5,8 — N 18,8 — M. G. 446.

 Di[o-Azodibenzylamin]. Sm. 230° (B. 2 C 83,0 — H 6,7 — N 10,3 — M. G. 405. Sm. 230° (B. 24, 3558; 25, 663). — IV. 1385. $\mathbf{C}_{28}\mathbf{H}_{27}\mathbf{N}_3$

1) Phenylhydrazon d. Dibenzylidentropinon. Sm. 1930 (B. 30, 735). — IV, 466. C 77,6 — H 6,2 — N 16,2 — M. G. 433.

 $C_{28}H_{27}N_5$

1) Base (aus 1,3-Di [Phenylamido] benzol u. 4-Nitroso-1-Dimethylamidobenzol).

Sm. 210—212°. + C₆H₆ (Sm. 178°) (A. 286, 205). — IV, 1285.

2) Verbindung (aus s-Bisdiphenylformamidylphenylhydrazin). α-Derivat Sm. 258—260°; β-Derivat Sm. 258—260° (B. 26, 1190). — IV, 1225.

C 88,4 — H 7,3 — O 4,2 — M. G. 380.

1) 5-Phenyl-2,3-Di[4-Isopropylphenyl]furan. Sm. 85° (B. 26, 64; A. 289, 323). — III, 695. C 73,1 — H 6,1 — O 20,8 — M. G. 460.

C28 H28 O

 $C_{28}H_{28}O_6$

 $C_{28}H_{28}O_{14}$

 $\mathbf{C}_{28}\mathbf{H}_{28}\mathbf{N}_{2}$

 $C_{28}H_{29}O_5$ $C_{28}H_{30}O_{2}$

C28 H30 O4

C28H30O5

C28H30O7

1) Triacetat d. Tri[4-Oxy-3-Methylphenyl]methan. Sm. 170° (B. 27,

 $C_{28}H_{28}O_{13}$ C 58,7 - H 4,9 - O 36,4 - M. G. 572.

Hexaacetat d. Aloïn. Sm. 140—141° (B. 23 [2] 207). — III, 618.
 C 57,1 — H 4,8 — O 38,1 — M. G. 588.

Eichenrindengerbsäure + H₂O. + 3 PbO (Fr. 20, 213). — III, 587.
 C 85,7 — H 7,1 — N 7,1 — M. G. 392.
 αβ-Di[Benzylamido]-αβ-Diphenyläthan. Sm. 153° (B. 22, 2301). —

2) αβ-Di[Phenylbenzylamido] äthan. Sm. 134—135° (C. 1898 [1] 381).

3) Tetrabenzylhydrazin? Sm. 149° (A. 257, 225). — IV, 1089.

4) Tetra[4-Methylphenyl]hydrazin. Sm. 138° u. ger. Zers. (Soc. 67, 1093). **– IV**, 805.

5) $Di[\alpha-(2)-Naphtylbutyliden]hydrazin. Sm. 130° (Bl. [3] 17, 313).$

C 80,0 - H 6,7 - N 13,3 - M. G. 420. $C_{28}H_{28}N_4$

1) p-Benzylenimid = $(C_7H_7N)_4$. Sm. 110—115°. (4HCl, 2PtCl₄) (B. 19, 1612; **28**, 1650; A. **259**, 55). — IV, 186. **2) 4**, **4'** - Di[Aethylphenylamido] azobenzol.

Sm. 178° (M. 4, 798). —

IV, $136\overline{9}$. 3) **2,2'-Di[2-M**ethylphenylamidomethyl]azobenzol. Sm. 160° (*J. pr.* [2] 51, 274). — IV, 1385.

4) Verbindung (aus s-Dibenzylhydrazin). Sm. 152° (B. 28, 2346; J. pr. [2]

58, 383). — IV, 811.

1) Bleitetra [4-Methylphenyl]. Sm. 239-240° (B. 20, 721). — IV, 1716. C, H, Pb $C_{28}H_{28}Si$ 1) Siliciumtetrabenzyl. Sm. 127,5°; Sd. oberh. 550° (B. 18, 1543; 19,

1023). — IV, 1702. 2) Siliciumtetra [3-Methylphenyl]. Sm. 150,8°; Sd. oberh. 550° (B. 19,

1021). — IV, 1702.

3) Siliciumtetra [4-Methylphenyl]. Sm. 228°; Sd. oberh. 450° (B. 18,

1542; 19, 1019). — IV, 1702. 1) Farbstoff (aus Beth-a-barra-Holz) + $3 \, \text{H}_2\text{O}$) = $(C_{28} \, \text{H}_{29} \, \text{O}_5)_x$. Sm. 135° (Am. 3, 22). — III, 651. C 84,4 — H 7,6 — O 8,0 — M. G. 398.

1) $\alpha\delta$ -Diketo- δ -Phenyl- $\alpha\beta$ -Di[4-Isopropylphenyl] butan (Phenacyldesoxycuminoïn). Sm. 145° (A. 289, 321; B. 26, 63). — III, 308.

C 78,1 — H 7,0 — O 14,9 — M. G. 430.

1) Lakton d. 1-Di[3-Methyl-6-Isopropylphenoxyl]oxymethylbenzol-2-Carbonsäure (Thymolphtalid). Sm. 84—85° (B. 28, 1876). C 75,3 — H 6,7 — O 17,9 — M. G. 446.

1) Stearopten (aus Cassiaöl) (J. 1850, 509). — III, 58.

C 70,3 — H 6,3 — O 23,4 — M. G. 478. 1) Cubebensäure (oder $C_{13}H_{14}O_7$) + H_2O (J. 1861, 411; 1870, 881; 1873,

863). — II, 1114. 2) Anhydrid d. Dihydrocurcumin. Sm. bei 120° (Am. 4, 360). — III, 660. C 55,4 — H 4,9 — O 39,6 — M. G. 606.

C28H30O15 1) Eichengerbsäure (Fr. 20, 213). — III, 587.

C 70,3 — H 6,3 — N 23,4 — M. G. 478. $\mathbf{C}_{28}\mathbf{H}_{30}\mathbf{N}_{8}$ 1) 5,5'-Diphenylazo -4,4'-Diamido -2,2'-Di[Dimethylamido] biphenyl. (4HCl, PtCl₄) (B. 30, 2944). — IV, 1403.

 $\mathbf{C}_{28}\mathbf{H}_{32}\mathbf{O}_{10}$

C 63,6 — H 6,1 — O 30,3 — M. G. 528. 1) Triacetat d. Kosin (C. 1897 [2] 1076).

C 84.8 - H 8.1 - N 7.1 - M. G. 396. $\mathbf{C}_{28}\mathbf{H}_{32}\mathbf{N}_{2}$ 1) ?-Di[Diäthylamido]-?-Binaphtyl. Sm. 190°; Sd. oberh. 360° (Soc. 41. 182). — IV, 1073. C 79,2 — H 7,5 — N 13,2 — M. G. 424. $C_{28}H_{32}N_4$ 1) 4,4'-Di[Diäthylamido]-1,1-Azonaphtalin. Sm. 143°. 2 Pikrat (M. 16, 803). **— IV**, *1391*. C 87,1 — H 8,8 -- O 4.1 - M. G. 386. $C_{28}H_{34}O$ 1) β -Oxy- $\alpha \alpha \alpha$ -Tri[4-Methylphenyl]- β -Methylpropan. Sd. oberh. 300° (J. pr. [2] 37, 370). — II, 1094. C 72,1 - H 7,3 - O 20,6 - M. G. 450. $\mathbf{C}_{28}\mathbf{H}_{34}\mathbf{O}_{5}$ 1) Bixin. Sm. $175-176^{\circ}$. Na + $2H_2O$, Na₂ + $2H_2O$, K + $2H_2O$, K₂ + $2H_2O$, Ca, Ba (J. 1861, 709; 1864, 546; 1867, 730; B. 3, 166; 11, 864; 30, 1972). — III, 651. C 52,3 — H 5,3 — O 42,4 — M. G. 642. 1) Lokain. NH₄ (J. 1869, 1169; 1871, 1106; 1872, 1068). — III, 596. C 78,9 — H 8,0 — N 13,1 — M. G. 426. C28H34O17 $C_{28}H_{34}N_4$ 1) 4-[4-Diäthylamidobenzylidenamido] benzol. Sm. 206,5—207,5°. 2HCl +7H,0 (B. 31, 2255). C 81,3 — H 8,5 — N 10,2 — M. G. 413. $C_{28}H_{35}N_{3}$ 1) Tri[4-norm. Propylphenyl]guanidin. (2 HCl, PtCl₄) (B. 17, 1226). — II, 549. 2) Tri[2,4,6-Trimethylphenyl]guanidin. Sm. 2250 (B. 15, 1014). $C_{28}H_{36}O_4$ C 77,1 — H 8,2 — O 14,7 — M. G. 436. 1) Diisoamylester d. α-Truxillsäure (B. 22, 2242). — II, 1901. C 52,2 - H 5,6 - O 42,2 - M. G. 644. $C_{28}H_{36}O_{17}$ 1) Tetracetylamygdalinsäure + H₂O (A. 154, 352). - II, 2108. C 78,5 - H 8,4 - N 13,1 - M. G. 428. $\mathbf{C}_{28}\mathbf{H}_{36}\mathbf{N}_{4}$ 1) Tetralutidin. (HCl, PtCl₄) (J. 1881, 430). — IV, 132. C 81,0 — H 8,9 — N 10,1 — M. G. 415. $\mathbf{C}_{28}\mathbf{H}_{37}\mathbf{N}_3$ 1) Tri[4-Dimethylamido-2-Methylphenyl]methan. Sm. 190—191° (B. 24, 562). — IV, 1199. 2) 5'-Amido-4²,4³-Di[Diäthylamido]-2'-Methyltriphenylmethan. Sm. 103° (B. **24**, 3135). — **IV**, 1197. C 76,7 — H 8,7 — O 14,6 — M. G. 438. $\mathbf{C}_{28}\mathbf{H}_{38}\mathbf{O}_4$ Bryogenin (Bl. [3] 9, 1055). — III, 573.
 d-Diborneolester d. Benzol-1,2-Dicarbonsäure. Sm. 101° (B. 22 [2]) 255). — III, 471. 3) 1-Diborneolester d. Benzol-1, 2-Dicarbonsäure. Sm. 101° (B. 22 [2] 255). **— III**, *472*. 4) Diisoborneolester d. Benzol-1, 2-Dicarbonsäure. Sm. 118° (B. 22 [2] 255). **— III**, *473*. C 49.6 - H 5.6 - O 44.8 - M. G. 678.C28H38O19 1) Oktacetyldiglykose. Sm. 39-40° (Bl. 12, 204; B. 12, 1940; 26, 2402). **- I**, 1049. 2) isom. Oktacetyldiglykose. Sm. 134° (B. 12, 1940; 13, 266; 22, 1466; 25 [2] 911; 26, 2402). — I, 1049. 3) Oktacetylmaltose. Sm. 158-159° (156-157°) u. Zers. (B. 13, 267; 28, 440, 1019; A. 220, 215; Soc. 67, 212). — I, 1061. 4) Oktacetylmelibiose. Sm. 170—171° (B. 23, 1441). — I, 1061. 5) Oktacetylmilchzucker. Sm. 95-1000 (B. 12, 1936; 13, 266; 25, 1453; A. 220, 218; Bl. 12, 208). — I, 1064.
6) Oktacetylrohrzucker. Sm. 78° (67°) (Bl. 12, 208; B. 12, 1936; 13, 267; J. 1887, 2260). — I, 1070.

7) Oktacetyltrehalose. Sm. 97—98° (B. 24 [2] 554). — I, 1070. C 86,3 — H 10,0 — N 3,6 — M. G. 389. C28 H29 N 1) 5-Pentadekylakridin. Sm. 65°. HCl, H₂SO₄ (G. 21 [2] 235). — IV, 421. C 82,4 - H 9,8 - O 7,8 - M. G. 408 $\mathbf{C}_{28}\mathbf{H}_{40}\mathbf{O}_{2}$ β-Paracatol. Sd. 236° (A. 199, 80; 271, 307).
 γ-Paracatol. Sd. 240—242° (A. 199, 81; 271, 307).
 C 76,4 — H 9,1 — O 14,5 — M. G. 440. C28 H40 O4 1) Verbindung (aus Bixin) (B. 11, 867). — III, 651.

C 68,9 — H 8,2 — O 22,9 — M. G. 488. C28 H40 O7 1) Verbindung (aus Bixin) (B. 11, 867). — III, 651. C 81,9 — H 10,3 — 0 7,8 — M. G. 410. $\mathbf{C}_{28}\mathbf{H}_{42}\mathbf{O}_{2}$ 1) Acetat d. Ergosterin. Sm. 169° u. Zers. (A. ch. [6] **20**, 294). — II, 1076. C 76,0 — H 9,5 — O 14,5 — M. G. 442. $C_{28}H_{42}O_4$ 1) Parigenin (J. 1877, 907). — III, 600. 2) Dimenthylester d. Benzol-1,2-Dicarbonsäure. Sm. 133° (A. ch. [6] 7, 485). — III, 467. C 66,4 — H 8,3 — O 25,3 — M. G. 506. 1) Urechitin + xH₂O (J. 1878, 974). — III, 614. 2) Trimethylester d. Biliansäure. Sm. 126—127° (B. 19, 482). — II, 2076. 3) Trimethylester d. Isobiliansäure. Sm. 98° (B. 19, 1531). — II, 2077. C 44,1 — H 5,5 — O 50,4 — M. G. 762. C28 H42 O8 $C_{28}H_{42}O_{24}$ 1) Pektin (siehe auch $C_{32}H_{43}O_{32}$) (A. 51, 356). — I, 1105. C 82,8 — H 10,3 — N 6,9 — M. G. 406. $\mathbf{C}_{28}\mathbf{H}_{42}\mathbf{N}_{2}$ 1) Diönanthylidendi [4 - Methylphenyl] diamin. Fl. (A. 140, 97). -II, 511. C 81,6 — H 10,7 — O 7,7 — M. G. 412.

1) Lactucerin (Lactucon). Sm. 210° (A. 60, 83; 238, 220). — III, 634.

2) Acetat d. Lupeol. Sm. 223° (H. 15, 423). — II, 1077.

C 68,3 — H 8,9 — O 22,8 — M. G. 492. C28H44O2 $C_{28}H_{44}O_{7}$ 1) Diacetylcholsäure (J. r. 19, 164; 19, 2003). 2) Trimethylester d. Cholansäure. Sm. 121° (B. 19, 478). — II, 2017. 3) Trimethylester d. Isocholansäure. Sm. 135—136° (B. 19, 1530). — II, 2018. C 77,1 — H 10,1 — N 12,8 — M. G. 436. $C_{28}H_{44}N_4$ 1) 4,4'-Di[Diisobutylamido] azobenzol. Sm. 158°. 2+6J (M. 3, 713; 4, 291). — IV, 1362. C 84,4 — H 11,6 — O 4,0 — M. G. 398. 1) Verbindung (aus Copal). Sd. 199-201° (C. 1896 [2] 795). C 81,2 — H 11,1 — O 7,7 — M. G. 414. C28H46O C28H46O2 1) Acetat d. Cholesterin (oder $C_{29}H_{49}O_2$). Sm. 114,3—114,7° (113°) (B. 5, 513; A. ch. [3] 56, 60; J. 1866, 1301; Bl. 47, 899; M. 9, 428; 15, 367, 370). — II, 1073.

2) Acetat d. Isocholesterin. Sm. unter 100° (J. pr. [2] 7, 174). — II, 1075. 3) Acetat d. Phytosterin. Sm. 120° (A. 228, 296). — II, 1075. Acetat d. Phytosterin. Sm. 120° (A. 228, 296). — II, 1075.
 Verbindung (aus Gurjunbalsamharz). Sm. 126° (J. 1877, 967). — III, 559. C 62,0 — H 8,5 — O 29,5 — M. G. 542.
 β-Digitoxin + 5H₂O. Sm. 145—150° (B. 28 [2] 1057). C 84,0 — H 12,0 — O 4,0 — M. G. 400.
 Chironol. Sm. 176° (B. 28 [2] 1056).
 Homocholesterin. Sm. 183° (G. 19, 209). — II, 1076. C 77,8 — H 11,1 — O 11,1 — M. G. 432.
 Yeophindung (des Cholesterin mit Fesigosiure). Sm. 110° (J. 1863, 545). C28H46O10 $C_{28}H_{48}O$ $C_{28}H_{48}O_{3}$ 1) Verbindung (des Cholesterin mit Essigsäure). Sm. 110° (J. 1863, 545). - II. 1073. 2) Verbindung (aus Isobutyraldehyd). Sd. 227-2290 (Soc. 43, 95; M. **19**, 37**4**). — **I**, 947. C 75,0 — **H** 10,7 — O 14,3 — **M**. G. 448. $C_{28}H_{48}O_4$ C 75,0 — H 10,7 — O 14,5 — M. G. 448.

1) Chironolsäure (B. 28 [2] 1056).

2) Stearocutinsäure (J. 1885, 1802). — I, 1079.

C 83,6 — H 12,4 — O 4,0 — M. G. 402.

1) Tetraönanthaldehyd. Sd. 330—340° (B. 15, 2805, 2807; 16, 211). — $C_{28}H_{50}O$ C 56.6 - H 8.4 - O 35.0 - M. G. 594. $C_{28}H_{50}O_{18}$ Säure (aus Jalapinsäure). Sm. 80°. Ba (A. 95, 158). — III, 595.
 C 80,0 — H 12,4 — O 7,6 — M. G. 420. $C_{28}H_{52}O_{2}$ C 80,0 — H 12,4 — 0 7,5 — M. G. 420.

Stearat d. d-Borneol (A. 112, 366). — III, 470.

C 79,6 — H 12,8 — 0 7,6 — M. G. 422.

Stearat d. Menthol. Sm. 39° (J. pr. [2] 55, 17).

Wachs (aus Cladonia rangiformis). Sm. 81° (J. pr. [2] 57, 275).

Verbindung (aus Kamala). Sm. 82° (Soc. 63, 985). — III, 671.

C 76,7 — H 12,3 — 0 11,0 — M. G. 438. $\mathbf{C}_{28}\mathbf{H}_{54}\mathbf{O}_{2}$

 $C_{28}H_{54}O_{8}$

1) Verbindung (aus polym. Oenanthol). Sd. 330-340°₂₅₀ (B. 5, 481; 6, 982; Soc. 43, 82). — I, 955. 137*

C28H56O2

C 79,2 — H 13,2 — O 7,5 — M. G. 424. 1) Geocerain. Sm. 80° (J. 1852, 649). — I, 689.

2) Geocerinsäure. Sm. 82° (J. 1852, 649). — I, 689. 3) Methylester d. Cerotinsäure. Sm. 60° (A. 224, 233). — I, 449.

4) Dodekylester d. Palmitinsäure. Sm. 41° (B. 16, 3019). — I, 443.

5) Acetat d. Cerylalkohol. Sm. 63,5° (B. 30, 1418).
 C 73,7 — H 12,3 — O 14,0 — M. G. 456.

 $\mathbf{C}_{28}\mathbf{H}_{56}\mathbf{O}_{4}$

 $C_{28}H_{58}O_{2}$

1) Glycerinmonocerotin. Sm. 78,75° (C. 1896 [1] 642). C 79,6 — H 13,7 — O 7,6 — M. G. 426. 1) Drimol. Sm. 73—74° (A. 286, 374; C. 1896 [2] 715). — III, 630.

C₂₈-Gruppe mit drei Elementen.

 $\mathbf{C}_{28}\mathbf{H}_{8}\mathbf{O}_{14}\mathbf{N}_{8}$ 1) Chryiodin (A. **72**, 289). — III, 428. $\mathbf{C}_{28}\mathbf{H}_{12}\mathbf{OCl}_{8}$ 1) Oktochlortetraphenylfuran (Oktochlorlepiden). Sm. 97° (A. 153, 357). - III, 696.

C 53.5 - H 1.9 - O 35.7 - N 8.9 - M. G. 628. $\mathbf{C}_{28}\mathbf{H}_{12}\mathbf{O}_{14}\mathbf{N}_{4}$

1) Dibenzoat d. 1,6-Dioxy-9,10-Anthrachinon (A. 142, 90). — III, 428. C₂₈H₁₄OCl₆ 1) Hexachlortetraphenylfuran (Hexachlorlepiden). Sm. 80—89° (A. 153, 356). — III, 696. C 62.9 — H 2.6 — O 24.0 — N 10.5 — M. G. 534.

 $C_{28}H_{14}O_8N_4$

1) P-Dinitro-4, 4'-Diphtalylamidobiphenyl (B. 17, 1182). — IV, 966. C₂₈ $\mathbf{H}_{14}\mathbf{N}_{6}\mathbf{Br}_{4}$ 1) Tetrabromtetraimidoazoanthracen. Sm. 233° (B. 14, 1336). — III, 412. C₂₈H₁₅OCl₅ 1) Pentachlortetraphenylfuran (Pentachlorlepiden). Sm. 186° (A. 153, 355). — III, 696. C 75,5 — H 3,4 — O 18,0 — N 3,1 — M. G. 445.

 $C_{28}H_{15}O_5N$

1) Benzenylbenzoylamidoalizarin (Benzoat d. Oxyphenylanthrachinonoxazol). Sm. oberh. 300° (B. 18, 1669). — III, 424. C 84,8 — H 4,0 — O 4,0 — N 7,2 — M. G. 396.

1) Anhydrophenanthrenchinonimid. Sm. 247° (B. 12, 1643). — III, 444. C 75,7 — H 3,6 — O 14,4 — N 6,3 — M. G. 444.

 $\mathbf{C}_{28}\mathbf{H}_{16}\mathbf{ON}_{2}$

 $C_{28}H_{16}O_4N_2$

1) ?-Dinitro-9,9'-Bianthryl. Sm. 337° u. Zers. (B. 20, 2433). — II, 304. 2) **2,4'-Di**[Phtalylamido] biphenyl. Sm. 255—257° (B. **22**, 3013). IV, 960. 3) 4,4'-Diphtalylamidobiphenyl. Sm. oberh. 360° (B. 17, 1181). —

4) P-Diphtalylamidobiphenyl. Sm. 193—195° (B. 17, 1183). — IV, 966. C 70,6 — H 3,4 — O 20,1 — N 5,9 — M. G. 476. $\mathbf{C}_{28}\mathbf{H}_{16}\mathbf{O}_{6}\mathbf{N}_{2}$

1) Imidohydroxyl-9,10-Anthrachinon? Sm. 240° (A. 166, 153). — III, 410.

2) P-Dinitro-9,10-Anthrachinon + Anthracen (Z. 1869, 115). — III, 411. C 63,2 — H 3,0 — O 18,0 — N 15,8 — M. G. 532.

 $\mathbf{C}_{28}\mathbf{H}_{16}\mathbf{O}_{6}\mathbf{N}_{6}$

 $C_{28}H_{16}O_8N_6$

1) Trinitrophenylrosindulin (A. 286, 214). — IV, 1206. C 59,6 — H 2,8 — O 22,7 — N 14,9 — M. G. 564. 1) Tetranitrotetraphenyl-1,4-Diazin. Sm. 130—140° (B. 21, 1271). — IV, 1095.

 $C_{28}H_{16}O_8Br_2$ 1) 2, 6-Dibrom-3, 4, 5-Tribenzoxylbenzol-1-Carbonsäure. Sm. 95-960 (\acute{Bl} . [3] **9**, 117). — II, 1924. C 43,3 — H 2,1 — O 33,0 — N 21,6 — M. G. 776.

1) Verbindung (aus Phenanthrenchinon u. Benzylamin) (Soc. 67, 47). C 84,2 — H 4,3 — O 8,0 — N 3,5 — M. G. 399. 1) Anhydrobisdiketohydrinden-2-Naphtalid (B. 30, 3144). $\mathbf{C}_{28}\mathbf{H}_{17}\mathbf{O}_{2}\mathbf{N}$

 $\mathbf{C}_{28}\mathbf{H}_{17}\mathbf{O}_{4}\mathbf{N}_{8}$

C 73,3 — H 3,7 — O 13,9 — N 9,1 — M. G. 459.
1) Dianthrachinonamidoimid (J. pr. [2] 18, 156). —
C 61,0 — H 3,1 — O 23,2 — N 12,7 — M. G. 551.

 $\mathbf{C}_{28}\mathbf{H}_{17}\mathbf{O}_{8}\mathbf{N}_{5}$ 1) 2,3,4,5-Tetra[?-Nitrophenyl]pyrrol. Zers. bei 123° (B. 22, 554). IV, 478.

C 62,3 - H 3,1 - O 26,7 - N 7,8 - M. G. 539. $C_{28}H_{17}O_9N_8$

1) Verbindung (aus 1,5-Dinitro-9,10-Anthrachinon) (B. 17, 895). — III, 412. 2) isom. Verbindung (aus 1,5-Dinitro-9,10-Anthrachinon) (B. 17, 894). III, 412.

C 57,2 - H 2,9 - O 32,7 - N 7,1 - M. G. 587 $\mathbf{C}_{28}\mathbf{H}_{17}\mathbf{O}_{12}\mathbf{N}_{3}$

1) Verbindung (aus 1,5-Dinitro-9,10-Anthrachinon) (B. 17, 894). — III, 412. 1) Tribromtetraphenylthiophen. Sm. 265-270° (A. 144, 194). - III, 750. $\mathbf{C}_{28}\mathbf{H}_{17}\mathbf{Br}_{3}\mathbf{S}$ $\mathbf{C}_{28}\mathbf{H}_{18}\mathbf{OCl}_2$ 1) Dichlortetraphenylfuran (Dichlorlepiden). Sm. 169° (J. r. 5, 22; 7, 333). **— III**, *695*.

2) isom. Dichlortetraphenylfuran (Dichlorlepiden). Sm. 156° (A. 153,

355). — III, 695.

 $C_{28}H_{18}O_2N_4$

 $C_{28}H_{19}O_6N$

3) Isodichlorlepiden. Sm. 166° (J. r. 7, 194, 331). — III, 695.

1) Dibromtetraphenylfuran (Dibromlepiden). $\mathbf{C}_{28}\mathbf{H}_{18}\mathbf{OBr}_{2}$ Sm. 190° (185°) (Z. 1867. 315; A. 153, 131; J. r. 7, 330). — III, 696.

C 81,2 - H 4,3 - O 7,7 - N 6,8 - M. G. 414. $\mathbf{C}_{28}\mathbf{H}_{18}\mathbf{O}_2\mathbf{N}_2$

1) Dibenzoyldiimidotolan. Sm. 239,5—240,5°. + C_6H_6 (J. r. 16, 581). — III, 282.

2) Acetat d. 4-Oxynaphtindon. Sm. 290—295° (A. 272, 343). — IV, 1085. 3) Benzoat d. 2-[2-Oxyphenyl] phenanthrenimidazol. Śm. 218—220°

(Soc. 41, 146). — III, 447. C 76,0 — H 4,1 — O 7,2 — N 12,7 — M. G. 442. 1) Nitrophenylrosindulin. Sm. 270° (A. 286, 213). — IV, 1206.

C₂₈H₁₈O₂Cl₂ 1) Dichloroxylepiden. Sm. 178° (A. 153, 353). — III, 313. 2) isom. Dichloroxylepiden. Sm. 202° (J. r. 5, 23; 7, 332; J. 1876, 426).

— III, 312.

3) isom. Dichloroxylepiden. Sm. 230° (J. r. 7, 191). — III, 313.

4) isom. Dichloroxylepiden (J. r. 7, 191). — III, 313.

C₂₈H₁₈O₂Br₂ 1) Dibromoxylepiden. Sm. 222° (J. r. 7, 329; J. 1876, 425). — III, 313.

2) isom. Dibromoxylepiden (2 Isomere). Sm. 239° (J. r. 7, 329; J. 1876, 425). — III, *313*. C 71,4 — H 3,7 — O 20,1 — N 5,8 — M. G. 478.

 $C_{28}H_{18}O_6N_2$

1) ?-Dinitro-9,10-Anthrachinon + Stilben (Z. 1869, 116). — III, 411. 2) Dibenzoat d. 1,5-Di[Hydroxylamido]-9,10-Anthrachinon. Sm. 1880 (B. **29**, 2936).

C 68.0 - H 3.6 - O 22.7 - N 5.7 -- M. G. 494. $C_{28}H_{18}O_7N_2$

1) Diphenylcarbamidflavopurpurin (B. 18, 2610). — III, 435. C 64,4 — H 3,5 — O 21,4 — N 10,7 — M. G. 522.

 $C_{28}H_{18}O_7N_4$

1) Verbindung (aus 1,5-Dinitro-9,10-Anthrachinon) (B. 17, 895). — III, 412. C₂₈H₁₈O₁₁Br₂1) Tetracetat d. Dibromhydrogallein. Sm. 234° (A. 209, 266). — II, 2093.

1) Dichlortetraphenylthiophen. Sm. 219° (A. 153, 351). — III, 750. $\mathbf{C}_{28}\mathbf{H}_{18}\mathbf{Cl}_2\mathbf{S}$ C28H19ON8

C 71,3 — H 4,6 — O 3,9 — N 10,2 — M. G. 413.

1) Diphenanthrenoxytriimid. ~-Modif. Sm. 282°; \$\beta\$-Modif. Sm. oberh. 300° (M. 1, 149, 157). — III, 444.

2) α -Oxy- $\alpha \alpha \alpha$ -Tri[?-Chinolyl]methan. Sm. 198° (B. 24, 1608). — IV, 1221.

3) 7-Phenylamidorosindon (A. 286, 226). — IV, 1207.

1) Chlortetraphenylfuran (Chlorlepiden). Sm. 143-146° (A. 153, 355). - $C_{28}H_{19}OC1$ III, 695.

1) Chloroxylepiden. Sm. 185° (J. r. 5, 21). — III, 312. $C_{28}H_{19}O_{2}C1$ C 77,6 — H 4,4 — O 14,8 — N 3,2 — M. G. 433. $C_{28}H_{19}O_4N$

1) Mono-l-Naphtylamid d. Pulvinsäure. Sm. 211—212°. NH₄, Ba (A. **282**, 28). — II, 2031.

2) Mono-2-Naphtylamid d. Pulvinsäure. Sm. 192°. NH₄, Ba (A. 282, 29). — II, 2031.

C 72,2 — H 4,1 — O 20,6 — N 3,0 — M. G. 465.

1) Dimethyläther d. Galleïnanilid. Sm. 205° (B. 27, 2794). — II, 2088.

2) 1-Naphtylimid d. Dibenzoylweinsäure. Sm. 215—217° (A. 279, 150).
 3) 2-Naphtylimid d. Dibenzoylweinsäure. Sm. 179—180° (A. 279, 152).

C 84,0 — H 5,0 — O 4,0 — N 17,0 — M. G. 400. 1) **4-Benzoyl-1,3,5-Triphenylpyrazol.** Sm. 172—173° (G. **24** [1] 12). — $\mathbf{C}_{28}\mathbf{H}_{20}\mathbf{ON}_{2}$ IV, 1037. C 80,8 — H 4,8 — O 7,7 — N 6,7 — M. G. 416.

 $\mathbf{C}_{28}\mathbf{H}_{20}\mathbf{O}_{2}\mathbf{N}_{2}$ 1) Di [Phenylbenzoylmethylen] hydrazin (Bisphenylbenzoylazimethylen). Sm. 202° (J. pr. [2] 52, 132). — III, 225.

 $\mathbf{C}_{28}\mathbf{H}_{21}\mathbf{ON}_{5}$

 $C_{28}H_{21}O_3N$

C28 H21 O5 N

C₉₈H₂₀O₂N₂ 2) Aethyläther d. 4-Oxynaphtindon. Sm. oberh. 340° (A. 272, 344). — IV, 1085.

1) Verbindung (aus Dibenzaldiphenylhydrotetrazon). Sm. 183-1870 (G. 27 [2] 287). — IV, 749. C 73,0 — H 4,3 — O 10,4 — N 12,2 — M. G. 460.

 $C_{28}H_{20}O_3N_4$

1) Anhydrid d. Di[Diphenylhydrazon] āthan $-\alpha\beta$ -Dicarbonsäure. Sm. $218-220^\circ$ u. Zers. (B. 20, 843). — IV, 730. C₂₈H₂₀O₃Cl₂ 1) Dichloroxylepidensäure. Sm. 182° (J. r. 7, 191; J. 1875, 411). —

III, 310.

 $\begin{array}{c} \mathbf{C_{28}H_{20}O_3Br_2} \ 1) \ \ \mathbf{Dibromoxylepidens\"{a}ure} \ (J. \ 1876, \ 425; \ J. \ r. \ 7, \ 330). \ -- \ \mathbf{III}, \ 310. \\ \mathbf{C_{28}H_{20}O_4N_2} \ \ C \ 75,0 \ -- \ \mathbf{H} \ 4,5 \ -- \ 0 \ 14,3 \ -- \ \mathbf{N} \ 6,2 \ -- \ \mathbf{M}. \ G. \ 448. \\ 1) \ \mathbf{Benzidylphtalaldehyds\"{a}ure}. \ \ \mathbf{Zers.} \ \ \mathbf{bei} \ 290^{\circ} \ (B. \ \mathbf{24}, \ 2351). \ -- \ \mathbf{IV}, \ 966. \end{array}$

 $\mathbf{C}_{28}\mathbf{H}_{20}\mathbf{O}_4\mathbf{Br}_2$ 1) Dibenzoat d. $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[2-Oxyphenyl]äthan. Sm. 58-59 (B. **24**, 3180). — **II**, 1151. 2) isom. Dibenzoat d. $\alpha\beta$ -Dibrom- $\alpha\beta$ -Di[2-Oxyphenyl]äthan. Sm. 176°

u. Zers. (A. **277**, 357). — **II**, 1151. C 70,0 — H 4,2 — O 20,0 — N 5,8 — M. G. 480. $C_{28}H_{20}O_6N_2$

1) 4,4'-Di[Benzoylamido]biphenyl-3,3'-Dicarbonsaure. Sm. 302—304°. (NH₄)₂ + 2H₂O (B. 31, 2582). C 56,4 - H 3,3 - O 21,5 - N 18,8 - M. G. 596.

 $\mathbf{C}_{28}\mathbf{H}_{20}\mathbf{O}_{8}\mathbf{N}_{8}$

 Tetranitroderivat d. Verb. C₂₈H₂₄N₄ (B. 11, 831). — II, 446.
 7-Chlorphenylat d. 5-Phenylamido-αβ-Naphtophenazin (Phenylrosindulinchlorid) (B. 31, 2431).
 12-Chlorphenylat d. 10-Phenylamido-αβ-Naphtophenazin. 2+PtCl₄ $\mathbf{C}_{28}\mathbf{H}_{20}\mathbf{N}_{3}\mathbf{C}\mathbf{1}$

(B. 30, 2635). — IV, 1201. C 86.8 — H 5.4 — O 4.1 — N 3.6 — M. G. 387. $C_{28}H_{21}ON$

1) 2-Keto-3,3,4,5-Tetraphenyl-2,3-Dihydropyrrol. Sm. 206-2070 (Soc. 59, 142). — III, 311.

Dibenzoylstilbenimid. Sm. 180—182° (Soc. 59, 142). — III, 311.
 C 75,9 — H 4,7 — O 3,6 — N 15,8 — M. G. 443.

1) 4-[4-Phenylamidophenylazo]-1-[2-Oxy-1-Naphtylazo]benzol. Sm. 203—204° (Soc. **43**, 441). — IV, 1434. C 83,4 — H 5,2 — O 7,9 — N 3,5 — M. G. 403.

 $C_{28}H_{21}O_2N$

1) α -Phenylamido- $\beta\beta$ -Dibenzoyl- α -Phenyläthen. Sm. 140—142° (A. 291, 104). — III, 322. C 78,0 — H 4,9 — O 7,4 — N 9,7 — M. G. 431.

 $\mathbf{C}_{28}\mathbf{H}_{21}\mathbf{O}_2\mathbf{N}_3$

1) 1, 3 - Dibenzoyl-2-[4-Methylphenyl]imido-2, 3-Dihydrobenzimidazol. Sm. 191° (B. 24, 2512). — IV, 567. 2) 1, 3-Dibenzoyl-2-Phenylimido-5-Methyl-2, 3-Dihydrobenzimidazol.

Sm. 222^o (B. **24**, 2516). — IV, 623.

3) Verbindung (aus ?-Amidoanthracen). Sm. 250° (B. 16, 1638). — II, 640. C 73,2 — H 4,6 — O 7,0 — N 15,2 — M. G. 459.

 $C_{28}H_{21}O_{2}N_{5}$ 1) Imid d. Di[Diphenylhydrazon]äthan-αβ-Dicarbonsäure? Sm. 191

bis 192° (B. **20**, 844). — **IV**, 730. C 80,2 — H 5,0 — O 11,4 — N 3,3 — M. G. 419.

1) Verbindung (aus Benzil u. Benzonitril). Sm. 225° (B. 16, 2653). — III, 295. C 75,2 — H 4,7 — O 10,7 — N 9,4 — M. G. 447.

 $C_{28}H_{21}O_{3}N_{3}$

Verbindung (aus 1,3,4,6-Tetraphenyl-1,2-Dihydro-1,2-Diazin). Sm. 255°
 u. Zers. (A. 289, 331). — IV, 1082.
 C 77,2 — H 4,8 — O 14,7 — N 3,2 — M. G. 435.

 $\mathbf{C}_{28}\mathbf{H}_{21}\mathbf{O_4N}$

1) 2-Diphtalidylmethyl-6,8-Dimethylchinolin. Sm. 224° (B. 29, 190). - IV, 451.

2) Orcinphtaleïnanilid. Sm. noch nicht bei 300° (B. 26, 3078). - II, 2066.

3) Dimethyläther d. Fluoresceïnanilid. Sm. 207-208° (B. 27, 2237). -II, 2062.

4) Benzoat d. ?-Benzoylamido-?-Oxy-?-Methyldiphenylketon. Sm. 192 bis 193° (B. **16**, 1930). — III, 216. C 74,5 — H 4,6 — O 17,7 — N 3,1 — M. G. 451.

1) Dibenzoat d. 2-Benzoylamido-3,5-Dioxy-1-Methylbenzol. Sm. 165 bis 166° (M. 19, 495).

- C 60.5 H 3.8 O 23.1 N 12.6 M. G. 555. $C_{28}H_{21}O_8N_5$
 - 1) P-Trinitro- $\alpha\beta$ -Di[Benzoylamido]- $\alpha\beta$ -Diphenyläthan. Sm. 137° u. Zers. (B. 28, 3176). — IV, 979.
- $\mathbf{C}_{28}\mathbf{H}_{21}\mathbf{N}_4\mathbf{Cl}$ 1) 12-Chlorphenylat d. 9-Amido-10-Phenylamido- $\alpha\beta$ -Naphtophenazin (B. 31, 3103).
- \dot{C} 83,6 H 5,5 O 4,0 N 6,9 M. G. 402, $\mathbf{C}_{28}\mathbf{H}_{22}\mathbf{ON}_{2}$
 - 1) Benzoylamarin. Sm. 180°. HCl, (2HCl, PtCl₄), H₂Cr₂O₇, Acetat (B. 18, 3081). — III, 25.
 - 2) Phenylhydrazon d. $\alpha \delta$ -Diketo- $\alpha \beta \delta$ -Triphenyl- β -Buten. Sm. 173 bis 174° (Soc. 57, 708). — IV, 786.
 - 3) 1-Phenylamido-2-Keto-3,3,5-Triphenyl-2,3-Dihydropyrrol. Sm. 1850 (Soc. **57**, 682). — IV, 699. C 78,1 — H 5,1 — O 3,7 — N 13,0 — M. G. 430.
- C28H22ON4
- 1) Verbindung (aus Gaultheriaöl). Sm. 254—256° (A. 171, 144). II, 1500. C 73.4 - H 4.8 - O 3.5 - N 18.3 - M. G. 458.C28H22ON6
- 1) 3,4-Di[α -Phenylhydrazonbenzyl]-1,2,5-Oxdiazol. Sm. 172° (B. 26, 529). **— III**, *323*.
- C 80,4 H 5,2 O 7,6 N 6,7 M. G. 418 $\mathbf{C}_{28}\mathbf{H}_{22}\mathbf{O}_{2}\mathbf{N}_{2}$
 - 1) Diphenylaminfumarid. Sm. 275-276° (G. 16, 22). II, 416.
- C 75,3 H 4,9 O 7,2 N 12,6 M. G. 446. $\mathbf{C}_{28}\mathbf{H}_{22}\mathbf{O}_{2}\mathbf{N}_{4}$ 1) $\alpha \beta$ -Di[Benzoylhydrazon]- $\alpha \beta$ -Diphenyläthan. Sm. 206° (J. pr. [2] 50, 307). — III, 288.
- $C_{28}H_{22}O_3N_2$ C 77.4 — H 5.1 — O 11.0 — N 6.4 — M. G. 434. 1) ?-Di[Benzoylamido]-?-Methyldiphenylketon. Sm. 226° (B. 16, 1929).
 - **III**, 216. 2) s-3,3'-Di[4-Methylbenzoyl]oxyazobenzol (m-Oxyazophenyl-p-Tolyl-
 - keton). Sm. 145° (A. 286, 311). IV, 1345.
 - 3) Verbindung (aus Benzil u. Benzonitril). Sm. 176°. $+2C_2H_6O$ (B. 16, 2653). — III, 295.
 - 4) Verbindung (aus Salicylaldehyd u. 1,3,4-Toluylendiamin). Sm. 106 bis 110° (B. 11, 597). — IV, 620. C 74,7 — H 4,9 — O 14,2 — N 6,2 — M. G. 450.
- $\mathbf{C}_{28}\mathbf{H}_{22}\mathbf{O}_{4}\mathbf{N}_{2}$
 - 1) Dibenzoat d. α-Phenylhydrazon-α-[2,5-Dioxyphenyl]äthan. Sm. 148° (B. **31**, 1216).
 - 2) Dibenzoylphenylhydrazid d. α-Oxyphenylessigsäure. Sm. 208° (B. **23**, 3704). — **IV**, 694.
- $C_{28}H_{22}O_4N_3$ 1) Verbindung (aus d. Verb. $C_{14}H_{11}O_2N_3$ aus Stilben). Sm. 57—73° (B. 7, 1098). — II, 249.
- C 70.3 H 4.6 O 13.4 N 11.7 M. G. 478. $C_{28}H_{22}O_4N_4$ 1) $\alpha\beta$ -Di[3-Nitrobenzylidenamido]- $\alpha\beta$ -Diphenyläthan. Sm. 159—161°
 - (B. 22, 2303). IV, 979. 2) s-Diphenyläthylendi[2-Hydrazidobenzol-l-Carbonsäure]. Sm. über 320° (B. 27, 1139). — III, 288.
 - 3) s-Diphenyläthylendi[4-Hydrazidobenzol-l-Carbonsäure]. Sm. über
 - 320° (B. **27**, 1133). III, 288.
 - 4) $\mathbf{Di}[\mathbf{Diphenylhydrazon}]$ äthan- $\alpha\beta$ -Dicarbonsäure (Tetraphenylizindioxy-
 - weinsäure). Sm. 177° u. Zers. Ag₂ (B. 20, 841). IV, 73 $\mathring{0}$. 5) Di[Phenylamidoformiat] d. $\alpha\beta$ -Dioximido $\alpha\beta$ -Diphenyläthan (Dicarbanilido α-Benzildioxim). Sm. 180° (B. 22, 3111). — III, 294.
 - 6) $\mathbf{Di}[\mathbf{Phenylamidoformiat}]$ d. isom. $\alpha\beta$ -Dioximido- $\alpha\beta$ -Diphenyläthan.
 - Sm. 175° (B. 22, 3111). III, 294. 7) $\mathbf{Di}[\mathbf{Phenylamidoformiat}]$ d. isom. $\alpha\beta$ -Dioximido- $\alpha\beta$ -Diphenylathan.
- Sm. 187° (B. 22, 3111). III, 294. C 65.9 - H 4.3 - O 18.8 - N 11.0 - M. G. 510. $\mathbf{C}_{28}\mathbf{H}_{22}\mathbf{O}_{6}\mathbf{N}_{4}$
 - 1) $\alpha\beta$ -Di[Benzoyl-2-Nitrophenylamido]äthan. Sm. 218–220° (J. pr. [2] **48**, 198). — II, 1169.
 - 2) **4,4'-Di[2-Nitrobenzylformylamido]** biphenyl. Sm. 205° (B. **29**, 1452).
- IV, 963. C 62,4 H 4,1 O 17,8 N 15,6 M. G. 538. $\mathbf{C}_{28}\mathbf{H}_{22}\mathbf{O}_6\mathbf{N}_6$
 - 1) Verbindung (aus 3 Oxy 5 Keto 1 Phenyl 4,5 Dihydropyrazol) oder $C_{10}H_{14}O_4N_4$. Sm. 303° (B. 30, 1019). IV, 702. C 63,9 H 4,2 O 21,3 N 10,6 M. G. 526.
- C28H22O7N4 1) Disazobenzolhesperitin. Sm. 246-247° (Soc. 73, 1033). - IV, 1474.

 $C_{28}H_{22}O_8N_2$

 $C_{28}H_{22}N_2Br_41$) ?-Tetrabrom-1, 2-Di[Diphenylamido]-R-Tetramethylen (B. 14, 2096).

C 65,4 - H 4,3 - O 24,9 - N 5,4 - M. G. 514.

1) Lignonblau-o-Dicarbonsäure (B. 30, 241). 2) Lignonblau-m-Dicarbonsäure (B. 30, 241).

— IV, 1091.

1) Chinolinjodoform. Sm. 65° u. Zers. (B. 16, 202). — IV, 251.

1) Sulfid d. 5-Merkapto-2, 3-Diphenyl-2, 3-Dihydro-1, 3, 4-Thiodiazol. $\mathbf{C}_{28}\mathbf{H}_{22}\mathbf{N}_{8}\mathbf{J}_{8}$ C28H22N4S4 Sm. 138° (B. **28**, 2645). — IV, 750. C 86,4 — H 5,9 — O 4,1 — N 3,6 — M. G. 389. C28 H28 ON 1) 2-Keto-3,3,4,5-Tetraphenyltetrahydropyrrol. Sm. 237° (Soc. 59, 145). — III, *311*. $C_{28}H_{28}OC1$ 1) Verbindung (aus Isohydrobenzoïn). Sm. 149-150° (A. 198, 168). -II, 1102. C 83,0 — H 5,7 — O 7,9 — N 3,4 — M. G. 405. 1) Benzoinidam. Sm. 199° (Soc. 49, 825; A. 135, 187). — III, 223. C 77,6 — H 5,3 — O 7,4 — N 9,7 — M. G. 433. C28H23O2N $\mathbf{C}_{28}\mathbf{H}_{28}\mathbf{O}_{2}\mathbf{N}_{3}$ 1) 5-Nitro-4,4'-Dibenzylidenamido-3,3'-Dimethylbiphenyl. Sm. 1470 (B. 25, 1034). — IV, 982. 2) Verbindung (aus 1,3,4,6-Tetraphenyl-1,2-Dihydro-1,2-Diazin). Sm. 262° u. Zers. (A. **289**, 329). — IV, 1082. C 79,8 — H 5,5 — O 11,4 — N 3,3 — M. G. 421. C28H23O8N 1) Dimethyläther d. 1-Keto-2-Phenyl-3,3-Di[?-Oxyphenyl]-1,3-Dihydroisoindol (D. d. Phenolphtaleïnanilid). Sm. 1920 (B. 26, 3078). -II. 1984. 2) Benzoat d. β -Benzoylamido- α -Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 254° (B. 29, 1215). 3) Benzoat d. isom. β -Benzoylamido- α -Oxy- $\alpha\beta$ -Diphenyläthan. Sm. 186—187° (B. 29, 1216). C 64.5 - H 4.4 - O 12.3 - N 18.8 - M. G. 521. $\mathbf{C}_{28}\mathbf{H}_{28}\mathbf{O}_{4}\mathbf{N}_{7}$ 1) Verbindung (aus 3-Amidobenzoyl-3-Amidobenzolcarbonsäureamid) (A. 251, 171). — IV, 1577. $\mathbf{C}_{28}\mathbf{H}_{23}\mathbf{N}_{2}\mathbf{C}_{1}$ 1) Verbindung (aus Hydrobenzamid) + H₂O. 2 + PtCl₄ (A. 111, 152). -III, 21. Jodäthylat d. Akridin (A. 158, 275). — IV, 406.
 C 83,2 — H 5,9 — O 4,0 — N 6,9 — M. G. 404. $\mathbf{C}_{28}\mathbf{H}_{23}\mathbf{N}_{2}\mathbf{J}$ $\mathbf{C}_{28}\mathbf{H}_{24}\mathbf{ON}_{2}$ 1) 4-[4-Methylphenyl]oxydhydrat d. 6-Methyl-2,3-Diphenyl-1,4-Benzdiazin. Sm. 173° (B. 25, 1023). — IV, 1076.
2) Aethyläther d. 7-Oxy-1,2,3-Triphenyl-1,2-Dihydro-1,4-Benzdiazin. Sm. 126—128° (B. 25, 1009). — IV, 1075.
3) Benzoïnam (Berx. J. 18, 354; 26, 666; A. 135, 183; Soc. 49, 825). — C28H24ON4 C 77.8 - H 5.5 - O 3.7 - N 13.0 - M. G. 432.1) α -Acetyl- $\alpha\beta$ -Di[Phenylhydrazon]- $\alpha\beta$ -Diphenyläthan. Sm. $80-90^{\circ}$ (A. 305, 176). 2) isom. α -Acetyl- $\alpha\beta$ -Di[Phenylhydrazon]- $\alpha\beta$ -Diphenyläthan. Sm. 1830 (A. 305, 178). 3) Acetyldehydrobenzalphenylhydrazon. Sm. 124-125° (G. 27 [2] 255). - IV, 749. 4) α -Phenyl- β -Benzylidenhydrazid d. β -Benzyliden- α -Phenylhydrazidoessigsäure. Sm. 180-181° (A. 301, 86). 5) Verbindung (aus Phtalidmethylphenylketon). Sm. 163-175° (M. 19, 453). C 80,0 — H 5,7 — O 7,6 — N 6,7 — M. G. 420. 1) $\alpha\beta$ -Di[Phenylbenzoylamido]äthan (J. 1873, 698). — II, 1169. C28H24O2N2 2) $\alpha\beta$ -Di[Benzoylamido] - $\alpha\beta$ -Diphenyläthan. Sm. 287° (B. 22, 2300; 28, 3176). — IV, 979. 3) $\alpha\beta$ -Di[2-Benzoylamidophenyl]äthan. Sm. 255° (A. 305, 99) 4) $\alpha\beta$ -Di[2-Oxybenzylidenamido]- $\alpha\beta$ -Diphenyläthan. Sm. 2050 (B. 22, 2303). — IV, 979.

5) 4,4'-Di[Benzoylamido]-3,3'-Dimethylbiphenyl. Sm. 259° (B. 21, 1065).

7) 4,4'-Di[2-Oxybenzylidenamido]-3,3'-Dimethylbiphenyl. Sm. 2020

 $6) \ \textbf{4.4'-Di} [\textbf{2-Oxybenzylidenamido}] \textbf{-2.2'-Dimethylbiphenyl.}$

bis 199° (B. **28**, 2554). — **IV**, 980.

(A. 258, 377). - IV, 982.

– IV, 982.

 $\mathbf{C}_{28}\mathbf{H}_{24}\mathbf{O}_2\mathbf{N}_2$ 8) $\mathbf{Di}[\beta$ -Oxy- $\alpha\beta$ -Diphenyläthyliden]hydrazin (Benzoïnketazin). Sm. 1570 (J. pr. [2] **52**, 131). — III, 225.

9) Dibenzyläther d. $\alpha\beta$ -Dioximido - $\alpha\beta$ -Diphenyläthan (D. d. α -Benzildioxim). 2 isom. Formen. α-Derivat Sm. 153—154°; β-Derivat Sm. 104 bis 105° (B. 23, 3600, 3601, 3602). — III, 292.

10) Dibenzyläther d. isom. αβ-Dioximido-αβ-Diphenyläthan (D. d. β-Benzildioxim). Sm. 59—60° (B. 23, 3601). — III, 293.

11) 4-Phenyloxydhydrat d. 6-Oxy-2, 3-Diphenyl-1, 4-Diazin-6-Aethyläther. Sm. bei 145° (B. 25, 1010). — IV, 1075. 12) Tetraphenylamid d. Bernsteinsäure. Sm. 234° (231°) (G. 14, 467;

A. 292, 194). — II, 414.

C 75,0 — H 5,4 — 0 7,1 — N 12,5 — M. G. 448. 1) **6,6'-Di**[Benzoylamido]-3,3'-Dimethylazobenzol. Sm. 242° (Am. 17, $C_{28}H_{24}O_{2}N_{4}$ 449). — IV, 1378. C 77,1 — H 5,5 — O 11,0 — N 6,4 — M. G. 436.

 $\mathbf{C}_{28}\mathbf{H}_{24}\mathbf{O_{3}N}_{2}$

1) 6,4'-Di[4-Methoxylbenzylidenamido]-3-Oxybiphenyl. Sm. 184-185° (A. 303, 346).

2) Aethyläther d. 6,4'-Di[Benzoylamido]-3-Oxybiphenyl. Sm. 221° (A. 303, 352).

 $\mathbf{C}_{28}\mathbf{H}_{24}\mathbf{O}_{3}\mathbf{N}_{4}$ C 72.4 - H 5.2 - O 10.3 - N 12.1 - M. G. 464.

1) 5,5'-Di[Benzoylamido]-2,2'-Dimethylazoxybenzol. Sm. 290° (Am. 5, 284). — IV, 1339.

2) Dioxim d. 3,3'-Di[4-Methylbenzoyl]oxyazobenzol. α-Modif. Sm. 235°;

 $\mathbf{C}_{28}\mathbf{H}_{24}\mathbf{O_4N_2}$

β-Modif. Sm. 245° (A. 286, 312). — IV, 1345.
 C 74,3 — H 5,3 — O 14,1 — N 6,2 — M. G. 452.
 αβ-Di[Benzoylamido]-αβ-Di[2-Oxyphenyl]äthan. Sm. oberh. 300° u. Zers. (Soc. 45, 673; B. 17, 2403). — II, 994; III, 287.
 Dimethyläther d. 4,4'-[Benzoylamido]-3,3'-Dioxybiphenyl. Sm. 200° (L. 195) 50, 215.

236° (J. pr. [2] 58, 215).

3) Di[Acetyl-1-Naphtylamid] d. Bernsteinsäure. Sm. 1220 (C. 1896)

[1] 109). C 70,0 — H 5,0 — O 13,3 — N 11,7 — M. G. 480. $\mathbf{C}_{28}\mathbf{H}_{24}\mathbf{O}_4\mathbf{N}_4$

1) Verbindung (aus Benzylenimid) (B. 28, 1653). C 69,4 — H 5,0 — O 19,8 — N 5,8 — M. G. 484.

1) 1-Naphtylamid d. Diacetylweinsäure. Sm. 260° (A. 279, 149).

2) 2-Naphtylamid d. Diacetylweinsäure. Sm. 240° (226°) (A. 279, 151; $\mathbf{C}_{28}\mathbf{H}_{24}\mathbf{O}_{6}\mathbf{N}_{2}$

C. **1896** [1] 996; Soc. **71**, 1062). C 67,2 — H 4,8 — O 22,4 — N 5,6 — M. G. 500.

 $C_{28}H_{24}O_7N_2$ 1) Orcein (M. 11, 231). — II, 966.

 $\mathbf{C}_{28}\mathbf{H}_{24}\mathbf{O}_{8}\mathbf{N}_{4}$

 $\mathbf{C}_{28}\mathbf{H}_{25}\mathbf{O}_{2}\mathbf{N}_{3}$

C 61.8 - H 4.4 - O 23.5 - N 10.3 - M. G. 544.

1) Dinitrodimethyllignonblau (aus 2-Nitro-4-Amido-1-Methylbenzol) (B. 31, 621).

1) Di[4-Benzylidenamidobenzyl]sulfid. Sm. 950 (B. 24, 726; 28, 1338). $\mathbf{C}_{28}\mathbf{H}_{24}\mathbf{N}_{2}\mathbf{S}$ **- III**, 32.

 $\begin{array}{c} \mathbf{C_{28}H_{24}N_7Cl_3} \ 1) \ \ \mathbf{Verbindung} \ \ (\text{aus d. Verb. } C_{28}H_{26}O_2N_7Cl) \ \ (\textit{B. 31, } 1412). \\ \mathbf{C_{28}H_{25}ON_3} \ \ C \ \ 80,2 \ \ - \ \ H \ \ 6,0 \ \ - \ \ O \ \ 3,8 \ \ - \ \ N \ \ 10,0 \ \ - \ \ M. \ \ G. \ \ 419. \\ \end{array}$ $\mathbf{C}_{28}\mathbf{H}_{25}\mathbf{ON}_{3}$

1) Base (aus 3-Amido-4-p-Tolylamido-1-Methylbenzol). Sm. 1880 (2HCl, $PtCl_4$) (B. 23, 3801; 27, 2782). — IV, 612.

2) Base (aus d. isom. Base $C_{28}H_{25}ON_8$ Sm. 188°). Sm. 260° (B. 27, 2783).

— IV, 612. C 77,2 — H 5,7 — O 7,4 — N 9,7 — M. G. 435. 1) 5-Dimethylamido-2, 4'-Di[2-Oxybenzylidenamido]biphenyl. 158-159° (A. 303, 357).

2) α -Phenyl- β -[4-Methylphenyl]- β -[2-Benzoylamidobenzyl]harnstoff. Sm. 192—193° (*J. pr.* [2] **55**, 246). — IV, 633. C 74,5 — H 5,5 — O 10,6 — N 9,3 — M. G. 451.

 $C_{28}H_{25}O_3N_3$ 1) Acetat d. α-Oxy-?-Triamido-4-Benzoyltriphenylmethan (Bl. [3] 17, 83). C 76,5 — H 5,7 — O 14,6 — N 3,2 — M. G. 439. $\mathbf{C}_{28}\mathbf{H}_{25}\mathbf{O}_4\mathbf{N}$

1) Diäthylester d. 1,2,5-Triphenylpyrrol-22,52-Dicarbonsäure. Sm. 122° (B. 20, 1488). — IV, 452. C 71,9 — H 5,3 — O 13,7 — N 9,0 — M. G. 467.

 $\mathbf{C}_{28}\mathbf{H}_{25}\mathbf{O}_4\mathbf{N}_3$

1) 1,2-Diphtalylditrimethylenphenyltriamin. Sm. 144-145° (B. 23, 1168). — II, 1803.

C 79,6 — H 6,2 — O 7,6 — N 6,6 — M. G. 422. 1) 3,6-Diketo-2,5-Diäthyl-1,4-Di[1-Naphtyl]hexahydro-1,4-Diazin. $\mathbf{C}_{28}\mathbf{H}_{26}\mathbf{O}_2\mathbf{N}_2$ Sm. 287—289° (B. 25, 2925). — II, 614. 2) 3,6-Diketo-2,5-Diäthyl-1,4-Di[2-Naphtyl]hexahydro-1,4-Diazin. Sm. 304-306° (B. 25, 2926). — II, 622. 3) isom. 3,6-Diketo-2,5-Diäthyl-1,4-Di[2-Naphtyl]hexahydro-1,4-Diazin. Sm. 195--196° (B. 25, 2926). — II, 622. C 74,6 - H 5,8 - O 7,1 - N 12,4 - M. G. 450. $\mathbf{C}_{28}\mathbf{H}_{26}\mathbf{O}_{2}\mathbf{N}_{4}$ 1) $\alpha\beta$ -Di[4-(2)Oxybenzylidenamidophenylamido]äthan. Sm. 224° (Soc. 71, 424). — IV, 587.
2) α-Phenyl-β-[4-Methylphenyl]-β-[2-Phenylureïdobenzyl]harnstoff. Sm. 135° (J. pr. [2] 55, 247). — IV, 633.
3) Dimethyläther d. Di-4-Oxybenzaldiphenylhydrotetrazon. Sm. 152° (G. 27 [2] 226). - IV, 1307.4) Dimethyläther d. Dehydro-4-Oxybenzalphenylhydrazon. Sm. 190° (G. 27 [2] 227). — IV, 1307. 5) Diphenylamid d. $\alpha\beta$ -Di[Phenylamido] bernsteinsäure. Sm. 220°; Sd. · bei 300° (B. **24**, 2961). — II, 438. $\mathbf{C}_{28}\mathbf{H}_{26}\mathbf{O}_{3}\mathbf{N}_{2}$ C 76,7 - H 5,9 - O 10,9 - N 6,4 - M. G. 438.1) Benzoylstrychnin (A. 108, 353; M. 6, 859). — III, 939. 2) Verbindung (aus d. Aethylderivat C₂₂H₂₀O₄). Sm. 220° u. Zers. (Soc. 59, 18). — II, 1908. C 74,0 — H 5,7 — O 14,1 — N 6,2 — M. G. 454. 1) p-Dimethyllignonblau (B. 30, 239). $\mathbf{C}_{28}\mathbf{H}_{26}\mathbf{O}_4\mathbf{N}_2$ 2) Diäthylester d. 1-Phenylamido-2, 5-Diphenylpyrrol-3, 4-Dicarbonsäure. Sm. 184—185° (A. **293**, 109). — **IV**, 1037. C 69,7 — H 5,4 — O 13,3 — N 11,6 — M. G. 482. $\mathbf{C}_{28}\mathbf{H}_{26}\mathbf{O}_4\mathbf{N}_4$ 1) Verbindung (aus 1,4-Benzochinon u. 3-Amido-2-Oxy-1-Methylbenzol). Sm. 283—285° (A. 226, 73). — III, 346. C 67,5 — H 5,2 — O 16,1 — N 11,2 — M. G. 498. $\mathbf{C}_{28}\mathbf{H}_{26}\mathbf{O}_5\mathbf{N}_4$ 1) Verbindung (aus Benzylenimid) (B. 28, 1653). C 69,1 — H 5,3 — O 19,8 — N 5,8 — M. G. 486. 1) Dimethyläther d. o-Dioxylignonblau (B. 30, 240). $\mathbf{C}_{28}\mathbf{H}_{26}\mathbf{O}_{6}\mathbf{N}_{2}$ 1) $\alpha \alpha \alpha$ -Tri[Benzylsulfon]phenylmethan. Sm. 2070 (B. 25, 360). — II, 1292. $C_{28}H_{26}O_6S_3$ C 45,3 — H 3,5 — O 17,2 — N 34,0 — M. G. 742. 1) Diacetat d. Verbindung $C_{24}H_{22}O_6N_{18}$. Sm. 164—165° (B. 27, 941). 1) Verbindung (aus Rubbadin). Zers. über 200° (B. 25, 1883). — II, 658. $\mathbf{C}_{28}\mathbf{H}_{26}\mathbf{O}_{8}\mathbf{N}_{18}$ $C_{28}H_{26}O_8S_2$ $\mathbf{C}_{28}\mathbf{H}_{26}\mathbf{N}_{4}\mathbf{S}$ 1) Di [β -Phenylhydrazon - β -Phenyläthyl] sulfid. Sm. 146—147° (B. 23, 3475). — IV, 771.
2) Sulfid d. α-[4-Merkaptophenyl]hydrazon-α-Phenyläthan. Sm. 170° u. Zers. (A. 270, 152). — IV, 816. 1) 4,4'-Biphenylendi [uns-Methylphenylthioharnstoff] (B. 27, 1561). — $\mathbf{C}_{28}\mathbf{H}_{26}\mathbf{N}_4\mathbf{S}_2$ IV, 965. 2) 4,4'-Biphenylendi[2-Methylphenylthioharnstoff]. Sm. noch nicht bei 300° (B. 27, 1559). — IV, 965. $\mathbf{C}_{28}\mathbf{H}_{26}\mathbf{N}_{4}\mathbf{S}_{3}$ 1) Thiodiphenylditolyldithioharnstoff. Sm. 1340 (B. 20, 670). — II, 821. $\mathbf{C}_{28}\mathbf{H}_{27}\mathbf{ON}_{8}$ C 79.8 - H 6.4 - O 3.8 - N 10.0 - M. G. 421. $1) \ ?-Di[4-Methylphenylamido]-2-Methyl-1, 4-Benzochinon-4-Methyl-1, phenylimid. Sm. 191° (B. 21, 679). — III, 360. $\mathbf{C}_{28}\mathbf{H}_{27}\mathbf{O}_{2}\mathbf{N}_{3}$ C 76,9 - H 6,2 - O 7,3 - N 9,6 - M. G. 437.

1) Verbindung (aus d. Methyläther d. α-Bromäthyl-3, 5-Dibrom-4-Oxyphenylketon (J. pr. [2] **52**, 208). — III, 142. 1) Verbindung (aus Benzaldehyd u. Phosphorwasserstoff). Sm. 153° (B. 21, $\mathbf{C}_{28}\mathbf{H}_{27}\mathbf{O}_{4}\mathbf{P}$ 332). — III, 6. C 71,0 - H 5,7 - O 20,3 - N 3,0 - M. G. 473. $C_{28}H_{27}O_6N$

1) Benzylhydrastin. Sm. 135°. HCl, HBr, HNO₃ (B. **26**, 2489). — II, 2054. 1) Jodmethylat d. Hydrocinnamid. Sm. 185° (Bl. [3] **19**, 274). $\mathbf{C}_{28}\mathbf{H}_{27}\mathbf{N}_{2}\mathbf{J}$ $\mathbf{C}_{28}\mathbf{H}_{28}\mathbf{ON}_{2}$

C 82,3 - H 6,9 - O 3,9 - N 6,9 - M. G. 408.

1) Verbindung (Base aus Dibenzylhydroxylamin). 2HCl, (2HCl, PtCl₄), HJ, 2HJ, 2HNO₃, H₂SO₄ (B. 19, 1631, 3289). — II, 535.

1) Di [4-Methylphenyl]arsenoxyd. Sm. 98° (A. 208, 20). — IV, 1692. $\mathbf{C}_{28}\mathbf{H}_{28}\mathbf{OAs}_{2}$

2) Tetramethyläther d. Di[4-Oxyphenyl]arsenoxyd. Sm. 130° (B. 20, 50). - IV, 1688.

 $\mathbf{C}_{28}\mathbf{H}_{28}\mathbf{O}_{2}\mathbf{N}_{4}$

C 74,3 — H 6,2 — O 7,1 — N 12,4 — M. G. 452. 1) Bisazoxybenzyl. Sm. 210—211° (A. 263, 211; B. 30, 2281). — IV, 1341. 2) Dimethyläther d. 2,2'-Di[2-Oxyphenylamidomethyl]azobenzol. Sm.

150—151° (*J. pr.* [2] **52**, 402). — **IV**, *1386*. C 70,0 — H 5,8 — O 6,7 — N 17,5 — M. G. 480. $\mathbf{C}_{28}\mathbf{H}_{28}\mathbf{O}_{2}\mathbf{N}_{6}$ 1) Di[Phenylhydrazid] d. Phenylhydrazonanemonsäure. Sm. 164° (M.

17, 292). — IV, 796. C 76,3 — H 6,4 — O 10,9 — N 6,4 — M. G. 440. $\mathbf{C}_{28}\mathbf{H}_{28}\mathbf{O_8N}_2$

Verbindung (aus Diphenylacetamid). Sm. 85° (B. 14, 2372). — II, 367. C 71,8 — H 6,0 — O 10,3 — N 11,9 — M. G. 468. $\mathbf{C}_{28}\mathbf{H}_{28}\mathbf{O}_{3}\mathbf{N}_{4}$

1) Diäthyläther d. 3,3'-Di[Phenylamido]-4,4'-Dioxyazoxybenzol. Sm. 125° (B. **26**, 685). — **IV**, 1343. C 73,7 — H 6,1 — O 14,0 — N 6,1 — M. G. 456.

 $\mathbf{C}_{28}\mathbf{H}_{28}\mathbf{O}_4\mathbf{N}_2$

1) Diäthylester d. 1,1-Dinaphtyläthylen-Diamidoameisensäure. Sm. 156° (B. 8, 25). — II, 608.

 $\mathbf{C}_{28}\mathbf{H}_{28}\mathbf{O}_4\mathbf{Si}$ 1) Tetra [2-Methylphenylester] d. Kieselsäure. Sd. 435-438° (B. 18,

 $C_{28}H_{28}N_6S_2$

 $\mathbf{C}_{28}\mathbf{H}_{29}\mathbf{O_6N}$

 $\mathbf{C}_{28}\mathbf{H}_{29}\mathbf{O}_7\mathbf{N}$

 $\mathbf{C}_{28}\mathbf{H}_{30}\mathbf{ON}_{4}$

 $\mathbf{C}_{28}\mathbf{H}_{30}\mathbf{ON}_{8}$

1687). — II, *738*. 2) Tetra[3-Methylphenylester] d. Kieselsäure. Sd. 443-446° (B. 18,

1688). — II, 744.

3) Tetra[4-Methylphenylester] d. Kieselsäure. Sm. 69-70°; Sd. 442 bis 445° (B. 16, 1252; 18, 1689). — II, 749. C 71,2 — H 5,9 — O 17,0 — N 5,9 — M. G. 472. l) Benzylhydrastimid. Sm. 140°. HCl (B. 26, 2490). — II, 2054. $\mathbf{C}_{28}\mathbf{H}_{28}\mathbf{O}_5\mathbf{N}_2$

2) Verbindung (aus Aethylacetessigester u. m-Homoanthranilsäure) (B. 27, 1402).

C 68.8 - H 5.7 - O 19.7 - N 5.7 - M. G. 488. $\mathbf{C}_{28}\mathbf{H}_{28}\mathbf{O}_{6}\mathbf{N}_{2}$

1) Oximanhydrid d. Benzylhydrasteïn. Sm. 135° (B. 26, 2489). — II, 2054. C 56.7 - H 4.7 - O 24.3 - N 14.2 - M. G. 592. $\mathbf{C}_{28}\mathbf{H}_{28}\mathbf{O}_{9}\mathbf{N}_{6}$

1) Tetraspartiddianilid. Zers. bei 270—275° (A. 303, 211).
1) Tetrabenzylammoniumchlorid. Sm. 230° (A. 151, 136). — II, 523. $\mathbf{C}_{28}\mathbf{H}_{28}\mathbf{NCl}$ 1) Thiodiphenyldi[P-Methylphenyl] guanidin. Sm. $152-153^{\circ}$ (B. 20, 675). $\mathbf{C}_{28}\mathbf{H}_{28}\mathbf{N}_{6}\mathbf{S}$

— II, 821. 1) $\alpha \beta$ -Di[β -Phenylthiouramidophenylamido]äthan (Aethylentetraphenyl-

 $\begin{array}{c} \textbf{C}_{28}\textbf{H}_{28}\textbf{C}_{4}\textbf{S}_{2} & \textbf{1} & \textbf{3} & \textbf{2} & \textbf{3} &$

- IV, 1691.

C₂₈H₂₈BrP 1) Tetrabenzylphosphoniumbromid (B. 21, 407). — IV, 1666. C₂₈H₂₈BrAs 1) Tetrabenzylarsoniumbromid + H₂O. Sm. 173° (A. 233, 80). — IV, 1691. C₂₈H₂₈JP 1) Tetrabenzylphosphoniumjodid. Sm. 191° (B. 21, 406). — IV, 1666. C₂₈H₂₆JAs 1) Tetrabenzylarsoniumjodid. Sm. 168° (A. 233, 80). — IV, 1691.

1) Tetrabenzylarsoniumtrijodid. Sm. 149-150° (A. 233, 81). - IV, 1691.

 $\mathbf{C}_{28}\overline{\mathbf{H}}_{28}\mathbf{J}_{3}\mathbf{A}$ s 1) Tetrabenzylphosphoniumoxydhydrat. Sm. 190°. Chlorid + H₂O, $\mathbf{C}_{28}\mathbf{H}_{29}\mathbf{OP}$ Bromid, Jodid, Nitrat, Sulfat + 6H₂O, Oxalat, Pikrat (B. 21, 406). — IV, 1666.

Tetrabenzylarsoniumoxydhydrat. Chlorid, 2 Chlorid + PtCl4, Bromid, $\mathbf{C}_{28}\mathbf{H}_{29}\mathbf{OAs}$ Jodid, Trijodid (A. 233, 78). — IV, 1691. C 69,0 — H 5,9 — O 16,4 — N 8,6 — M. G. 487.

 $\mathbf{C}_{28}\mathbf{H}_{29}\mathbf{O}_5\mathbf{N}_3$

1) Phenylhydrazon d. Methylhydrastein. Sm. 175-176°. HCl, HNO₃ (A. **271**, 396). — IV, 800.

2) Tetracetylrosanilin. Sm. 153-155° (B. 16, 1303). — II, 1093.

C 70,7 — H 6,1 — O 20,2 — N 2,9 — M. G. 475.

1) Papaverinphenacyloxydhydrat. Chlorid + 6H₂O, Bromid, Nitrat, Bichromat, Pikrat (M. 9, 1035). — IV, 441.

C 68,4 — H 5,9 — O 22,8 — N 2,8 — M. G. 491.

1) Benzylhydrastein + x H₂O. Sm. 159° (wasserfrei) (B. 26, 2489). — II, 2054.

2) Hydrastinbenzyloxydhydrat + H₂O. Sm. 194° (wasserfrei). Jodid, siehe dieses (B. 26, 2489). — II, 2051.

C 76,7 — H 6,8 — O 3,6 — N 12,8 — M. G. 438.

1) Base (aus Benzylenimid). Sm. 130-135° (B. 28, 1651). - IV, 187. 2) Verbindung (aus Diphenylacetamid). Sm. 186° (B. 14, 2371). — II, 367. C 68,0 — H 6,1 — O 3,2 — N 22,7 — M. G. 494.

1) Anhydrid d. 2-Amido-3-Methylamido-5,10-Naphtdiazin-5-Methyl-

oxydhydrat (B. 26, 381). - IV, 1281.

 $\mathbf{C}_{28}\mathbf{H}_{30}\mathbf{O}_{8}\mathbf{N}_{2}$ C 76,0 — H 6,8 — O 10,9 — N 6,3 — M. G. 442. C 76,0 — H 6,8 — O 10,9 — N 6,3 — M. G. 442.

1) Benzylstrychnin + 9 H₂O (Strychninbenzyloxydhydrat). Sm. 220°. Salze siehe (M. 10, 1; A. 304, 53). — III, 939.
C 69,1 — H 6,2 — O 13,2 — N 11,5 — M. G. 486.

1) Brenzkatechinantipyrin. Sm. 78—79° (Bl. [3] 15, 172). — IV, 510.
C 68,6 — H 6,1 — O 19,6 — N 5,7 — M. G. 490.
1) Benzylhydrastamid. Sm. 116° (B. 26, 2490). — II, 2054.
Distrylither d. 3 6 Dishlor 2 5 Disyyl 14 Powershiponedia $\mathbf{C}_{28}\mathbf{H}_{80}\mathbf{O}_{4}\mathbf{N}_{4}$ $\mathbf{C}_{28}\mathbf{H}_{30}\mathbf{O}_{6}\mathbf{N}_{2}$ C₂₈H₃₀O₈Cl₂ 1) Diäthyläther d. 3,6-Dichlor-2,5-Dioxy-1,4-Benzochinondibenzoyldiäthylacetat. Sm. 170° (Am. 17, 636). — III, 351. C 52,3 — H 4,7 — O 29,9 — N 13,1 — M. G. 642. $\mathbf{C}_{28}\mathbf{H}_{30}\mathbf{O}_{12}\mathbf{N}_{6}$ 1) 4,5-Di[3,5-Dinitro-4-Pseudobutyl-2,6-Dimethylbenzoyl]-1,2,3,6-Dioxdiazin. Sm. 245° (B. 31, 1348). C₂₈H₃₀NCl Methyltri[γ-Phenylpropenyl]ammoniumchlorid. Sm. 166°. 2 + PtCl₄ (B. **26**, 1864). — II, 585. (B. 26, 1864). — II, 585.

1) Methyltri[γ-Phenylpropenyl]ammoniumjodid. Sm. 129—130° (B. 26, 1864). — II, 585.

C 79,0 — H 7,3 — O 3,8 — N 9,9 — M. G. 425. $\mathbf{C}_{28}\mathbf{H}_{80}\mathbf{NJ}$ $\mathbf{C}_{28}\mathbf{H}_{31}\mathbf{ON}_{3}$ 1) Methyläther d. $\alpha\alpha$ -Di[4-Dimethylamidophenyl]- α -[7-Oxy-5-Methyl-6-Chinolyl] methan. Sm. 1830 (B. 24, 3143). — IV, 1214. C 62,1 - H 5,7 - O 29,6 - N 2,6 - M. G 541 $C_{28}H_{31}O_{10}N$ 1) Tetracetylhelicintoluid (A. 154, 34). — III, 69. $C_{28}H_{31}N_3Cl_3$ 1) Farbstoff (aus Tetrahydrochinolin) (*C.* 1897 [1] 906). $C_{28}H_{32}O_5N_2$ C 70,6 — H 6,7 — O 16,8 — N 5,9 — M. G. 476. 1) Verbindung (aus 2-Methylchinolin-3-Carbonsäureäthylesterchlormethylat). Sm. 235°; Zers. bei 180—240° (B. 19, 38; A. 282, 111). — IV, 353. C 64,1 — H 6,1 — O 24,4 — N 5,3 — M. G. 524. 1) Phtalat d. Camphonitrosophenol. Sm. 275° u. Zers. (Bl. [3] 1, 471). $\mathbf{C}_{28}\mathbf{H}_{32}\mathbf{O}_{8}\mathbf{N}_{2}$ - III, 494. C 60,9 - H 5,8 - O 23,2 - N 10,1 - M. G. 552. $\mathbf{C}_{28}\mathbf{H}_{32}\mathbf{O}_{8}\mathbf{N}_{4}$ 1) 4,5-Di[?-Nitro-4-Pseudobutyl-2,6-Dimethylbenzoyl]-1,2,3,6-Dioxdiazin. Sm. 176° (B. 31, 1348).

1) 2-Methylphenylamid d. Orthokieselsäure (Soc. 55, 480). — II, 460.

2) 4-Methylphenylamid d. Orthokieselsäure. Sm. 131—132° (Soc. 55, 480). $\mathbf{C}_{28}\mathbf{H}_{82}\mathbf{N}_{4}\mathbf{Si}$ 479). — II, 490. C 73,2 - H 7,2 - O 10,5 - N 9,1 - M. G. 459. $\mathbf{C}_{28}\mathbf{H}_{33}\mathbf{O}_{3}\mathbf{N}_{3}$ 1) Acetat d. α - Oxy - 4', 4², 4³ - Pentamethylacetyltriamidotriphenylmethan. Sm. $223-225^{\circ}$ (B. 16, 2905). — II, 1088. C 60,1 — H 5,9 — O 11,4 — N 22,5 — M. G. 559. $C_{28}H_{33}O_4N_9$ 1) Verbindung (aus Dioximidotropinon) = $(C_{28}H_{33}O_4N_9)_n$. Sm. 224—225° u. Zers. (B. 30, 2707). — IV, 798. C 78,1 — H 7,9 — O 7,4 — N 6,5 — M. G. 430. $\mathbf{C}_{28}\mathbf{H}_{34}\mathbf{O}_{2}\mathbf{N}_{2}$ 1) Dipiperidid d. α -Truxillsäure. Sm. 259° (B. 22, 2264). — IV, 17. 2) Dipiperidid d. β -Truxillsäure. Sm. 180° (B. 22, 2264). — IV, 17. 3) Dipiperidid d. γ -Truxillsäure. Sm. 248° (B. 22, 2265). — IV, 17. 3) Dipiperidid d. γ-Truxillsäure. Sm. 248° (B. 22, C 72,7 — H 7,4 — O 13,8 — N 6,1 — M. G. 462. $\mathbf{C}_{28}\mathbf{H}_{34}\mathbf{O}_{4}\mathbf{N}_{2}$ 1) 4.5 - Di[4 - Pseudobutyl- 2.6 - Dimethylbenzoyl] - 1.2.3.6 - Dioxdiazin.Sm. 201^o (B. 31, 1348).

2) dimolec. 4-Methylphenylimid d. mal. Pentan- $eta\delta$ -Dicarbonsäure. Sm. 237° (A. 285, 237; 292, 201). C 61,1 — H 6,2 — O 17,4 — N 15,3 — M. G. 550. 1) Diäthylester d. 2,5-Diketo-1,4-Di[2-Isopropylphenyl-5-Carbon-

 $\mathbf{C}_{28}\mathbf{H}_{34}\mathbf{O}_{6}\mathbf{N}_{2}$

säure] hexahydro-1,4-Diazin. Sm. 192-193 (J. pr. [2] 40, 440). -II, 1388. C'69.8 - H 7.3 - O 20.0 - N 2.9 - M. G. 481.

 $\mathbf{C}_{28}\mathbf{H}_{35}\mathbf{O}_{6}\mathbf{N}$ 1) Camphorylcodein $+4H_2O$. $HCl+3H_2O$, $(2HCl, PtCl_4)$ (Soc. 28, 689). - III, 906. $\mathbf{C}_{28}\mathbf{H}_{36}\mathbf{O}_{5}\mathbf{N}_{10}$ C 56.7 - H 6.1 - O 13.5 - N 23.6 - M. G. 592.

1) Verbindung (aus Dioximidotropinon). Sm. 177-178 (B. 30, 2706). -

IV, 798. C 54,9 — H 5,9 — O 20,9 — N 18,3 — M. G. 612. $\mathbf{C}_{28}\mathbf{H}_{36}\mathbf{O}_{8}\mathbf{N}_{2}$ 1) Dimethylester d. o-Phtalyldiecgonin. (2HCl, PtCl₄) (B. 21, 3338). - III, 870. 2) Dimethylester d. o-Phtalyldi-d-Eegonin. Fl. 2HJ(B. 24,11).—III, 870.

- 1) Jodid d. Tetraäthylrosanilin (J. 1863, 419). II, 1092.
 C 73,3 H 8,3 O 12,2 N 6,1 M. G. 458. $C_{28}H_{36}N_3J$ $\mathbf{C}_{28}\mathbf{H}_{38}\mathbf{O_4N_2}$
 - 1) polym. 2 Heptylidenamidobenzol-1-Carbonsäure. Sm. 183° (B. 28, 2816).
- $\mathbf{C}_{28}\mathbf{H}_{38}\mathbf{O}_{5}\mathbf{N}_{2}$
- C 69,7 H 7,9 O 16,6 N 5,8 M. G. 482.

 1) Brucinisoamyloxydhydrat. Salze siehe (*J. pr.* [2] 3, 167). III, 947.
- 1) Jodnethylat d. 4',42-Di[Dimethylamido]-43-Isopropyltriphenylmethan. Sm. 200° (B. 13, 787). IV, 1048.
 C 77,1 H 9,2 O 7,3 N 6,4 M. G. 436. $\mathbf{C}_{28}\mathbf{H}_{38}\mathbf{N}_{2}\mathbf{J}_{2}$
- $C_{28}H_{40}O_2N_2$
- 1) Diphenylamid d. Thapsiasäure. Sm. 162—163° (G. 13, 517). II, 416. 1) Trichlormethylat d. Tri[2-Dimethylamidophenyl] methan. 2+3PtCl4 $\mathbf{C}_{28}\mathbf{H}_{40}\mathbf{N}_{3}\mathbf{Cl}_{3}$ (B. 16, 1307). — IV, 1193. 2) Trichlormethylat d. Tri[4-Dimethylamidophenyl]methan. 2+3PtCl₄
 - (B. 12, 2345). IV, 1195.
 - 3) Trichlormethylat d. 3',4's-Tri[Dimethylamido]triphenylmethan. 2+3 PtCl₄ (B. 12, 803). IV, 1193.
 - 1) Trijodmethylat d. Tri[2-Dimethylamidophenyl] methan (B. 16, 1306).
 - **IV**, 1193. 2) Trijodmethylat d. Tri[4-Dimethylamidophenyl]methan. Sm. 188° u. Zers. (B. 2, 448; 12, 2344; 14, 1953; Bl. [3] 13, 552). — IV, 1195.
 3) Trijodmethylat d. 3',4²,4³-Tri[Dimethylamido]triphenylmethan (B.
 - 12, 803; 13, 673). IV, 1193. C 71,1 H 9,1 O 16,9 N 2,9 M. G. 473.
- $C_{28}H_{43}O_5N$

 $C_{28}H_{40}N_3J_3$

 $\mathbf{C}_{28}\mathbf{H}_{47}\mathbf{O}_{6}\mathbf{N}$

 $\mathbf{C}_{28}\mathbf{H}_{50}\mathbf{N}_{2}\mathbf{J}_{2}$ $\mathbf{C}_{28}\mathbf{H}_{53}\mathbf{ON}$

 $\mathbf{C}_{28}\mathbf{H}_{57}\mathbf{OJ}$ C28 H62 ON6

- 1) Veratralbin (Soc. 35, 405). III, 950. C 66,5 H 8,5 O 22,2 N 2,8 M. G. 505. $C_{28}H_{43}O_7N$
 - 1) Erythrophieïn (oder $C_{99}H_{45}O_7N$). HCl, (2HCl, PtCl₄) (C. 1897 [1] 301). C 76,3 H 10,0 O 7,3 N 6,4 M. G. 440.
- $C_{28}H_{44}O_2N_2$ 1) 2-Oktyl-1,4-Benzdiazin-3-[Undekyl-\lambda-Carbonsäure] (Oktyldodekyl-
- säurechinoxalin). Sm. 45°. (2HCl, PtCl₄) (B. 29, 812). IV, 950. C 81,7 H 10,9 O 3,9 N 3,4 M. G. 411.

 1) Phenylamid d. Behenolsäure. Sm. 73° (B. 25, 2669). II, 371. C 64,2 H 8,6 O 24,5 N 2,7 M. G. 523. $\mathbf{C}_{28}\mathbf{H}_{45}\mathbf{ON}$
- $\mathbf{C}_{28}\mathbf{H}_{45}\mathbf{O}_8\mathbf{N}$ 1) **Verin.** Sm. 130° (*Soc.* **33**, 338). — III, *949*. C 78,9 — H 10,8 — O 3,7 — N 6,6 — M. G. 426. $\mathbf{C}_{28}\mathbf{H}_{46}\mathbf{ON}_{2}$
 - 1) Phenylhydrazid d. Behenolsäure. Sm. 86,5° (B. 25, 2670). IV, 667.
- C 76,0 H 10,4 O 7,2 N 6,3 M. G. 442. $C_{28}H_{46}O_2N_2$ 1) Phenylhydrazid d. Oxybrassidinsäure. Sm. 111° (B. 26, 840). — IV, 693.
- $\mathbf{C}_{28}\mathbf{H}_{47}\mathbf{ON}$
- 1, 093.
 C 81,3 H 11,4 O 3,9 N 3,4 M. G. 413.
 Phenylamid d. Brassidinsäure. Sm. 78° (B. 19, 3326). II, 371.
 Phenylamid d. Erucasäure. Sm. 55° (B. 19, 3326). II, 371.
 C 68,2 H 9,5 O 19,5 N 2,8 M. G. 493.
 Aethylester d. Glykocholsäure. Fl. (Am. I, 182). I, 1193.
- C 78,5 H 11,2 O 3,7 N 6,5 M. G. 428. $\mathbf{C}_{28}\mathbf{H}_{48}\mathbf{ON}_{2}$
 - 1) Phenylhydrazid d. Brassidinsäure. Sm. 95° (B. 25, 2671). IV, 667.
- $\mathbf{C}_{28}\mathbf{H}_{56}\mathbf{O}_{2}\mathbf{N}_{2}$
- 2) Phenylhydrazid d. Brassdinsatre. Sm. 82° (B. 25, 2671). IV, 667.

 2) Phenylhydrazid d. Erucasäure. Sm. 82° (B. 25, 2671). IV, 667.

 Di[Jodäthylat] d. Conessin + H₂O (B. 19, 82). III, 875.

 C 80,2 H 12,6 O 3,8 N 3,3 M. G. 419.

 1) Tetraönanthoxaldin. Fl. (A. Spl. 6, 25). I, 955.

 C 74,3 H 12,4 O 7,1 N 6,2 M. G. 452.

 1) s-Tridekylmyristylharnstoff. Sm. 103° (B. 18, 2016; 19, 1436). I 1804 I, 1304.
 - 1) Verbindung (aus Drimol). Sm. 47° (A. 286, 375). III, 630. C 67,5 H 12,4 O 3,2 N 16,9 M. G. 498.
 - 1) Verbindung (aus Isobutyraldehyd). Sm. 31°; Zers. bei 90° (A. 205, 5; B. 13, 904). — I, 947,

C₂₈-Gruppe mit vier Elementen.

- 1) **2,2**'-Dibrom-**4,4**'-Diphtalylamidobenzol (B. 11, 2262). IV, 966. $\mathbf{C}_{28}\mathbf{H}_{14}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{Br}_{2}$
- 1) Tetranitrotetraphenylthiophen. Sm. oberh. 250° (A. 144, 197). $\mathbf{C}_{28}\mathbf{H}_{16}\mathbf{O}_{8}\mathbf{N}_{4}\mathbf{S}$ III, 750.

(B. 15, 1522; 16, 56, 903). - III, 431.

C₂₈H₁₇O₁₂N₄Br₃ 1) Säure (aus Tribromtetraphenylthiophen).

1) Di[?-Amido-?-Oxy-9,10-Anthrachinonyl]äther-?-Disulfonsäure

 $Ba_2 + 8H_2O$ (A. 144, 201).

 $C_{98}H_{16}O_{18}N_{9}S_{9}$

 $\mathbf{C}_{28}\mathbf{H}_{27}\mathbf{O}_{2}\mathbf{N}_{4}\mathbf{Br}$

- III, 750. C₂₈H₁₇O₁₄N₄Br₃ 1) Verbindung (aus Tribromtetraphenylthiophen) (A. 144, 201). III, 750. $C_{28}H_{19}O_3N_3S$ 1) Phenylrosindulin-m-Sulfonsäure (A. 262, 242). — IV, 1206. C28 H20 O3 N2S 1) 7-Phenyloxydhydrat d. 5-Phenylsulfon- $\alpha\beta$ -Naphtophenazin. Sm. 287° (B. 31, 2434). Tetracetyltetrabromdiimidophenolphtaleïn. Sm. 241° (A. 202, 117). — II, 1985. C28 H20 O6 N2 Br4 1) 1-Chlorphenylat d. 6-Acetylamido-2, 3-Diphenyl-1, 4-Benzdiazin C28H22ON3Cl (B. 31, 2426). 1) 4,4'-Di[4-Nitrobenzylidenamidobenzyl]sulfid. Sm. 1730 (B. 28, $\mathbf{C}_{28}\mathbf{H}_{22}\mathbf{O_4N_4S}$ 1339). — III, *32*. 1) Verbindung (aus Amarin u. Benzoylchlorid) (J. pr. [2] 27, 300). C, H, ON, Cl - III, 25. 1) Di[4-(2-Oxybenzyliden)amidobenzyl]sulfid. Sin. 176-1770 (1630) C28H24O2N2S (B. 24, 727; 28, 1339). — III, 74. 2) Di[4-Benzoylamidobenzyl] sulfid. Sm. 223° (224°) (B. 24, 726; 28, 915) 3) s-Di[4-Benzoylamido-l-Methylphenyl]sulfid. Sm. 185-186° (B. **20**, 668). — II, 1179. 1) 5-Dibenzylamido-2-[3-Nitrophenyl]-3-Phenyl-2,3-Dihydro- $\mathbf{C}_{28}\mathbf{H}_{24}\mathbf{O}_{2}\mathbf{N}_{4}\mathbf{S}$ 1,3,4-Thiodiazol. HCl (B. 30, 855). - IV, 686. 1) Aethyläther d. Stilbendisulfonsäuredisazophenol. $C_{28}H_{24}O_8N_4S_9$ Na_2 , Cu (B. **27**, 3357). — **IV**, 1419. 1) Verbindung (aus d. Verb. $C_{28}H_{28}O_2N_7Br$) (B. 31, 1413). 1) Verbindung (aus Chloral u. β -2-Methyl-7-Chinolylakryísäure). Sm. $\mathbf{C}_{28}\mathbf{H}_{24}\mathbf{N}_{7}\mathbf{Cl}_{2}\mathbf{Br}$ $\mathbf{C}_{28}\mathbf{H}_{25}\mathbf{O}_5\mathbf{N}_2\mathbf{Cl}_5$ 128°. HCl (B. 22, 284). — IV, 382.

1) α-Phenyl-β-[4-Methylphenyl]-β-[2-Phenylthioureïdobenzyl]-harnstoff. Sm. 230—231° (J. pr. [2] 55, 248). — IV, 635.

1) αβ-Di[α-Brompropionyl-2-Naphtylamido]äthan. Sm. 196—197° $\mathbf{C}_{28}\mathbf{H}_{26}\mathbf{ON}_{4}\mathbf{S}$ $\mathbf{C}_{28}\mathbf{H}_{26}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{Br}_{2}$ (B. 25, 3269). - II, 617.1) Verbindung (aus Chloralhydrat u. salzs. Phenylhydrazin). Zers. bei $\mathbf{C}_{28}\mathbf{H}_{26}\mathbf{O}_{2}\mathbf{N}_{7}\mathbf{C}\mathbf{I}$ 145°. Ag₂ (B. 31, 1410). 1) Verbindung (aus Bromalhydrat u. salzs. Phenylhydrazin). Ag. (B. $\mathbf{C}_{28}\mathbf{H}_{26}\mathbf{O}_{2}\mathbf{N}_{7}\mathbf{Br}$ **31**, 1412). $\mathbf{C}_{28}\mathbf{H}_{26}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{S}$ 1) 4-Methoxylbenzaldehyd-2-Naphtylthionaminsaures-2-Amidonaphtalin. Sm. 110° (A. 274, 256). — III, 82. 1) Diacetat d. Quecksilberammoniumbase $\mathbf{C}_{24}\mathbf{H}_{22}\mathbf{O_2N_2Hg_2}$. Sm. 178° $\mathbf{C}_{28}\mathbf{H}_{26}\mathbf{O}_4\mathbf{N}_2\mathbf{H}\mathbf{g}_2$ (G. 28 [2] 131). — IV, 1707. 1) 2-Brom-4,4'-Dimethylazoxybenzol + 4,4'-Dimethylazoxybenzol.

Sm. 63° (M. 10, 598). — IV, 1340. $\mathbf{C}_{28}\mathbf{H}_{27}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{C}\mathbf{l}$ 1) Leukochlordimethyllignonblau (B. 31, 620).

 $\mathbf{C}_{28}\mathbf{H}_{28}\mathbf{O}_{4}\mathbf{Br}_{2}\mathbf{S}_{4}$ 1) Bromid d. Di[4-Methylphenyl]disulfoxyd (A. 149, 105). — II, 826. $\mathbf{C}_{28}\mathbf{H}_{28}\mathbf{O}_{5}\mathbf{NCl}$ 1) Papaverinphenacylchlorid $+ 6H_2O$. $2 + PtCl_4$ (M. 9, 1039). -IV, 441.

 $\mathbf{C}_{28}\mathbf{H}_{28}\mathbf{O}_{5}\mathbf{NBr}$ 1) Papaverinphenacylbromid $+2^{1}/_{2}$ H₂O. Zers. bei 194° (M. 9, 1035). **- IV**, 441.

1) Jodbenzylat d. Hydrastin. Sm. 1770 (B. 26, 2488). — II, 2051. $\mathbf{C}_{28}\mathbf{H}_{28}\mathbf{O}_{6}\mathbf{NJ}$ 1) Verbindung (aus d. 4-Aethoxylphenylamid d. Benzolsulfonsäure). Sm. 168°. K (A. 265, 185). — II, 721. $C_{28}H_{28}O_6N_2S_2$

1) Jodäthylat d. Acetylbenzoylmorphin $+\frac{1}{2}$ H₂O (Soc. 28, 323). — $\mathbf{C}_{28}\mathbf{H}_{30}\mathbf{O}_{5}\mathbf{NJ}$ $\mathbf{C}_{28}\mathbf{H}_{31}\mathbf{O}_{3}\mathbf{N}_{2}\mathbf{J}$

 Jodmethylat d. Benzoylcinchonin (A. ch. [7] 7, 142). — III, 815.
 Di [Jodmethylat] d. Benzoylcinchonin (Bl. [3] 9, 714). — III, 835.
 Chlorbenzylat d. Dimethylcinchonin (A. 277, 287). — III, 833. $\mathbf{C}_{28}^{2}\mathbf{H}_{32}^{3}\mathbf{O}_{2}^{2}\mathbf{N}_{2}^{2}\mathbf{J}_{2}$ $\mathbf{C}_{28}\mathbf{H}_{33}^{2}\mathbf{O}\mathbf{N}_{2}^{2}\mathbf{C}\mathbf{I}$ C28H88N8ClP

 Methyltri [1,2,3,4-Tetrahydro-1-Chinolyl] phosphonium chlorid. Sm. 148-150°. 2 + PtCl₄ (B. 31, 1040). — IV, 1683.
 Methyltri [1,2,3,4-Tetrahydro-1-Chinolyl] phosphonium jodid. $C_{28}H_{33}N_3JP$

Sm. 188° (B. 31, 1040). — IV, 1683. C28H34O3N4S2 1) Verbindung (aus 1-Methylbenzol-4-Sulfinsäure). Sm. 132° u. Zers. (J. pr. [2] 56, 227).

 $\mathbf{C}_{28}\mathbf{H}_{36}\mathbf{O}_4\mathbf{N}_2\mathbf{S}_2$

1) 1,2-Di[Isobutylphenylsulfonamidomethyl]benzol. Sm. 157° (B. 31, 1706).

 $\mathbf{C}_{28}\mathbf{H}_{36}\mathbf{O}_{8}\mathbf{NJ}$

1) Jodallylat d. Narceinäthylester. Sm. 154-155° (A, 277, 42). -II, 2080.

 $\mathbf{C}_{28}\mathbf{H}_{37}\mathbf{O_4N_2Cl}$

1) Chlorisoamylat d. Brucin + H_2O . $2 + PtCl_4$ (J. pr. [2] 3, 167). -III, 947.

 $\mathbf{C}_{28}\mathbf{H}_{37}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{J}$ $\mathbf{C}_{28}\mathbf{H}_{60}\mathbf{O}_{4}\mathbf{JP}$

1) Jodisoamylat d. Brucin. $+ J_2$, $+ J_5$ (J. pr. [2] 3, 167). — III, 947. 1) Tetrahydrooxyönanthylidenphosphoniumjodid. Sm. 120-1220 (A. ch. [6] 2, 40). - I, 955.

C₂₉-Gruppe mit einem Element.

 $\mathbf{C}_{29}\mathbf{H}_{22}$ $\mathbf{C}_{29}\mathbf{H}_{26}$ C 94,0 - H 6,0 - M. G. 370.

1) 2,3,4,5-Tetraphenyl-R-Penten. Sm. 177° (A. 302, 231). C 93,1 - H 6,9 - M.G. 374.

 $C_{29}H_{54}$

1) 1,2,3,4-Tetraphenyl-R-Pentamethylen. Sm. 80,5-81° (A. 302, 229). C 86,6 — H 13,4 — M. G. 402.

1) Kohlenwasserstoff (aus Polyporus officinalis). Sm. 125-126° (J. 1886, 1823). — III, *645*. C 85,3 — H 14,7 — M. G. 408.

 $C_{29}H_{60}$

1) Kohlenwasserstoff (aus Charas). Sm. 63,5-64°; Sd. 285-290°, (Soc. 69, 543).

C₂₀-Gruppe mit zwei Elementen.

 $C_{29}H_{18}O_6$

C = 75,3 - H = 3,9 - O = 20,8 - M. G. = 462.

1) Dibenzoat d. Chrysophansäure. Sm. 200° (J. 1862, 323; A. 183,

173; 212, 38). — III, 452. 2) Dibenzoat d. 7,8-Dioxy-2-Phenyl-1,4-Benzpyron. Sm. 192,5—194° (B. **29**, 2432). C 70,6 — H 4,6 — O 14,8 — M. G. 432.

 $C_{29}H_{20}O_4$

1) Benzoat d. α -Oxy- $\beta\beta$ -Dibenzoyl- α -Phenyläthen. Sm. 121—122° (A. **291**, 102). — III, 322. C 70,2 — H 4,0 — O 25,8 — M. G. 496.

 $C_{29}H_{20}O_8$

 $\mathbf{C}_{29}\mathbf{H}_{20}\mathbf{N}_{2}$

 $C_{29}H_{21}N$

 $\mathbf{C}_{29}\mathbf{H}_{22}\mathbf{N}_{2}$

 $\mathbf{C}_{29}\mathbf{H}_{22}\mathbf{N}_4$

 $\mathbf{C}_{29}\mathbf{H}_{28}\mathbf{N}$

1) Säure (aus Phenol) (G. 14, 103). — II, 649. 2) Methylester d. 3,4,5-Tribenzoylbenzol-1-Carbonsäure. Sm. 139° (A, 301, 110).

3) Verbindung (aus Krapp) (B. 3, 295). — III, 425. C 53,0 — H 3,0 — O 43,9 — M. G. 656.

1) Tannoform. Zers. bei 230° (C. 1896 [1] 560). C 87,8 — H 5,0 — N 7,1 — M. G. 396.

C29H20O18

1) Dianthracylamidoimidomethan (Methenyldianthraminamidin) (B. 16, 1639). — II, 640.

 $\mathbf{C}_{29}\mathbf{H}_{20}\mathbf{Br}_{2}$

1) 1,1-Dibrom-2,3,4,5-Tetraphenyl-R-Penten. Sm. 151,5-1520 (A. 302,

C 90.9 - H 5.5 - N 3.6 - M. G. 383.

1) **2,3,4,6-Tetraphenylpyridin.** Sm. 179° (A. **281**, 51, 52). — **IV**, 478. 2) **2,3,5,6-Tetraphenylpyridin.** Sm. 233,5° (A. **302**, 234). C 84,7 — H 5,1 — N 10,2 — M. G. 411.

 $C_{29}H_{21}N_{3}$

- 1) 2-Methylphenylrosindulin. Sm. 197° (A. 272, 318). IV, 1207. 2) 4-Methylphenylrosindulin. Sm. 212—213° (A. 272, 318). IV, 1207.
- 3) 9-Methyl-5-Phenylrosindulin. Sm. 224,5° (B. 26, 581). IV, 1210. C 87,4 H 5,5 N 7,0 M. G. 398.

α-[1-Naphtyl] azotriphenylmethan. Sm. 114° (C. 1898 [2] 1132).

IV, 1404. C 81,7 — H 5,2 — N 13,1 — M. G. 426. 1) 9-Phenylamido-5-Methylrosindulin[5]. Sm. 225° u. Zers. HCl (A. 286,

161). — IV, 1297. C 90,4 — H 6,0 — - N 3,6 - M. G. 385.

1) 1-Methyl-2,3,4,5-Tetraphenylpyrrol. Sm. 214° (B. 22, 555). — IV, 478.

 $\mathbf{C}_{29}\mathbf{H}_{26}\mathbf{O}_{2}$

 $\mathbf{C}_{29}\mathbf{H}_{28}\mathbf{O}_{6}$

 $C_{29}H_{30}O_4$

 $C_{29}H_{30}O_6$

 $C_{29}H_{24}O$ C 89,7 - H 6,2 - O 4,1 - M G 388. $1)\ 10\text{-}Keto\text{-}3\text{-}Methyl\text{-}9\text{,}10\text{-}Di[4\text{-}Methyl\text{phenyl}]\text{-}9\text{,}10\text{-}Dihydroanthracen.}$ Sm. 217° (Bl. [3] **15**, 392; [3] **17**, 988). C 86,1 — H 5,9 — O 7,9 — M. G. 404. $C_{29}H_{24}O_{2}$ 1) $\alpha \varepsilon$ -Diketo- $\alpha \beta \gamma \varepsilon$ -Tetraphenylpentan. Sm. 189° (A. 281, 50, 53). III, 310. 2) $\alpha \varepsilon$ -Diketo- $\alpha \beta \delta \varepsilon$ -Tetraphenylpentan. Sm. 145,5—146,5° (A. 302, 223). $C_{29}H_{24}O_{4}$ C 79.8 - H 5.5 - O 14.7 - M. G. 436.1) Dibenzoat d. $\beta\beta$ -Di[4-Oxyphenyl]propan. Sm. 153,5° (J. r. 23, 495). — II, 1151. C 74,4 - H 5,1 - O 20,5 - M. G. 468. $C_{29}H_{24}O_6$ 1) Dibenzoat d. Verb. $C_{15}H_{16}O_4$. Sm. 115° (Bl. [3] 7, 564). — II, 919. C 69,6 — H 4,8 — O 25,6 — M. G. 500. $C_{29}H_{24}O_{8}$ 1) Piscidin. Sm. 192° (Am. 5, 39). — III, 644. 2) Tetracetat d. Di[2,7-Dioxynaphtyl]methan. Sm. 249,5° (B. 26, 85). — II, 1039. С 87,0 — Н 6,0 — N 7,0 — М. G. 400. $\mathbf{C}_{29}\mathbf{H}_{24}\mathbf{N}_{2}$ 1) α -Triphenyl- β -[1-Naphtyl]hydrazin (C. 1898 [2] 1132).

2) 1,2,6-Triphenyl-4-Benzoyl-1,4-Dihydro-1,4-Diazin. Sm. 184—185°

(Soc. **63**, 1374). — IV, 1031. C 85,7 — H 6,4 — O 7,9 — M. G. 406.

1) 2,3-Dioxy-1,2,3,4-Tetraphenyl-R-Pentamethylen. Sm. 138° (A. 302, 225).

2) Allo-2, 3-Dioxy-1, 2, 3, 4-Tetraphenyl-R-Pentamethylen. Sm. 239 bis 240° (A. **302**, 227). C 74,1 — H 5,5 — O 20,4 — M. G. 470.

 $\mathbf{C}_{29}\mathbf{H}_{26}\mathbf{O}_{6}$ 1) Rottleron (Soc. 67, 237). — III, 971. C 67,2 — H 5,0 — O 27,8 — M. G. 518. $C_{29}H_{26}O_{9}$

1) Dibenzoat d. Pikrotin. Sm. 247-248° (B. 31, 2972). $\mathbf{C}_{29}\mathbf{H}_{26}\mathbf{O}_{12}$ C 61,5 - H 4,6 - O 33,9 - M. G. 566.

1) Aromadendrin + 3H₂O. Sm. 216° (C. **1897** [1] 170). C 78,2 - H 6,1 - N 15,7 - M. G. 445.

 $\mathbf{C}_{29}\mathbf{H}_{27}\mathbf{N}_{5}$ 1) 1, 3 - Di [4 - Methylphenylamido] methylen-2-[4-Methylphenyl] imido-2,3-Dihydrobenzimidazol. Sm. 187,5—188° (B. 24, 2513). — IV, 567.

 $2) \ \ \textbf{2-Phenylimido-1, 3-Di} \\ [\textbf{4-Methylphenylamido}] \\ \textbf{methylen-5-Methyl-phenylamido} \\]$ 2,3-Dihydrobenzimidazol. Sm. 1930 (B. 24, 2510). — IV, 624. C 73,7 — H 5,9 — O 20,3 — M. G. 472.

 Diäthylester d. αε-Diketo-αγε-Triphenylpentan-βδ-Dicarbonsäure. Sm. 103° (95°). Na₂ (B. 18, 2375; A, 281, 55). — II, 2039. C 58,0 — H 4,7 — O 37,3 — M. G. 600.
 Eichentannoform + H₂O. Zers. bei 275° (C. 1896 [1] 560). C 80,6 — H 6,5 — N 12,9 — M. G. 432.
 Aethylmauvein (Dahlia). HCl, (2HCl, PtCl₄), (HJ, J₂) (Soc. 35, 721). — III 670 $C_{29}H_{28}O_{14}$

 $\mathbf{C}_{29}\mathbf{H}_{28}\mathbf{N}_{4}$

III, 678.

2) Base (aus Acetanilid u. Succinylchlorid). Sm. 132-133°. 2HCl, 2HNO₃ (B. 10, 2165). — IV, 1305. C 78,7 — H 6,8 — O 14,5 — M. G. 442.

1) Diphenylester d. Phenyloxycamphocarbonsäure (A. ch. [7] 2, 277).

— II, 1872. C 73,4 — H 6,3 — O 20,3 — M. G. 474.

1) Triacetat d. ααβ-Tri[2-Oxy-1-Methylphenyl]äthan (A. 257, 325). II, 1029.

2) Triacetat d. $\alpha\alpha\beta$ -Tri[3-Oxy-1-Methylphenyl]äthan (A. 257, 325). II, 1029.

3) Triacetat d. $\alpha \alpha \beta$ -Tri[4-Oxy-1-Methylphenyl]äthan (A. 257, 325).

 $\mathbf{C}_{29}\mathbf{H}_{30}\mathbf{O}_{10}$ $C'64,7 - H \cdot 5,6 - O 29,7 - M. G. 538.$ 1) Melanthin (C. 1895 [1] 352).

 $\mathbf{C}_{29}\mathbf{H}_{30}\mathbf{O}_{11}$ C 62.8 - H 5.4 - O 31.8 - M. G. 554.

1) Diacetyleupittonsäure. Sm. 265° u. Zers. (B. 12, 2218). — II, 2092. $\mathbf{C_{29}H_{31}N_3}$ C 82,6 - H 7,4 - N 9,9 - M. G. 421.1) 4'-Phenylamido-42,43-Di[Dimethylamido]triphenylmethan. Sm. 176°.

Pikrat (A. 274, 214). — IV, 1195.

C 54,7 - H 5,0 - O 40,3 - M. G. 636.C29 H32 O16 1) Lupinin + $7 H_2 O$ (B. 11, 2200; A. 278, 352). — III, 597. C 79.8 - H 7.3 - N 12.8 - M. G. 436. $C_{29}H_{32}N_4$ 1) Phenylhydrazon d. Malachitgrün. Sm. 167° u. Zers. (B. 28, 211). — C 66.2 - H 6.4 - O 27.4 - M. G. 526.C29H34O9 1) Säure (aus Pyrogalloldiäthyläther u. Methylpyrogalloldimethyläther) (B. **12**, 1384). — II, 2092. 2) Diäthylester d. Eupittonsäure. Sm. 201-202° (B. 12, 2220). -II, 2092. C 60.6 - H 5.9 - O 33.4 - M. G. 574. $C_{29}H_{84}O_{12}$ 1) Onospin. Sm. 162° (J. 1855, 715). — III, 599. C 59,0 — H 5,8 — O 35,2 — M. G. 590. $\mathbf{C}_{29}\mathbf{H}_{34}\mathbf{O}_{13}$ 1) Diglyko-o-Cumarketon + 4H₂O. Sm. 257° wasserfrei (B. 18, 1967). — III, 252. C 68,0 - H 7,0 - O 25,0 - M. G. 512.C29H36O8 1) Tetraäthylester d. $\alpha \varepsilon$ -Diphenylpentan- $\beta \beta \delta \delta$ -Tetracarbonsäure. Sd. 230—250° (i. V.) (A. 256, 191; B. 30, 961). — II, 2085. C 82,4 — H 9,9 — O 7,6 — M. G. 422. C29H42O2 1) Benzoat d. Cholestol. Sm. 1440 (B. 18, 1807). — II, 1069. $C_{29}H_{44}O_3$ C 79,1 — H 10,0 — O 10,9 — M. G. 440. 1) Acetat d. α -Oxycholestenol. Sm. $101-102^{\circ}$ (M. 17, 584). 2) Acetat d. β -Oxycholestenol. Sm. 152—153° (M. 17, 594). $C_{29}H_{44}O_{8}$ C 66,9 - H 8,5 - O 24,6 - M. G. 520.1) Diäthylester d. Biliansäure + 1/4 H₂O. Sm. 192-193°. Ba, Pb (B. 19, 481). — II, 2077. C 63,0 — H 8,0 — O 29,0 — M. G. 552. C29H44O10 1) Tetramethylester d. Pseudocholoïdansäure C25 H36 O10. Sm. 127 bis 128° (B. 19, 1528). — I, 727. 2) Diäthylester d. Pseudocholoidansäure $C_{25}H_{36}O_{10}$. $+ \frac{1}{2}H_2O$. Sm. **245**—**247°.** Ba + H_2 O (*B.* **19**, 1528). — **I**, 727°. C 61,3 — H 7,7 — O 31,0 — M. G. 568. C29H44O11 1) Verbindung (aus Digitalin) (B. 25 [2] 680). C 53,7 — H 6,8 — O 39,5 — M. G. 648.

1) Oktoäthylester d. Propan-ααγγ-Tetracarbonsäure-ββ-Di[Methyldicarbonsäure]. Fl. (Bl. [3] 7, 19). — I, 873.
C 81,7 — H 10,8 — O 7,5 — M. G. 426.
1) Acetat d. Sitosterin. Sm. 127° (M. 18, 557). C29H44O16 $C_{29}H_{46}O_{2}$ 2) Acetat d. Parasitosterin. Sm. 115-120° (M. 18, 567). C 76,0 — H 10,0 — O 14,0 — M. G. 458. C29 H46 O4 1) Acetat d. Verb. $C_{27}H_{44}O_3$ (aus Cholesterylacetat). Sm. 154° (M. 17, 597). $C_{29}H_{46}O_{5}$ C 73,4 — H 9,7 — O 16,9 — M. G. 474. 1) Diacetat d. Trioxycholesterin. Sm. 77° (J. r. 10, 358). — II, 1074. C 68,8 — H 9,1 — O 22,1 — M. G. 506. C29H46O7 1) Diäthylester d. Cholansäure $+ \frac{1}{4}H_2O$. Sm. 130–131°. Ba, Pb (B. 13, 1056; 19, 477). — II, 2017.
2) Verbindung (aus Cholsäure) (B. 19, 2003). — I, 783.
1) Bisabolresen = $(C_{29}H_{47}O_6)_x$ (C. 1897 [2] 429).
C 75,7 — H 10,4 — O 13,9 — M. G. 460. C29H47O6 $C_{29}H_{48}O_4$ 1) Cerin (A. 45, 286). — III, 627. C 42,0 — H 5,8 — O 52,2 — M. G. 828. C29 H48 O27 1) Arabinose (Soc. 45, 54). — I, 1101. C 80,9 — H 11,6 — O 7,4 — M. G. 430. $\mathbf{C}_{29}\mathbf{H}_{50}\mathbf{O}_{2}$ 1) Acetat d. Koprosterin. Sm. 85° (H. 22, 400). C 72,7 — H 10,5 — O 16,7 — M. G. 478.

1) β-Seymnol (H. 24, 349).
C 48,3 — H 7,2 — O 44,5 — M. G. 720. C29 H50 O5 C29 H52 O20 1) Rhinanthin (J. 1870, 876, 877). — III, 606. 2) Sapotin. Sm. 240° u. Zers. (Am. 13, 572). — III, 611. C 74,4 — H 11,9 — O 13,7 — M. G. 468. C29H56O4 1) Aethylester d. α-Acetoxylcerotinsäure. Sm. 57-58° (C. 1896

[1] 642).

RICHTER, Lex. d. Kohlenstoffverb.

C 82,5 — H 13,7 — O 3,8 — M. G. 422.

1) Laktaron. Sm. 81,5-82,5° (Bl. [3] 2, 158). - I, 1006.

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C29 H58 O

 $-\mathbf{C}_{29}\mathbf{H}_{58}\mathbf{O}_{2}$ C 79.4 - H 13.2 - O 7.3 - M. G. 438.

1) Aethylester d. Cerotinsäure. Sm. 59-60° (A. 67, 189; 224, 234). — **- I**, 449.

2) Cerylester d. Essigsäure. Sm. 65° (62°) (M. 9, 581; A. 271, 224). — I, 411.

3) Isocerylester d. Essigsäure. Sm. 57° (B. 11, 2114). — I, 411. 4) Dimyristylcarbinolester d. Essigsäure. Sm. 45-45,5° (Soc. 63, 459). C 74,0 - H 12,3 - O 13,6 - M. G. 470. $\mathbf{C}_{29}\mathbf{H}_{58}\mathbf{O}_{4}$

1) Raphanol. Sm. 620 (Bl. [3] 15, 797). — III, 647.

C₂₉-Gruppe mit drei Elementen.

 $C_{20}H_{19}O_4Br$ 1) 4-Brombenzoat d. α -Oxy- $\beta\beta$ -Dibenzoyl- α -Phenyläthen. Sm. 155 bis 156° (A. **291**, 105). — III, 322. C 73,1 — H 4,2 — O 16,8 — N 5,9 — M. G. 476.

 $C_{29}H_{20}O_5N_2$

1) Carbonat d. β -Oximido- α -Keto- $\alpha\beta$ -Diphenyläthan (aus α -Benziloxim). Sm. 122° (B. 26, 796). — III, 289.

2) Carbonat d. isom. β -Oximido- α -Keto- $\alpha\beta$ -Diphenyläthan (aus β -Benziloxim). Sm. 163° (B. **26**, 796). — III, 290. C 66,9 — H 3,8 — O 18,5 — N 10,8 — M. G. 520.

 $\mathbf{C}_{29}\mathbf{H}_{20}\mathbf{O}_{6}\mathbf{N}_{4}$

1) Acetat d. Diphenylazoapigenin. Sm. 277—280° (C. 1897 [1] 653; Soc. 73, 668). — IV, 1482. 2) Diacetat d. 4,5-Diphenylazo-1,7-Dioxyxanthon. Sm. 197—199°

 $\begin{array}{c} \text{(Soc. 73, 672).} & -\text{IV, } 1479. \\ \text{C}_{29}\text{H}_{20}\text{O}_{15}\text{Br}_{4}\text{1)} & \text{Pentacetat d. Tetrabromdehydroeichenrindengerbsäure (A. 240, } \\ \text{C}_{29}\text{H}_{21}\text{ON}_{3} & \text{C 81,5} - \text{H } 4.9 - \text{O } 3,7 - \text{N } 9,8 - \text{M. G. } 427. \\ \end{array}$

1) Methylphenylamidorosindon. Sm. 235—237°. (2 HCl, PtCl₄) (B. 31, 306). — IV, 1203. C 76,5 — H 4,6 —

 $\mathbf{C}_{29}\mathbf{H}_{21}\mathbf{ON}_{5}$ - O 3,5 - N 15,4 - M. G. 455.

1) 6-[2-Oxynaphtyl]azo-2, 3-Diphenyl-2, 3-Dihydro-1, 2, 4-Benztriazin (B. 30, 2598). — IV, 1492. C 75,8 — H 4,6 — O 10,5 — N 9,1 — M. G. 459. 1) Verbindung (aus Salicylaldehyd). Sm. 168° (B. 6, 341). — III, 75. C 84,0 — H 5,3 — O 3,9 — N 6,8 — M. G. 414.

C29 H21 O8 N8

 $\mathbf{C}_{29}\mathbf{H}_{22}\mathbf{ON}_{2}$

 Triphenyl-2-Naphtylharnstoff. Sm. 128° (B. 24, 2922). — II, 617.
 Triphenylmethanazo-β-Naphtol. Sm. 150° (B. 26, 3082). — IV, 1439.
 C 76,0 — H 4,8 — O 7,0 — N 12,2 — M. G. 458. $C_{29}H_{22}O_{2}N_{4}$

1) Verbindung (aus d. Chlorid d. β -Trichloracetyl- $\alpha\beta$ -Dichlorakrylsäure). Sm. 146—147° (B. **25**, 2232). — II, 406. C 75,3 — H 4,8 — O 13,8 — N 6,1 — M. G. 462.

 $\mathbf{C}_{29}\mathbf{H}_{22}\mathbf{O}_{4}\mathbf{N}_{2}$

1) Diäthylester d. $\alpha\gamma$ -Di[Phenylimido]- $\alpha\gamma$ -Diphenylpropan- $\beta\beta$ -Dicarbonsäure. Sm. 160° (B. 18, 2625). — II, 1893. C₂₉H₂₂N₃Br 1) Brommethylat d. Phenylrosindulin (B. 31, 304). — IV, 1206.

1) Jodmethylat d. Phenylisorosindulin (B. 31, 305). — IV, 1202. C 86,8 — H 5,7 — O 4,0 — N 3,5 — M. G. 401. $\mathbf{C}_{29}\mathbf{H}_{22}\mathbf{N}_{3}\mathbf{J}$ $\mathbf{C}_{29}\mathbf{H}_{28}\mathbf{ON}$

1) 2-Keto-1-Methyl-3, 3, 4, 5-Tetraphenyl-2, 3-Dihydropyrrol. Sm. 161° (Soc. 59, 146; B. 24, 517). — III, 312.

Nitril d. γ-Benzoyl-αβγ-Triphenylbuttersäure (Gemisch isom. Verb.).
 Sm. 205—210° (B. 26, 445). — II, 1730.
 C 83,4 — H 5,5 — O 7,7 — N 3,4 — M. G. 417.

 $\mathbf{C}_{29}\mathbf{H}_{23}\mathbf{O}_{2}\mathbf{N}$

1) Aethylester d. 2,5-Diphenyl-1-[1-Naphtyl]pyrrol-3-Carbonsäure. Sm. 181—182° (B. 22, 3091). — IV, 450.
2) Aethylester d. 2,5-Diphenyl-1-[2-Naphtyl]pyrrol-3-Carbonsäure.

Sm. 181—182° (B. **22**, 3032). — **1V**, 450. C 78,2 — H 5,2 — O 7,2 — N 9,4 — M. G. 445. $\mathbf{C}_{29}\mathbf{H}_{23}\mathbf{O}_{2}\mathbf{N}_{3}$

1) 1,3-Dibenzoyl-2-[4-Methylphenyl]imido-5-Methyl-2,3-Dihydro-C₂₉H₂₃O₉Cl₃ 1) Tribenzoat d. β -Galaktochloral. Sm. 141° (C. 1896 [2] 83). C₂₉H₂₄ON₄ C 78,4 C H 5,4 C O 3,6 C N 12,6 C M. G. 444.

Phenylhydrazid d. δ-Phenylhydrazon-αδ-Diphenyl-α-Butin-γ-Carbonsäure. Sm. bei 100° (B. 21, 3059). — IV, 699.

C 80,6 - H 5,5 - O 7,4 - N 6,5 - M. G. 432. $\mathbf{C}_{29}\mathbf{H}_{24}\mathbf{O}_{2}\mathbf{N}_{2}$ 1) 1,3-Dibenzoyl-2-Methyl-4-Phenyl-1,2,3,4-Tetrahydro-1,3-Benz-

diazin. Sm. 188—189° (B. 25, 3095). — IV, 995. C 77,7 — H 5,3 — O 10,7 — N 6,2 — M. G. 448. $\mathbf{C}_{29}\mathbf{H}_{24}\mathbf{O}_{3}\mathbf{N}_{2}$

1) 4,4'-Di[Methylbenzoylamido]diphenylketon. Sm. 102° (B. 22, 1877). — III, 186. C 75,0 — H 5,2 — O 13,8 — N 6,0 — M. G. 464.

C29 H24 O4 N2

1) 3,4,3',4'-Dimethylenäther d. ε-Phenylhydrazon-αι-Di[3,4-Dioxyphenyl]-αγζθ-Nonatetraën. Sm. 58-60° (B. 28, 1194). — IV, 779. C 66,4 — H 4,6 — O 18,3 — N 10,7 — M. G. 524. $\mathbf{C}_{29}\mathbf{H}_{24}\mathbf{O}_{6}\mathbf{N}_{4}$

1) Acetat d. Phloretindisazobenzol. Sm. 217—219° (Soc. 71, 1152).

IV, 1479.

 $C_{29}H_{26}O_5N_4$

 $\mathbf{C}_{29}\mathbf{H}_{27}\mathbf{O}_5\mathbf{N}_3$

 $\mathbf{C}_{29}\mathbf{H}_{27}\mathbf{N}_{2}\mathbf{J}$

 $\mathbf{C}_{29}\mathbf{H}_{28}\mathbf{ON}_{2}$

 $C_{29}H_{28}O_{2}N_{4}$

 $\mathbf{C}_{29}\mathbf{H}_{24}\mathbf{O}_{15}\mathbf{Br}_{2}\mathbf{1}$) Pentacetat d. Dibromeichenrindengerbsäure (A. 240, 333). — III, 588. C 83,0 - H 6,0 - O 7,6 - N 3,3 - M. G. 419.C29H25O2N

1) Monoxim d. αε-Diketo-αβγε-Tetraphenylpentan. Sm. 212° (A. 281,

51). **— III**, 310.

2) Methylamid d. β -Benzoyl- $\alpha \alpha \beta$ -Triphenylpropionsäure. Sm. 267° (Soc. 59, 147). — III, 312.

C 77.1 - H 5.5 - O 14.2 - N 3.1 - M. G. 451. $\mathbf{C}_{29}\mathbf{H}_{25}\mathbf{O}_{4}\mathbf{N}$

1) Diäthylester d. 2,4,6-Triphenylpyridin-3,5-Dicarbonsäure. Sm. 146° (A. 281, 56). — IV, 477. C 72,7 — H 5,2 — O 13,3 — N 8,8 — M. G. 479.

 $\mathbf{C}_{29}\mathbf{H}_{25}\mathbf{O}_{4}\mathbf{N}_{3}$

1) Aethylester d. Di [4-Benzoylamidophenyl] amidoameisensäure. Sm. 235° (B. 18, 2577). — IV, 1169.

2) Verbindung (aus d. 4-Amidophenylamidoameisensäure). Sm. noch nicht

bei 360° (B. 17, 2628). — IV, 595.

1) Dibenzyl-α-Phenyl-c-Phenyldithioalduret. Sm. 112° (A. 275, 41). — $C_{29}H_{25}N_3S_2$ $\mathbf{C}_{29}\mathbf{H}_{28}\mathbf{O}_{2}\mathbf{N}_{2}$

C 80,2 - H 6,4 - O 7,4 - N 6,4 - M. G. 434.

1) $\alpha\beta$ -Di[Phenylbenzoylamido]propan. Sm. 136—137° (B. 25, 3273). — IÌ, 1169.

2) 7-Aethyläther d. 1,7-Dioxy-6-Methyl-1,2,3-Triphenyl-1,1-Dihydro-1,4-Benzdiazin. Sm. 136° (A. 287, 150). — III, 285.

3) 7-Aethyläther d. 1,7-Dioxy-2,3-Diphenyl-1-[3-Methylphenyl]-1,1-

Dihydro-1,4-Benzdiazin. Sm. 1760 (A. 287, 171). — III, 285. 4) 7-Aethyläther d. 1,7-Dioxy-2,3-Diphenyl-1-[4-Methylphenyl]-1,1-Dihydro-1,4-Benzdiazin? Sm. 144—146° (A. 287, 178). — III, 285. C 68,2 — H 5,1 — O 15,7 — N 11,0 — M. G. 510.

1) Phloretindisazo-2-Methylbenzol. Sm. 250—251° (Soc. 71, 1152). — IV, 1480.

2) Phloretindisazo-4-Methylbenzol. Sm. 250-251° u. Zers. (Soc. 71, 1151). — IV, 1480. C 80,4 — H 6,2 — O 3,6 — N 9,7 — M. G. 433.

 $\mathbf{C}_{29}\mathbf{H}_{27}\mathbf{ON}_{8}$

Aethyläther d. α-[4-Oxyphenyl]-β-Benzyliden-α-[2-Benzyliden-amidobenzyl]hydrazin. Sm. 152° (B. 27, 2904). — IV, 1131.

2) Azoniumbase (aus 4-Dimethylamido-6'-Amido-3'-Methyldiphenylamin).

Sm. 173° u. Zers. (Soc. 65, 887). — IV, 621. C 72,3 — H 5,6 — O 13,3 — N 8,7 — M. G. 481. 1) 4-Di[γ-Phtalylamidopropyl]amido-1-Methylbenzol (p-Toluidodipropyldiphtalimid). Sm. 124° (B. 30, 2499).
C 70,0 — H 5,4 — O 16,1 — N 8,4 — M. G. 497.
1) Diäthylester d. 4-[3-β-Naphtolazophenyl]-2,6-Dimethylpyridin- $C_{29}H_{27}O_4N_3$

3,5-Dicarbonsäure. Sm. 151° (G. 17, 468). — IV, 1487.

1) Jodmethylat d. Benzylamarin. Sm. 130° (B. 18, 1855). — III, 24.

C 82,8 — H 6,7 — O 3,8 — N 6,7 — M. G. 420.

1) Tetrabenzylharnstoff. Sm. 85° (B. 25, 1820). — II, 527. 2) Tetra[4-Methylphenyl]harnstoff. Sm. 78—80,5° (B. 25, 1822).

II, 495.

3) $\alpha\beta$ -Dibenzyl- $\alpha\beta$ -Di[4-Methylphenyl]harnstoff. Sm. 91—93° (B. 25, 1823). — II, *527*.

4) Methylbenzyldihydroamarin. Sm. 208°. HCl + xH₂O, (2HCl, PtCl₄ $+2H_0O$) (B. 15, 2327). — III, 26. C 75,0 — H 6,0 — O 6,9 — N 12,1 — M. G. 464.

1) αγ-Di[s-Diphenylharnstoff] propan. Sm. 153° (B. 20, 783). — II, 381.

 $\mathbf{C}_{29}\mathbf{H}_{42}\mathbf{O}_{4}\mathbf{N}_{2}$

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C_{20}H_{28}O_2N_4 2) \alpha-Phenyl-\alpha \alpha-Di[3-Keto-2-Phenyl-1,5-Dimethyl-2,3-Dihydropyrazo-2-Phenyl-1,5-Dimethyl-2,3-Dihydropyrazo-2-Phenyl-1,5-Dimethyl-2,3-Dihydropyrazo-2-Phenyl-1,5-Dimethyl-2,3-Dihydropyrazo-2-Phenyl-1,5-Dimethyl-2,3-Dihydropyrazo-2-Phenyl-1,5-Dimethyl-2,3-Dihydropyrazo-2-Phenyl-1,5-Dimethyl-2,3-Dihydropyrazo-2-Phenyl-1,5-Dimethyl-2,3-Dihydropyrazo-2-Phenyl-1,5-Dimethyl-2,3-Dihydropyrazo-2-Phenyl-1,5-Dimethyl-2,3-Dihydropyrazo-2-Phenyl-1,5-Dimethyl-2,3-Dihydropyrazo-2-Phenyl-1,5-Dimethyl-2,3-Dihydropyrazo-2-Phenyl-1,5-Dimethyl-2,3-Dihydropyrazo-2-Phenyl-1,5-Dimethyl-2,3-Dihydropyrazo-2-Phenyl-1,5-Dimethyl-2,3-Dihydropyrazo-2-Phenyl-1,5-Dimethyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-Phenyl-2,3-Dihydropyrazo-2-
                                            lyl-4] methan (Benzylidenbisantipyrin). Sm. 201° (A. 238, 214).
                                           IV, 1288.
C 72,5 — H 5,8 — O 10,0 — N 11,7 — M. G. 480.
   \mathbf{C}_{29}\mathbf{H}_{28}\mathbf{O}_{3}\mathbf{N}_{4}
                                    1) 2-Oxybenzylidenbisantipyrin + H<sub>2</sub>O. Sm. 180-190°. Pikrat (B. 28,
                                            1186). — IV, 1289.
C 57,3 — H 4,8 — O 26,3 — N 11,5 — M. G. 607.
   \mathbf{C}_{29}\mathbf{H}_{29}\mathbf{O}_{10}\mathbf{N}_{5} C 57,3 — H 4,8 — O 20,5 — H 11,0
1) Brucin + 1,3,5-Trinitrobenzol. Sm. 198° u. Zers. (R. 14, 66). —
                                           C 74,0 - H 6,4 - O 13,6 - N 6,0 - M. G. 470.
  \mathbf{C}_{29}\mathbf{H}_{30}\mathbf{O}_{4}\mathbf{N}_{2}
                                   1) Benzoat d. Gelseminin. HCl (Sm. 303°) (C. 1896 [1] 111). C 69,9 — H 6,0 — O 12,9 — N 11,2 — M. G. 498.
  C_{29}H_{30}O_4N_4
                                    1) d-Cocaïnazophenylamidobenzol. Sm. 172-1730 (B. 27, 1887).
                                           IV, 1482.
  \mathbf{C}_{29}\mathbf{H}_{80}\mathbf{O}_{8}\mathbf{N}_{2}
                                           C 65,2 - H 5,6 - O 24,0 - N 5,2 - M. G. 534.
                                   1) Diäthylester d. \alpha\eta-Di[1,2-Phtalylamido]heptan-\delta\delta-Dicarbonsäure. Sm. 155,5° (B. 26, 2140). — II, 1812.
                                   1) Diphenylauraminchlorid (J. pr. [2] 47, 411). — IV, 1173. C 79,6 — H 7,1 — O 3,7 — N 9,6 — M. G. 437.
  C29 H30 N3 C1
  C_{29}H_{31}ON_{3}
                                   1) \alpha-Oxy-4-Phenylamido-4',42-Tetramethyldiamidotriphenylmethan.
                                  Chlorid (A. 274, 216). — II, 1089.

C 63,4 — H 5,6 — O 23,3 — N 7,6 — M. G. 549.

1) Narceinphenylhydrazon. HCl (A. 277, 53). — IV, 732.
  C29H31O8N3
                                  2) Triphenylamidoformiat d. Aethylchinovosid (B. 18, 971, 2606). -
                                         III, 575.
 C29H32O3N4
                                         C 71.9 - H 6.6 - O 9.9 - N 11.6 - M. G. 484.
                                  1) \alpha - [4 - Diacetylamido - ? - Acetylphenyl]imidodi[4 - Dimethylamido-
+2 AuCl<sub>8</sub> (B. 31, 1705).
C, H, N, Br, 1) Diammoniumbromid (aus Pentamethylen-1, 2-Xylylendiamin u. 1, 2-Xyly-
                                         lenbromid). Sm. 65° (B. 31, 1705).
C<sub>28</sub>H<sub>34</sub>N<sub>2</sub>Br<sub>6</sub>1) Diammoniumperbromid (aus d. Diammoniumbromid C<sub>28</sub>H<sub>34</sub>N<sub>2</sub>Br<sub>2</sub>) (B.
                                         31, 1705).
                                1) Diisoamyleyaninchlorid. (HCl, PtCl<sub>4</sub>) (Z. 1867, 343). — IV, 315.
 \mathbf{C}_{29}\mathbf{H}_{35}\mathbf{N}_{2}\mathbf{C}\mathbf{1}

    Diisoamyleyaninenioria. (HCl, PtOl<sub>4</sub>) (Z. 1867, 343). — IV, 315.
    Diisoamyleyaninjodid + 1½H<sub>2</sub>O. Sm. bei 100°. 2HCl, + J<sub>2</sub> (J. 1862, 351; Z. 1867, 343; R. 2, 28, 42, 324; 3, 352). — IV, 315.
    Diisoamyleyanintrijodid. Sm. 187—189° (R. 3, 361). — IV, 315. C 81,3 — H 8,4 — O 3,7 — N 6,5 — M. G. 428.
    Diisoamyleyaninhydrat. Chlorid, Jodid, Superjodid, Nitrat, Sulfat + 2H<sub>2</sub>O (Z. 1867, 343; J. 1862, 351; R. 2, 28, 42, 324; 3, 352). —

C29 H35 N2J
C_{29}H_{35}N_2J_3
\mathbf{C}_{29}\mathbf{H}_{36}\mathbf{ON}_{2}
                                        IV, 315.
                                2) Benzoylderivat d. Base C<sub>22</sub>H<sub>32</sub>N<sub>2</sub>. Sm. 132 — 134° (B. 25, 2044). -
                                        II, 445.
C 75,8 — H 8,1 — O 7,0 — N 9,1 — M. G. 459.
\mathbf{C}_{29}\mathbf{H}_{37}\mathbf{O}_{2}\mathbf{N}_{3}
                                1) 4'-Nitro-2<sup>2</sup>, 2<sup>3</sup>-Di[Diäthylamido]-4<sup>2</sup>, 4<sup>3</sup>-Dimethyltriphenylmethan.
Sm. 155° (B. 24, 559). — IV, 1047.
C 68,2 — H 7,4 — O 18,8 — N 5,5 — M. G. 510.
C_{29}H_{38}O_6N_2

    Allylhydrastisoamylamid. Sm. 123—124° (A. 271, 361). — II, 2054.
    C 68,5 — H 7,9 — O 12,6 — N 11,0 — M. G. 508.

\mathbf{C}_{29}\mathbf{H}_{40}\mathbf{O}_{4}\mathbf{N}_{4}

    C 08,9 — H 7,9 — O 12,0 — N 11,0 — M. G. 508.
    Diäthylester d. βθ-Di[Phenylhydrazon]-γη-Dimethylnonan-γη-Dicarbonsäure. Fl. (Soc. 59, 574). — IV 723.
    C 77,3 — H 9,3 — O 7,1 — N 6,3 — M. G. 450.
    Diphenylamid d. Roccellsäure. Sm. 55,3° (A. 117, 342). — II, 416.
    C 72,2 — H 8,7 — O 13,3 — N 5,8 — M. G. 482.

\mathbf{C}_{29}\mathbf{H}_{42}\mathbf{O}_{2}\mathbf{N}_{2}
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1) d-Diborneolester d. Benzylidendiamidoameisensäure (Benzylidenborneolurethan). Sm. 185-1870 (J. 1882, 393). - III, 471. C29H42N3Cl3 1) Trichlormethylat d. 4',42,48-Tri[Dimethylamido]-?-Methyltriphenyl-

methan. $2 + 3 \text{ PtCl}_4 + 2 \text{ H}_2 \text{ O}$ (B. 2, 448; 12, 2344). — IV, 1197. Trijodmethylat d. $4', 4^2, 4^3$ -Tri[Dimethylamido]-?-Methyltriphenylmethan + $\text{H}_2 \text{ O}$ (B. 2, 448; 12, 2344). — IV, 1197.

- C29 H49 O7 N
- C 67,3 H 8,4 O 21,6 N 2,7 M. G. 517. 1) Pseudojervin. Sm. 300—307° (209°). HCl + 2 H₂O, (HCl, AuCl₃), H₂SO₄ (Soc. 35, 405). — III, 950. C 77,0 — H 9,7 — O 7,1 — N 6,2 — M. G. 452. 1) s-Stearyl-1-Naphtylharnstoff. Sm. 114—115° (Soc. 69, 1601).
- $C_{29}H_{44}O_{2}N_{2}$
- C 79,4 H 10,5 O 3,6 N 6,4 M. G. 438. C29 H46 ON2
 - 1) 6-Oxy-4-Methyl-2-Heptadekyl-5-Benzyl-1, 3-Diazin. Sm. 94° (Pinner, Imidoäther 234). - IV, 986.
- C₂₀H₄₆O₂Cl₁₂1) Aethylester d. Dodekachlorcerotinsäure (A. 67, 191). I, 477.
- C₂₉H₄₆O₂Br₂ 1) Acetat d. Sitosterindibromid (M. 18, 558).
 - 2) Acetat d. Parasitosterindibromid. Sm. 112° (M. 18, 568).
- C29 H46 O4 N2 C 71,6 - H 9,5 - O 13,2 - N 5,7 - M.G. 486.
 - 1) Verbindung (aus d. Amidoformiat d. Menthol). Sm. 1430 (A. ch. [6] 7, 464). — III, 467.
- $\mathbf{C}_{29}\mathbf{H}_{48}\mathbf{O}_{2}\mathbf{Cl}_{2}$ 1) Verbindung (aus Cholesterinacetat). Sm. $93-94^{\circ}$ (M. 15, 103). II, 1073.
- C₂₉H₄₈O₂Br₂ 1) Verbindung (aus Cholesterinacetat). Sm. 115,8° (u. 118°) (M. 9, 424,
- 433; 15, 371). II, 1073. $\mathbf{C}_{29}\mathbf{H}_{49}\mathbf{O}_{2}\mathbf{Br}$ 1) Bromacetat d. Koprosterin. Sm. 118° (H. 22, 404). $C_{29}H_{51}O_8N$
- C 64,3 H 9,4 O 23,6 N 2,6 M. G. 541.

 1) Sabadin. Sm. 238—240° u. Zers. HCl + 2H₂O, (HCl, AuCl₃), HNO₃. - III, 950.
- $\mathbf{C}_{99}\mathbf{H}_{55}\mathbf{O}_{14}\mathbf{N}_{6}$ 1) Secalin (C. 1897 [1] 1060).

C_{29} -Gruppe mit vier Elementen.

- 1) α -Phenyl- β -[2-Naphtyl]- β -Thiodiphenylharnstoff. Sm. 169—170° C29H20N2S (B. 24, 2914). - II, 807.
- C29 H20 ON4S 1) 2-[1-Naphtylbenzoylamido]-5-[1-Naphtylamido]-1, 3, 4-Thiodiazol. Sm. 270° (B. 23, 361). — IV, 1237.
 - 2) 2-[2-Naphtylbenzoylamido]-5-[2-Naphtylamido]-1,3,4-Thiodiazol. Sm. 247° (B. 23, 363). — IV, 1237.
- Sm. 318° (B. 18, 3084). C29H25ON2J 1) Jodmethylat d. Benzoylamarin. III, 25.
- $\mathbf{C}_{29}\mathbf{H}_{28}\mathbf{O}_{10}\mathbf{NCl}$ 1) Tetracetylchlor-α-Orcindichroïn (B. 21, 2483). — II, 966.
- 1) Strychnin + Acetophenonchlorid + H₂O. Sm. 232—233°. 2 + PtCl₄, C₂₉H₂₉O₃N₂Cl $+ \text{AuCl}_3$ (C. 1897 [2] 556).
- 1) Strychnin + Acetophenonbromid + H_2O . Sm. 245-250° (C. 1897) $\mathbf{C}_{29}\mathbf{H}_{29}\mathbf{O}_{3}\mathbf{N}_{2}\mathbf{Br}$ [2] 556).
- 1) Thioharnstoff d. 4-Amido-4'-Aethoxyldiphenylamin. Sm. 155 $C_{29}H_{80}O_{2}N_{4}S$ bis 156° (B. 26, 694). — IV, 584.
- 1) Jodmethylat d. Benzylhydrastin. Sm. 240° (A. 271, 351). - $\mathbf{C}_{29}\mathbf{H}_{30}\mathbf{O}_{6}\mathbf{NJ}$ II. 2054. 1) Jodmethylat d. Benzylhydrastimid. Sm. 230° (B. 26, 2490). —
- $\mathbf{C}_{29}\mathbf{H}_{31}\mathbf{O}_{5}\mathbf{N}_{2}\mathbf{J}$ II, 2054.
- Jodmethylat d. Methylhydrasteinphenylhydrazon. Sm. (A. 271, 398). IV, 800.
 Jodäthylat d. Benzoylchinin (A. ch. [7] 7, 143). III, 815. $C_{29}H_{32}O_5N_3J$ $\mathbf{C}_{29}\mathbf{H}_{33}\mathbf{O}_{3}\mathbf{N}_{2}\mathbf{J}$
- 1) Acetyl-3, 3'-Di [Diäthylamido] phenylsacchareïn. Sm. $230-232^{\circ}$ $C_{29}H_{38}O_4N_3S$ (Bl. [3] 17, 699).
- 1) Di[Jodmethylat] d. Benzoylchinin (A. ch. [7] 7, 143). III, 815. $\mathbf{C}_{29}\mathbf{H}_{34}\mathbf{O}_{3}\mathbf{N}_{2}\mathbf{J}_{2}$ $C_{29}H_{35}O_3N_3S$
- 1) Aethyl-3,3'-Di[Diäthylamido]phenolsaccharein. Sm. 220—2220 (Bl. [3] 17, 700).
 1) Di[Bromäthylat] d. Dioxybenzylcinchotenin. Sm. 210° u. Zers. $\mathbf{C}_{29}\mathbf{H}_{36}\mathbf{O}_{5}\mathbf{N}_{2}\mathbf{Br}_{2}$
- (A. 269, 246). III, 842.
- 1) s-Stearyl-l-Naphtylthioharnstoff. Sm. 80-81° (Soc. 69, 1601). C29H44ON2S 1) Taurochenocholsäure. Na + H₂O (J. 1849, 547; 1859, 636; A. C29H49O6NS
- 149, 192). I, 1181. 1) Nucleïn. Lit. bedeutend. IV, 1621. $\mathbf{C}_{29}\mathbf{H}_{49}\mathbf{O}_{22}\mathbf{N}_{9}\mathbf{P}_{8}$

C₃₀-Gruppe mit einem Element.

- C30H22
- C 94,3 H 5,8 M. G. 382.

 1) 1,2,3,5 oder 1,2,4,5-Tetraphenylbenzol. Sm. 277—278° (A. 302, 211).

 2) Kohlenwasserstoff (aus Dibenzylcarbinol). Sm. 268—269° (B. 25, 1273;
- A. 302, 211). II, 304. C 92,8 H 7,2 M. G. 388. C30 H28
- 1) Tetra [?-Methylphenyl]äthen. Sm. 215° (B. 14, 1530). II, 302. C 88,2 — H 11,8 — M. G. 408. C₈₀H₄₈
- 1) α-Amyrilen. d-Derivat Sm. 134—135°; l-Derivat Sm. 193—194° (B. 20. 1244; 24, 3834, 3835). — III, 540. 2) β -Amyrilen. Sm. 175—178° (B. 20, 1245; 24, 3836). — III, 540.
 - 3) Triterpen (aus Galbanum- oder Kamillenöl). Sd. 250-255° (A. 119, 263;
- Can H
- B. 4, 39). III, 540. C 87,8 H 12,2 M. G. 410. 1) Kohlenwasserstoff (aus Caryophyllenhydrat). Sm. 144—145° (A. 271, 293; **279**, 393). — **III**, *513*. C 85,7 — H 14,3 — M. G. 420.
- C30 H60 1) Melen. Sm. 62° (A. 2, 259; 71, 156).

C₃₀-Gruppe mit zwei Elementen.

- C30H18O4 C 81.4 - H 4.1 - O 14.5 - M. G. 442.
 - 1) 2,2'-Bi[1,3-Diketo-2-Phenyl-2,3-Dihydroindenyl]. Sm. 208° (B. 26.
- 2580). III, 325. C 71,1 H 3,6 O 25,3 M. G. 506. $C_{80}H_{18}O_{8}$
 - 1) 3,4-Methylenäther-7,8-Dibenzoat d. 7,8-Dioxy-2-[3,4-Dioxyphenyl]-1,4-Benzpyron. Sm. 178° (B. 29, 2435).
 - 2) Verbindung (aus 1-Oxynaphtalin u. Benzol-1, 2, 4, 5-Tetracarbonsäure).
- (B. 4, 726). II, 2073. C 88,7 H 4,4 N 6,9 M. G. 406. $C_{30}H_{18}N_2$
 - 1) Trinaphtylendiamin + H₂O. Zers. bei 180°. HCl (B. 9, 1107).
- IV, $9\overline{25}$. C 85,5 H 4,5 N 10,0 M. G. 421. $\mathbf{C}_{30}\mathbf{H}_{19}\mathbf{N}_{3}$
 - 1) α -[2-Naphtyl]amido- $\alpha\beta$ -Naphtazin. Sm. 296°. HCl (B. 26, 185; 29. 2087). — IV, 1216.
- 2) ms-α-Naphtyl-s-Naphtindulin (A. 286, 233). IV, 1215. C30H20O6 C 75,6 — H 4,2 — O 20,2 — M. G. 476.
- 1) Tetraphenyläther d. 2,3,5,6-Tetraoxy-1,4-Benzochinon. Sm. 229
- C30 H20 O7
- $\mathbf{C}_{80}\mathbf{H}_{20}\mathbf{O}_{8}$
- C80 H20 N2 C 88,2 - H 4,9 - N 6,9 - M. G. 408.
- 1) Biacenaphtylidenonphenylhydrazon (A. 290, 203). IV, 779. $\mathbf{C}_{80}\mathbf{H}_{20}\mathbf{N}_4$ C 82,6 - H 4,6 - N 12,8 - M. G. 436.
 - 1) Diphenylfluorindin. 2 HCl, (HCl, AuCl₃ + $\rm H_2O$) (B. 23, 2789; 28, 300; 29, 1251). IV, 1301.
 - 2) Diphenylisofluorindin. 2HCl, (2HCl + FeCl₃), (2HCl, PtCl₄), (2HCl, AuCl₃), Bichromat (B. 29, 1821; 31, 2442). IV, 1301.
- 3) s-Amido-ms-Naphtylnaphtylndulin. HCl (Magdalaroth), (2 HCl, PtCl₄), Pikrat (B. 2, 374; 11, 623; 19, 1365; A. 286, 235). IV, 1303. C 90,5 H 5,5 O 4,0 M. G. 398.

 1) Verbindung (aus 1,2-Dioxy-1, 2,3,5 oder 1, 2, 4,5-Tetraphenyl-1,2-Dihydro-hor-ph), 1200 C₃₀H₂₂O
- benzol). Sm. 180—181° (A. 302, 208). C 87,0 H 5,3 O 7,7 M. G. 414.
- $\mathbf{C}_{80}\mathbf{H}_{22}\mathbf{O}_{2}$ 1) $\alpha \zeta$ -Diketo- $\alpha \beta \delta \zeta$ oder $\alpha \gamma \delta \zeta$ -Tetraphenyl- $\beta \delta$ -Hexadiën. Sm. 191—192° (A. 302, 198).

2) Verbindung (aus 2-Methyl-9,10-Anthrachinon). Sm. 217-218° (B. 15, C30H22O2 1823). — III, 450. C 80,7 — H 4,9 — O 14,3 — M. G. 446. 1) Diacetat d. αβ-Dioxydibiphenylenäthan. C30H22O4 Sm. 230° u. Zers. (A. **291**, 5). C 75,3 — H 4,6 — O 20,1 — M. G. 478. C₈₀H₂₂O₆ 1) 1,2,4,5-Tetraphenyläther d. Hexaoxybenzol. Sm. 219-2200 u. Zers. (Am. 17, 648).2) 9,9-Di[?-Acetoxylphenyl]fluoren-?-Carbonsäure. Sm. 130° u. Zers. (A. **247**, 287). — II, 1916. C 57,9 — H 3,5 — O 38,6 — M. G. 622. C30H22O15 1) Protocetrarsaure + H₂O. Zers. bei 230°. Ba₃, Ag₃ (J. pr. [2] 57, 297, 442; [2] 58, 468). 2) Usnarsäure. Zers. bei 230° (J. pr. [2] 57, 241). C 52,5 — H 3,2 — O 44,3 — M. G. 686. $\mathbf{C}_{30}\mathbf{H}_{22}\mathbf{O}_{19}$ 1) Anhydrid d. Methylendigallussäure (B. 31, 262) 2) Anhydrid d. isom. Methylendigallussäure. NH₄ (B. 5, 1097; 31, 264; A. 263, 285). C 87,8 — H 5,4 — N 6,8 — M. G. 410. $\mathbf{C}_{30}\mathbf{H}_{22}\mathbf{N}_{2}$ 1) 2,3,4-Triphenyl-3,4-Dihydro-1,4-Naphtisodiazin. Sm. 163-1640 (B. **24**, 722). — **IV**, 1090. C 82,2 — H 5,0 — N 12,8 — M. G. 438. $\mathbf{C}_{80}\mathbf{H}_{22}\mathbf{N}_4$ 1) 1,1',5,5'-Tetraphenyl-3,3'-Bipyrazol. Sm. 232° (A. 278, 295). — IV, 1299. 2) Tetraphenylglykosin. Sm. oberh. 300° (Soc. 51, 553). — III, 286. 3) Phenylamidophenylaposafranin (Phenylindulin). Sm. 231°. HNO₃ (A. 256, 261; 262, 257; 286, 190, 193; B. 28, 2288; 29, 368; 30, 2626). · IV, 1280. 4) Phenylmauvein. Sm. 256-257° (A. 286, 208). — IV, 1285. C 79,4 — H 5,1 — N 15,4 — M. G. 453.

1) Amidophenylindulin. Sm. 150—152°. HCl + ½ H₂O, (HCl, AuCl₃), HNO₃ + H₂O (B. 17, 75; 29, 368; A. 262, 256; 286, 195; Soc. 43, 116).

— IV, 1326. $\mathbf{C}_{30}\mathbf{H}_{23}\mathbf{N}_{5}$ Base (aus Phenylamidoindulin). HCl (A. 272, 315). — IV, 1284.
 C 74,8 — H 4,8 — N 20,4 — M. G. 481. $C_{30}H_{23}N_7$ 1) 5-Imido-4-[1,3-Diphenyl-4,5-Dihydropyrazolyl-5-]azo-1,3-Diphenyl-4,5-Dihydropyrazol. Sm. 217° (*J. pr.* [2] 58, 142). C 86,5 — H 5,7 — O 7,7 — M. G. 416. $\mathbf{C}_{80}\mathbf{H}_{24}\mathbf{O}_{2}$ 1) $\alpha \zeta$ -Diketo- $\alpha \beta \delta \zeta$ oder $\alpha \gamma \delta \zeta$ -Tetraphenyl- β -Hexen. Sm. 220—2220 (A. **302**, 203). 2) 1,2-Dioxy-1,2,3,5 oder 1,2,4,5-Tetraphenyl-1,2-Dihydrobenzol. Sm. 170—171° (A. 302, 206). 3) 2,7,2',7'-Tetramethyldixanthylen. Sm. 275-277° (B. 28, 2311). III, 232. 4) 4,5,4',5'-Tetramethyldixanthylen. Sm. noch nicht bei 360° (B. 28, 2311). — III, *232*. 5) Verbindung (aus d. Verb. $C_{30}H_{22}O$). K (A. 302, 208). C 83,3 - H 5,6 - O 11,1 - M. G. 432. $C_{30}H_{24}O_{3}$ 1) 2,4,6-Tribenzoyl-1,3,5-Trimethylbenzol. Sm. 215-216° (A. ch. [6] **6**, 237). — III, 322. C 80,3 — H 5,3 — O 14,3 — M. G. 448. C30H24O4 1) Diacetat d. Verb. $C_{26}H_{20}O_2$ (aus Phenol- u. Benzaldehyd) (Am. 9, 131). **— III**, 10. C 75.0 - H 5.0 - O 20.0 - M. G. 480.C30H24O6 1) β-Truxillfluoresceïn (B. **26**, 835). — II, 2067. C 70,3 — H 4,7 — O 25,0 — M. G. 512. C₈₀H₂₄O₈ 1) Dibenzoat d. Di[4,6-Dioxy-2-Methylphenyl]essigsäure. Sm. 2046 (Soc. 73, 401). Acetylrhizocarpsäure. Sm. 168° (J. pr. [2] 58, 515). C 68,1 — H 4,5 — O 27,3 — M. G. 528.

1) Dibenzoat d. Barbaloïn (C. 1897 [2] 525).
C 87,4 — H 5,8 — N 6,8 — M. G. 412. $C_{30}H_{24}O_{9}$

1) 4,4'-Dicinnamylidenamidobiphenyl. Sm. 260-261°. 2HCl (A. 239,

 $\mathbf{C}_{30}\mathbf{H}_{24}\mathbf{N}_{2}$

385). - IV, 968.

 $C_{30}H_{28}O_{4}$

 $\mathbf{C}_{30}\mathbf{H}_{28}\mathbf{O}_{5}$

2) 2, 6-Diphenyl-3, 5-Dibenzyl-1, 4-Diazin. Sm. 146-1470 (Soc. 63, 1371). $\mathbf{C}_{30}\mathbf{H}_{24}\mathbf{N}_{2}$ — IV, 1096. 3) Nitril d. $\alpha\beta\gamma\delta$ -Tetraphenylbutan- $\beta\gamma$ -Dicarbonsäure. Sm. 235° (B.

25, 290). — II, 1916.

C 81.8 - H 5.4 - N 12.7 - M. G. 440. $\mathbf{C}_{30}\mathbf{H}_{24}\mathbf{N}_{4}$

1) 2,5-Di[Phenylamido]-1,4-Di[Phenylimido]-1,4-Dihydrobenzol (Azophenin). Sm. 236—237° (B. 8, 1028; 10, 1311; 20, 1539, 2480; 21, 683; A. 255, 180; 256, 258; M. 9, 417; Soc. 43, 115; J. 1882, 369; B. 31, 1789). — III, 341.

C 76,9 — H 5,1 — N 17,9 — M. G. 468.

C30 H24 N6

1) 5,5'-Diphenyl-1,1'-Di[4-Methylphenyl]-3,3'-Bi-1,2,4-Triazol. Sm. bei 300% $+ C_6 H_6$ (B. **22**, 3117). - IV, 1332. C 90,2 - H 6,3 - N 3,5 - M. G. 399.

 $C_{30}H_{25}N$

1) 1-Aethyl-2, 3, 4, 5-Tetraphenylpyrrol. Sm. 221° (B. 22, 555). — IV, 478. C 79,1 — H 5,5 — N 15,4 — M. G. 455. $\mathbf{C}_{30}\mathbf{H}_{25}\mathbf{N}_{5}$

1) Anilinschwarz. 2HCl. Lit. bedeutend. — III, 675. C 89,5 - H 6,5 - O 4,0 - M. G. 402. $\mathbf{C}_{30}\mathbf{H}_{26}\mathbf{O}$

 Verbindung (aus d. Diketon C₃₀H₂₄O₂). Sm. 110—111° (A. 302, 205).
 Verbindung (aus d. Diketon C₃₀H₂₄O₂). Sm. 194—195° (A. 302, 205).
 C 86,1 — H 6,2 — O 7,6 — M. G. 418. $\mathbf{C}_{30}\mathbf{H}_{26}\mathbf{O}_{2}$ 1) $\alpha \zeta$ -Diketo- $\alpha \gamma \delta \zeta$ -Tetraphenylhexan. Sm. 270° (266—267°) (A. 296, 327; 302, 202, 214).

C 82.9 - H 6.0 - O 11.0 - M. G. 434.C30 H26 O3

1) Methyläther d. $\alpha \varepsilon$ -Diketo- ε -[4-Oxyphenyl]- $\alpha \beta \gamma$ -Triphenylpentan. Sm. 206° (A. 281, 59). — III, 310.

 $\mathbf{C}_{30}\mathbf{H}_{26}\mathbf{O}_4$

C 80,0 — H 5,8 — O 14,2 — M. G. 450. 1) Aethyldibenzoïn. Sm. 200° (A. 155, 79, 93; B. 4, 336). — III, 283. 2) Diacetat d. $\alpha\alpha$ -Diphenyl- $\beta\beta$ -Di[?-Oxyphenyl] athan. Sm. 155° (A. **279**, 331). — II, 1008.

3) Succinat d. α-Oxydiphenylmethan. Sm. 141-142° (A. 133, 23). -

II, 1078. C 77,2 — H 5,6 — O 17,2 — M. G. 466. C30 H26 O5

1) Anhydrid d. α -Oxy- $\beta\beta$ -Diphenylpropionsäure (A. 248, 48). — II, 1699.

2) Verbindung (aus Lapachon) (*G.* 12, 373; 19, 618). — III, 403. C 72,3 — H 5,2 — O 22,5 — M. G. 498. $\mathbf{C}_{30}\mathbf{H}_{26}\mathbf{O}_{7}$

1) Chrysarobin. Sm. 170-178° (A. 212, 29; B. 14, 2700; 19, 2331). — III, 453.

2) Diathylester d. Rhizocarpsäure. Sm. 1590 (J. pr. [2] 58, 514). C 67,9 - H 4,9 - O 27,2 - M. G. 530. $C_{80}H_{26}O_{9}$

1) Oxypeucedanin. Sm. 140—141° (C. 1899 [1] 432). C 64,0 — H 4,6 — O 31,3 — M. G. 562. $\mathbf{C}_{30}\mathbf{H}_{26}\mathbf{O}_{11}$

1) Pentacetat d. Gallol. Sm. 230° (A. 209, 269). — II, 1124. 2) Pentacetat d. o-Verb. C₂₀H₁₆O₆ (A. 243, 183).

3) Pentacetat d. m-Verb. $C_{20}H_{16}^{10}O_{8}$ (A. 243, 179). C 87,0 — H 6,3 — N 6,6 — M. G. 414. $C_{30}H_{26}N_2$

1) 2,5-Diphenyl-1,4-Dibenzyl-1,4-Dihydro-1,4-Diazin. Sm. 1630 (Soc. 63, 1362). — IV, 1030.

2) 2,6-Diphenyl-1,4-Dibenzyl-1,4-Dihydro-1,4-Diazin. Sm. 86°. (2 HCl, PtCl₄ + 5H₂O) (Soc. **63**, 1369). — **IV**, 1031. C 81,4 — H 5,9 — N 12,7 — M. G. 442. 1) Hydrazophenin. Sm. 173—174° (B. **20**, 2483). — **III**, 342.

 $C_{30}H_{26}N_4$ $\mathbf{C}_{30}\mathbf{H}_{28}\mathbf{O}$

C 89,1 — H 6,9 — O 4,0 — M. G. 404.

1) 1-Oxy-1, 2, 4, 5-Tetraphenylhexahydrobenzol. Sm. 182° (A. 296, 327). 2) Phenyl-2,5-Dimethylphenylpinakolin. Sm. 146° (J. pr. [2] 35, 477). **- III**, 266.

C 85,7 — H 6,6 — O 7,6 — M. G. 420. $\mathbf{C_{80}H_{28}O_{2}}$ 1) 1,2-Dioxy-1,2,4,5-Tetraphenylhexahydrobenzol. Sm. 210-211° (A. **296**, 326).

C 79.6 - H 6.2 - O 14.2 - M. G. 452.

1) Tetramethyläther d. $\alpha\alpha\beta\beta$ -Tetra[4-Oxyphenyl]äthen. Sm. 181 bis 182° (B. **28**, 2874). C 76,9 — H 6,0 — O 17,1 — **M**. G. 468.

1) Tetramethyläther d. $\alpha\alpha\beta\beta$ -Tetra[4-Oxyphenyl]äthanoxyd. Sm. 188 bis 189° (B. 28, 2874).

C 86,5 - H 6,7 - N 6,7 - M. G. 416. $C_{30}H_{28}N_2$ Aethylbenzylamarin. Sm. 135°. (2HCl, PtCl₄) (B. 18, 1855). — III, 24.
 C 78,4 — H 6,3 — N 15,2 — M. G. 459. $\mathbf{C}_{30}\mathbf{H}_{29}\mathbf{N}_{5}$ $1) \ \ \textbf{2-[4-Methylphenyl]} imido-1, 3-Di[4-Methylphenylamido] methylen-1 \\$ 5-Methyl-2, 3-Dihydrobenzimidazol. Sm. 210° (B. 24, 2521). — IV, 624. C 76,6 — H 6,4 — O 17,0 — M. G. 470. C30 H30 O5 1) Anhydroderivat (aus d. Lakton d. α-Oxydi[?-Methylphenyl]essigsäure) (B. 28 [2] 613). Cetrarsaure, siehe C₁₈H₁₈O₈. — II, 2082.
 C 80,7 — H 6,7 — N 12,5 — M. G. 446. $\mathbf{C}_{30}\mathbf{H}_{30}\mathbf{O}_{12}$ $\mathbf{C}_{30}\mathbf{H}_{30}\mathbf{N}_{4}$ 1) $\alpha \beta$ -Di[4-Benzylidenamido-2-Methylphenylamido]äthan. Sm. 175 bis 176° (Soc. 71, 426). — IV, 602. 2) Acetophenonäthylenphenylhydrazon. Sm. 117-118° (A. 254, 127). - IV, 771. C 78,9 - H 7,0 - O 14,0 - M. G. 456. 1) Bis-Dihydrosantinsäure. Sm. 215° (G. 23 [1] 60). - II, 2035. C 82,7 - H 7,6 - N 9,7 - M. G. 435. C 82,7 - H 7,6 - N 9,7 - M. G. 435. C30H32O4 $C_{30}H_{33}N_3$ 1) 4' - [4 - Methylphenyl amido - 4^2 , 4^3 - Di [Dimethylamido] triphenylmethan. Sm. 177°. Pikrat (A. 274, 229). - IV, 1196. 2) trimolec. 2-Methyl-?-Dihydrochinolin (C. 1896 [1] 1127). 3) Base (aus Isobutylidenphenylhydrazin). Sm. 215-216° (M. 16, 860). IV, 227. C 78,6 — H 7,4 — O 14,0 — M. G. 458. $C_{30}H_{34}O_{4}$ Santonon. Sm. 223° (G. 22 [2] 126). — II, 2035.
 Isosantonon. Sm. 280° u. Zers. (G. 22 [2] 132). — II, 2035.
 C 65,5 — H 6,1 — O 28,9 — M. G. 554. $\mathbf{C}_{30}\mathbf{H}_{34}\mathbf{O}_{10}$ 1) Aethylenester d. Filixsäure. Sm. 165° (B. 21, 2964). — II, 1967. $\mathbf{C}_{30}\mathbf{H}_{34}\mathbf{O}_{12}$ C 61,4 - H 5,8 - O 32,8 - M. G. 586.1) Hexapropionat d. α-Hexaoxybiphenyl (A. 169, 243). — II, 1042. C 59.8 — H 5,6 — O 34,5 — M. G. 602. 1) Ledixanthin (J. 1883, 1402). — III, 688. 2) Ononin. Sm. 235° u. Zers. (J. 1855, 713). — III, 599. C₃₀H₃₄O₁₃ 3) Pikrotoxin, siehe C₁₅H₁₆O₈. — III, 642. C 56,8 — H 5,3 — O 37,9 — M. G. 634. 1) Aloëretinsäure (J. 1863, 597). — III, 618. C 64,7 — H 6,5 — O 28,8 — M. G. 556. C₃₀H₃₄O₁₅ C₃₀H₃₆O₁₀ 1) Coriamyrtin. Sm. 220° (Z. 1866, 663). - C 37,6 — H 3,8 — O 58,6 — M. G. 956. - III, 578. $\mathbf{C}_{30}\mathbf{H}_{36}\mathbf{O}_{35}$ 1) Mannitweinsäure. $Mg_3 + 30 H_2 O$, $Ca_3 + 6 H_2 O$ (A. ch. [3] 47, 330). **I**, 795. 2) Pinitweinsäure. Ca₃ (Berthelot, Chim. org. 2, 220). — I, 795.
C 84,9 — H 8,5 — N 6,6 — M. G. 424. $\mathbf{C}_{30}\mathbf{H}_{36}\mathbf{N}_{2}$ 1) Hydrocuminamid. Sm. 65° (A. 106, 259; 245, 304; B. 6, 1253). — III, 56. 2) Base (aus Hydrocuminamid). Sm. bei 205°. H₂SO₄ (B. 6, 1253). -III, 56. 1) α-Trithiocuminaldehyd. Sm. 165° (B. 29, 150). — III, 55. $C_{30}H_{36}S_3$ 2) β -Trithiocuminaldehyd. Sm. 205°. + 3 C_8H_8 (β . 29, 150). — III, 55. C 83,7 — H 8,8 — O 7,4 — M. G. 430. C30 H38 O3 Di[3-Methyl-6-Propylphenyläther] d. αα-Dioxy-α-[4-Isopropylphenyl]methan (Cumylenthymoläther). Sm. 157° (Z. 1869, 43). — III, 55. C 80,7 — H 8,5 — O 10,8 — M. G. 446. $\mathbf{C}_{30}\mathbf{H}_{38}\mathbf{O}_{3}$ 1) Anhydrid d. Säure C₁₅H₂₀O₂ (aus Camphersäureanhydrid). Sm. 135° (C. 1895 [2] 1082). C 77,9 — H 8,2 — O 13,9 — M. G. 462. C₈₀H₈₈O₄ 1) Helleboresin. Sm. 140—150° u. Zers. (A. 135, 64). — III, 593. C 72,9 — H 7,7 — O 19,4 — M. G. 494. C₃₀H₃₈O₆ 1) Santononsäure. Sm. 215—216° u. Zers. Ag₂ (G. 22 [2] 129). —

II, 2035. 2) Isosantononsäure. Sm. 167—168°. Ag₂ (G. 22 [2] 137). — II, 2035. 3) d-Disantonige Säure. Sm. 250° u. Zers. (G. 25 [1] 507). — II, 2036. 4) l-Disantonige Säure. Sm. 250—250,5° (B. 28 [2] 394; G. 25 [1] 521). - II, 2036.

 $\mathbf{C}_{80}\mathbf{H}_{48}\mathbf{O}_8$

C30H38O6 5) racem. i-Disantonige Säure. Sm. 243-244° u. Zers. (G. 25 [1] 528; B. 28 [2] 394). — II, 2036. 6) Didesmotroposantonige Säure. Sm. 254—255° (B. 28 [2] 394; G. 25 [1] 538). — II, 2036. C 68,4 — H 7,2 — O 24,3 — M. G. 526. $\mathbf{C}_{80}\mathbf{H}_{38}\mathbf{O}_{8}$ 1) Tetraäthylester d. $\alpha\zeta$ -Diphenylhexan- $\beta\beta\varepsilon\varepsilon$ -Tetracarbonsäure. Sm. 126—127° (Soc. 65, 1018). — II, 2085. C 64,5 — H 6,8 — O 28,7 — M. G. 558. 1) Quassiasäure + H₂O. Sm. 244—245° u. Zers. Ba + 7H₂O, Pb + 6H₂O, Fe₂ (G. 14, 7; 17, 570). — III, 647. C 87,2 — H 9,4 — N 3,4 — M. G. 413. C₈₀H₃₈O₁₀ $C_{30}H_{39}N$ 1) Tri[4-Isopropylbenzyl]amin. Sm. 81-82°. HCl, (2HCl, PtCl₄) (A. Spl. 1, 143). — II, 561. C 81,3 — H 9,2 — N 9,5 — M. G. 443. $C_{30}H_{41}N_{8}$ 1) 2-Pentadekyl-4, 6-Diphenyl-1, 3, 5-Triazin. Sm. 64°; Sd. 327-328°; (B. **22**, 809). — **IV**, 1199. C 86,3 — H 10,3 — N 3,4 — M. G. 417. $\mathbf{C}_{30}\mathbf{H}_{43}\mathbf{N}$ 1) 5-Heptadekylakridin. Sm. 69-70°. HCl, (2HCl, PtCl₄), H₂SO₄ (G. 22 [2] 549). — IV, 421. C 85,7 — H 10,5 — O 3,8 — M. G. 420. $\mathbf{C}_{30}\mathbf{H}_{44}\mathbf{O}$ 1) α-Keto-αβ-Diphenyloktadekan (Cetyldesoxybenzoin). Sm. 76°; Sd. bei 430° (B. **25**, 2239). — III, 239. C 85,3 — H 10,9 — O 3,8 — M. G. 422. C30 H46 O 1) Verbindung (aus Sandelöl). Sd. 280—285° (Bl. 37, 303). — III, 549. C 82,2 — H 10,5 — O 7,3 — M. G. 438. $\mathbf{C}_{30}\mathbf{H}_{46}\mathbf{O}_{2}$ 1) Butyrat d. Ergosterin. Sm. 95° u. Zers. (A. ch. [6] 20, 295). — II, 1076. C 76,6 — H 9,8 — O 13,6 — M. G. 470. l. Echicerinsäure (A. 178, 64). — III, 630. C 60,2 — H 7,7 — O 32,1 — M. G. 598. $\mathbf{C}_{30}\mathbf{H}_{46}\mathbf{O}_4$ $\mathbf{C}_{30}\mathbf{H}_{46}\mathbf{O}_{12}$ 1) Ouabain + 9H₂O. Sm. 185-200°. Ba (B. 21 [2] 359; 22 [2] 105; Bl. [3] 19, 201, 734, 831). — III, 599. C 57,2 — H 7,3 — O 35,5 — M. G. 630. 1) Menganthin. Sm. 60—65° (J. 1861, 749; 1865, 610). — III, 597. C 48,5 — H 6,2 — O 45,3 — M. G. 742. $\mathbf{C}_{30}\mathbf{H}_{46}\mathbf{O}_{14}$ C30H46O21 C 48,5 — H 6,2 — O 45,5 — M. G. 742.

1) Glykolignose (A. Spl. 5, 223). — III, 592.
C 82,9 — H 10,6 — N 6,4 — M. G. 434.

1) Verbindung (aus Campherimin). Sm. bei 100°. (HCl, AuCl₃) (B. 29, 2810). — IV, 77.
C 84,9 — H 11,3 — O 3,8 — M. G. 424. $\mathbf{C}_{30}\mathbf{H}_{46}\mathbf{N}_{2}$ C₈₀H₄₈O 1) α -Amyron + H₂0. Sm. 125-130° (B. 24, 3836). — III, 557. 2) β-Amyron. Sm. 178—180° (B. 24, 3837). — III, 557. C30 H48 O2 C 81.8 - H 10.9 - O 7.3 - M. G. 440. Echicerin. Sm. 157° (A. 178, 61; P. 65, 240). — III, 629.
 Oxy-α-Amyrin + 2H₂O. Sm. 207—208° (B. 24, 3838). — III, 557.
 Propionat d. Sitosterin. Sm. 108,5° (M. 18, 559). 1) Gentiol. Sm. 215-219° (*M.* 12, 480). — III, 633. 2) Urson + 2H₂O. Sm. 264-266° (*Z.* 1866, 382; *J.* 1854, 659; *M.* 14, C30 H48 O8 255). — III, 649. C 76,3 — H 10,2 — O 13,5 — M. G. 472 $\mathbf{C}_{30}\mathbf{H}_{48}\mathbf{O}_{4}$

1) Diacetat d. Onocol. Sm. 224° (B. 29, 2986). 2) d-Diborneolester d. Camphersäure. Sm. 102—128°(?) (B. 23 [2] 283). - III, 471. 3) 1-Diborneolester d. Camphersäure. Sm. 122° (B. 23 [2] 283). —

C 67,1 - H 8,9 - O 23,9 - M. G. 536.

1) α -Chinovin. PbO (A. 17, 161; 40, 323; 45, 278; 79, 145; 111, 182; 145, 9; Z. 1867, 537; J. 1859, 578; B. 16, 928; R. 2, 162). — III, 575. 2) β -Chinovin. Sm. 235° u. Zers. $+5 C_2 H_6 O$ (B. 16, 928, 930). — III, 575. C 60,0 — H 8,0 — O 32,0 — M. G. 600.

C₃₀H₄₈O₁₂ 1) Periplocin. Sm. 205° (C. 1897 [2] 130).

C30H48O13 C 58,4 - H 7,8 - O 33,8 - M.G. 616.

1) Ouabaïnsäure. Sm. bei 235° u. Zers. Na $+3H_2O$, Sr $+6H_2O$, Ba + H_2O (Bl. [3] 19, 832).

C30H48O14 C 56,9 - H 7,6 - O 35,4 - M. G. 632.C 30,9 — H 7,5 — U 30,4 — M. G. 632.

1) Hexascetyllinusinsäure. Fl. (M. 8, 161). — I, 851.
C 35,4 — H 4,7 — O 59,8 — M. G. 1016.

1) Pachymose (B. 28, 776; H. 21, 149).
C 84,5 — H 11,7 — O 3,8 — M. G. 426.
1) α-Amyrin. Sm. 181—181,5° (J. 1851, 528; 1876, 911; A. 192, 179; B. 20, 1243; 23, 3186; 24, 3836). — III, 556.
2) β-Amyrin. Sm. 193—194° (B. 20, 1245; 23, 3187; 24, 3836; A. 271, 216). — III, 556.
C 81.5 — H 11.3 — O 7.2 — M C 442. C30H48O38 $C_{30}H_{50}O$ $C \pm 81.5 - H \pm 11.3 - O \pm 7.2 - M. G. 442$ $\mathbf{C}_{30}\mathbf{H}_{50}\mathbf{O}_{2}$ Co1,5 — II 11,5 — O 1,2 — M. G. 442.

1) Cerin (oder C₃₂H₅₄O₂). Sm. 249° (C. 1898 [2] 1102).

2) Conduransterin (G. 21, 210). — III, 577.

3) Pertusarin. Sm. 235° (J. pr. [2] 58, 504).

4) Acetat d. Chironol. Sm. 196° (B. 28 [2] 1056).

5) Acetat d. Homocholesterin. Sm. 223° (G. 19, 211). — II, 1076.

6) Propionat d. Cholesterin (oder C₂₂H₄₈O₂). Sm. 98° (H. 15, 39, 368, 272). II. 1072 373). — II, 1073. 7) Butyrat d. Cholesterin (A. ch. [3] 56, 59; M. 15, 374). — II, 1073. C 81,1 — H 11,7 — O 7,2 — M. G. 444. 1) Propionat d. Koprosterin. Sm. 92° (H. 22, 400). C30H52O2 2) Verbindung (aus Diisovaleraldehyd) (B. 8, 373). — I, 962. $C_{30}H_{52}O_8$ C 66,7 - H 9,6 - O 23,7 - M. G. 540.1) Boldoglykosid (Bl. 42, 291). — III, 573. C 62,9 — H 9,1 — O 28,0 — M. G. 572. 1) Randiasäure. Sm. 208—210° (C. 1895 [1] 226). C 56,6 — H 8,2 — O 35,2 — M. G. 636. $\mathbf{C}_{30}\mathbf{H}_{52}\mathbf{O}_{10}$ $\mathbf{C}_{30}\mathbf{H}_{52}\mathbf{O}_{14}$ 1) Verbindung (Glykosid) (B. 26 [2] 897). C 77,3 — H 12,4 — O 10,3 — M. G. 466. C₃₀H₅₈O₃ 1) Lakton d. Lanocerinsäure. Sm. 104-105° (B. 28, 3134; 29, 1474). 2) isom. Lakton d. Lanocerinsäure. Sm. 86° (B. 29, 1476). C 70,0 — H 11,3 — O 18,7 — M. G. 514. 1) Lithobilinsäure. Sm. 199°, Ba + 6H₂O (B. 12, 1925; J. 1880, 831; C₈₀H₅₈O₆ 1) Melissinsäure (oder $C_{91}H_{62}Q_2$). Sm. 90° (90,6°). Pb, Ag (A. 71, 149; 183, 353; 223, 295; J. r. 11, 113; M. 14, 736; C. 1896 [1] 642). $\mathbf{C}_{80}\mathbf{H}_{59}\mathbf{N}$ $\mathbf{C}_{30}\mathbf{H}_{60}\mathbf{O}_{2}$ I, 449. 2) Säure (aus Bienenwachs). Sm. 89-90° (A. 224, 249). - I, 449. 3) Tetradekylester d. Palmitinsäure. Sm. 48° (B. 16, 3021). — I, 443. C 76,9 — H 12,8 — O 10,3 — M. G. 468. C30 H60 O3 C 76,9 — H 12,8 — O 10,3 — M. G. 468.

1) a-Oxymelissinsäure. Sm. 96,5° (C. 1896 [1] 642).

2) Acetat d. Drimol. Sm. 42—43° (A. 286, 375). — III, 630.

C 74,4 — H 12,4 — O 13,2 — M. G. 484.

1) Lanocerinsäure. Sm. 104—105° (B. 29, 1475).

1) Chlortriakontan (Myricylchlorid). Sm. 64,5° (A. 183, 348). — I, 157.

1) Jodtriakontan (Myricylchlorid). Sm. 69,5° (A. 183, 347). — I, 196.

C 82,2 — H 14,1 — O 3,6 — M. G. 438.

1) Myricylalkohol. Sm. 85° (88°) (A. 71, 147; 183, 344; 223, 283; Z. 1869, 300; B 3, 560; M 14, 735; B/ [3] 11, 185). — I, 241.

 $\mathbf{C}_{30}\mathbf{H}_{60}\mathbf{O}_{4}$

 $\mathbf{C}_{30}\mathbf{H}_{61}\mathbf{C}\mathbf{I} \\ \mathbf{C}_{30}\mathbf{H}_{61}\mathbf{J}$ $\mathbf{C}_{30}^{"}\mathbf{H}_{62}^{"}\mathbf{O}$

 $C_{30}H_{62}O_{2}$

300; B. 3, 569; M. 14, 735; Bl. [3] 11, 185). — I, 241. C 79,3 — H 13,6 — O 7,0 — M. G. 454. 1) Coccerylalkohol. Sm. 101—104° (B. 18, 1981). — I, 267.

1) Merkaptotriakontan (Myricylmerkaptan). Sm. 94,5° (A. 183, 349). — C30H62S

1) Bleitriisoamyl. Fl. (J. 1860, 383). — I, 1530. $\mathbf{C}_{30}\mathbf{H}_{66}\mathbf{Pb}_{2}$

C₃₀-Gruppe mit drei Elementen.

C 70,2 — H 2,9 — O 18,7 — N 8,2 — M. G. 513. $C_{80}H_{15}O_6N_3$ 1) Tri[Phenylimid] d. Benzolhexacarbonsäure (J. pr. [2] 32, 238). -II, 2106.

C 68,0 — H 2,8 — O 21,2 — N 7,9 — M G 529. C30H15O7N3 1) Triphtalylpikramid. Sm. oberh. 300° (G. 16, 253). — II, 1809. C 85,3 — H 4,3 — O 3,8 — N 6,6 — M G. 422. 1) Naphtylnaphtindon (A. 286, 234). — IV, 1084. 2) Phenylhydrazon d. Biacenaphtylidendion. Sm. 105—110° (A. 276, C₃₀H₁₈ON₂ 20). — III, 311. C 82,2 - H 4,1 - O 7,3 - N 6,4 - M. G. 438. $C_{30}H_{18}O_{2}N_{2}$ 1) Oxynaphtylnaphtindon. HCl (A. 286, 237). — IV, 1085. C 77,2 — H 3,9 — O 6,9 — N 12,0 — M. G. 466. $C_{30}H_{18}O_2N_4$ 1) Verbindung (aus Rhodizonsäure u. 2-Amido-1-Phenylamidobenzol) (B. 31, 2441). C 76,6 — H 3,8 — O 13,6 — N 6,0 — M. G. 470. $C_{30}H_{18}O_4N_2$ 1) Dibenzoylindigo. Sm. 108° (J. 1863, 557). — II, 1621. C₃₀H₁₈O₄Br₂ 1) Verbindung (aus Brommorphenolmethyläther). Sm. oberh. 315° (B. 30, C 82,4 - H 4,3 - O 3,7 - N 9,6 - M. G. 437.C30H19ON3 1) Amidonaphtylnaphtindon (A. 286, 237). — IV, 1216. C 84,9 — H 4,7 — O 3,8 — N 6,6 — M. G. 424. $\mathbf{C}_{30}\mathbf{H}_{20}\mathbf{ON}_{2}$ 1) 4-[1-Naphtyl]imido-3-[1-Naphtyl]amido-1-Keto-1, 4-Dihydronaphtalin. Sm. 237° (A. 272, 352). — IV, 1166. 2) 4-[I-Naphtyl]imido-P-[1-Naphtyl]amido-l-Keto-1,4-Dihydronaphtalin. Sm. 178⁶ (B. 21, 395). — III, 394. 3) 4-[2-Naphtyl]imido-p-[2-Naphtyl]amido-1-Keto-1,4-Dihydronaphtalin. Sm. 246-247° (Soc. 45, 160). - III, 394. 4) Phenylnaphtophenanthrazoniumhydrat. HNO₃ (B. 20, 1185). 5) 2,3,4-Triphenyl-1,4-Naphtisodiazinon [6] (Phenylnaphtostilborosindon). HCl (B. 25, 2006). — IV, 1092. 1) 1,1-Dinaphtyläther d. 1-Merkapto-?-Oxynaphtalin. Sm. 111° (J. pr. C₈₀H₂₀OS [2] **38**, 140). — II, 870. C 81,8 — H 4,5 — O 7,3 — N 6,4 — M. G. 440. $\mathbf{C}_{30}\mathbf{H}_{20}\mathbf{O}_{2}\mathbf{N}_{2}$ 1) 6,11-Di[Phenylamido]-5,12-Diketo-5,12-Dihydronaphtacen. Sm. bei 245° (B. 31, 1283). 2) Diphtalsuccindehydroanilid. Sm. noch nicht bei 280° (B. 18, 3123). **- II**, 1809. C 76.3 - H 4.2 - O 13.6 - N 5.9 - M. G. 472.C30H20O4N2 1) 4,4'-Di[Phtalylamido]-3,3'-Dimethylbiphenyl. Sm. 307° (B. 21, 1066). **— IV**, 982. C,0H,00,S 1) Dibenzoat d. Phenyl-3,4-Dioxy-1-Naphtylsulfon. Sm. 178° (B. 28, 1316). C30H20O8N8 C 60.8 - H 3.4 - O 21.6 - N 14.2 - M. G. 592.1) Di[3-Oxyphenyläther] d. Cyanursäure + 6H₂O. Sm. oberh. 360° u. Zers. (B. 13, 1619). — II, 918. Verbindung (aus d. Verb. C₂₄H₁₅O₈N₅). Sm. 229° (A. 226, 67). — IV, 1005.
 C 65,2 — H 3,6 — O 26,1 — N 5,1 — M. G. 552.
 Anhydrid d. 2-[3-Nitro-4-Methylbenzoyl] benzol-1-Carbonsäure. Sm. 203° (A. 299, 313). C30 H20 O9 N2 $C_{30}H_{20}O_{11}Br_61$) Pentacetat d. Verb. $C_{20}H_{10}O_6Br_6$ (aus $\alpha\alpha\beta$ -Tri[1,2-Dioxyphenyl]äthan) (A. 243, 184). — II, 1045. (aus $\alpha\beta\beta$ -Tri[1, 3-Dioxyphenyl]äthan) (A. 243, 180). - II, 1045. $\mathbf{C}_{30}\mathbf{H}_{20}\mathbf{N}_4\mathbf{Cl}_4$ 1) Tetrachlorazophenin. Sm. 265° (B. 21, 678). — III, 342. $C_{30}H_{20}N_4Br_41$) Tetrabromazophenin. Sm. 243° (B. 20, 2481; 21, 682; A. 243, 85). - III, 342.

C₃₀H₂₁O₂N₅
C 74,5 - H 4,3 - O 6,6 - N 14,5 - M. G. 483.

Rubazonsäure. Sm. 200°? (B. 27, 785). - IV, 1491.

C₃₀H₂₁O₃As 1) Tri [2-Naphtylester] d. Arsenigensäure. Sm. 113-114° (B. 28, 622).

Tri [1-Naphtylester] d. Phosphorsäure. Sm. 145° (149-150°) (A. 152, 289; B. 15, 312 Anm.; 16, 640, 1770; 28, 3054; 30, 2380). - II, 858.

Tri [2-Naphtylester] d. Phosphorsäure. Sm. 108° (110,5-111°) (A. 152, 290; B. 16, 1768; 28, 3057; 30, 2377). - II, 877.

C₃₀H₂₁O₁₀N₃
C 61,7 - H 3,6 - O 27,4 - N 7,2 - M. G. 583.

2,4,6 - Tri [Benzoylamido] - I - Oxybenzol - 2',2²,2³ - Tricarbonsäure (Pikramintrinhtalylsäure). Sm. oberh. 300° (G. 16, 254). - II, 1809. III, 342.

(Pikramintriphtalylsäure). Sm. oberh. 300° (G. 16, 254). — II, 1809.

- C₃₀H₂₁N₂Cl 1) 4-Chlorphenylat d. 2,3-Diphenyl-1,4-Naphtisodiazin (B. 24, 1872). · IV, 1092.
- - 1) 4-Phenyloxydhydrat d. 2,3-Diphenyl-1,4-Naphtisodiazin. Sm. 167°.
- Chlorid (B. 24, 1817, 2679). IV, 1092. C 79,3 H 4,8 O 3,5 N 12,3 M. G. 454. C₈₀H₂₂ON₄
 - 1) 4-Acetylamidophenylrosindulin. HCl (B. 31, 2431).
- 2) 3-Phenyl-2-[3-Benzoylamidophenyl]-2, 3-Dihydro-1, 2, 4-Naphtisotriazin. Sm. 176—177° (Soc. 59, 700). IV, 1359. C 81,4 H 5,0 O 7,2 N 6,3 M. G. 442. $\mathbf{C}_{30}\mathbf{H}_{22}\mathbf{O}_{2}\mathbf{N}_{2}$
 - 1) 3-Benzoylamido-1-[Benzoyl-2-Naphtyl]amidobenzol. Sm. 213° (B.
 - 26, 980). IV, 573.
 2) 1,4-Dibenzoyl-2,3-Diphenyl-1,4-Dihydro-1,4-Diazin. Sm. 188—189°
- (Soc. **63**, 1293). III, 284. C 76,6 H 4,7 O 6,8 N 11,9 M. G. 470. $\mathbf{C}_{80}\mathbf{H}_{22}\mathbf{O}_{2}\mathbf{N}_{4}$
 - 1) 5,5'-Diketo-1,3,1',3'-Tetraphenyl-4,5,4',5'-Tetrahydro-4,4'-Bipyrazol. Sm. 320° u. Zers. (316-317°) (B. 20, 2548; 27, 1168; 30, 116; A. **293**, 108). — **IV**, *1299*
 - 2) Phenylhydrazonderivat d. s-Aethylendibenzoyl-2,2'-Dicarbonsäure. Sm. 236—237° (B. 18, 804). — IV, 725.
- $\mathbf{C_{80}H_{22}O_2Br_2}$ 1) $\beta\gamma$ oder $\delta\varepsilon$ -Dibrom- $\alpha\zeta$ -Diketo- $\alpha\beta\delta\zeta$ oder $\alpha\gamma\delta\zeta$ -Tetraphenyl- β -Hexen. Zers. bei 170° (A. 302, 200).
- $\mathbf{C}_{30}\mathbf{H}_{22}\mathbf{O}_{2}\mathbf{Br}_{4}$ 1) $\beta\gamma\delta\varepsilon$ -Tetrabrom- $\alpha\zeta$ -Diketo- $\alpha\beta\delta\zeta$ oder $\alpha\gamma\delta\zeta$ -Tetraphenylhexan (A. 302, 200).
- C 75,9 H 4,6 O 13,5 N 5,9 M. G. 474. $\mathbf{C_{30}H_{22}O_4N_2}$
 - 1) 3,4-3',4'-Dimethylenäther d. 1,6-Diphenyl-3,4-Di[3,4-Dioxyphenyl]-
- 1,2-Dihydro-1,2-Diazin. Sm. 166° (A. 289, 325). IV, 786. C 71,7 H 4,4 O 12,7 N 11,2 M. G. 502. 1) 1,4 Dibenzoyl 3,6 Di[Phenylamido] 2,5 Diketo 1,2,4,5 Tetrahydro 1,4 Diazin (Hippuroflavindianilid). Sm. 235° (A. 287, 74). $\mathbf{C_{80}H_{22}O_{4}N_{4}}$
- Π , 1185. C 73,5 H 4,5 O 16,3 N 5,7 M. G. 490. $\mathbf{C_{30}H_{22}O_5N_2}$ 1) **Verbindung** (aus 5-Keto-2-Benzyliden-3, 4-Diphenyl-2, 5-Dihydropyrrol). Sm. 173° (B. 24, 3873). — II, 1728.
 - C 65,4 H 4,0 O 20,4 N 10,2 M. G. 550. $_{30}\mathbf{H}_{22}\mathbf{O}_{7}\mathbf{N}_{4}$ 1) 3-Methyläther-1,7-Diacetat d. 4,5-Diphenylazo-1,3,7-Trioxyxan-
- thon. Sm. 218—220° (Soc. 73, 673). IV, 1479. C 56,4 H 3,4 O 22,6 N 17,6 M. G. 638. Verbindung (aus 2-Nitrophenylbrenztraubensäure). 1040). IV, 697. $\mathbf{C_{30}H_{22}O_9N_8}$ Sm. 157° (B. 30,
 - 1) 4-Chlorphenylat d. 6-Amido-2,3-Diphenyl-1,4-Naphtisodiazin
- $\mathbf{C}_{30}\mathbf{H}_{22}\mathbf{N}_{3}\mathbf{C}\mathbf{1}$ $+ H_2O. 2 + PtCl_4 (B. 25, 2003). - IV, 1218.$ 2) Farbstoff (aus 4 Chlor-2-Methylchinolin). Sm. 220°. 2 HCl (B. 20, 957).
- **IV**, 309. 1) Disulfid d. 2-Merkapto-4,5-Diphenylimidazol. Zers. bei 300° (A. $\mathbf{C}_{\mathbf{30}}\mathbf{H}_{22}\mathbf{N}_{\mathbf{4}}\mathbf{S}_{2}$ **284**, 16). — III, 224. C 87,2 — H 5,5 — O 3,9 — N 3,4 — M. G. 413.
- $\mathbf{C}_{80}\mathbf{H}_{28}\mathbf{ON}$ 1) 1-Acetyl-2, 3, 4, 5-Tetraphenylpyrrol. Sm. 226° (B. 22, 554). —
- IV, 478. C 76,7 H 4,9 O 3,4 N 14,9 M. G. 469. C₃₀H₂₃ON₅ Verbindung (aus Diazobenzolchlorid) (Soc. 37, 752). - IV, 1515.
- 1) 3-Chlor-2,5-Di[Phenylamido]-1,4-Di[Phenylimido]-1,4-Dihydro- $\mathbf{C}_{30}\mathbf{H}_{23}\mathbf{N}_{4}\mathbf{C}\mathbf{1}$ benzol (Chlorazophenin). Sm. 230° (B. 20, 481; A. 243, 289). — III, 342.
- 2) Anilidophenylaposafraninchlorid (B. 30, 2626). C30 H24 ON4
- C 79.0 H 5.2 O 3.5 N 12.3 M. G. 456. 1) Hydroxyazophenin. Sm. 197° (B. 21, 910). II, 730. C 81.1 H 5.4 O 7.2 N 6.3 M. G. 444. 1) $\alpha \zeta$ -Dioximido $-\alpha \beta \delta \zeta$ oder $\alpha \gamma \delta \zeta$ -Tetraphenyl- $\beta \delta$ -Hexadiën. Sm. 246° $C_{30}H_{24}O_2N_2$ Zers. (A. 302, 199).
 - 2) 1,3-Di[Acetyl-2-Naphtylamido] benzol. Sm. 175° (B. 26, 981).
 - 3) 1,4-Di[Acetyl-2-Naphtylamido] benzol. Sm. 210° (B. 22, 1802). IV, 590.

C 75,6 — H 5,0 — O 13,4 — N 5,9 — M. G. 476.

1) Diphtalsuccinanilid. Sm. 267° u. Zers. (B. 18, 3123). — II, 1808. C30H24O4N2

C30H24O4N4

C 71,4 - H 4,8 - O 12,7 - N 11,1 - M. G. 504.

1) 1,4-Dibenzoyl-3,6-Di[Phenylamido]-2,5-Dioxy-1,4-Dihydro-1,4-Diazin (Dihydrobippuroflavindianilid). Sm. 158-160° (A. 287, 73).

 $C_{50}H_{54}O_4Cl_4$ 1) Tetramethyläther d. $\alpha\alpha\beta\beta$ -Tetra[P-Chlor-P-Oxyphenyl]äthen. 257° (B. 28, 2875). C 69,2 — H 4,6 — O 15,4 — N 10,8 — M. G. 520.

 $\mathbf{C}_{30}\mathbf{H}_{24}\mathbf{O}_{5}\mathbf{N}_{4}$

1) Anhydroverbindung d. $\alpha\beta$ -Di[Phenylamido]- $\alpha\beta$ -Di[Benzoylamido]bernsteinsäure. Sm. 226-227°. Ca (B. 26, 2322; A. 287, 77). II, 1185. C 70,9 — H 4,7 — O 18,9 — N 5,5 — M. G. 508. 1) Aethylenäther d. Benzoylbenzhydroxamsäure. Sm. 148° (A. 175,

 $\mathbf{C}_{30}\mathbf{H}_{24}\mathbf{O}_{6}\mathbf{N}_{2}$

342). — II, 1208. C 67,2 — H 4,5 — O 17,9 — N 10,4 — M. G. 536. l) Tri[β-Phtalylamidoäthyl]amin. Sm. 187,5°. HCl, HBr (B. 29, 2531).

 $C_{30}H_{24}O_6N_4$

C 63,4 — H 4,2 — O 22,5 — N 9,9 — M. G. 568.

1) Acetat d. Disazobenzolhesperitin. Sm. 240—242° (Soc. 73, 1033). — $C_{80}H_{24}O_8N_4$

IV, 1474. C₃₀H₂₄O₁₅Br₄1) Pentacetyltetrabromhemlockgerbsäure (B. 17, 1042). — III, 684.

 $\mathbf{C}_{80}\mathbf{H}_{25}\mathbf{ON}_{5}$ C 76.4 - H 5.3 - O 3.4 - N 14.9 - M. G. 471.

1) 4-[4-Aethylphenylamidophenylazo]-1-[2-Oxy-1-Naphtylazo]benzol (Soc. 45, 111). — IV, 1434.

C 83,5 — H 5,8 — O 7,4 — N 3,2 — M G 431. $\mathbf{C}_{30}\mathbf{H}_{25}\mathbf{O}_{2}\mathbf{N}$

1) 1,3-Diketo-2,4,4-Tribenzyl-1,2,3,4-Tetrahydroisochinolin. Sm. 109° (В. **20**, 2498). — **П**, 1913. С 77,8 — **Н** 5,4 — О 13,8 — **N** 3,0 — **М**. **G**. 463.

C30 H25 O4 N

1) Dimethyläther d. Orcinphtaleïnanilid. Sm. noch nicht bei 300° (B.

26, 3079). — II, 2066. 2) Diäthyläther d. Fluoresceïnanilid. Sm. 162—164° (B. 27, 2791). — II, 2062.

1) 9-Chlormethylat d. 2-Phenylamido-9-Methylrosindulin[9]. HCl (A. C₂₀H₂₅N₄Cl **272**, 328). — \mathbf{IV} , 1297.

C 86.5 - H 6.2 - O 3.8 - N 3.4 - M. G. 416. $\mathbf{C}_{30}\mathbf{H}_{26}\mathbf{ON}_{2}$

1) 4 - Phenylhydrazon -1 - Oxy-1,2,5 - Triphenyl-1,2,3,4 - Tetrahydrobenzol. Sm. 197° (B. **26**, 67). — IV, 779. C 78,6 — H 5,7 — O 3,5 — N 12,2 — M. G. 458.

 $\mathbf{C}_{80}\mathbf{H}_{26}\mathbf{ON}_{4}$

1) Verbindung (aus Diphenacylessigsäure u. Phenylhydrazin). Sm. 164—1660 (B. 19, 3148). — IV, 712. C 80,7 — H 5,8 — O 7,2 — N 6,3 — M. G. 446.

 $\mathbf{C}_{30}\mathbf{H}_{26}\mathbf{O}_{2}\mathbf{N}_{2}$

1) $\alpha \zeta$ -Dioximido- $\alpha \beta \delta \zeta$ oder $\alpha \gamma \delta \zeta$ -Tetraphenyl- β -Hexen. Sm. 230° (A. 302, 204).

2) Monophenylhydrazon d. $\alpha\beta\gamma$ -Tribenzoylpropan. Sm. 57—60° (B. 24, 602). - IV, 788.

3) Cinnidimabenzil. Sm. 283° (Soc. 49, 471). — III, 286. 4) Di[Phenylamid] d. γ-Truxillsäure. Sm. 255° (B. 26, 838). — II, 1903. 5) Diacetylderivat d. Base C₂₆H₂₂N₂. Sm. 280° (B. 26, 1704). —

IV, 1091.

6) Verbindung (aus Amarin) (J. pr. [2] 27, 302). — III, 25. $\mathbf{C}_{30}\mathbf{H}_{26}\mathbf{O}_{3}\mathbf{N}_{2}$ C 77,9 — H 5,6 — O 10,4 — N 6,0 — M. G. 462.

1) 3,3'-Di[2,4-Dimethylbenzoyl] oxyazobenzol. Sm. 124° (A. 286, 335). - IV, 1345. C 66,9 - H 4,8 - O 17,8 - N 10,4 - M. G. 538.

 $\mathbf{C}_{30}\mathbf{H}_{26}\mathbf{O}_{6}\mathbf{N}_{4}$

1) $\alpha\beta$ -Di[Benzoylamido]- $\alpha\beta$ -Di[Phenylamido]bernsteinsäure. Sm. 221 bis 222°. Ca (B. 26, 2322; A. 287, 77). — II, 1192.

C 63,2 — H 4,6 — O 22,4 — N 9,8 — M. G. 570. 1) Katechinazobenzol (M. 2, 552). — III, 687. $\mathbf{C}_{30}\mathbf{H}_{26}\mathbf{O}_{8}\mathbf{N}_{4}$

 $\mathbf{C}_{30}\mathbf{H}_{26}\mathbf{N}_{3}\mathbf{J}_{3}$ 1) Tri[Jodmethylat] d. 2-[4-Chinolyl]-3-[2-Chinolyl]chinolin + 2H₂O. Sm. 201° u. Zers. (M. 17, 417). — IV, 1220. $\mathbf{C}_{30}\mathbf{H}_{27}\mathbf{O}_{2}\mathbf{N}$

C 83,2 - H 6,2 - O 7,4 - N 3,2 - M. G. 433.

1) Di [β-Benzoyl-α-Phenyläthyl]amin (Dibenzalacetophenonamin). Sm. 163° u. Zers. (B. 31, 349).

 $\mathbf{C}_{30}\mathbf{H}_{27}\mathbf{O}_{2}\mathbf{N}_{6}$ 1) Oxytrinikotin? (4HCl, 2PtCl₄ + 8H₂O) (J. 1883, 1338). — IV, 857.

- C 75,3 H 5,7 O 10,0 N 8,8 M. G. 477. $C_{80}H_{27}O_8N_8$
 - 1) 1,3,5-Tri[Phenyltriacetylamido]benzol. Sm. 172-173° (G. 20, 340).
- IV, 1125. C 51,6 H 3,9 O 34,4 N 10,0 M. G. 697. $\mathbf{C}_{80}\mathbf{H}_{27}\mathbf{O}_{15}\mathbf{N}_{5}$
 - Verbindung (aus Furfurinsulfat). Sm. 94—95°. (2 HCl, PtCl₄) (B. 10, 1189). III, 723.
 C 80,4 H 6,2 0 7,1 N 6,2 M. G. 448.
- $\mathbf{C}_{30}\mathbf{H}_{28}\mathbf{O}_{2}\mathbf{N}_{2}$
 - 1) $\beta \gamma$ -Di[Phenylbenzoylamido] butan. Sm. 243 244° (B. 25, 3281). II. 1170.
 - 2) $\alpha \hat{\beta}$ -Di[Phenylbenzoylmethylamido]äthan(Diphenylacyläthylendiphenyl-
 - diamin). Sm. 170-172,5° (G. 21 [2] 500). III, 126.
 - 3) 7-Aethyläther d. 1,7-Dioxy-6-Methyl-2,3-Diphenyl-1-[2-Methylphenyl]-1,1-Dihydro-1,4-Benzdiazin. Sm. 1530 (A. 287, 191). — III, 285.
 - 4) 7-Aethyläther d. 1,7-Dioxy-6-Methyl-2,3-Diphenyl-1-[3-Methylphenyl]-1,1-Dihydro-1,4-Benzdiazin. Sm. 137,5—140° (A. 287, 197). — III, 285.
 - 5) 7-Aethyläther d. 1,7-Dioxy-5-Methyl-2,3-Diphenyl-1-[4-Methylphenyl]-1,1-Dihydro-1,4-Benzdiazin? Sm. 178-179° (A. 287, 210). - III, 285.
 - 6) 7-Aethyläther d. 1,7-Dioxy-6-Methyl-2,3-Diphenyl-1-[4-Methylphenyl]-1,1-Dihydro-1,4-Benzdiazin. Sm. 146-149° (A. 287, 202).
 - 7) Tetrabenzyldiamid d. Oxalsäure. Sm. 127-128° (B. 25, 1825). II, 530.
 - 8) Tetra[4-Methylphenyl]diamid d. Oxalsäure. Sm. 100—101,5° (B. 25, 1826). — II, 501.
 - 9) $\mathbf{Di}[\alpha\beta \mathbf{Diphenyl}]$ d. Oxalsäure. Sm. 212° (G. 23 [2] 229). - II, 636.
 - 10) Base (aus Benzoyl-R-Trimethylen). 2 HCl, (2 HCl, PtCl₄) (Soc. 47, 846). - III, *163*.
- C 75,6 H 5,9 O 6,7 N 11,8 M. G. 476. $\mathbf{C}_{30}\mathbf{H}_{28}\mathbf{O}_{2}\mathbf{N}_{4}$
 - 1) 2,2'-Di[Benzoylamido]-3,5,3',5'-Tetramethylazobenzol. Zers. bei $280-290^{\circ}$ (Am. 17, 450). — IV, 1387.
 - 2) Di[Phenylhydrazid] d. α-Truxillsäure. Sm. 320° (B. 27, 1411). —
 - IV, 712.
 3) Di[Phenylhydrazid] d. γ-Truxillsäure. Sm. 305° (B. 27, 1412). —
- $\mathbf{C}_{30}\mathbf{H}_{28}\mathbf{O}_{3}\mathbf{N}_{2}$
- IV, 712. C 77,6 H 6,0 O 10,3 N 6,0 M. G. 464. 1) 5-Aethyläther d. 4,4'-Di[2-Oxybenzylidenamido]-5-Oxy-2,2'-Dimethylbiphenyl? Sm. 127° (B. 27, 2705). — III, 75.
 - 2) 5-Aethyläther d. ?-Di[2-Oxybenzylidenamido]-5-Oxy-2,4'-Dimethyl-
 - biphenyl? Sm. 106° (B. 27, 2713). III, 75. 3) Aethyläther d. 6,4'-Di[4-Methoxylbenzylidenamido]-3-Oxybiphenyl,
 - Sm. 124° (A. 303, 349). C 73,2 H 5,7 O 9,7 N 11,4 M. G. 492.
- $\mathbf{C}_{30}\mathbf{H}_{28}\mathbf{O}_{3}\mathbf{N}_{4}$
 - 1) Bisphenylhydrazon d. Mekoninmethylphenylketon. Sm. 187° u. Zers. (M. 13, 669). — II, 2022.
 - 2) Di [Phenylamid] d. α-Phenylamido-β-Phenylacetylamidobernsteinsäure. Sm. 252° (B. 24, 2962). II, 438.
 C 69,2 H 5,4 O 9,2 N 16,1 M. G. 520.
- $\mathbf{C}_{30}\mathbf{H}_{28}\mathbf{O}_{3}\mathbf{N}_{6}$
 - 1) Verbindung (aus 4-α-Brompropionylamidoazobenzol). Sm. 227-228° (B. 31, 2851). C 75,0 — H 5,8 — O 13,3 — N 5,8 — M. G. 480. Verbindung (aus Isohydrobenzoïn). Sm. 163° (B. 24, 1779). — II, 1102.
- $\mathbf{C}_{30}\mathbf{H}_{28}\mathbf{O_4N}_2$

 - 2) Verbindung (aus $\alpha\beta$ -Dioxy- $\alpha\beta$ -Diphenyläthan). Sm. 233—234° (B. 24, 1779). — Π , 1101. C 67,2 — H 5,2 — O 11,9 — N 15,7 — M. G. 536.
- $\mathbf{C}_{30}\mathbf{H}_{28}\mathbf{O}_{4}\mathbf{N}_{6}$
 - 1) Diäthylester d. Benzol-1, 3-Di $[\beta$ -Phenylhydrazon- α -Cyanpropionsäure]. Sm. 260-261° (Bl. [3] 11, 1098). - IV, 725.
 - 2) Diäthylester d. Benzol-1, 4-Di[β-Phenylhydrazon-α-Cyanpropionsäure]. Sm. 267—268° (Bl. [3] 11, 927). IV, 725.
 C 63,8 H 5,0 O 11,3 N 19,8 M. G. 564.
 Tetra[β-Phenylhydrazid] d. Aethentetracarbonsäure. Zers. bei 225°
- C₃₀H₂₈O₄N₈
 - (B. 26, 2357). IV, 731.

 $C_{80}H_{28}O_5N_4$ C 68,7 - H 5,3 - O 15,3 - N 10,7 - M. G. 524.

Verbindung (aus α-Usninsäure) + 3 H₂O. Sm. 229° (wasserfrei) (A. 284, 164). - IV, 727.

C 59,2 - H 4,6 - O 31,6 - N 4,6 - M. G. 608. $\mathbf{C}_{30}\mathbf{H}_{28}\mathbf{O}_{12}\mathbf{N}_{2}$

1) Verbindung (aus Hemipinsäure u. Amidoäthylpiperonylcarbonsäure-anhydrid) + H₂O. Sm. 187—189° (Soc. 57, 1101). — II, 1995.

1) Dithiotetra-[3-Methylphenyl]dithioharnstoff. Sm. 228-2310 (B. 20, $\mathbf{C}_{80}\mathbf{H}_{28}\mathbf{N}_{4}\mathbf{S}_{4}$ 672). — II, 821. C 71,0 — H 5,7 — O 9,5 — N 13,8 — M. G. 507. l) Phenylamid d. Di[3-Keto-1,5-Dimethyl-2-Phenyl-2,3-Dihydropyra-

C₈₀H₂₉O₃N₅

zolyl-4-]essigsäure. Sm. 237° (A. 255, 245). — IV, 1266. C 64,9 — H 5,2 — O 17,3 — N 12,6 — M. G. 555.

 $C_{30}H_{29}O_6N_5$

1) Verbindung (aus 3-Cyanamidobenzol-1-Carbonsäure) (B. 15, 2121). -II, 1270.

C'58,9 - H 4,7 - O 34,0 - N 2,3 - M. G. 611. $C_{80}H_{29}O_{13}N$

1) Teropiammon (A. 86, 187). — III, 916.

C₃₀H₂₀N₂Cl 1) Aethylchlorid d. Benzylamarin. Sm. 125°. 2 + PtCl₄ + 3H₂O (B. 18,

1854). — III, 24. 1) Aethyljodid d. Benzylamarin. Sm. 182° (B. 18, 1854). — III, 24. C 77,9 — H 6,5 — O 3,5 — N 12,1 — M. G. 462. $\mathbf{C}_{30}\mathbf{H}_{29}\mathbf{N}_{2}\mathbf{J}$ C30 H30 ON4

1) α -[2-Benzoylamidophenyl]imidodi[4-Dimethylamidophenyl]methan. Sm. 236—237° (J. pr. [2] 50, 426). — IV, 1173.

2) α-[4-Benzoylamidophenyl]imidodi[4-Dimethylamidophenyl]methan.

 $\mathbf{C}_{30}\mathbf{H}_{30}\mathbf{O}_{3}\mathbf{N}_{2}$

Sm. 117° (*J. pr.* [2] **50**, 415). — **IV**, 1174. C 77,3 — H 6,4 — O 10,3 — N 6,0 — M. G. 466. 1) Piperidylrhodamin. 2 HCl, (2 HCl, PtCl₄) (*B.* **23**, 1387). — **IV**, 17. C 68,9 — H 5,7 — O 9,2 — N 16,1 — M. G. 422. $\mathbf{C}_{30}\mathbf{H}_{30}\mathbf{O}_{3}\mathbf{N}_{6}$

1) trimolec. ?-Nitroso-2-Methyl-?-Dihydrochinolin (C. 1896 [1] 1127).

 $\mathbf{C}_{30}\mathbf{H}_{30}\mathbf{O}_{4}\mathbf{N}_{2}$

C 34,7 — H 6,2 — O 13,3 — N 5,8 — M. G. 482.

1) Verbindung (aus Dimethylamidobenzol u. 2-Oxybenzol-1-Carbonsäurechlorid). HCl + 2H₂O, (2HCl, PtCl₄), Acetat (B. 10, 955). — II, 1500. C 63,6 — H 5,3 — O 11,3 — N 19,8 — M. G. 566. $\mathbf{C}_{30}\mathbf{H}_{80}\mathbf{O}_{4}\mathbf{N}_{8}$

Tetra[Phenylhydrazid] d. Aethan-ααββ-Tetracarbonsäure. Zers. bei 255° (269°) (B. 26, 2357; 29, 1290).
 C 60,6 — H 5,0 — O 29,6 — N 4,7 — M. G. 594.

 $\mathbf{C}_{30}\mathbf{H}_{30}\mathbf{O}_{11}\mathbf{N}_{2}$

1) Düngersäure (J. 1857, 631). — II, 2109. $\mathbf{C}_{30}\mathbf{H}_{30}\mathbf{N}_{6}\mathbf{S}_{2}$ 1) Dithiotetra[3 - Methylphenyl]diguanidin. Sm. 194—196° u. Zers. (2 HCl, PtCl₄) (*B*. **20**, 673). — II, *821*. C 80,2 — H 6,9 — O 3,6 — N 9,3 — M. G. 449.

 $\mathbf{C}_{80}\mathbf{H}_{31}\mathbf{ON}_{3}$

1) 2'-Benzoylamido-42,43-Di[Dimethylamido]triphenylmethan. Sm. 1280 (B. 22, 1887). — IV, 1194. C 70,2 — H 6,0 — O 15,6 — N 8,2 — M. G. 513.

 $C_{30}H_{31}O_5N_3$

1) Verbindung (aus Caramel u. Amidobenzol). (2 HCl, PtCl4) (B. 4, 909). II, 448.

C₈₀H₈₁N₅S 1) Phenylsenföl-2-Amidophenylauramin. Sm. 166-167° (J. pr. [2] 50, 428). — IV, 1174. 2) Phenylsenföl-4-Amidophenylauramin. Sm. 124-127° (J. pr. [2] 50,

420). — IV, 1174. C 76,9 — H 6,8 — O 10,3 — N 6,0 — M. G. 468. $C_{30}H_{32}O_3N_2$

1) 2-Naphtylamid d. α -[α -Aethoxylbutyryl-2-Naphtyl]amidobuttersäure. Sm. 106-110° (B. 25, 2926). - II, 622.

2) 2-Naphtylamid d. α-[α-Aethoxylisobutyryl-2-Naphtyl]amidoisobuttersäure. Sm. 156-165° (B. 25, 2930). - II, 622.

C30H32O4N2 C 74.4 - H 6.6 - O 13.2 - N 5.8 - M. G. 484.

1) Diäthylester d. $\alpha\beta$ -Di[2-Methyl-5-Phenyl-1-Pyrazolyl]äthan- $\alpha^3\beta^3$ -

 $\mathbf{C}_{30}\mathbf{H}_{32}\mathbf{O}_{4}\mathbf{N}_{4}$

Dicarbonsäure. Sm. 197° (B. 19, 3158). — IV, 357. C 70,3 — H 6,2 — O 12,5 — N 10,9 — M. G. 512. 1) Di[Phenylhydrazon] d. Dicampherylsäure + H₂O. Zers. bei 237° (Soc. 75, 184).

 $\mathbf{C}_{30}\mathbf{H}_{32}\mathbf{O}_{14}\mathbf{N}_{2}$ C 55.9 - H 5.0 - O 34.8 - N 4.3 - M. G. 644.

1) Verbindung (aus Hemipinsäure u. ω-Amidoäthylpiperonylcarbonsäure). Sm. 175° u. Zers. (Soc. 57, 1103). — II, 1994.

C₈₀H₃₈O₇P 1) Tri[2-Methoxyl-4-Allylphenylester] d. Phosphorsäure (Trieugenolester d. Phosphorsäure). Fl. (B. 27, 2456). — II, 975.

 $C_{30}H_{33}O_{7}P$ 2) Tri[2-Methoxyl-4-Propenylphenylester] d. Phosphorsäure (Triiso-

 $C_{30}H_{34}O_3N_4$

eugenolester d. Phosphorsäure). Fl. (B. 27, 2456). C 72,3 — H 6,8 — O 9,6 — N 11,2 — M. G. 498. 1) Verbindung (aus Benzidin u. Acetessigsäureäthylester). Sm. 128° (M. 19, 692).

1) Eugenolchinin (A. 135, 329). — III, 813.

2) ?-Diisoamyl-1, 4-Phenylenester d. Phenylamidoameisensäure. Sm. 248° (B. **25**, 2652). — II, 972.

1) Tri[2-Methylbenzyl]trimethyltrimethylentrisulfon. Sm. 2060 (B. 27, $\mathbf{C}_{30}\mathbf{H}_{36}\mathbf{O}_{6}\mathbf{S}_{8}$ 1677). — III, *150*.

C 61,6 - H 6,2 - O 27,4 - N 4,8 - M. G. 584 $\mathbf{C}_{30}\mathbf{H}_{36}\mathbf{O}_{10}\mathbf{N}_{2}$

1) Hydroxylaminderivat d. Quassiin. Sm. 228-230° u. Zers. (G. 17, 575). **— III**, 647.

 $\mathbf{C} \ 76,0 - \mathbf{H} \ 8,0 - \mathbf{O} \ 10,1 - \mathbf{N} \ 5,9 - \mathbf{M}. \ \mathbf{G}. \ 474.$ $\mathbf{C}_{30}\mathbf{H}_{38}\mathbf{O}_{3}\mathbf{N}_{2}$

Verbindung (aus 6-Nitrothymol u. Chloranil) (B. 19, 2317). — II, 773.
 C 26,7 — H 2,8 — O 58,1 — N 12,4 — M. G. 1350.
 Pyrokollodion (C. 1897 [2] 451).

 $\mathbf{C}_{30}\mathbf{H}_{38}\mathbf{O}_{49}\mathbf{N}_{12}$

1) Tri[4-tert. Butylphenylester] d. Phosphorsäure. Fl. (B. 18, 1700). $\mathbf{C}_{80}\mathbf{H}_{89}\mathbf{O}_{4}\mathbf{P}$ - II. 765.

2) Tri[2-Methyl-5-Isopropylphenylester] d. Phosphorsäure. Sm. 75° $(71,5-72^{\circ})$ (B. 15, 818; 18, 1704). — II, 767.

3) Tri[3-Methyl-6-Isopropylphenylester] d. Phosphorsäure. Sm. 590 (Z. 1869, 44). — II, 770.

1) Oxyfleischsäure. Ba, Zn, Ag₃ + 2H₂O (H. 22, 256). — IV, 1640. C 77,6 — H 9,5 — O 6,9 — N 6,0 — M. G. 464.

 $C_{30}H_{44}O_{2}N_{2}$

 $\begin{array}{c} \textbf{C}_{30}\textbf{H}_{44}\textbf{O}_{2}\textbf{N}_{2} & \textbf{C}_{17,0} - \textbf{H}_{2}, \textbf{S}_{3} - \textbf{C}_{3}, \textbf{S}_{4} - \textbf{N}_{2}, \textbf{O}_{3} - \textbf{N}_{3}, \textbf{O}_{4} - \textbf{N}_{4}, \textbf{O}_{4} \textbf{N}_{2} \\ \textbf{C}_{30}\textbf{H}_{44}\textbf{O}_{4}\textbf{N}_{2} & \textbf{C}_{72,6} - \textbf{H}_{3}, \textbf{9} - \textbf{O}_{12,9} - \textbf{N}_{5,6} - \textbf{M}_{3}, \textbf{G}_{3} - \textbf{M}_{4}, \textbf{G}_{3}, \textbf{N}_{2}; \textbf{O}_{4}\textbf{F}_{4}, \textbf{O}_{5}\textbf{N}_{2}, \textbf{N}_{2}, \textbf{S}_{3}, \textbf{G}_{3}, \textbf{$

 $\mathbf{C}_{30}^{\mathbf{H_{44}O_{13}N_{9}}}$ 1) Cornein (B. 17, 1843; J. Th. 1881, 357). — IV, 1628. $\mathbf{C}_{30}^{\mathbf{H_{44}O_{13}N_{9}}}$ C 60,9 — H 7,6 — O 24,4 — N 7,1 — M. G. 591.

1) Tricamphonitrophenol + 3H₂O. Sm. 75° (98° wasserfrei). Ba+3H₂O

 $\mathbf{C}_{30}\mathbf{H}_{46}\mathbf{O}_{10}\mathbf{N}_{2}$

(Bl. [3] 1, 244, 422). — III, 494. C 60,6 — H 7,7 — O 26,9 — N 4,7 — M. G. 594. 1) Säure (aus Camphersäureanhydrid). Na₂, Pb₂ (G. 24 [2] 337). 1) 4,4'-Biphenylendi[uns-Diisobutylthioharnstoff]. Sm. 185° (B. 27, $C_{30}H_{46}N_4S_2$

1560). — IV, 965. $\mathbf{C_{30}H_{47}O_{2}Br}$ 1) Bromechicerin. Sm. 116° (4. 178, 63). — III, 629. $\mathbf{C_{30}H_{48}O_{3}N_{2}}$ C 74,4 — H 9,9 — O 9,9 — N 5,8 — M. G. 484.

1) Chlorophyll (aus Raygras) (C. 1895 [1] 656).

C 82,0 - H 11,2 - O 3,6 - N 3,2 - M. G. 439.

1) Oxim d. α -Amyron. Sm. 233—234° u. Zers. (B. 24, 3837). — III, 557. 2) Oxim d. β -Amyron. Sm. 262—263° u. Zers. (B. 24, 3838). — III, 557. 1) Brom- α -Amyrin. Sm. 177—178° (B. 23, 3189; A. 192, 180). — C₃₀H₄₉OBr

III, 557.

2) Brom- β -Amyrin. Sm. 182—186° (B. 23, 3190). — III, 557. C 47,4 — H 6,4 — O 44,3 — N 1,8 — M. G. 759. $C_{30}H_{49}O_{21}N$ 1) Verbindung (aus Milchzucker u. Amidobenzol) (B. 4, 835). - II, 448.

C₃₀H₅₀O₂Br₂ 1) Bromid d. Cholesterinpropionat. Sm. 110° (H. 15, 39). — II, 1073.

 $\mathbf{C}_{30}\mathbf{H}_{52}\mathbf{O}_{12}\mathbf{N}$ 1) Verbindung (aus Cardol). Sm. 105° (C. 1896 [1] 112).

 $\mathbf{C_{30}^{02}H_{54}^{02}O_{18}^{12}S_{2}}$ 1) Atractylsäure. K₈ (Z. 1869, 94). — II, 2109. C₃₀H₅₇O₆N₁₇ C 47,9 — H 7,6 — O 12,8 — N 31,7 — M. G. 751. $\mathbf{C}_{30}\mathbf{H}_{57}\mathbf{O}_{6}\mathbf{N}_{17}$ 1) Clupein (Salmin), siehe auch C₁₆H₃₁O₃N₉. 2H₂SO₄ (C. 1898 [1] 1061; H. 25, 167, 169).

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 $\mathbf{C}_{30}\mathbf{H}_{49}\mathbf{ON}$

 $\begin{array}{c} \mathbf{C}_{80}\mathbf{H}_{58}\mathbf{O}_2\mathbf{Br}_2 \ 1) \ \ \mathbf{Dibrommelissins\"{a}ure.} \quad \mathbf{Sm.} \ 47^{\circ} \ (\textit{C.} \ \mathbf{1896} \ [1] \ 642). \\ \mathbf{C}_{30}\mathbf{H}_{59}\mathbf{O}_2\mathbf{Cl} \ 1) \ \ \mathbf{Chlorid} \ \ \mathbf{d.} \ \ \mathbf{Melissins\"{a}ure.} \quad \mathbf{Sm.} \ 60^{\circ} \ (\textit{C.} \ \mathbf{1896} \ [1] \ 642). \\ \mathbf{C}_{30}\mathbf{H}_{59}\mathbf{O}_2\mathbf{Br} \ 1) \ \ \alpha\text{-Brommelissins\"{a}ure.} \quad \mathbf{Sm.} \ 79,5^{\circ} \ (\textit{C.} \ \mathbf{1896} \ [1] \ 642; \ \textit{Bl.} \ [3] \ \mathbf{15}, \ 573). \\ \mathbf{C}_{30}\mathbf{H}_{60}\mathbf{O}_6\mathbf{N}_{18} \quad \mathbf{C} \ \ 46,9 \ - \mathbf{H} \ 7,8 \ - \mathbf{O} \ 12,5 \ - \mathbf{N} \ 32,8 \ - \mathbf{M}. \ \mathbf{G.} \ 768. \\ 1) \ \ \mathbf{Scombrin.} \quad \ 2\mathbf{H}_2\mathbf{SO}_4, \ 2\mathbf{H}_2\mathbf{CrO}_4 \ (\textit{H.} \ \mathbf{26}, \ 526). \\ \mathbf{C}_{30}\mathbf{H}_{61}\mathbf{ON} \quad \mathbf{C} \ \ 79,8 \ - \mathbf{H} \ 13,5 \ - \mathbf{O} \ 3,6 \ - \mathbf{N} \ 3,1 \ - \mathbf{M}. \ \mathbf{G.} \ 451. \\ 1) \ \ \mathbf{Amid} \ \ \mathbf{d.} \ \ \mathbf{Melissins\"{a}ure.} \quad \mathbf{Sm.} \ 116^{\circ} \ (\textit{C.} \ \mathbf{1896} \ [1] \ 642). \\ \mathbf{C}_{50}\mathbf{H}_{61}\mathbf{O}_2\mathbf{N} \quad \mathbf{O} \ \ \mathbf{Amid} \ \mathbf{d.} \ \mathbf{Melissins\"{a}ure.} \quad \mathbf{Sm.} \ 2015^{\circ} \ \mathbf{N} \ \ 3,0 \ - \mathbf{M}. \ \mathbf{G.} \ 467. \\ \mathbf{G} \ \ \mathbf{Amid} \ \mathbf{d.} \ \mathbf{Melissins\"{a}ure.} \quad \mathbf{Sm.} \ 2015^{\circ} \ \mathbf{N} \ \ \mathbf{3},0 \ - \mathbf{M}. \ \mathbf{G.} \ 467. \\ \mathbf{G} \ \ \mathbf{Amid} \ \mathbf{d.} \$

C₂₀-Gruppe mit vier Elementen.

 $C_{30}H_{17}OBr_{8}S$ 1) Tribromderivat d. 1,1-Dinaphtyläther d. 1-Merkapto-?-Oxynaphtalin. Sm. 182° (J. pr. [2] 38, 141). — II, 871.

C₈₀H₁₈O₄Cl₃P 1) Tri[1-Chlor-2-Naphtylester] d. Phosphorsäure. Sm. 1520 (B. 21, 896; 30, 2379). — II, 878. 1) 4,4'-Di[Phtalylamidobenzyl]sulfid. Sm. 225° (B. 28, 1339). —

 $\mathbf{C}_{30}\mathbf{H}_{20}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{S}$ II, 1809.

C80 H20 O4 N2 S2 1) Dibenzoat d. Di[2-Oxybenzyliden]dithiooxamid. Sm. 156° (B.

24, 1028). — III, 74. 1) 7-Chlorphenylat d. 5-[4-Acetylamidophenyl]amido- $\alpha\beta$ -Naphto- $\mathbf{C}_{30}\mathbf{H}_{23}\mathbf{ON}_{4}\mathbf{Cl}$ phenazin (B. 31, 2431).

1) 1-Naphtylamid d. Orthophosphorsäure. Sm. 216° (B. 26, 573). $C_{30}H_{24}ON_3P$ **- II**, 605. 2) 2-Naphtylamid d. Orthophosphorsäure. Sm. 170° (B. 26, 573).

- II, 615.

 $C_{30}H_{24}O_8N_2S_2$ 1) Succinyldibenzoylamid d. Benzolsulfonsäure. Sm. 146° (J. 1856. 507). — II, 1174.

1) 1,2-Di[Diphenylsulfonamido]benzol (Tetrabenzolsulfon-o-Phenylen- $C_{30}H_{24}O_8N_2S_4$

diamin). Sm. 150—151° (A. 287, 224). — IV, 561.

1) Jodäthylat d. Benzoylamarin. Sm. 354° (B. 18, 3085). — III, 25.

1) Dithio[3-Methylphenyl]harnstoff (B. 20, 671). — II, 821.

1) Verbindung (aus Oxyphosphazobenzolanliid). Sm. 240° (B. 29, 719). C30 H27 ON2J $\mathbf{C}_{30}\mathbf{H}_{28}\mathbf{O}_{2}\mathbf{N}_{4}\mathbf{S}$

 $\mathbf{C}_{30}\mathbf{H}_{28}\mathbf{O}_{3}\mathbf{N}_{4}\mathbf{P}_{2}$ $\mathbf{C}_{30}\mathbf{H}_{30}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{Br}_{2}$ 1) $\alpha\beta$ -Di[α -Brombutyryl-1-Naphtylamido]äthan. Sm. 232—234° (\dot{B} .

25, 3266). — II, 607. 2) $\alpha \beta$ -Di[α -Brombutyryl-2-Naphtylamido] äthan. Sm. 180° (B. 25, 3270). — II, 617.

3) αβ-Di[α-Bromisobutyryl-l-Naphtylamido] äthan. Sm. 1940 (B. 25, 3266). — II, 607.

4) αβ-Di[α-Bromisobutyryl-2-Naphtylamido]äthan. Sm. 201° (B. 31, 3247).

C₃₀H₃₀O₄N₂Hg₂ 1) Diacetat d. Diquecksilberbenzylanilin. Sm. 143,5—144° (G. 27 [1] 15). — IV, 1708. 2) Diacetat d. Quecksilberammoniumbase $C_{26}H_{26}O_2N_2Hg_2$. Sm.

128° (G. 28 [2] 133). — IV, 1707.

1) Tetramethyläther d. 1,4,1',4'-Tetraoxybiphenyldi[Phenylthio-C30 H30 O4 N4 S2 harnstoff]. Sm. 1840 (B. 17, 2128). — II, 1037.

 $C_{30}H_{30}O_{18}N_6S_3$ 1) Hexanitrotri[2-Methylbenzyl]trimethyltrimethylentrisulfon. Sm. 191° u. Zers. (B. 27, 1677). — III, 150. 1) Jodäthylat d. Benzylhydrastimid. Sm. 232° (B. 26, 2490). —

 $C_{30}H_{33}O_5N_9J$ II, 2054.

 $C_{30}H_{33}O_6N_3S_3$ 1) β-Trithio-3-Nitrocuminaldehyd. Sm. 118° (B. 29, 156). — III, 56. $\mathbf{C}_{30}\mathbf{H}_{34}\mathbf{O}_{3}\mathbf{N}_{3}\mathbf{Fe}$ 1) Hämatin (siehe auch $C_{32}H_{30}O_3N_4$ Fe) (B. 29 [2] 239; \acute{C} . 1897 [2] 1153). - IV, 1618.

C₃₀H₃₄O₉Cl₃Br₁₁ 1) Hexaäthyläther d. Trichlorxanthogallol. Sm. 75° (A. 245, 338). - II, 1014.

1) Verbindung (aus ?-Chlor-?-Amido-3-Oxy-4-Isopropyl-1-Methylbenzol u. Chloranil) (B. 19, 2317). — II, 774. $\mathbf{C}_{30}\mathbf{H}_{35}\mathbf{O}_{3}\mathbf{N}_{2}\mathbf{Cl}_{3}$

 $\mathbf{C}_{30}\mathbf{H}_{36}\mathbf{O}_{4}\mathbf{Br}_{3}\mathbf{P}$ 1) Tri[4-Brom-3-Methyl-6-Isopropylphenylester] d. Phosphorsäure. Sm. 94-95° (G. 23 [2] 70). - II, 772.

C₃₀H₃₆O₇N₃P

- 1) Phenylamid d. Phosphorsäuretri [α-Oxyisobuttersäure]. Sm. 158 bis 159° (A. 279, 114).
- 2) 2-Methylphenylamid d. Phosphorsäuretri[a-Oxypropionsäure]. Sm. 177° (A. 279, 87).
- 3) 4-Methylphenylamid d. Phosphorsäuretri[a-Oxypropionsäure]. Sm. 156° (A. 279, 91).
- $C_{30}H_{42}O_{10}N_3P$ 1) Phosphat d. Camphonitrosophenol (Bl. [3] 1, 469). — III, 494.
- 1) Sinalbin $+ 5 \,\mathrm{H}_2\mathrm{O}$. Sm. $83 84^\circ$ (138,5 140° wasserfrei). Hg (C. 1896 [2] 922; 1897 [1] 821; A. 199, 150; B. 30, 2327). $C_{30}H_{42}O_{15}N_2S_2$ III, 61Ì.
- $C_{30}H_{43}O_{11}N_3Cl_2$ 1) Verbindung (aus Nitrocampher). Sm. 110° (G. 11, 26). III, 494. C₃₀H₄₃O₁₁N₃Br₂ 1) Verbindung (aus Nitrocampher). Sm. 94-95° (G. 11, 22; C. 1897) [2] 551). — III, 494.
- 1) α-Palmitylimido-α-Phenylbenzylamido-α-Merkaptomethan (Pal-C30 H44 ON2S mitylpseudophenylbenzylthioharnstoff). Sm. 62-630 (Soc. 69, 1598).

C₂₁-Gruppe mit einem Element.

C81 H64 C 85,3 — H 14,7 — M. G. 436.

1) norm. Hentriakontan. Sm. 68,1°; Sd. 302°₁₅ (199°₀) (B. 15, 1714; 29, 1323; A. 235, 117; C. 1897 [1] 338). — I, 107.

C₃₁-Gruppe mit zwei Elementen.

- $C_{31}H_{20}O_6$ C 76.2 - H 4.1 - O 19.7 - M. G. 488.
 - 1) Tribenzoat d. isom. Trioxybenzol (Tr. d. β-Hydrojuglon). Sm. 228 bis 229° (B. 18, 2570). — II, 1027.
- C 90.7 H 5.4 O 3.9 M. G. 410. $C_{31}H_{22}O$
- α-Oxytri[?-Naphtyl]methan. Sm. 278° (B. 16, 1275). II, 1096.
- $C_{31}H_{22}O_5$ C 78,5 — H 4,6 — O 16,9 — M. G. 474. 1) Acetondiphenanthrenchinon. Sm. 190° u. Zers. (B. 17, 2829). — III, 448.
- C 82,6 H 4,9 N 12,4 M. G. 450. $C_{31}H_{22}N_4$
- Benzylidenamidodiphenylindulin. Sm. 261—262° (A. 286, 201).
 C 85,1 H 5,3 N 9,6 M. G. 437.
 1,1,1-Trinaphtylguanidin. Sm. 178° (B. 21, 969). II, 605. C₃₁H₂₃N₃
- C 80,9 H 5,2 O 13,9 M. G. 460.

 1) Anhydroacetondibenzil. Sm. 158—160° (194—195°). + C₂H₆O (B. 18, 175, 186; Soc. 71, 297). III, 300.
 C 87,7 H 5,7 N 6,6 M. G. 424. C31H24O4
- $C_{31}H_{24}N_{2}$ 1) **2,3-Diphenyl-4-[4-Methylphenyl]-3,4-Dihydro-1,4-Naphtisodiazin.** Sm. 173° (B. **25**, 2834). — IV, 1090. C 84,7 — H 5,7 — N 9,6 — M. G. 439.
- $C_{81}H_{25}N_3$ 1) Trimethylphenylrosindulin (A. 256, 244). — IV, 1210.
- C 87,3 H 6,1 N 6,6 M G. 426. $C_{91}H_{96}N_{9}$ 1) 4',42-Di[Phenylamido]triphenylmethan. Sm. bei 170° (Soc. 41, 192).
- $\mathbf{C_{31}H_{26}N_4}$
- IV, 1043. C 82,0 H 5,7 N 12,3 M. G. 454. 1) Methylazophenin. Sm. 230° (A. 255, 166). III, 342. C 84,4 H 6,1 N 9,5 M. G. 441.
- $\mathbf{C}_{31}\mathbf{H}_{27}\mathbf{N}_3$ 1) 1,4-Di[4-Methylphenylimido]-2-Amido-1,4-Dihydronaphtalin. Sm.
- 147° (A. 256, 246). IV, 1162. C 74,8 H 5,4 N 19,7 M. G. 497. 1) 4-Amidobenzylidendi-4-Amidoazobenzol. Sm. 115° (J. pr. [2] 56, $\mathbf{C}_{31}\mathbf{H}_{27}\mathbf{N}_7$ 115). — IV, *1357*. C 80,2 — H 6,0 —
- O 13,8 M. G. 464. $C_{81}H_{28}O_4$ 1) Dibenzoat d. γγ-Di[4-Oxyphenyl]pentan. Sm. 162,5° (J. r. 23, 501).
 - 2) Verbindung (aus Benzil). Sm. 147-148° (Soc. 49, 832). III, 283. 139*

 $\mathbf{C}_{31}\mathbf{H}_{28}\mathbf{O}_{8}$ C 70.5 - H 5.3 - O 24.2 - M. G. 528.

1) Diäthylester d. $\beta\delta$ -Dibenzoyl- $\alpha\varepsilon$ -Diketo- γ -Phenylpentan- $\alpha\varepsilon$ -Dicarbonsäure (D. d. Benzylidendibenzoylbrenztraubensäure). Sm. 1620 (A. **281**, 54). — II, 2089. C 84,0 — H 6,5 — N 9,5 — M. G. 443.

 $C_{31}H_{29}N_3$

1) 1,2,4-Tri[4-Methylphenylamido]naphtalin. Sm. 159-160° (A. 256,

245). — IV, 1162. 2) α -[2-Methyl-6-Chinolyl]- $\alpha\alpha$ -Di[2-Methyl-1, 2-Dihydro-6-Chinolyl]methan + ½ H₂O (B. 24, 1704). — IV, 1219. C 85,7 — H 6,9 — O 7,4 — M. G. 434. 1) Dibenzylthymolester d. Benzolcarbonsäure. Sm. 75—80° (G. 11,

 $C_{31}H_{30}O_{2}$

434). — II, 1149.

C31H30O14 C 59.4 - H 4.8 - O 35.8 - M. G. 626.

Pentacetat d. Rubiadinglykosid. Sm. 237° (Soc. 63, 969). — III, 607.
 C 86,5 — H 7,0 — N 6,5 — M. G. 430.

 $\mathbf{C}_{\mathbf{s}_1}\mathbf{H}_{\mathbf{s}_0}\mathbf{N}_{\mathbf{s}_2}$

1) α-Phenyl-αα-Di[l-Dimethylamido-P-Naphtyl]methan, Sm. 188--1890 (B. **21**, 3129). — IV, 1093. C 56,3 — H 4,8 — O 38,8 — M. G. 660.

C31H32O16

1) Oktacetat d. Leukodrin. Sm. 188—190° (C. 1896 [1] 561). C 57,6 — H 5,2 — O 37,2 — M. G. 646. 1) Pentacetylphloridzin + H₂O (A. 156, 4). — III, 600. C 85,7 — H 7,8 — N 6,4 — M. G. 434.

C₈₁H₈₄O₁₅

C31 H34 N2

1) α-Phenyl-α α-Di[1, 2, 4-Trimethyl-?-Dihydrochinolyl-2-]methan (Benzylidenditrimethyldihydrochinolin). Sm. 142-144° (G. 24 [2] 194). -ĬV, 1090. C 78,8 — H 7,6 — O 13,6 — M. G. 472.

 $\mathbf{C}_{31}\mathbf{H}_{36}\mathbf{O}_4$

1) Diacetat d. Phenyldithymolmethan. Sm. 125—126° (B. 22, 1949). — II, 1004.

 $C_{91}H_{97}N_{9}$

C 82.5 - H 8.2 - N 9.3 - M. G. 451.1) Tri[2-Methyl-1, 2, 3, 4-Tetrahydro-6-Chinolyl]methan (B. 24, 1719).

 $C_{31}H_{38}O_{10}$

C 65,3 — H 6,7 — O 28,0 — M. G. 570. 1) Kosin (siehe auch $C_{22}H_{26}O_7$). Sm. 142° (J. 1859, 585, 586; 1862, 513; 1874, 900; C. 1897 [2] 1076). — III, 634. C 68,9 — H 7,4 — O 23,7 — M. G. 540.

 $C_{31}H_{40}O_8$

1) Tetraäthylester d. $\alpha\eta$ -Diphenylheptan- $\beta\beta\zeta\zeta$ -Tetracarbonsäure. Sm. 57—77° (Soc. **59**, 843). C 81,8 — H 9,0 — N 9,2 — M. G. 455.

 $\mathbf{C}_{31}\mathbf{H}_{41}\mathbf{N}_{3}$

1) Tri[4-Isobutylphenyl]guanidin. Sm. 163-164°. (2HCl, PtCl₄) (B. 17, 1241). — II, 557. C 81,4 — H 9,4 — O 9,2 — M. G. 457.

 $\mathbf{C}_{31}\mathbf{H}_{43}\mathbf{N}_{3}$

1) Tri [4-Dimethylamido-2, 6-Dimethylphenyl] methan. Sm. 134-1350 (B. **24**, 563). — **IV**, 1199. C 76,9 — H 9,9 — O 13,2 — M. G. 484.

C₃₁H₄₈O₄

1) Brenzchinovasäure. Sm. 216°; Sd. oberh. 360°. K, Ba (B. 16, 936; 17, 869). — II, 1860.

 $\mathbf{C}_{31}\mathbf{H}_{48}\mathbf{O}_{8}$ C'67,9 - H 8,7 - O 23,4 - M.G. 548.

 $\mathbf{C}_{81}\mathbf{H}_{48}\mathbf{O}_{12}$

1) Triacetylcholsäure (J. r. 19, 164; B. 19, 2003). — I, 783. C 60,8 — H 7,8 — O 31,4 — M. G. 612.

1) Strophantin (oder C₃₁H₃₈O₁₅) (J. 1877, 945; B. 21 [2] 734; 31, 271, 515; M. 19, 390). — III, 649.

1) Harz (aus Doona ceylanica) = (C₃₁H₄₉O)_x (M. 12, 102). — III, 555. C 69,7 — H 9,4 — O 20,9 — M. G. 534.

 $\mathbf{C}_{31}\mathbf{H}_{49}\mathbf{O}$ $\mathbf{C}_{31}\mathbf{H}_{50}\mathbf{O}_7$

1) Triäthylester d. Cholansäure $+ \frac{1}{4} H_2 O$. Sm. 75—76° (B. 19, 478). —

II, 2017.

2) Triäthylester d. Isocholansäure. Sm. 43 - 50° (B. 19, 1530). -

 $\mathbf{C}_{31}\mathbf{H}_{50}\mathbf{O}_{10}$

Triathylester d. Isocholansaure. Sm. 43 - 50 (B. 10, 156).
 11, 2018.
 C 63,9 - H 8,6 - O 27,5 - M. G. 582.
 Asebotoxin (Andromedotoxin). Sm. 229° u. Zers. (R. 1, 224, 225, 285; 2, 327; 4, 422; 5, 313). — III, 619.
 Digitoxin, oder C₃₄H₅₄O₁₁. Sm. 145° (J. 1875, 840; B. 29 [2] 699; 31, 2457; C. 1896 [2] 790). — III, 582.
 C 53,4 - H 7,5 - O 39,1 - M. G. 696.
 Digitonin (J. 1875, 840). — III, 581.

C31H52O17

- $C_{81}H_{61}N$
- C₈₁H₆₂O
- C 83,2 H 13,6 N 3,1 M, G. 447.

 1) Myricyleyanid. Sm. 75° (A. 183, 357). I, 1468.
 C 82,7 H 13,8 O 3,5 M, G. 450.

 1) Palmiton. Sm. 84° (82,8°) (J. 1855, 519; A. 82, 249; 94, 246; B. 15, 1714; Soc. 57, 985; 63, 462). I, 1006.
 C 79,8 H 13,3 O 6,9 M, G. 466. $\mathbf{C}_{31}\mathbf{H}_{62}\mathbf{O}_{2}$
- 1) Melissinsäure (siehe auch $C_{50}H_{60}O_2$). Sm. $88.5-89^{\circ}$. Mg, Pb, Cu, Ag (A. 235, 135). — I, 449.
 - 2) Methylester d. Melissinsäure. Sm. 74,5° (C. 1896 [1] 642).
- 3) Pentadekylester d. Palmitinsäure. Sm. 57° (M. 14, 85).
- $C_{31}H_{62}O_3$
- C 77,2 H 12,9 O 9,9 M. G. 482.

 1) Cocerinsäure. Sm. 92—93°. Ca, Ba (B. 18, 1980). I, 580. C 82,3 H 14,1 O 3,5 M. G. 452. $\mathbf{C}_{31}\mathbf{H}_{64}\mathbf{O}$
 - 1) π-Oxyhentriakontan (Dipalmitylcarbinol). Sm. 84-85° (Soc. 57, 986). - I, 241.
 - 2) Alkohol (aus Bienenwachs). Sm. 85-85,5° (A. 235, 126; C. 1897 [1] 338).

C₃₁-Gruppe mit drei Elementen.

- C 74,5 H 3,4 O 19,2 N 2,8 M. G. 499. $C_{31}H_{17}O_6N$
 - Dibenzoat d. Dioxyanthrachinolinchinon (D. d. Alizarinblau). Sm. 244° (A. 201, 342). IV, 462.
 C 80,2 H 4,3 O 3,4 N 12,1 M. G. 464.
- $C_{31}H_{20}ON_4$
- Benzoylphenylfluorindin (B. 29, 1250). IV, 1300.
 C 68,4 H 3,7 O 17,6 N 10,3 M. G. 544.
- $\mathbf{C}_{31}\mathbf{H}_{20}\mathbf{O}_{6}\mathbf{N}_{4}$
 - 1) Verbindung (aus Anthranilcarbonsäure). Sm. 280° u. Zers. (J. pr. [2] **33**, 25). — II, *1249*. C 79,8 — H 4,7 — O 3,4 — N 12,0 — M. G. 466.
- $\mathbf{C}_{31}\mathbf{H}_{22}\mathbf{ON}_{4}$
- 1) 2-Oxybenzylidenamidodiphenylindulin (A. 286, 201). $\mathbf{C}_{31}\mathbf{H}_{22}\mathbf{O_4N}_2$ C 76,5 - H 4,5 - O 13,2 - N 5,7 - M. G. 486.
 - 1) Benzoat d. s-Di[?-Benzoylamido]-2-Oxynaphtalin. Sm. 265° (B. 23,
- 2543). II, *1180*. 1) 1,1'-Benzylidendi[2-Thiënylindol]. Sm. 245° u. Zers. (A. 272, 203). $\mathbf{C}_{31}\mathbf{H}_{22}\mathbf{N}_{2}\mathbf{S}_{2}$
- IV, 394. C 76,7 H 4,7 O 9,9 N 8,7 M. G. 485. $C_{31}H_{23}O_3N_3$
 - 1) 1,2,6 oder 1,2,7-Tri[Benzoylamido]naphtalin. Sm. 277° (B. 23, 2545).
- IV, 1163. C 73,7 H 4,5 O 19,0 N 2,8 M. G. 505. $\mathbf{C}_{31}\mathbf{H}_{23}\mathbf{O}_{6}\mathbf{N}$
- 1) Diacetat d. 3-Nitrophenyldi[2-Oxynaphtyl] methan. Sm. 2420 (G.
- C₃₁H₂₃N₂Cl 1) Chlor-4-Methylphenylat d. 2, 3-Diphenyl-1, 4-Naphtisodiazin. + FeCl₃, $2 + PtCl_4$ (B. 25, 2836). IV, 1092. C₃₁H₂₃N₂Br 1) Brom-4-Methylphenylat d. 2, 3-Diphenyl-1, 4-Naphtisodiazin (B. 25,
- 2836). IV, 1092. C 84,6 H 5,4 O 3,6 N 6,4 M. G. 440.
- $\mathbf{C}_{31}\mathbf{H}_{24}\mathbf{ON}_{2}$
 - 1) 4-[4-Methylphenyl]oxydhydrat d. 2, 3-Diphenyl-1, 4-Naphtisodiazin. Sm. 194°. Chlorid + FeCl₃, 2Chlorid + PtCl₄, Nitrat (B. 25, 2835). -
- IV, 1092. C 76,8 H 5,0 O 6,6 N 11,6 M. G. 484. $\mathbf{C}_{31}\mathbf{H}_{24}\mathbf{O}_{2}\mathbf{N}_{4}$
 - 1) Monobenzyläther d. 4,4'-Di[4-Oxyphenylazo]biphenyl (B. 27, 3360). **IV**, 1418.
- C 62,4 H 4,0 O 24,2 N 9,4 M. G. 596. $\mathbf{C}_{81}\mathbf{H}_{24}\mathbf{O}_{9}\mathbf{N}_{4}$
 - 1) Triacetat d. Maclurinazobenzol. Sm. 240—243° u. Zers. (Soc. 71, 188).
- Verbindung (d. Saffraningruppe) + H₂O (B. 27, 2355). IV, 1218.
 C 78,9 H 5,3 O 6,8 N 9,0 M. G. 471. $\mathbf{C}_{31}\mathbf{H}_{24}\mathbf{N}_{3}\mathbf{C}\mathbf{I}$
- $C_{31}H_{25}O_2N_3$ 1) α -2-Oxybenzyliden- β -2-[2-Oxybenzyliden]amidobenzyl- β -2-Naphtylhydrazin. Sm. 1766 (*J. pr.* [2] **52**, 416). — IV, 1130. C 76,4 — H 5,1 — O 9,9 — N 8,6 — M. G. 487.
- $C_{31}H_{25}O_3N_3$ 1) Verbindung (aus 4-Oxy-2-Methylchinolin). Sm. 1920 (B. 21, 1974). -IV, 372.

 $C_{31}H_{25}N_2Cl$ 1) α -Chlor-4,4'-Di[Phenylamido]triphenylmethan (Soc. 41, 192). II, 1086.

C'84,1 - H 5,9 - O 3,6 - N 6,3 - M. G. 442. $\mathbf{C}_{31}\mathbf{H}_{26}\mathbf{ON}_{2}$

1) α-Oxy-4, 4'-Di[Phenylamido]triphenylmethan (Soc. 41, 192; A. 217, 248). — II, 1086.

C 79.2 - H 5.5 - O 3.4 - N 11.9 - M. G. 470. $\mathbf{C}_{31}\mathbf{H}_{26}\mathbf{ON}_4$

1) Verbindung (aus Phenylisocyanat u. Kyanbenzylin). Sm. 162° (J. pr.

 $C_{31}H_{26}O_3N_8$

 $\mathbf{C}_{31}\mathbf{H}_{27}\mathbf{O}_5\mathbf{N}$

1) Verbindung (aus Phenyllsocyanat u. Kyandelizyini). Sin. 12. [2] 53, 249). — IV, 1217. (2.66,7 — H 4,6 — O 8,6 — N 20,1 — M. G. 558. 1) αη-Di[Phenylhydrazon]-γε-Diphenylazo-βδζ-Triketoheptan. Sm. 152° (B. 28, 1826). — IV, 1477. (2.75,5 — H 5,5 — O 16,2 — N 2,8 — M. G. 493. 1) Dibenzoylmorphin. Sm. 188—190,5°. HCl, (2HCl, PtCl₄) (Soc. 28, 23, 323; 37, 610; B. 13, 98; C. 1899 [1] 705). — III, 900. C 73,2 — H 5,5 — O 15,7 — N 5,5 — M. G. 508.

1) Verbindung (aus Phenylhydrazin u. Aethylenoxyd). Sd. 230 — 240°₁₀

 $C_{31}H_{28}O_5N_2$

(M. 15, 671).

1) Trijodmethylat d. Tri[?-Chinolyl]methan. Sm. 265-266° u. Zers. $\mathbf{C}_{31}\mathbf{H}_{98}\mathbf{N}_{3}\mathbf{J}_{3}$ (B. **24**, 1608). — IV, 1221. C 70,2 — H 5,7 — O 3,0 — N 21,1 — M. G. 530.

 $\mathbf{C}_{31}\mathbf{H}_{30}\mathbf{ON}_{8}$

1) Phenylhydrazid d. 3,4,5-Tri[Phenylhydrazido]benzol-1-Carbonsäure. Sm. 185° u. Zers. (Bl. [3] 15, 785). — IV, 716.

C 80.5 - H 6.5 - O 6.9 - N 6.1 - M. G. 462. $\mathbf{C}_{31}\mathbf{H}_{30}\mathbf{O}_{2}\mathbf{N}_{2}$

1) $\alpha\beta$ -Di[4-Methylphenylbenzoylamido]propan. Sm. 151-152° (B. 25, 3277). — II, 1170. C 75,3 — H 6,1 — O 12,9 — N 5,7 — M. G. 494.

 $C_{31}H_{30}O_4N_2$

1) Dibenzoat d. Di [4-Dimethylamido-2-Oxyphenyl] methan. (Sm. 72-73°) (J. pr. [2] 54, 226).

1) 1,1,3,5-Tetrabenzyl-R-Trimethylentrisulfon. Sm. 171-1720 (B. 25, $C_{31}H_{30}O_6S_3$ 245). — III, 229.

 $C \hat{8}2.8 - \hat{H} \hat{6}.9 - \hat{O} \hat{7}.1 - \hat{N} \hat{3}.1 - \hat{M} \hat{G}.449.$ $\mathbf{C}_{31}\mathbf{H}_{31}\mathbf{O}_{2}\mathbf{N}$

1) Di[2-Naphtyl]amidoformiat d. Geraniol (D. d. Rhodinol). Sm. 105

bis 107° (J. pr. [2] 56, 12).
1) Jodmethylat d. α-Naphtylamido-s-Naphtazin (B. 26, 185). — $C_{31}H_{32}N_3J$

IV, 1216. C 75,1 — H 6,7 — O 9,7 — N 8,5 — M. G. 495. $\mathbf{C}_{31}\mathbf{H}_{33}\mathbf{O}_{3}\mathbf{N}_{3}$

1) Base (aus Pararosanilin) (B. 24, 1708). — III, 675.
2) Verbindung (aus 4-Amido-1-Methylbenzol u. Succinylbernsteinsäurediäthylester). Sm. 263° (B. 17, 545). — I, 824.
C 63,9 — H 5,8 — O 11,0 — N 19,2 — M. G. 582.

 $\mathbf{C}_{31}\mathbf{H}_{34}\mathbf{O}_4\mathbf{N}_8$

1) Tricinnamaltetraureïd. Sm. 182—184° u. Zers. (G. 23 [1] 383). —

C 70,2 - H 6,4 - O 18,1 - N 5,3 - M. G. 530. $\mathbf{C}_{31}\mathbf{H}_{34}\mathbf{O}_{6}\mathbf{N}_{2}$

1) Benzylidendińydrocotarnin. Sm. 229—230°. (2HCl, PtCl₄) (B. 31, 2101). $C_{66,9} - H_{6,5} - O_{11,5} - N_{15,1} - M_{6,5}$ $\mathbf{C}_{31}\mathbf{H}_{36}\mathbf{O}_{4}\mathbf{N}_{6}$

1) Phenylharnstoff d. Base $C_{10}H_{21}ON_3$ (aus Amylalkohol). Sm. 286° (B. 30, 229).

 $\mathbf{C}_{31}\mathbf{H}_{36}\mathbf{O}_{8}\mathbf{N}_{2}$ $C_{65,9} - H_{6,4} - O_{22,7} - N_{5,0} - M_{6,564}$

1) Tetraäthylester d. 2,4-Di[2,5-Dimethyl-1-Pyrryl]-1-Methylbenzol-2³, 2⁴, 4³, 4⁴-Tetracarbonsäure. Fl. (A. 236, 313). — IV, 1022. C 72,2 — H 7,2 — O 12,4 — N 8,2 — M. G. 515.

 $\mathbf{C}_{31}\mathbf{H}_{37}\mathbf{O}_4\mathbf{N}_3$

1) 4'- Nitro - 52, 53- Di Acetylamido - 22, 23-Dimethyltriphenylmethan. Sm. 114° (B. **21**, 3214). — **IV**, 1049.

C 63,4 — H 7,0 — O 27,2 — N 2,4 — M. G. 587. $\mathbf{C}_{31}\mathbf{H}_{41}\mathbf{O}_{10}\mathbf{N}$ 1) Pyroaconitin. Sm. 167,5°. HCl, (HCl, AuCl₃), HBr, HJ (Soc. 65, 177).

- III, 774. C 63,2 - H 7,3 - O 27,2 - N 2,3 - M. G. 589. $\mathbf{C}_{31}\mathbf{H}_{43}\mathbf{O}_{10}\mathbf{N}$

1) Diacetylapopseudoaconin. Sm. unter 100° (Soc. 33, 330). — III, 776. $C_{31}H_{43}O_{11}N$ C 61,5 - H 7,1 - O 29,1 - N 2,3 - M. G. 605.

1) Benzoylaconin (Napellin; Pikroaconitin) (oder $C_{32}H_{45}O_{10}N$; $C_{33}H_{45}O_{12}N$). Sm. 125° ($150-165^{\circ}$ wasserfrei). HCl + H₂O, (HCl, AuCl₃), HBr, HJ, Benzoat (Soc. 31, 146; 63, 444, 992; 65, 174, 290; B. 27, 434, 727). III, 773.

- C 62,8 H 8,1 O 24,3 N 4,7 M. G. 592. 1) Septentrionalin. Sm. 128,9° (C. 1895 [1] 1184). $C_{31}H_{48}O_9N_2$
- 1) Verbindung (aus Isoamyljodid u. Diönanthylidendiphenyldiamin) (A. Spl. $\begin{array}{c} \mathbf{C_{31}H_{49}N_2J} & 1) & \mathbf{Verbindung} & (\text{aus Isoamyljodid u. Diönanthyldendiphenyldiam 3, 352).} \\ \mathbf{C_{31}H_{50}O_{16}N_{30}} & C & 33.9 - H & 4.5 - O & 23.3 - N & 38.3 - M. & G. & 1098. \\ 1) & \mathbf{Divicin.} & 8 & \mathbf{HNO_3} & (J. \ pr. \ [2] & \mathbf{24}, 202). - & \mathbf{III}, 951. \\ \mathbf{C_{31}H_{58}O_{16}N_6} & C & 48.3 - H & 7.5 - O & 33.3 - N & 10.9 - M. & G. & 770. \\ 1) & \mathbf{Verbindung} & (Säure \ aus \ Blut). & Ba & (B. \ 25 \ [2] & 476). \\ \mathbf{C_{31}H_{60}OBr_2} & 1) & \mathbf{Dibrompalmiton.} & Sm. & 55^{\circ} & (A. & 186, 269). \\ \mathbf{C_{31}H_{61}OBr_3} & 1) & \mathbf{Verbindung} & (aus \ Dibrompalmiton). & Sm. & 5,5^{\circ} & (A. & 186, 269). \\ \mathbf{C_{31}H_{63}ON} & C & 80.0 - H & 13.5 - O & 3.4 - N & 3.0 - M. & G. & 465. \\ 1) & \mathbf{Palmitonoxim.} & Sm. & 59^{\circ} & (Soc. \ 57, 986). - I, & 1031. \\ \end{array}$ C31 H49 N2 J

C₃₁-Gruppe mit vier Elementen.

- $C_{31}H_{23}O_3N_3S$
- 3,3'-Di[Phenylamido]phenolsacchareïn (Bl. [3] 17, 699).
 Inn. Anhydrid d. α-Oxy-4', 4²-Di[Phenylamido]triphenylmethan-4³-Sulfonsäure. Na (Soc. 41, 192). Π, 1086.
 Verbindung (aus Benzoylchlorid u. Kyanbenzylin). Sm. 129° (J. pr. 1000). C31 H24 O3 N2S
- Cq1HqqONqCl
- [2] 53, 249). \rightarrow IV, 1217. $C_{31}H_{28}ON_8Br_2$ 1) Phenylhydrazid d. 2, 6-Dibrom-3, 4, 5-Tri[Phenylhydrazido]-
- benzol-1-Carbonsäure. Zers. bei 200° (Bl. [3] 15, 786). IV, 716. C₃₁H₂₈O₃N₄Cl₂ 1) Chlorid d. Aethyldiphenylharnstoff? Sm. 167° (B. 14, 2183).
- C₃₁H₂₈O₃N₄Cl₂ 1) Chlorid d. Rethyldiphenylhariston? Sm. 167° (B. 14, 2183).
 C₃₁H₃₄O₂N₄S 1) Diäthyläther d. s-Di[4-(4-Oxy-2-Methylphenyl)amidophenyl]thioharnstoff. Sm. 181,5° (A. 287, 159).
 C₃₁H₃₅O₃N₃S₂ 1) Aldehydgrün (siehe auch C₃₂H₃₅O₃N₃S) (B. 24, 1711). III, 675.
 C₃₁H₃₇O₃N₃Cl₂ 1) Paraldehydblau (B. 22, 228; 24, 1703). III, 675.
 C₃₁H₄₃O₅N₂Cl 1) Chlormethylat d. Emetin. (HCl, PtCl₄) (J. 1887, 2213). III, 881.
 C₃₁H₄₅O₉N₂Br₃ 1) Tribromseptentrionalin. Sm. 88° (C. 1895 [1] 1184).

C₃₂-Gruppe mit einem Element.

- C32H24
- C 94,1 H 5,9 M. G. 408. 1) **Dypnopinakolen.** Sm. 200—200,5° (B. **25** [2] 428). II, 305. C 93,7 H 6,3 M. G. 410. C, H,
- α-Dypnopinakolen. Sm. 95,5—96° (B. 25 [2] 425). II, 304.
 γ-Dypnopinakolen. Sm. 81—82° (B. 27 [2] 339).
 C 93,2 H 6,8 M. G. 412.
- C32H28

 - Tetraphenyläthan + Benzol (A. 184, 177). II, 301.
 Kohlenwasserstoff (aus Benzol u. Toluol). Sd. 404—427° (Soc. 37, 702,
- $C_{32}H_{32}$
- $C_{32}H_{66}$
- 713). II, 303.
 C 92,3 H 7,7 M. G. 416.
 1) αα-Ditolyl-ββ-Dixylyläthen. Sm. 244—245° (B. 14, 1532).
 C 85,3 H 14,7 M. G. 450.
 1) Dotriakontan (Dicetyl). Sm. 70,5°; Sd. 310°₁₈ (205°₀) (B. 19, 2219; 29, 1323; J. r. 16 [2] 299; Soc. 47, 39). I, 107.

C₂₂-Gruppe mit zwei Elementen.

- $C_{82}H_{14}O_5$ C 80.3 - H 2.9 - O 16.7 - M. G. 478.
 - 1) Pentaacetat d. Scoparinäthyläther. Sm. 140-141° (M. 15, 330). -III, 648.
- $C_{32}H_{18}O_6$
- C 77,1 H 3,6 O 19,3 M. G. 498.

 1) Dibenzoat d. 6,11-Dioxy-5,12-Diketo-5,12-Dihydronaphtacen. Sm. 334—339° (B. 31, 1281).

 C 62,9 H 2,9 O 34,1 M. G. 610. $C_{32}H_{18}O_{13}$
- 1) Verbindung (aus d. Säure $C_{16}H_{10}O_{9}$) (M. 10, 659). II, 2091. C 62,7 H 3,2 O 34,0 M. G. 612. C32 H20 O13
- 1) Verbindung (aus Carminsäure) (A. 163, 114). II, 2098.

C 61,1 - H 3,2 - O 35,7 - M. G. 628. $C_{32}H_{20}O_{14}$

1) Verbindung (aus d. Säure $C_{18}H_{14}O_{9}$) (M. 10, 659). — II, 2091.

C 83.5 - H 4.3 - N 12.2 - M. G. 460. $\mathbf{C}_{32}\mathbf{H}_{20}\mathbf{N}_{4}$

 Tetraphenyldipiazin. Sm. 271° (Soc. 63, 1299). — IV, 1306.
 C 85,9 — H 4,7 — N 9,4 — M. G. 447. $\mathbf{C}_{32}\mathbf{H}_{21}\mathbf{N}_{3}$

 $C_{82}H_{22}O_{2}$

C 85,9 = H 4,7 - N 9,4 - M. G. 444.

1) s- α β -Phenylnaphtindulin. Sm. 256° (268°) (A. 256, 248; 262, 240; 272, 331; B. 31, 2486). — IV, 1215.

2) 1-Naphtylrosindulin. Sm. 247° (A. 256, 248). — IV, 1207. C 87,7 — H 5,0 — O 7,3 — M. G. 438.

1) Lakton d. 1 - [Dibiphenyloxymethyl]benzol - 2-Carbonsäure (Biphenylyl-o-Phtalid) (B. **28**, 513). — **II**, 1730. C 84,6 — H 4,8 — O 10,6 — M. G. 454.

 $C_{32}H_{22}O_3$

1) Verbindung (aus αββ-Tri[1-0xynaphtyl]äthan) (A. **243**, 168). — II, 1029. $C_{32}H_{22}O_4$ C 81,7 - H 4,7 - O 13,6 - M. G. 470.

1) Phenylnaphtylchinhydron. Sm. 132-133° (A. 226, 31). — III, 460. 2) 2,2'-Bis-1,3-Diketo-5-Methyl-2-Phenyl-2,3-Dihydroinden. Sm. 2090 (B. **29**, 2379).

3) 2,2'-Bis-1,3-Diketo-2-[3-Methylphenyl]-2,3-Dihydroinden. 203—205° (B. **28**, 1391). — III, *326*. C 79,0 — H 4,5 — O 16,4 — M. G. 486.

 $C_{32}H_{22}O_5$

1) 3-Oxy-2-Phenyl-1,4-Naphtochinhydron. Sm. 171-172,5° (A. 296, 30). 2) Verbindung (aus Oxyphenylnaphtochinonimid). Sm. 186-187° (A. 226, 42).

- III, 461.

3) Verbindung (aus d. polym. Phenylnaphtochinon). Sm. oberh. 300° (A. **226**, 45). — III, 461. C 67,8 — H 3,9 — O 28,3 — M. G. 566.

C32 H22 O10

1) Heraclin. Sm. 185° (J. 1879, 905). — III, 633. C 83,1 — H 4,8 — N 12,1 — M. G. 462. $\mathbf{C}_{32}\mathbf{H}_{22}\mathbf{N}_4$

1) Phenylamidonaphtindulin (Naphtylviolet) (A. 272, 331). — IV, 1303. C 80.5 - H 4.8 - N 14.7 - M. G. 477. $\mathbf{C}_{32}\mathbf{H}_{23}\mathbf{N}_{5}$

1) $\alpha\beta$ -Dinaphtylamindisazobenzol. Sm. 238° (B. **22**, 3347). — IV, 1401. C 90,5 — H 5,7 — O 3,8 — M. G. 424. C32H24O

1) Dehydrodypnopinakolin. Sm. 186,5—187° (В. **25** [2] 427). — II, 1107. С 87,4 — H 5,4 — О 7,2 — М. G. 440. $\mathbf{C}_{\mathbf{82}}\mathbf{H}_{\mathbf{24}}\mathbf{O}_{\mathbf{2}}$ 1) 2,5-Di[Diphenylmethyl]-1,4-Benzochinon. Sm. 238° (B. 31, 2351).

C32H24O3 C 84.2 - H 5.3 - O 10.5 - M. G. 456.

1) $\alpha\beta\beta$ -Tri[1-Oxynaphtyl] äthan (A. 243, 165). — II, 1029. C 81,4 — H 5,1 — O 13,5 — M. G. 472. C32H24O4

C,2H,4O8

Diacetat d. Dianthranol. Sm. 276—279° u. Zers. (Am. 18, 462).
 C 71,6 — H 4,5 — O 23,9 — M. G. 536.
 polym. inn. Anhydrid d. 2-Oxy-1-Methylbenzol-3-Carbonsäure (Tetra-β-Kresotid). Sm. 293—295° (A. 273, 88; B. 25, 3510). — II, 1545.
 Verbindung (aus 1,4-Benzochinon u. Benzaldehyd). Sm. 116—117° (B. 244).

24, 1341). — III, 346. $\mathbf{C}_{32}\mathbf{H}_{24}\mathbf{O}_{10}$ C 67,6 - H 4,2 - O 28,2 - M. G. 568.

1) Dibenzoat d. Irigenin. Sm. 123-126° (B. 26, 2013). - III, 596. C32H24O16 C 57,8 — H 3,6 — O 38,6 — M. G. 664.

1) Verbindung (aus d. Säure $C_{16}H_{14}O_{6}$) (M. 10, 659). — II, 2091. C 78,1 — H 4,9 — N 17,0 — M. G. 492. $\mathbf{C}_{32}\mathbf{H}_{24}\mathbf{N}_{6}$

1) Aethylentetraphenylhexacyanid. Sm. bei 245° (B. 23, 2388). —

IV, 1333. C 85,1 — H 5,5 — N 9,3 — M. G. 451. $\mathbf{C}_{32}\mathbf{H}_{25}\mathbf{N}_{3}$

1) 7-Phenylamido-1, 2, 3-Triphenyl-1, 2-Dihydro-1, 4-Benzdiazin. Sm. 223° (B. 24, 722). — IV, 1212.

C32H25Cl 1) α-Chlorpentaphenyläthan. Sm. 120—125°; Sd. oberb. 340° (J. 1877, 403). **— II**, 304. $C_{32}H_{26}O$

C 90,1 - H 6,1 - O 3,8 - M. G. 426.

1) α-Dypnopinakolin. Sm. 133,5-134° (B. 25 [2] 424; 27 [2] 339). — II, 1107.

2) β -Dypnopinakolin. Sm. 140,5—141° (B. **25** [2] 426; **27** [2] 339). — II, 1107.

3) γ-Dypnopinakolin. Sm. 178° (B. **27** [2] 339). — Π, 1107. 4) α-Isodypnopinakolin (Bl. [3] **15**, 1175). 5) β-Isodypnopinakolin. Sm. 196° (Bl. [3] **15**, 1175).

6) γ-Isodypnopinakolin. Sm. 179—180° (Bl. [3] 15, 1177).
7) δ-Isodypnopinakolin. Sm. 169—170° (Bl. [3] 15, 1176).
8) ε-Isodypnopinakolin. Sm. 139,5° (Bl. [3] 15, 1176).
C 86,9 — H 5,9 — O 7,2 — M. G. 442.
1) Chinon (aus d. Kohlenw. C₃₂H₂₈). Sm. 180° (Soc. 37, 713). — III, 464. C 78,4 — H 5,3 — O 16,3 — M. G. 490.
1) Dibonuscut d. Provencia (C. H. O.) G. 1700 (M. J. 1800). $C_{32}H_{26}O$

 $C_{32}H_{26}O_2$

 $C_{32}H_{26}O_5$

1) Dibenzoat d. Pyroguajacin (oder $C_{20}H_{18}O_3$). Sm. 179° (M. 1, 599; 19, 99). — III, 645. C 75,9 — H 5,1 — O 19,0 — M. G. 506.

 $\mathbf{C}_{82}\mathbf{H}_{26}\mathbf{O}_{6}$

1) Succinat d. β-Oxy-α-Keto-αβ-Diphenyläthan. Sm. 129° (A. 155, 92; B. 5, 331). — III, 223. C 71,4 — H 4,8 — O 23,8 — M. G. 538. $C_{99}H_{96}O_{8}$

1) Dibenzoat d. Pinoresinol. Sm. 160° (M. 15, 513). — III, 563. 2) Tetrabenzoat d. Erythrit. Sm. 186,5—187° (190°) (M. 10, 393; A. 301, 102). — II, 1142.

3) Dibenzylester d. Dibenzoylweinsäure. Sm. 76-77° (Bl. [3] 13, 831). C 82.4 - H 5.6 - N 12.0 - M. G. 466.

1) 4-Methylphenyl-4-Methylphenylamidoaposafranin. Sm. 238—240° (B. 29, 366). — IV, 1281. C 79,8 — H 5,6 — N 14,6 — M. G. 481. 1) Pentaphenyldiguanid. Sm. 160°. HCl, (2 HCl, PtCl₄) (A. 286, 361;

 $C_{32}H_{27}N_5$

 $C_{32}H_{26}N_4$

J. pr. [2] **55**, 416). C **75**,4 — H **5**,3 — N **19**,3 — M. G. **509**.

 $\mathbf{C}_{32}\mathbf{H}_{27}\mathbf{N}_7$

1) 5-Imido-4-[1-Phenyl-3-p-Methylphenyl-4,5-Dihydropyrazolyl-5-]azo-1-Phenyl-3-[4-Methylphenyl|-4,5-Dihydropyrazol. Sm. 2120 (J. pr. [2] **58**, 145). C 89,7 — H 6,5 — O 3,7 — M. G. 428. $C_{32}H_{28}O$

1) α-Dypnopinalkohol. Sm. 138,5—139° (B. 25 [2] 425; 27 [2] 339). —

II, 1096. 2) γ-Dypnopinalkohol? Sm. 128—129° (B. 27 [2] 339). — II, 1096.

β-Isodypnopinalkohol. Sm. 164° (Bl. [3] 15, 1176).
 C 86,5 — H 6,3 — O 7,2 — M. G. 444.

 $\mathbf{C}_{32}\mathbf{H}_{28}\mathbf{O}_2$ 1) Dypnopinakon. Sm. 160,5—161° (B. 25 [2] 423). — II, 1107. C 78,0 — H 5,7 — O 16,3 — M. G. 492.

C32H28O5 1) Acetyläthyldibenzoïn. Sm. 145° (B. 4, 337; 18, 177). — III, 283. C 71,1 — H 5,2 — O 23,7 — M. G. 540. $\mathbf{C}_{32}\mathbf{H}_{28}\mathbf{O}_{8}$

1) polym. inn. Anhydrid d. 4-Oxy-1-Methylbenzol-3-Carbonsäure. Sm.

295—297° (A. **273**, 91). — II, 1547. C 63,6 — H 4,6 — O 31,8 — M. G. 604. $C_{32}H_{28}O_{12}$

1) Hesperitin (oder $C_{16}H_{14}O_{8}$). Sm. 226° u. Zers. Na, K (B. 9, 607; 14, 951; Soc. 73, 1036). C 87,3 — H 6,3 — N 6,3 — M. G. 440.

 $C_{82}H_{28}N_{2}$ 1) 1, 2-Di[Diphenylamidomethyl] benzol. Sm. 179° (B. 31, 429).

2) 4,4'-Dicinnamylidenamido-3,3'-Dimethylbiphenyl. Sm. 213-214° (A. **258**, 378). — IV, 982. C 77,4 — H 5,6 — N 16,9 — M. G. 496.

 $\mathbf{C}_{32}\mathbf{H}_{28}\mathbf{N}_6$ 1) α-Phenyl-β-Di[Phenylimidophenylamidomethyl]hydrazin. Sm. 204°. 4 HCl, (4HCl, 2PtCl₄), Pikrat (B. 21, 2275; 25, 3119; 26, 1181). — IV, 1224. C 79,5 — H 6,0 — N 14,5 — M. G. 483.

 $C_{32}H_{29}N_5$ 1) 9-Dimethylamido-5-[4-Dimethylamidophenyl]rosindulin. 2 HCl, 2HNO_{3} (A. 272, 323; 286, 222). — IV, 1297. C 80,3 - H 6,3 - O 13,4 - M. G. 478. $C_{32}H_{30}O_4$

1) Diäthylester d. $\alpha \alpha \beta \beta$ -Tetraphenyläthan- $\alpha \beta$ -Dicarbonsäure. Sm. 88 bis 89° (B. 22, 1538). — II, 1916.

C 63,4 - H 4,9 - O 31,7 - M. G. 606. $C_{32}H_{30}O_{12}$ 1) Hexacetat d. $\alpha\beta\beta$ -Tri[1,2-Dioxyphenyl]äthan (A. 243, 182). — II, 1045.

2) α -Hexacetat d. $\alpha\beta\beta$ -Tri[1,3-Dioxyphenyl] athan (A. 243, 175). — II, 1045.

3) β -Hexacetat d. $\alpha\beta\beta$ -Tri[1,3-Dioxyphenyl] äthan (A. 243, 177). — II, 1045.

4) Hexacetat d. $\alpha\beta\beta$ -Tri[1,4-Dioxyphenyl]äthan (A. 243, 185). —

5) Tetraäthylester d. 3,6-Dibenzoylbenzol-1,2,4,5-Tetracarbonsäure. Sm. 157° (A. 258, 294). — II, 2095.

C32H48O6

C 63,2 - H 5,2 - O 31,6 - M. G. 608. $C_{32}H_{32}O_{12}$ 1) Tetraäthylester d. 2,5-Dibenzoxyl-P-Dihydrobenzol-1,3,4,6-Tetra-Carbonsäure. Sm. 135° (A. **258**, 295). — **II**, 2094. C 57,1 — H 4,8 — O 38,1 — M. G. 672.

1) **Hexacetat d. Scoparin.** Sm. 255—256° u. Zers. (M. **15**, 317). — **III**, 648. C 88,5 — H 7,8 — O 3,7 — M. G. 434. C32H32O16 $C_{32}H_{34}O$ 1) $Di[\alpha-(2,4,6-Trimethylphenyl)benzyl]$ äther. Sm. 137° (A. ch. [6] 6, 213). — II, 1081. $\mathbf{C}_{32}\mathbf{H}_{34}\mathbf{O}_{2}$ C 85,3 - H 7,6 - O 7,1 - M. G. 450.1) $\beta \gamma$ -Dioxy- $\alpha \beta \gamma \delta$ -Tetra[4-Methylphenyl] butan? Sm. 226° (A. 279, 337). - III, 235. $\mathbf{C}_{32}\mathbf{H}_{34}\mathbf{O}_{13}$ C 64,0 - H 5,7 - O 30,3 - M. G. 600. Anhydrokolatannin (C. 1898 [1] 579).
 C 53,2 — H 4,7 — O 42,1 — M. G. 722.
 Glykosid (aus Cichorium intybus) + 4¹/₂ H₂O. Sm. 215—220° u. Zers. $\mathbf{C}_{32}\mathbf{H}_{34}\mathbf{O}_{19}$ (J. **1876**, 852). — III, 576. C 81,0 — H 7,2 — N 11,8 — M. G. 474. $\mathbf{C}_{32}\mathbf{H}_{34}\mathbf{N}_4$ 1) $\beta\eta$ -Diphenylhydrazon- $\delta\varepsilon$ -Diphenyloktan. Sm.194°(B. 29, 385).—IV, 786. 2) $\alpha \delta$ -Di[Phenylhydrazon]- $\alpha \delta$ -Di[2,4-Dimethylphenyl]butan. Sm. 1890 (B. 20, 1375). — IV, 786. 3) Di-4-Isopropylbenzaldiphenylhydrotetrazon. Sm. 1560 (159,50—1600) (G. **27** [2] 229). — IV, 1306. 4) Dehydro-4-Isopropylbenzalphenylhydrazon. Sm. 151,5-152,50 (G. **27** [2] 230). — **IV**, 1307. 5) Isodehydro-4-Isopropylbenzalphenylhydrazon. Sm. 215-219 (G. **27** [2] 231). — IV, 1307. C 70,1 — H 6,5 — O 33,4 - $C_{32}H_{36}O_{8}$ - M. G. 548. 1) Pinoresinotannol (M. 18, 497). C 76,2 — H 7,1 — N 16,7 — M. G. 504. $\mathbf{C}_{32}\mathbf{H}_{36}\mathbf{N}_{6}$ 1) Base (aus Bromphenylaceton). Sm. 225°. 3 HCl, (6 HCl, 3 PtCl₄), (3 HCl, 3 AuCl₃), Pikrat (A. 291, 271). C 69,8 H 6,9 - O 23,3 - M. G. 550. $C_{32}H_{38}O_{8}$ 1) Quassiinanhydrid. Sm. bei 150—158° (G. 15, 6). — III, 647. C 58,0 — H 5,7 — O 36,2 — M. G. 662. $\mathbf{C}_{32}\mathbf{H}_{38}\mathbf{O}_{15}$ Anhydrokolatannin (C. 1898 [1] 579).
 C 84,2 — H 8,8 — O 7,0 — M. G. 456. $C_{32}H_{40}O_{2}$ 1) bim. Methyl-1-Isopropylphenyl-3-Cyklohexenon-[5]. Sm. 175° (B. 32, 427). C₃₂H₄₀O₉ C 67,6 — H 7,0 — O 25,4 — M. G. 568. 1) Quassid. Sm. 192-194° (G. 14, 4). - III, 647. $\mathbf{C}_{32}\mathbf{H}_{40}\mathbf{N}_4$ C 80.0 - H 8.3 - N 11.7 - M. G. 480.1) Phenylhydrazon d. Dicamphochinon. Sm. 190-191° u. Zers. (G. 23 [2] 321). — III, 501. C 65,5 — H 7,2 — O 27,3 — M. G. 586.

1) Quassiin. Sm. 210—2116 (A. 21, 40; J. 1877, 931; 1882, 1116; G. 14, 1; 15, 8; 17, 575; B. 15, 2624; 25 [2] 349). — III, 646.
C 41,6 — H 4,5 — O 53,8 — M. G. 922. $\mathbf{C}_{32}\mathbf{H}_{42}\mathbf{O}_{10}$ $C_{32}H_{42}O_{31}$ 1) Verbindung (aus d. Rosskastanie) (Z. 1868, 727). — I, 1106. C 79,7 — H 8,7 — N 11,6 — M. G. 482. $\mathbf{C}_{32}\mathbf{H}_{42}\mathbf{N}_4$ 1) Di[Phenylhydrazon] d. i-Dicarvelon. Zers. bei 200° (A. 305, 227). 2) Di[Phenylhydrazon] d. act. Dicarvelon. Sm. 215° u. Zers. (A. 305, 227). 1) Verbindung (aus Asphalt). — III, 565.
 C 40,9 — H 4,7 — O 54,4 — M. G. 940. $C_{32}H_{42}S_2$ $\mathbf{C}_{32}\mathbf{H}_{44}\mathbf{O}_{32}$ 1) Verbindung (aus d. Rosskastanie) (Z. 1868, 381). — I, 1106. C 48,1 — H 5,8 — O 46,1 — M. G. 798.

1) Heptaacetat d. lösl. Stärke C₁₈H₂₈O₁₈. Sm. 110—120° (B. 31, 1793). C 41,5 — H 5,0 — O 53,5 — M. G. 926.

1) Pektosinsäure (A. 67, 274). — I, 1105.

2) Verbindung (aus Syringa vulgaris) (J. 1856, 692). — I, 1106. $C_{32}H_{46}O_{23}$ $C_{32}H_{46}O_{31}$ $C_{32}H_{46}S$

1) Verbindung (aus Asphalt). — III, 565. C 72,7 — H 9,1 — O 18,2 — M. G. 528. 1) Chinovasäure (oder $C_{33}H_{52}O_6$). $K_2 + 1\frac{1}{2}H_2O$, Na + $3\frac{1}{2}H_2O$, Cu + $3\frac{Cu(OH)_2}{5} + 5\frac{H_2O}{5}$, Ag. (A. III, 184; 145, 6; B. 16, 932; R. 2, 163; Z. 1867, 537). — II, 1860. C₃₂H₄₈O₁₆ C 55.8 - H 7.0 - O 37.2 - M. G. 688.1) Strophantin + H₂O. Sm. 170° u. Zers. (B. 31, 535). 2) Polymethakrylsäure. Zers. bei 200° (B. 30, 1227). $\mathbf{C}_{32}\mathbf{H}_{48}\mathbf{O}_{32}$ C 40,7 - H 5,1 - O 54,2 - M. G. 944.1) Pektin (A. 67, 262). — I, 1105. 2) Metapektin. + BaO (A. 67, 269). — I, 1105. 3) Parapektin (A. 67, 266). — I, 1105. C 85,9 — H 11,0 — N 3,1 — M. 66, 447. $C_{32}H_{49}N$ 1) Phenylamidocholesterin. Sm. 187°. HCl, H₂SO₄ (J. r. 10, 355). — II, 590. C 79,7 — H 10,4 — O 9,9 — M. G. 482. $\mathbf{C}_{32}\mathbf{H}_{50}\mathbf{O}_{3}$ 1) Cardol (C. 1896 [1] 112). 2) Acetat d. Oxy-α-Amyrin. Sm. 278° (B. 24, 3839). — III, 557. C 77,1 — H 10,0 — O 12,9 — M. G. 498. C32 H50 O4 1) Acetat d. Urson $+ 5 H_2 O'(M. 14, 261)$. — III, 649. C 82,1 - H 11,1 - O 6,8 - M. G. 468. $\mathbf{C}_{32}\mathbf{H}_{52}\mathbf{O}_{2}$ 1) Echitin. Sm. 170° (A. 178, 66). — III, 630. 2) Acetat d. α-Amyrin. Sm. 221° (B. 20, 1243; 23, 3188; J. 1876, 912). **– III**, 556. 3) Acetat d. β -Amyrin. Sm. 236° (B. 20, 1245; 23, 3188; A. 271, 218). · III, 556. 4) Verbindung (aus Cardol). Fl. (C. 1896 [1] 112). C 76,8 — H 10,4 — O 12,8 — M. G. 500.

1) Boswellinsäure. Sm. bei 150° (C. 1898 [2] 985). C 74,4 — H 10,1 — O 15,5 — M. G. 516. $\mathbf{C}_{32}\mathbf{H}_{52}\mathbf{O}_4$ $C_{32}H_{52}O_5$ 1) β -Panax-Resen (B. 28 [2] 1056). C 54,2 — H 7,3 — O 38,4 — M. G. 708. 1) Saponin. Zers. bei 195°. Lit. bedeutend. — III, 609. $\mathbf{C}_{32}\mathbf{H}_{52}\mathbf{O}_{17}$ 2) Senegin (G. 19, 21). — III, 610. C 78,0 — H 10,6 — N 11,4 — M. G. 492. $C_{32}H_{52}N_4$ 1) 4, 4'-Di [Diisoamylamido] azobenzol. Sm. 115°. $2 + J_6$, Pikrat (M. 3, 713; 4, 286). — IV, 1362. C 84,6 — H 11,9 — O 3,5 — M. G. 454. 1) Verbindung (Alkohol aus Harz). Sm. 114° (Soc. 61, 918). — II, 1076. C 76,5 — H 10,8 — O 12,7 — M. G. 502. $C_{32}H_{54}O$ $\mathbf{C}_{82}\mathbf{H}_{54}\mathbf{O}_{4}$ 1) α-Panax-Resen (B. 28 [2] 1056). C 62,5 — H 8,8 — O 28,7 — M. G. 614. $\mathbf{C}_{32}\mathbf{H}_{54}\mathbf{O}_{11}$ 1) Glykosid (aus Hedera helix). Sm. 233° (J. 1875, 827; 1881, 991; Bl. 35, 231). — III, 582. C 52.9 - H 7.4 - O 39.7 - M. G. 726. $C_{32}H_{54}O_{18}$ C 52.9 - H 7.4 - 0 59.7 - M. G. 726.

1) Saponin, siehe $C_{92}H_{52}O_{17}$. — III, 609.

C 77.7 - H 12.5 - O 9.7 - M. G. 494.

1) Anhydrid d. Palmitinsäure. Sm. 64° (B. 9, 1932). — I, 464.

C 73.0 - H 11.8 - O 15.2 - M. G. 526.

1) Verbindung (aus Angelikaöl). Sm. $74 - 77^{\circ}$ (G. 26 [2] 317).

C 68.8 - H 11.1 - O 20.1 - M. G. 558.

1) Jalapinol. Sm. $62 - 62.5^{\circ}$ (A. 95, 145; J. 1884, 1447). — III, 595. $C_{32}H_{62}O_3$ $\mathbf{C}_{32}\mathbf{H}_{62}\mathbf{O}_{5}$ $C_{82}H_{62}O_7$ C 65,1 - H 10,5 - O 24,4 - M. G. 590. $\mathbf{C}_{32}\mathbf{H}_{62}\mathbf{O}_{9}$ Verbindung (aus Hanfölsäure). Sm. 133° (M. 7, 227). — 1, 535.
 C 54,7 — H 8,8. — O 36,5 — M. G. 702. $\mathbf{C}_{32}\mathbf{H}_{62}\mathbf{O}_{16}$ 1) Convolvulin (Rhodeoretin), siehe auch $C_{54}H_{96}O_{27}$. Sm. 158° (A. 51, 89; 83, 121; 95, 161; R. 13, 192; C. 1897 [1] 418). — III, 578. C 80,3 — H 13,3 — O 6,7 — M. G. 480. $C_{82}H_{64}O_{2}$ 1) Methylester d. Melissinsäure $C_{31}H_{62}O_2$. Sm. 71-71,5° (A. 235, 138). **–** I, 449. 2) Aethylester d. Melissinsäure C₃₀H₆₀O₂. Sm. 73° (A. 183, 355; C. **1896** [1] 642). — **I**, 449. 3) Cetylester d. Palmitinsäure. Sm. 53,50 (A. 80, 297; B. 16, 3023; J. pr. [2] 31, 305). — I, 443. 4) Myricylester d. Essigsäure. Sm. 70° (73°) (M. 9, 581; Bl. [3] 11, 186). C 82,4 — H 14,2 — O 3,4 — M. G. 466. 1) Cetyläther. Sm. 55°; Sd. 300° (A. 83, 22). — I, 300. 1) Cetylsulfid. Sm. 57,5° (A. 83, 16). — I, 363. C₃₂H₆₆O

C32 H66 S

C₃₂-Gruppe mit drei Elementen.

C 73,0 - H 3,4 - O 18,2 - N 5,3 - M. G. 526. $C_{32}H_{18}O_6N_2$ 1) P-Dinitro-9,10-Anthrachinon + Chrysen. Sm. 294° (B. 3, 811; J. pr. [2] 9, 250). — III, 411. C 80,7 — H 4,2 — O 3,4 — N 11,7 — M. G. 476. 1) Verbindung (aus 4-Oxy-1-Phenylazonaphtalin). Sm. 290—291° u. Zers. $\mathbf{C}_{32}\mathbf{H}_{20}\mathbf{ON}_{4}$ (B. **30**, 2666). — **IV**, 1428. C 71,1 — H 3,7 — O 14,8 — N 10,4 — M. G. 540. $C_{32}H_{20}O_5N_4$ 1) Indoïn (B. 14, 1742; 15, 52, 56). — II, 1439.
1) Verbindung (aus Rubbadin) (B. 25, 1890). — II, 658.
1) Galleïndibenzolsulfonat. — II, 2088. $C_{32}H_{20}O_8S_2$ C32H20O11S2 $C_{32}H_{20}O_{11}S_3$ 1) Tribenzolsulfonat d. 1,2,7-Trioxy-9,10-Anthrachinon. Sm. 182 bis 186°. — III, 436. C 82,9 — H 4,5 — O 3,4 — N 9,1 — M. G. 463. 1) Phenylamidonaphtindon (A. 272, 336, 342). — IV, 1304. C 63,7 — H 3,4 — O 21,2 — N 11,7 — M. G. 603. CasHatONa $\mathbf{C}_{32}\mathbf{H}_{21}\mathbf{O}_{8}\mathbf{N}_{5}$ 1) ?-Trinitro-1,4-Di[Benzoylphenylamido]benzol. Sm. 248° (B. 25. 2722). — IV, 594. C 80,3 — H 4,6 — O 3,3 — N 11,7 — M. G. 478. $C_{32}H_{22}ON_4$ 1) Benzoylmethylphenylfluorindin (B. 29, 1247). C 82.4 - H 4.7 - O 6.9 - N 6.0 - M. G. 466. $C_{32}H_{22}O_2N_2$ 1) 4,4'-Di[2-Oxy-1-Naphtylazo]biphenyl. Sm. 243-245° (B. 22, 3014). — IV, 1439. C 77,7 — H 4,4 — O 6,5 — N 11,3 — M. G. 494. 1) 1,1'-Dioxy-4,4'-Diphenylazo-2,2'-Binaphtyl. Sm. 245—246° u. Zers. $\mathbf{C}_{32}\mathbf{H}_{22}\mathbf{O}_2\mathbf{N}_4$ (B. **30**, 2661). — **IV**, 1428. C 73,6 — H 4,2 — O 6,1 - $C_{32}H_{22}O_2N_6$ - N 16,1 — M. G. 522. 1) 3,3'-Di[2-Oxynaphtylazo]azobenzol. Sm. 282° (Soc. 69, 12). — IV. 1431. C 77,4 - H 4,4 - O 9,7 - N 8,5 - M. G. 496. $C_{32}H_{22}O_3N_2$ 1) Diphenylrhodamin. Sm. 260—262° (B. 31, 1333). C 71,4 — H 4,1 — O 8,9 — N 15,6 — M. G. 538. $C_{32}H_{22}O_3N_6$ 1) 3,3'-Di[2-Oxynaphtylazo]azoxybenzol. Sm. 244-245° (Soc. 69, 9). — IV, 1431. C 73,0 — H 4,2 — O 12,2 — N 10,6 — M. G. 526. $C_{82}H_{22}O_4N_4$ 1) Verbindung (aus Indigo) (Bl. 34, 530). — II, 1624. C 70,8 — H 4,1 — O 14,8 — N 10,3 — M. G. 542. 1) Hydrindin. K + 3H₂O (J. pr. [1] 25, 449; A. 72, 283). — II, 1617. 1) Verbindung (aus Rescrict u. 1-Methylbenzol-4-Carbonsäure-3-Sulfonsäure) $\mathbf{C}_{32}\mathbf{H}_{22}\mathbf{O}_{5}\mathbf{N}_{4}$ $C_{32}H_{22}O_8S$ + 3H₂O (*Am.* 16, 520; 17, 568). C 59,8 - H 3,4 - O 32,4 - N 4,4 - M. G. 642. $\mathbf{C}_{32}\mathbf{H}_{22}\mathbf{O}_{13}\mathbf{N}_{2}$ 1) Aristolochin. Zers. bei 215° (B. 25 [2] 635; 29 [2] 38). — III, 780. $C_{32}H_{22}O_{13}Br_{12}1$ Anhydrohexabromkolatannin (C. 1898 [1] 579). $C_{32}H_{24}O_{2}N_{2}$ C 82,0 - H 5,1 - O 6,8 - N 6,0 - M. G. 468.1) 1,3-Di[Benzoylphenylamido]benzol. Sm. 184° (B. 16, 2797). — IV, 572. 2) 1, 4 - Di[Benzoylphenylamido] benzol. Sm. 218,5 ° (B. 16, 2808). IV, 585.
3) P-Di[Acetylamido] bianthryl (B. 20, 2435). — IV, 1095. 4) Di[Diphenylamid] d. Benzol-1,2-Dicarbonsäure (Diphenylaminphtalein). Sm. 238-238,5° (A. 227, 192; G. 14, 470). — II, 1808. C 75,0 — H 4,7 — O 9,4 — N 10,9 — M. G. 512. l) Isaton (Z. 1865, 630). — II, 1612. C 74,4 — H 4,6 — O 15,5 — N 5,4 — M. G. 516. $\mathbf{C}_{32}\mathbf{H}_{24}\mathbf{O}_{3}\mathbf{N}_{4}$ $\mathbf{C}_{32}\mathbf{H}_{24}\mathbf{O}_5\mathbf{N}_2$ C 74,4 — H 4,6 — U 15,5 — N 5,4 — M. G. 516.

1) Verbindung (aus 5-Keto-4-Phenyl-5-Benzyl-4,5-Dihydrooxazol). Sm. 148 bis 149° u. Zers. (A. 296, 9).

C 70,6 — H 4,4 — O 14,7 — N 10,3 — M. G. 544.

1) Flavindin (A. 72, 284; Bl. 34, 530). — II, 1624.

2) Isatochlorin (Z. 1865, 630). — II, 1612.

3) isom. Verbindung (aus Isatin) (Z. 1865, 630). — II, 1612.

C 72,1 — H 4,5 — O 18,0 — N 5,3 — M. G. 532. $\mathbf{C}_{32}\mathbf{H}_{24}\mathbf{O}_5\mathbf{N}_4$

 $\mathbf{C}_{32}\mathbf{H}_{24}\mathbf{O}_{6}\mathbf{N}_{2}$ 1) Succinat d. β -Oximido- α -Keto- $\alpha\beta$ -Diphenyläthan. Sm. 164° (B. 26, 797). — III, 289.

- $C_{32}H_{24}O_6N_2$ 2) Succinat d. isom. β -Oximido- α -Keto- $\alpha\beta$ -Diphenyläthan. Sm. 195°
- (B. 26, 797). III, 290. 1) Verbindung (aus 1,4-Dioxybenzol u. 1-Methylbenzol-4-Carbonsäure- $\mathbf{C}_{32}\mathbf{H}_{24}\mathbf{O}_{9}\mathbf{S}$ 3-Sulfonsäure) + H₂O (Am. 16, 525).
- Cao HoaNAS 1) Phenylhydrazinverbindung d. Di[2-Oxynaphtyl]-?-Sulfid. Sm. 1840 (B. **27**, 3000). C 77,6 — H 5,0 — O 3,2 — N 14,1 — M. G. 495.
- $\mathbf{C}_{32}\mathbf{H}_{25}\mathbf{ON}_{5}$ 1) Acetylamidophenylindulin. Sm. 160° (A. 286, 199). — IV, 1326.
- C 81,7 H 5,5 O 6,8 N 6,0 M. G. 470. $C_{32}H_{26}O_2N_2$ 1) 4-Phenyloxydhydrat d. 6-Oxy-2, 3-Diphenyl-1, 4-Naphtisodiazin-6-Aethyläther. Sm. 175-178°. Chlorid (B. 25, 1018; 31, 895 Anm.).
- IV, 1092.
 2) Verbindung (aus β-Benzoylpropionsäure). Sm. 195° (Bl. [3] 19, 393). C 77,1 H 5,2 O 6,4 N 11,2 M. G. 498. $\mathbf{C}_{32}\mathbf{H}_{26}\mathbf{O}_{2}\mathbf{N}_{4}$
- 1) P-Di[2-Benzylphenylazo]-1, 3-Dioxybenzol. Sm. 189° (B. 27, 2788). - IV, 1446.
- C 69,3 H 4,7 O 5,8 N 20,2 M. G. 554. $\mathbf{C}_{32}\mathbf{H}_{26}\mathbf{O}_{2}\mathbf{N}_{8}$ 1) 4,4'-Di[5-Keto-3-Methyl-1-Phenyl-4,5-Dihydro-4-Pyrazolylazo]biphenyl. Sm. 2890 u. Zers. (A. 295, 337). — IV, 1291. C 76.5 - H 5.2 - O 12.7 - N 5.6 - M. G. 502.
- $C_{32}H_{26}O_4N_2$ 1) Dimethyläther d. 1,4-Dibenzoyl-5,6-Di[4-Oxyphenyl]-2,3-Dihydro-1,4-Diazin. Sm. 182—183° (Soc. 63, 1301). — III, 295.
- C 72,5 H 4,9 O 12,1 N 10,5 M. G. 530.C32 H26 O4 N4 1) 1,4-Dibenzoyl-3,6-Di[Methylphenylamido]-2,5-Diketo-1,2,4,5-Tetrahydro-1, 4 - Diazin (Hippuroflavindimethylanilid). Sm. 233-2340 (A. 287, 84).
- C 70.3 H 4.8 O 14.6 N 10.2 -- M. G. 546. $C_{32}H_{26}O_5N_4$ 1) Verbindung (aus Isatin) (Z. 1865, 631). — II, 1612. C 68,3 - H 4,6 - O 17,1 - N 10,0 - M. G. 562.C82H26O6N4
- Isatan. Ag. (J. pr. [1] 28, 346; J. 1865, 584). II, 1616.
 C 65,1 H 4,4 O 16,3 N 14,2 M. G. 590. $C_{32}H_{26}O_6N_6$ 1) Azoopiansäurephenylhydrazid. Śm. 222° (258°) (B. 19, 2275; J. pr.
- [2] **55**, 179). IV, 717. $C_{32}H_{26}O_{18}Br_4$ 1) Anhydrotetrabromkolatannin (C. 1898 [1] 579).
- $C_{82}H_{26}O_{15}Br_{12}$ 1) Anhydrohexabromkolatannin (C. 1898 [1] 579). C 48,4 - H 3,3 - O 34,2 - N 14,1 - M. G. 794. $\mathbf{C}_{32}\mathbf{H}_{26}\mathbf{O}_{17}\mathbf{N}_{8}$ 1) Oktaspartid + 6H₂O (A. 157, 30; 303, 187; J. 1871, 738; Bl. 38,
- 64; **42**, 158; *B*. **30**, 2450). **I**, 1211. C 81,9 H 5,7 O 3,4 N 9,0 M. G. 469. 1) Benzacin. Sm. 150° (Soc. **37**, 567). **II**, 1314. $\mathbf{C}_{82}\mathbf{H}_{27}\mathbf{ON}_{3}$
- C 81,4 H 5,9 O 6,8 N 5,9 M. G. 472. $\mathbf{C}_{32}\mathbf{H}_{28}\mathbf{O}_{2}\mathbf{N}_{2}$ 1) γδ-Di[Benzoylamido]-αζ-Diphenyl-αε-Hexadiën (Dibenzoylcinnylendiamin). Sm. 264° (Soc. 49, 468). — III, 286. C 78,7 — H 5,7 — O 9,8 — N 5,7 — M. G. 488.
- C, H, O, N, 1) 3,5-Di[Phenylbenzoylamido]-l-Oxybenzol. Sm. 184-185° (G. 20, 349). — II, 1178.
- C 74,4 H 5,4 O 9,3 N 10,9 M. G. 516. 1) Isatopurpurin (Z. 1865, 630). II, 1612. $C_{82}H_{28}O_3N_4$
- C 72,2 H 5,3 O 12,0 N 10,5 M. G. 532. $C_{32}H_{28}O_4N_4$ 1) 1,4-Dibenzoyl-3,6-Di[Methylphenylamido]-2,5-Dioxy-1,4-Dihydro-1,4-Diazin (Dihydrohippuroflavindimethylanilid). Sm. 238° u. Zers. (A.
 - **287**, 83). 2) 1,4-Dibenzoyl-3,6-Di[2-Methylphenylamido]-2,5-Dioxy-1,4-Dihydro-1,4-Diazin (Dihydrohippuroflavindi o-Toluid). Sm. 235-238° u. Zers. (A. 287, 86).
 - 3) Formyl-p-Benzylenimid + H₂O. Sm. 160° (B. 28, 1652). IV, 187. 1) Tetramethyläther d. Tetra[2-Oxyphenyl]thiophen. Sm. 136° (B.
- C₃₂H₂₈O₄S 25, 602). — III, 751. 2) Tetramethyläther d. Tetra[4-Oxyphenyl]thiophen. Sm. 217° (B.
- **28**, 890). III, 751. C 70,1 H 5,1 O 14,6 N 10,2 M. G. 548. C₃₂H₂₈O₅N₄ 1) Triacetyl- $\alpha\beta$ -Di[Phenylhydrazon]- $\alpha\beta$ -Di[2-Oxyphenyl]äthan. Sm. 80—90° (A. 305, 184).

C 71,6 — H 5,2 — O 17,9 — N 5,2 — M. G. 536. $\mathbf{C}_{32}\mathbf{H}_{28}\mathbf{O}_{6}\mathbf{N}_{2}$ 1) Diacetat d. $\alpha\beta$ -Di[Benzoylamido]- $\alpha\beta$ -Di[2-Oxyphenyl]äthan. Sm. $225-227^{\circ}$ (Soc. 45, 678; B. 17, 2405). — II, 994; III, 287. C 67,6 — H 4,9 — O 22,5 — N 4,9 — M. G. 568. 1) Benzidylopiansäure. Sm. noch nicht bei 320° (B. 21, 2522). — IV, 967.

 $C_{32}H_{28}O_8N_2$

2) Di[Acetyl-l-Naphtylamid] d. Diacetylweinsäure. Sm. 243-244° (C. 1896 [1] 109).

1) Di[1-Benzylchinolin]sulfid. Sm. bei 63°. + PtCl₄ (J. pr. [2] 51, 95). $C_{32}H_{28}N_2S$

- IV, 252.
2) 4,4'-Di[γ-Phenylallylidenamidobenzyl]sulfid. Sm. 158-159° (B. 24, 727; **28**, 880, 1339). — III, *61*. C 81,5 — H 6,1 — O 3,4 — N 9,0 — M. G. 471.

 $C_{32}H_{29}ON_3$

1) Diphenylrosanilin (N. Handw. d. Ch. 1, 626). — II, 1092. C 80,8 — H 6,1 — O 10,1 — N 2,9 — M. G. 475. $C_{92}H_{29}O_3N$

1) $\operatorname{Di}[\beta$ -Benzoyl- α -Phenyläthyl] amid d. Essigsäure (Acetyldibenzalacetophenonamin). Sm. 149° (B. 31, 350).

1) Verbindung (aus Quassiin). Sm. 119—120° u. Zers. (G. 15, 8). — III, 646. C 81,0 — H 6,3 — O 6,7 — N 5,9 — M. G. 474.

1) 4-Phenyloxydhydrat d. 6-Oxy-2,3-Diphenyl-7,8,9,10-Tetrahydro-

 $\mathbf{C}_{32}\mathbf{H}_{29}\mathbf{O}_{8}\mathbf{Cl}_{5}$ $C_{32}H_{30}O_2N_2$

1,4-Naphtisodiazin-6-Aethyläther. Sm. 151,5° (B. 31, 902). 2) Di[4-Methylphenylamid] d. γ-Truxillsäure. Sm. 2890 (B. 27, 1411).

- II, 1903

C 75,9 - H 5,9 - O 12,6 - N 5,5 - M. G. 506. $\mathbf{C}_{32}\mathbf{H}_{30}\mathbf{O}_4\mathbf{N}_2$

1) Di [Benzoylmethyläther] d. 1,4-Di [4-Oxyphenyl]hexahydro-1,4-Diazin (C. 1897 [1] 595).

2) dimolec. 2-Naphtylimid d. Butan-αγ-Dicarbonsäure. Sm. 166-169°

(A. **292**, 213). C 71,9 — H 5,6 — O 12,0 — N 10,5 — M. G. 534. $\mathbf{C}_{32}\mathbf{H}_{30}\mathbf{O}_{4}\mathbf{N}_{4}$

C 71,9 — H 5,0 — O 12,0 — N 10,5 — M. G. 554.

1) Diäthylester d. s-Diphenyläthylendi [4-Hydrazidobenzol-1-Carbonsäure]. Sm. 229° (B. 27, 1137). — III, 288.

C 71,4 — H 5,6 — O 17,8 — N 5,2 — M. G. 538.

1) Benzoylhelicindianilid (A. 154, 36). — III, 69.

C 67,8 — H 5,3 — O 17,0 — N 9,9 — M. G. 566.

1) Diacetat d. Verb. C₂₈H₂₈O₄N₄ (A. 226, 73). — III, 346.

C 64,2 — H 5,0 — O 21,4 — N 9,4 — M. G. 598.

1) αβ-Bisphenylhydron-αβ-Di[5,6-Dimethoxylphenyl]äthan-2,2'-Dicarbonsäure (M. 12, 70). — II. 2100.

 $\mathbf{C}_{32}\mathbf{H}_{30}\mathbf{O}_{6}\mathbf{N}_{2}$ $\mathbf{C}_{32}\mathbf{H}_{30}\mathbf{O}_{8}\mathbf{N}_{4}$

 $C_{32}H_{30}O_8N_4$

carbonsäure (M. 12, 70). - II, 2100. 2) Phenylamidoformiat d. Erythrit. Sm. 215° u. Zers. (B. 18, 970).

II, 372.

1) Di $[\beta\gamma$ -Diphenyl-norm. Propylamid] d. Oxalsäure. Sm. 115-116°

 $\mathbf{C}_{32}\mathbf{H}_{32}\mathbf{O_2N_4}$

1) Dispersive from tropy and G . Characters of the first of the fir $\mathbf{C}_{32}\mathbf{H}_{32}\mathbf{O}_{3}\mathbf{N}_{6}$

 $\begin{array}{c} \textbf{C}_{32}\textbf{H}_{32}\textbf{O}_{3}\textbf{N}_{6} & \textbf{C}_{10}\textbf{I} = \textbf{H}_{0,0} = \textbf{C}_{0,0} = \textbf{R}_{10,0} = \textbf{M}_{0}. \text{ G. 546}, \\ \textbf{1)} & \textbf{Verbindung (aus } 4\text{-}\alpha\text{-Brombutyrylamidoazobenzol)}. \text{ Sm. } 280^{\circ} (\textit{B. 31, 2852}). \\ \textbf{C}_{32}\textbf{H}_{32}\textbf{O}_{8}\textbf{N}_{2} & \textbf{C}_{67,1} = \textbf{H}_{5,6} = \textbf{O}_{22,4} = \textbf{N}_{4,9} = \textbf{M}_{0}. \text{ G. 572}. \\ \textbf{1)} & \textbf{Lycorin.} & \textbf{Zers. bei } 250^{\circ}. & 2 \textbf{HCl} + 2 \textbf{H}_{2}\textbf{O}, (2 \textbf{HCl, PtCl_{4}}) & (\textit{C. 1898 [1] 254}). \\ \textbf{C}_{32}\textbf{H}_{32}\textbf{O}_{15}\textbf{Br}_{8}\textbf{I} & \textbf{Anhydrotribromkolatannin (\textit{C. 1898 [1] 579}).} \\ \textbf{C}_{32}\textbf{H}_{34}\textbf{ON}_{2} & \textbf{C}_{33,1} = \textbf{H}_{7,4} = \textbf{O}_{3,5} = \textbf{N}_{6,0} = \textbf{M}_{0}. \text{ G. 462}. \\ \textbf{1)} & \textbf{Phenylhydrazon d. bim. Methylphenylcyklohexenon.} & \textbf{Sm. 250 bis} \end{array}$ 251° (B. **32**, 427). C 75,9 — H 6,3 — O 6,7 — N 11,1 — M. G. 506.

 $\mathbf{C}_{32}\mathbf{H}_{34}\mathbf{O}_{2}\mathbf{N}_{4}$

1) Phylloporphyrin. Zn (A. 278, 329; 284, 93; 288, 212; 290, 306). - III, *658*.

 $\mathbf{C}_{32}\mathbf{H}_{34}\mathbf{O}_{4}\mathbf{N}_{2}$ C 75,3 — H 6,6 — O 12,6 — N 5,5 — M. G. 510. 1) Hexamethyllignonblau (B. 30, 240).

 $\mathbf{C}_{32}\mathbf{H}_{\mathbf{34}}\mathbf{O}_{\mathbf{4}}\mathbf{N}_{\mathbf{4}}$ C 71,4 - H 6,3 - O 11,9 - N 10,4 - M. G. 538.

Verbindung (aus 2,4-Dimethylphenylhydrazin u. Acetessigsäureäthylester). Sm. 203° (M. 12, 213). — IV, 813.
 C 64,6 — H 5,7 — O 10,8 — N 18,8 — M. G. 594.
 Tetra[Phenylhydrazid] d. n-Butan-αβγδ-Tetracarbonsäure. Sm. oberh. 280° (B. 28, 886). — IV, 731.

 $\mathbf{C}_{32}\mathbf{H}_{34}\mathbf{O_4N_8}$

- 2) Tetra[Phenylhydrazid] d. h-Butan- $\alpha\beta\gamma\delta$ -Tetracarbonsäure. Sm. $C_{82}H_{84}O_4N_8$ oberh. 280° (B. 28, 889). — IV, 731. C 69,3 — H 6,1 — O 14,4 — N 10,1 — M. G. 554.
- $C_{32}H_{34}O_5N_4$
- $\mathbf{C}_{32}\mathbf{H}_{34}\mathbf{O}_{6}\mathbf{N}_{4}$
- Hämatoporphyrin (A. 288, 212).
 C 67,4 H 6,0 O 16,8 N 9,8 M. G. 570.
 Verbindung (aus Glyoxal u. Benzidinsemiurethan) (A. 258, 373). IV, 967.
- C 66,9 H 5,9 O 22,3 N 4,9 M. G. 574. $\mathbf{C_{32}H_{34}O_8N_2}$
- 1) Piperonaldihydrocotarnin. Sm. 202°. (2 HCl, PtCl₄) (B. 31, 2102). C 55,3 H 4,9 O 27,7 N 12,1 M. G. 694. $C_{32}H_{34}O_{12}N_6$
 - 1) ?-Trinitro-3-Pseudobutyl-1-Methylbenzol + Naphtalin. Sm. 89-90°
- $\mathbf{C}_{32}\mathbf{H}_{35}\mathbf{ON}_{3}$
- C32 H35 O2 N8
- P-Trinitro-3-Pseudobutyl-I-Methylbenzol + Naphtalin. Sm. 69-90 (B. 24, 2837). II, 182.
 C 80,5 H 7,3 O 3,3 N 8,8 M. G. 477.
 Leukophtalgrün (siehe auch C₂₄H₂₄O_{N2}). Sm. 235—236° (C. 1897 [2] 548).
 C 77,9 H 7,1 O 6,5 N 8,5 M. G. 493.
 Phtalgrün (siehe auch C₂₄H₂₄O₂N₂). Chlorid + H₂O, 6 Chlorid + 3 PtCl₄, Nitrat (Bl. [3] 15, 989; C. 1897 [2] 548; 1898 [1] 330).
 C 75,0 H 7,0 O 12,5 N 5,5 M. G. 51
 C 75,0 H 7,0 O 12,5 N 5,5 M. G. 250
- $C_{32}H_{36}O_4N_2$
- 1) Leukohexamethyllignonblau (aus Pseudocumidin) (B. 31, 620).
- 1) Tetra[2,3-Dimethylphenylester] d. Kieselsäure. Sd. 350-360 120 $C_{82}H_{36}O_4Si$ (B. 18, 1691). — II, 758.

 2) Tetra[2,4-Dimethylphenylester] d. Kieselsäure. Sd. 453—457° (B.
 - 18, 1690). II, 758. C 65,3 H 6,1 O 19,0 N 9,5 M. G. 588.
- C₃₂H₃₆O₇N₄
- $C_{32}H_{36}O_{7}N_{4}$ 10 0 13,0 N 3,5 M. G. 588. 1) Verbindung (aus Bilirubin) (H. 26, 322). $C_{32}H_{36}O_{8}N_{4}$ C 63,6 H 5,9 O 21,2 N 9,3 M. G. 604. 1) Biliverdin (Z. 1869, 365; J. 1876, 935; A. 132, 334; 181, 124; G. 11, 430; H. 26, 321). III, 663. $C_{32}H_{37}O_{5}Br_{3}$ 1) Tribromquassid. Sm. bei 155° u. Zers. (G. 14, 6). III, 647.
- C 57,3 H 5,7 O 28,7 N 8,3 \dot{M} . G. 670. $\mathbf{C}_{32}\mathbf{H}_{38}\mathbf{O}_{12}\mathbf{N}_{4}$ 1) 4,4'-Di Mesoxalsäurediäthylesterhydrazido biphenyl-3,3'-Dicarbon-
- $C_{32}H_{40}O_7N_4$
- 1) 3.7 Diplicaboralisative diatory rester by Grazino Joinen yi-3,3 Dicarbon-säure + 2 H₂O. Sm. 257° (B. 31, 2580). IV, 1557.
 C 64,8 H 6,8 O 18,9 N 9,4 M. G. 592.
 1) Hydrobilirubin (Urobilin). Zn₃ (Z. 1869, 666; J. Th. 1871, 230; 1881, 212; A. 163, 77; 181, 256; B. 7, 1065; 14, 1213; 16, 1106; J. r. 16, 269; M. 10, 572). III, 663.
- 1) Siliciumtetra [4-Dimethylamidophenyl]. Sd. 225° u. Zers. (C. 1896) CaoH40N4Si [1] 843).
- 1) Verbindung (aus 2-Amido-5-Dimethylamidobenzolthiosulfonsäure). Sm. 97° C₃₂H₄₀N₈S₅ (A. 251, 40). — II, 817. C 76,9 — H 8,2 — O 6,4 — N 8,4 — M. G. 499.
- $C_{32}H_{41}O_2N_3$ 1) 2-Diäthylamido-l, 4-Di[?-Diäthylamidobenzoyl] benzol. Sm. 70° (B.
- 9, 1914). III, 305. C 74,1 H 8,1 O 12,3 N 5,4 M. G. 518. $\mathbf{C}_{32}\mathbf{H}_{42}\mathbf{O}_{4}\mathbf{N}_{2}$
- 1) dimolec. 4-Methylphenylimid d. Heptan-γε-Dicarbonsäure. 176—178° (A. **292**, 209). $\mathbf{C}_{32}\mathbf{H}_{42}\mathbf{O}_{25}\mathbf{N}_{8}$ C 35.6 - H 3.9 - O 37.1 - N 23.4 - M. G. 1078.
- 1) Oktaspartsäure + 3H₂O. NH₄, (NH₄)₈, K₂, K₈ + H₂O, Cu₄ + 12H₂O, Ag₄, Ag₆ (B. 30, 2450; A. 303, 188).
- C₈₂H₄₂N₂Br₂1) Diammoniumbromid (aus Dissobutyl-1,2-Xylylendiamin u. 1,2-Xylylenbromid). Sm. 57° (B. 31, 1706). C 62,0 — H 7,3 — O 28,4 — N 2,3 — M. G. 619.
- $C_{32}H_{45}O_{11}N$ 1) Methylbenzoylaconin. Sm. 210—211° (C. 1896 [2] 791). — III, 774. C 69,3 — H 8,3 — U 17,3 — N 5,1 — M. G. 554.
- $\mathbf{C}_{32}\mathbf{H}_{46}\mathbf{O}_{6}\mathbf{N}_{2}$ 1) Nitroglycyrrhetin (J. 1880, 1030). — III, 592.
- C 75,4 H 9,2 O 12,6 N 2,7 M. G. 509. $C_{82}H_{47}O_4N$ 1) Glycyrrhetin. Sm. 200° (J. 1880, 1029). — III, 592. C 57,4 — H 7,0 — O 33,5 — N 2,1 — M. G. 669. 1) Tetracetylaconin. Sm. 196° (C. 1896 [1] 208). — III C 78,1 — H 9,7 — O 6,5 — N 5,7 — M. G. 492.
- $C_{32}H_{47}O_{14}N$
- $\mathbf{C}_{32}\mathbf{H}_{48}\mathbf{O}_{2}\mathbf{N}_{2}$
- α-Stearyl-β-Phenyl-β-Benzylharnstoff. Sm. 74—75° (Soc. 69, 1602).
 C 65,0 H 8,3 O 24,3 N 2,4 M. G. 591.
 Cevadin (Veratrin). Sm. 205°. HCl, (HCl, HgCl₂), (2HCl, PtCl₄), (HCl, AuCl₃), (HJ, J₂)₂, H₂SO₄, Pikrat (A. 95, 200; 185, 224; J. 1861, 49; $C_{32}H_{49}O_9N$

1862, 376; 1874, 861; 1883, 1351; Soc. 33, 338; Fr. 13, 454; C. 1872,

229; B. 23, 2701). — III, 948. 2) Veratrin + H₂O. Sm. 146—148°. (HCl, AuCl₃) (Am. 20, 361). C 80,3 — H 10,5 — O 3,3 — N 5,9 — M. G. 478. $\mathbf{C}_{99}\mathbf{H}_{49}\mathbf{O}_{9}\mathbf{N}$ C₃₂H₅₀ON₂

Phenylamid d. α-Phenylamidoarachinsäure. Sm. 82° (M. 17, 541).
 Di[Pentaäthylphenyl]sulfon. Sm. 76° (B. 21, 2815). — II, 828.

C39H50O2S

 $C_{39}H_{53}O_{9}Br$ 1) Aethylester d. α -Brommelissinsäure. Sm. 65° (C. 1896 [1] 642).

C₃₂-Gruppe mit vier Elementen.

1) Verbindung (aus 2-Oxynaphtalin-6-Sulfonsäure) + H₂O (B. 30, 189). CaoHao OaNaSa **- IV**, 1427.

C39H94O9N7Cl

 Diäthyläther d. Verbind. C₂₈H₂₆O₂N₇Cl (B. 31, 1412).
 4-Chlorphenylat d. 6-Oxy-2, 3-Diphenyl-1, 4-Naphtisodiazin-6-Aethyläther (B. 25, 1018). — IV, 1092.
 Verbindung (d. Saffraningruppe) + H₂O. 2 + PtCl₄ (B. 27, 2363). C₃₂H₂₅ON,Cl

 $C_{32}H_{26}ON_3Cl$ **– IV**, 1218.

 $C_{32}H_{26}O_6N_4S_2$ 1) Dibenzolsulfonat d. 4,4'-Bi[5-Oxy-3-Methyl-1-Phenylpyrazol]. Sm. 190° (B. 29, 1660). — IV, 1263.

 $\mathbf{C}_{32}\mathbf{H}_{26}\mathbf{O}_{8}\mathbf{N}_{2}\mathbf{Br}_{2}$ 1) Benzidylbromopiansäure. Sm. noch nicht bei 300° (B. 25, 2001). **- IV**, 967.

 Verbindung (aus 8-Oxychinolinchlorbenzylat) + 3 H₂O. Sm. 145° (J. pr. [2] 54, 8). — IV, 273.
 αα-Succinyldi [β-Phenyl-β-Benzylpseudothioharnstoff]. Sm. 137 bis 138° (Soc. 67, 570). C₃₂H₂₇O₂N₂Cl

 $C_{32}H_{30}O_2N_4S_2$

1) Hämin (siehe auch $C_{30}H_{34}O_3N_3$ Fe). HCl, HBr, HBr + C_2H_6O , 4HCl + Isoamylalkohol (B. 17, 2269; 18, 392; 27, 572; 29, 821, 2842; 30, $C_{32}H_{30}O_3N_4Fe$ 109). — IV, 1618.

 $\mathbf{C}_{32}\mathbf{H}_{30}\mathbf{O}_4\mathbf{N}_7\mathbf{Cl}$ $\mathbf{C}_{32}\mathbf{H}_{30}\mathbf{O}_{4}\mathbf{N}_{7}\mathbf{Br}$

1) Diacetylderivat d. Verb. $C_{28}H_{26}O_2N_7Cl$ (B. 31, 1410).
1) Diacetylderivat d. Verb. $C_{28}H_{36}O_2N_7Br$ (B. 31, 1413).
1) Hämatin. HCl (B. 29, 822, 2842, 2846; 30, 105; 32, 677). $\mathbf{C}_{32}\mathbf{H}_{32}\mathbf{O}_{4}\mathbf{N}_{4}\mathbf{F}\mathbf{e}$ IV, 1618.

 $\mathbf{C}_{32}\mathbf{H}_{33}\mathbf{O}_{6}\mathbf{N}_{4}\mathbf{Br}_{8}$ 1) Tribrombilirubin (A. 181, 117). — III, 662. $\mathbf{C}_{32}\mathbf{H}_{34}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{Br}_{2}$

1) αβ-Di[α-Bromisovaleryl-2-Naphtylamido] äthan. Sm. 193° (B. 31,

 $\mathbf{C}_{32}\mathbf{H}_{34}\mathbf{O}_{2}\mathbf{N}_{7}\mathbf{Br}$

1) Diäthyläther d. Verb. C₂₈H₂₆O₂N₇Br (B. 31, 1413). 1) Aldehydgrün (J. 1869, 1164; B. 3, 761; 24, 1711, 1713). — III, 675. 1) Hexahydrohämatoporphyrin (B. 17, 2273). — IV, 1620. $C_{32}H_{35}O_3N_3S$ $\mathbf{C}_{32}\mathbf{H}_{38}\mathbf{O}_5\mathbf{N}_4\mathbf{Fe}$

 $\mathbf{C}_{32}\mathbf{H}_{39}\mathbf{O}_{3}\mathbf{N}_{3}\mathbf{Cl}_{2}$ Aldehydblau (B. 22, 233). — III, 675.
 Bromglycyrrhetin (J. 1880, 1031). — III, 592.

 $\mathbf{C}_{32}\mathbf{H}_{46}\mathbf{O}_{4}\mathbf{NBr}$

C₃₂H₄₈ON₂S 1) α-Stearylimido-α-Phenylbenzylamido-α-Merkaptomethan (Stea-1) Veratrinterjoidid. + 2 H₂O. Sm. 129—130° (Am. 20, 363). $\mathbf{C}_{32}\mathbf{H}_{49}\mathbf{O}_{9}\mathbf{NBr}_{2}$

 $\mathbf{C}_{32}\mathbf{H}_{49}\mathbf{O}_{9}\mathbf{NBr}_{4}^{2}$

 $\mathbf{C}_{32}\mathbf{H}_{49}\mathbf{O}_{9}\mathbf{N}\mathbf{J}$ $\mathbf{C}_{32}\mathbf{H}_{49}\mathbf{O}_{9}\mathbf{N}\mathbf{J}_{3}$

 $\mathbf{C}_{32}\mathbf{H}_{49}\mathbf{O}_{9}\mathbf{NJ}_{4}$

C₃₂-Gruppe mit fünf Elementen.

C₃₂H₆₄N₁₆Br₄S₈Si 1) Verbindung (aus Allylthioharnstoff u. SiBr₄) (Soc. 53, 854).

C₃₃-Gruppe mit zwei Elementen.

- C 83.6 H 4.6 O 11.8 M. G. 474.C33H22O4 1) 1-Naphtoat d. α-Oxy-ββ-Dibenzoyl-α-Phenyläthen. Sm. 150—151° (A. 291, 105). — III, 322.
- C 76,7 H 4,3 O 19,0 M. G. 516. $C_{33}H_{22}O_7$ 1) Tribenzoat d. 2,5,3'-Trioxydiphenyläther. Sm. 188-191° (B. 30,
- $C_{33}H_{22}N_2$ C 88,8 - H 4,9 - N 6,3 - M. G. 446.
- 1) 2-Naphtylamido-meso-Phennaphtakridin. Sm. 244° (B. 26, 3086). - IV, 1090. C 81,0 - H 4,7 - N 14,3 - M. G. 489. $\mathbf{C}_{33}\mathbf{H}_{23}\mathbf{N}_{5}$
- C38H24O
- β-Trinaphtylguanidindicyanid. Sm. 220°. HNO₃. II, 624.
 C 91,2 H 5,6 O 3,2 M. G. 434.
 Verbindung (aus d. Verb. C₈₄H₂₄O₂ aus Anhydroacetonbenzil). Sm. 175° (162—163°) (Soc. 51, 526; 71, 131 Anm.). — III, 252. C 83,2 — H 5,1 — O 11,7 — M. G. 476.
- $C_{33}H_{24}O_4$ 1) Dibenzoat d. 4,4'-Dioxytriphenylmethan. Sm. 129—130° (B. 22. 1946). — II, 1003. C 88,4 — H 5,4 — N 6,2 — M. G. 448.
- C,3 H,4 N, 1) Hydro-β-Naphtamid. Sm. 146-150° (A. 168, 118). — III, 64. $\mathbf{C}_{33}\mathbf{H}_{24}\mathbf{N}_{6}$ C 78,5 — H 4,8 — N 16,7 — M. G. 504.
- α-Trinaphtylmelamin. Sm. 223° (B. 19, 244). II, 624.
 β-Trinaphtylmelamin. Sm. 209° (B. 19, 2057). II, 624.
- C 73.9 H 5.2 O 20.9 M. G. 536. $\mathbf{C}_{83}\mathbf{H}_{28}\mathbf{O}_{8}$ 1) Tetrabenzoat d. Penta-Erythrit. Sm. 99-101° (A. 276, 60). -II, 1142.
- C 82,5 H 5,8 N 11,7 M. G. 480. 1) 2,4,5-Triphenyl-1,3-Di[4-Amidophenyl]-2,3-Dihydroimidazol + $\mathbf{C}_{83}\mathbf{H}_{28}\mathbf{N}_{4}$ 2H₂O. Sm. 122—123° wasserfrei (*B*. **27**, 570). — III, *29*. C 80,0 — H 5,8 — N 14,1 — M. G. 495.
- $\mathbf{C}_{33}\mathbf{H}_{29}\mathbf{N}_{5}$ 1) Verbindung (aus Diphenyleyanamid u. p-Toluidin). Sm. 150°. HCl, (2HCl, PtCl₄) (A. 286, 360). C 79,8 — H 6,0 — O 14,1 — M. G. 496.
- $C_{33}H_{30}O_{5}$ 1) β -Keto- $\alpha \alpha \gamma \gamma$ -Tetrabenzylpropan- $\alpha \gamma$ -Dicarbonsäure (Tetrabenzyl-
- acetondicarbonsaure). Sm. 95°. Ag₂ (A. 261, 186). II, 1989. C 69,5 H 5,2 O 25,3 M. G. 570. l) Rottlerin. Sm. 200—201° (191—191,5°). Na + H₂O, K + H₂O, Ba + 2H₂O, Pb, Ag (J. 1855, 669; B. 20, 182; Soc. 63, 979; 65, 234; 67, 233; G. 24 [1] 4; 24 [2] 480). III, 67I. C 77,6 H 5,9 N 16,5 M. G. 510. l) Tetrapheny, 1.2 A. Ellewich reposition. C33 H30 O9
- $\mathbf{C}_{88}\mathbf{H}_{30}\mathbf{N}_{6}$ 1) Tetraphenyl-1, 2, 4-Toluylenguanidin. HCl (B. 8, 671). — IV, 606. 2) isom. Tetraphenyl-1,2,4-Toluylenguanidin. Sm. 76°. (2HCl, PtCl₄),
- $\frac{\text{HNO_8}}{\text{C 73,6}}$ (B. 3, 8). IV, 606. C 73,6 H 5,6 N 20,8 M. G. 538. $\mathbf{C}_{33}\mathbf{H}_{30}\mathbf{N}_{8}$ 1) p-Dicyanbenzophenonphenylhydrazon. Sm. 212° (B. 20, 522). —
- C 81,8 H 6,6 O 11,6 M. G. 484. 1) Dibenzoat d. $\delta\delta$ -Di[4-Oxyphenyl]heptan. Sm. 144—145° (J. r. 23, C33H32O4 503). — II, 1151. C 60,7 — H 4,9 — O 34,4 — M. G. 652.
- C₃₃H₃₂O₁₄ Verbindung (aus Phloretinsäure) (A. 119, 212). — II, 1570.
 C 84,1 — H 7,0 — N 8,9 — M. G. 471.
- C38 H38 N3 C 84,1 - H 7,0 - N 8,9 - M. G. 471.
 1) α α - Di[4 - Dimethylamidophenyl] - α - [1 - Phenylamido - ? - Naphtyl] - methan. Sm. 125°. (2 HCl, PtCl₄), Pikrat (B. 22, 1890). - IV, 1213. C 64,7 - H 5,6 - O 29,7 - M. G. 612.
 1) Phlobaphen (aus Eichenrinde) (C. 1897 [2] 1151). C 52,8 - H 4,5 - O 42,7 - M. G. 750.
 1) Randiaroth (C. 1895 [1] 227). C 83,7 - H 7,4 - N 8,9 - M. G. 473.
 1) α [4] Dimethylamidophenyll a α Di[1] Dimethylamido ? Naphtyll a [2, 1]
- C38H34O13
- C₃₃H₃₄O₂₀
- $\mathbf{C}_{33}\mathbf{H}_{35}\mathbf{N}_{3}$ 1) α -[4-Dimethylamidophenyl]- $\alpha \alpha$ -Di[1-Dimethylamido-?-Naphtyl]methan. Sm. 178—179° (B. 21, 3129). — IV, 1218.

 $\begin{array}{c} {\rm C~68,8~-H~6,2}-{\rm O~25,0}-{\rm M.~G.~576.} \\ {\rm 1)~Homorottlerin.~~Sm.~192^o~(\it Soc.~67,~233).} \\ {\rm C~63,5~-H~5,8}-{\rm O~30,7}-{\rm M.~G.~624.} \end{array}$ $C_{33}H_{36}O_{9}$ $\mathbf{C}_{33}\mathbf{H}_{36}\mathbf{O}_{12}$ Propionaldehydphloroglucid (C. 1896 [2] 486).
 C 83,0 — H 8,2 — N 8,8 — M. G. 477. $\mathbf{C}_{33}\mathbf{H}_{39}\mathbf{N}_{3}$ 1) Aethyldihydrochinolin = $(C_{11}H_{13}N)_3$. Fl. (2HCl, PtCl₄) (B. 17, 1331). **- IV**, 254. $C_{33}H_{46}O_{2}$ C 83.6 - H 9.7 - O 6.7 - M. G. 474.1) Benzoat d. Lupeol. Sm. 250° (H. 15, 422). — II, 1144. 1) Benzoat d. Lüpeol. Sm. 200° (H. 15, 422). — 11, 1144. C 83,2 — H 10,1 — O 6,7 — M. G. 476. 1) Benzoat d. Cholesterin. Sm. 146,6° (150—151°) (A. ch. [3] 56, 61; J. pr. [2] 7, 171; M. 9, 435; H. 15, 47). — II, 1144. 2) Benzoat d. Isocholesterin. Sm. 190—191° (194—195°) (J. pr. [2] 7, 174; B. 31, 1200). — II, 1144. 3) Benzoat d. Paracholesterin. Sm. 127—128° (A. 207, 234). — II, 1144. C 73,3 — H 8,9 — O 17,8 — M. G. 540. C33 H48 O2 $\mathbf{C}_{33}\mathbf{H}_{48}\mathbf{O}_{6}$ 1) Aethylester d. Benzoylcholsäure (B. 6, 1186; H. 10, 196). — II, 1154. C 85.8 - H 11.1 - N 3.0 - M. G. 461. $C_{33}H_{51}N$ 4-Methylphenylamidocholesterin. Sm. 172° (J. r. 10, 355). — II, 590.
 C 83,5 — H 13,1 — O 3,4 — M. G. 474. $C_{33}H_{62}O$ 1) Verbindung (aus Hendekanaphten). Sd. 240—242° (J. r. 15, 335). — II, 16. 1) Bromid d. Psyllostearylalkohol (H. 17, 428). $\mathbf{C_{83}H_{65}Br}$ C 82,9 — H 13,8 — O 3,3 — M. G. 478.

1) Daturon. Sm. 95° (B. 26 [2] 288). — I, 1006.

C 80,2 — H 13,3 — O 6,5 — M. G. 494. C33 H66 O C33H36O2 1) Aethylester d. Melissinsäure C₃₁H₆₂O₂. Sm. 69,5—70° (A. 235, 138). **- I**, 449. 2) Dipalmitylcarbinolester d. Essigsäure. Sm. 47-49° (Soc. 57, 987).

• I, 411. C 77,6 — H 12,9 — O 9,4 — M. G. 510. $C_{33}H_{66}O_{3}$

 $\mathbf{C}_{33}\mathbf{H}_{66}\mathbf{O}_{4}$

Aethylester d. Cocerinsäure. Sm. 70° (B. 18, 1980). — I, 580.
 C 75,3 — H 12,5 — O 12,2 — M G. 526.

1) Glycerinmonomelissin. Sm. 91,5—92° (C. 1896 [1] 642). C 79.8 — H 13,7 — O 6,5 — M. G. 496.

 $C_{33}H_{68}O_{2}$ 1) Psyllostearylalkohol. Sm. 86-87° (H. 25, 118).

C₃₃-Gruppe mit drei Elementen.

 $\mathbf{C}_{33}\mathbf{H}_{20}\mathbf{O}_{3}\mathbf{N}_{2}$ C 80,5 - H 4,1 - O 9,6 - N 5,7 - M. G. 492.1) Benzoat d. 4-Oxynaphtindon (A. 272, 344). - IV, 1085. $C_{33}H_{21}O_3N_3$ C 78,1 - H 4,1 - O 9,5 - N 8,3 - M. G. 507.1) Tri[1-Naphtylcyanurat]. Zers. bei 160—225° (B. 20, 2239). — II, 859.
2) Tri[2-Naphtylcyanurat]. Zers. bei 230° (B. 20, 2239). — II, 878.
C 58,6 — H 3,1 — O 23,7 — N 14,5 — M. G. 675.
1) 2,4,5-Tri[3-Nitrophenyl]-1,3-Di[4-Nitrophenyl]-2,3-Dihydroimidazol. Sm. 227—228° (B. 27, 569). — III, 30. $\mathbf{C}_{33}\mathbf{H}_{21}\mathbf{O}_{10}\mathbf{N}_{7}$ 2) 1,2,3,4,5-Penta[4-Nitrophenyl]-2,3-Dihydroimidazol. Sm. noch nicht bei 290° (B. 27, 570). — III., 30. C 85,3 — H 5,2 — O 3,4 — N 6,0 — M. G. 464. $\mathbf{C}_{33}\mathbf{H}_{24}\mathbf{ON}_{2}$ 1) $\alpha\beta$ -Diphenyl- $\alpha\beta$ -Di[2-Naphtyl]harnstoff. Sm. 185—186° (B. 24, 2920).

— II, 618. 2) $\alpha \alpha$ -Diphenyl- $\beta \beta$ -Di[2-Naphtyl]harnstoff. Sm. 103—104° (B. 24, 2923).

— II, 618. C 77,9 — H 4,7 — O 6,3 — N 11,0 — M. G. 508. $\mathbf{C}_{33}\mathbf{H}_{24}\mathbf{O}_{2}\mathbf{N}_{4}$ 1) Di[P-Phenylazo-2-Oxynaphtyl] methan. Sm. 127—128° (B. 25, 3481). - IV, 1450. C 77,3 - H 4,7 - O 12,5 - N 5,5 - M. G. 512.

 $C_{33}H_{24}O_4N_2$ 1) Benzoat d. 6,4'-Di[Benzoylamido]-3-Oxybiphenyl. Sm. 177-178° (A. 303, 348). $\mathbf{C}_{33}\mathbf{H}_{24}\mathbf{O}_{4}\mathbf{N}_{4}$ C 73,3 - H 4,4 - O 11,8 - N 10,4 - M. G. 540.

1) 2,4,5-Triphenyl-1,3-Di[4-Nitrophenyl]-2,3-Dihydroimidazol. Sm. $182-183^{\circ}$ (B. **27**, 569). — III, 29.

C 80,2 - H 5,3 - O 3,2 - N 11,3 - M. G. 494. $\mathbf{C}_{33}\mathbf{H}_{26}\mathbf{ON}_{4}$

1) Benzoyldehydrobenzalphenylhydrazon. Sm. 173°. + 1/2 C₆H₆ (G. 27, [2] 250). — IV, 749.

2) isom. Benzoyldehydrobenzalphenylhydrazon. Sm. 187-1880 (G. 26, [1] 455; **27** [2] 252). — IV, 749. C 82,2 — H 5,4 — O 6,6 — N 5,8 — M. G. 482.

C33 H26 O2 N2

1) 3,5-Di[Benzoylphenylamido]-l-Methylbenzol. Sm. 190-1910 (J. pr. [2] 33, 544). — IV, 625. 1) Di[2-Naphtyläther] d. $\beta\gamma$ -Dimerkaptopropyl-2-Naphtylsulfon. Sm.

 $C_{33}H_{26}O_{2}S_{3}$ $129^{\circ} \ (J. \ pr. \ [2] \ 53, \ 499).$

1) αβη-Tri[2-Naphtylsulfon] propan. Sm. 230° (J. pr. [2] 53, 494). C33 H26 O6 S3

1) s-Di[4-Phenylamido-l-Naphtyl]thioharnstoff. Sm. 1960 (A. 286, 185). $C_{33}H_{26}N_4S$ - IV, 923. C 79,7 - H 5,4 - O 6,4 - N 8,4 - M. G. 497.

 $C_{33}H_{27}O_{2}N_{3}$

1) Base (aus Lepidonviolet). 2HCl, (2HCl, PtCl,) (B. 25, 122). — IV, 317. C 71,1 — H 4,8 — O 11,5 — N 12,6 — M. G. 557. $\mathbf{C}_{33}\mathbf{H}_{27}\mathbf{O}_4\mathbf{N}_5$

1) Verbindung (aus Carbanilidooxyhydrazobenzol). Sm. 215-218° (B. 23,

493). — IV, 1504. C 77,3 — H 5,5 — O 6,2 — N 10,9 — M. G. 512. $\mathbf{C}_{33}\mathbf{H}_{28}\mathbf{O}_{2}\mathbf{N}_{4}$

1) Verbindung (aus β-Benzoylphenylhydrazin u. Benzaldehyd). Sm. 212-215° (G. **22** [2] 238). — IV, 751. C 72,8 — H 5,1 — O 11,8 — N 10,3 — M. G. 544.

C33 H28 O4 N4

1) Anhydrodi[benzoylphenylhydrazid] d. Hydrochelidonsäure. Zers. bei 110° (A. 267, 99). — IV, 714. C 70,1 — H 5,5 — O 17,0 — N 7,4 — M. G. 565. 1) Trianiläskulin. (2HCl, PtCl₄) (B. 3, 366). — III, 567. 1) Victoriablau B. 2 + PtCl₄ (B. 22, 1889). — IV, 1213.

 $\mathbf{C}_{33}\mathbf{H}_{31}\mathbf{O}_{6}\mathbf{N}_{3}$

C₃₃H₃₂N₃Cl

C 81.3 - H 6.8 - O 3.3 - N 8.6 - M. G. 487. $C_{33}H_{33}ON_{3}$

1) α -Oxy- $\alpha\alpha$ -Di[4-Dimethylamidophenyl]- α -[1-Phenylamido-?-Naphtyl]methan. Sm. 95°. Pikrat (B. 22, 1890). — II, 1095.

C 76.3 - H 6.3 - O 9.2 - N 8.1 - M. G. 519. $\mathbf{C}_{33}\mathbf{H}_{33}\mathbf{O}_{3}\mathbf{N}_{3}$

1) 1, 3, 5-Tri[4-Methylphenylacetylamido] benzol. Sm. 192-1930 (G. 20, 326). — IV, 1125. C 69,8 — H 5,8 — O 16,9 — N 7,4 — M. G. 567.

 $\mathbf{C}_{33}\mathbf{H}_{33}\mathbf{O}_{6}\mathbf{N}_{3}$

1) Tri[2-Methoxyl-4-Allylphenyl]cyanurat (Trieugenolcyanurat). Sm. 1220 (B. **20**, 2238). — II, 975. C 80,0 — H 6,9 — O 6,5 — N 5,7 — M. G. 490.

 $\mathbf{C}_{33}\mathbf{H}_{34}\mathbf{O}_{2}\mathbf{N}_{2}$

1) Oenanthylidendiphenylamid d. Benzolcarbonsäure (A. 148, 336). -II, 1194.

 $\mathbf{C}_{33}\mathbf{H}_{34}\mathbf{O}_{8}\mathbf{N}_{2}$ C 67.6 - H 5.8 - O 21.8 - N 4.8 - M. G. 586.1) Phloridzinanilid (A. 156, 9). — III, 600.

C 71,2 - H 6,5 - O 17,3 - N 5,0 - M. G. 556. $\mathbf{C}_{33}\mathbf{H}_{36}\mathbf{O}_{6}\mathbf{N}_{2}$

1) Cinnamylidendihydrocotarnin. Sm. 139-140°. (2HCl, PtCl₄) (B. 31, 2102).

C 69.0 - H 6.6 - O 19.5 - N 4.9 - M. G. 574. $\mathbf{C}_{33}\mathbf{H}_{38}\mathbf{O}_7\mathbf{N}_2$

1) α-Oxy-γ-Phenylallylidendihydrocotarnin? Sm. 228—230° u. Zers. (2 HCl, PtCl₄) (B. 31, 2102).

C 60,5 - H 5,8 - O 29,3 - N 4,3 - M. G. 654. $\mathbf{C}_{33}\mathbf{H}_{38}\mathbf{O}_{12}\mathbf{N}_{2}$

1) **Helicin-2,4-Diamido-1-Methylbenzol** $+ xH_2O$ (B. 16, 800; G. 12, 467). **— IV**, 607.

C 75,4 — H 7,4 — O 9,1 — N 8,0 — M. G. 525. $\mathbf{C}_{33}\mathbf{H}_{39}\mathbf{O}_{3}\mathbf{N}_{3}$

1) Tri[3-Methyl-6-Isopropylphenyl]cyanurat. Sm. 151° (B. 20, 2239). — II, 771. C 72,9 — I

- H 7.5 - O 11.8 - N 7.7 - M. G. 543. $C_{33}H_{41}O_4N_3$

1) Tri[2,4,5-Trimethylphenylamid d. Citronensäure. Sm. 1850 (B. 21, 660). — II, 553.

1) Triisobutyläther d. α-Trithio-2-Oxybenzaldehyd. Sm. 142° (B. 24, $\mathbf{C}_{33}\mathbf{H}_{42}\mathbf{O}_{3}\mathbf{S}_{3}$ 1449). — III, 71.

2) Triisobutyläther d. β -Trithio-2-Oxybenzaldehyd. Sm. $162-163^{\circ}$ $+ C_6 H_6$ (B. 24, 1450). — III, 71.

 $\mathbf{C}_{33}\mathbf{H}_{43}\mathbf{O}_{11}\mathbf{N}$

C 63,0 — H 6,8 — O 28,0 — N 12,2 — M. G. 629. 1) Anhydroaconitin (Apoaconitin). Sm. 185—186°. (HCl, AuCl₃), HBr + $2^{1}/_{2}$ H₂O, + AuCl₃ (Soc. 33, 324; 59, 284). — III, 773.

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- $\mathbf{C}_{99}\mathbf{H}_{45}\mathbf{O}_{4}\mathbf{P}$ 1) Tri[4-tert. Amylphenylester] d. Phosphorsäure. Fl. (B. 18, 1701). **- II**, 775.
- C 81.4 H 9.5 O 3.3 N 5.8 M. G. 486.C33 H46 ON2
- $C_{33}H_{53}O_{10}N$
- Phenylhydrazon d. Oxycholestenon. Sm. 271° (M. 17, 585).
 C 63,6 H 8,5 O 25,7 N 2,2 M. G. 623.
 Methyloxydhydrat d. Veratrin + 3H₂O. HCl, (2HCl, AuCl₃) (Am. 20, 369).

C₃₃-Gruppe mit vier Elementen.

- $C_{33}H_{22}ON_2S$ 1) $\alpha \alpha$ -Di[2-Naphtyl]- β -Thiodiphenylharnstoff. Sm. 225° (B. 24, 2914). - II. 807.
- 1) ? Dichlor 1, 4 Benzochinon 2 Imidozimmtsäuredi [2 Amido- $\mathbf{C}_{33}\mathbf{H}_{23}\mathbf{O}_{7}\mathbf{N}_{3}\mathbf{Cl}_{2}$ zimmtsäure] (Bl. [3] 15, 1033).
- 1) Benzyläther d. Stilbendisulfonsäuredisazophenol. Na. (B. 27, $C_{33}H_{26}O_8N_4S_2$ 3359). — IV, 1419.
- 1) 4-[Chlor-4-Methylphenylat] d. 6-Oxy-2, 3-Diphenyl-1, 4-Napht-isodiazin-6-Aethyläther (B. 27, 2354). IV, 1092. $C_{83}H_{27}ON_2Cl$
- C₃₈H₃₁O₄N₃Br₄ 1) 4,4'-Di[Phenylamidoformiat] d. Methyldi [3,6-Dibrom-4-Oxy-2,5-Dimethylbenzyl]amin. Sm. 202° (B. 29, 1113). C₃₈H₃₂O₅NJ 1) Jodäthylat d. Dibenzoylmorphin + ½H₂O (Soc. 28, 23, 323).
- III. 900.
- C33H35ON2Cl 1) Chlorbenzylat d. Benzyleinchonin. Sm. 255° u. Zers. (B. 13, 2296). - III, 834. $C_{33}H_{38}O_{2}N_{4}S$
- 1) Diäthyläther d. s-Di[4-(4-Methylphenyl)amido-6-Oxy-3-Methylphenyl]thioharnstoff. Sm. 176,50 (B. 27, 2708). 2) Diäthyläther d. s-Di[4-(4-Oxy-2-Methylphenyl)amido-3-Methyl
 - phenyl]thioharnstoff. Sm. 70-72° (A. 286, 208). 3) Diäthyläther d. s-Di[4-(4-Oxy-3-Methylphenyl)amido-2-Methyl-
- phenyl]thioharnstoff. Sm. 179—180° (A. 287, 194).

 1) Tetraäthyläther d. s-Di[4(4-Oxyphenyl)amido-2-Oxyphenyl]thioharnstoff. Sm. 154,5—155° (A. 287, 217). C₈₃H₈₈O₄N₄S
- C₃₃H₃₉O₃NBr₆
- 1) Triäthyläther d. Tri[3,6-Tribrom-4-Oxy-2,5-Dimethylbenzyl]-amin. Sm. 196—197° (B. 29, 1111). 2-Methylphenylamid d. Phosphorsäuretri [α-Oxyisobuttersäure]. $C_{33}H_{49}O_7N_3P$
- Sm. 194—196° (A. 279, 116). 2) 4-Methylphenylamid d. Phosphorsäuretri [α-Oxyisobuttersäure].
- Sm. 160—162° (A. 279, 117). 1) Jodmethylat d. Veratrin + 11/2 H2O. Sm. 210-2120 u. Zers. (Am. C, H, O, NJ

C₃₄-Gruppe mit einem Element.

C34 H36 C 91,9 — H 8,1 — M. G. 444. 1) Tetra[?-Dimethylphenyl]äthen. Sm. 244—245° (B. 14, 1531). — II, 302.

C₃₄-Gruppe mit zwei Elementen.

C34H20O4 C 82.9 - H 4.0 - O 13.0 - M. G. 492.

20, 368).

- Tetraphenyluvinon. Sm. noch nicht bei 280° (Soc. 57, 956). III, 737.
 C 75,6 H 3,7 O 20,7 M. G. 540.
 Dibenzoat d. Fluoresceïn. Sm. 215° (216—217°) (A. 183, 14; B. 28, $\mathbf{C}_{34}\mathbf{H}_{20}\mathbf{O}_{7}$
- C34H20O10
- 2963). II, 2062.

 2) Dibenzoat d. Hydrochinonphtaleïn. Sm. 252—253° (B. 28, 2963). C 69,4 H 3,4 O 27,2 M. G. 588.

 1) Tetrabenzoat d. 2,3,5,6-Tetraoxy-1,4-Benzochinon (B. 20, 3152; A. ch. [6] 12, 115). — III, 355. C 85,4 — H 4,6 — O 10,0 — M. G. 478. C34H22O3
- 1) Verbindung (aus Phenanthrenacetonchinon). Sm. 238° (Soc. 59, 105). - III, 447.

- C34H22O4 C 82,6 - H 4,4 - O 13,0 - M. G. 494.
 - 1) Dibenzoat d. α-Dioxybinaphtyl. Sm. 253° (J. r. 6, 190). II, 1152.
- 2) Dibenzoat d. β-Dioxybinaphtyl. Sm. 160° (J. r. 6, 192). II, 1152. C₈₄H₂₂O₆ C 77,6 — H 4,2 — O 18,2 — M. G. 526.

 - 1) Dibenzoat d. Phenolphtaleïn. Sm. 169° (B. 29, 132). 2) Dibenzoat d. ?-Dibenzoyl-1, 3-Dioxybenzol. Sm. 151° (A. 210, 259). - III, 305.
 - 3) Dibenzoat d. ?-Dibenzoyl-1,4-Dioxybenzol. Sm. 146° (A. 210, 265). **— III**, 305.
- $C_{34}H_{22}N_4$ C 83.9 — H 4.5 — N 11.5 — M. G. 486.
 - 1) 2,3,7,8-Tetraphenyl-1,4,6,9-Naphttetrazin. Sm. 289° (B. 22, 446). **- IV**, 1244.
- C34H24O C 91,1 - H 5,3 - O 3,6 - M. G. 448.
 - 1) Phenyl-1-Naphtylpinakolin. Sm. bei 130° (J. pr. [2] 35, 505). III, 267.
- C 88,0 H 5,1 O 6,9 M. G. 464. $\mathbf{C}_{34}\mathbf{H}_{24}\mathbf{O}_{2}$ Sm. 195—200° u. Zers. (Soc.
- Verbindung (aus Anhydroacetonbenzil).
 425; 71, 130). III, 251.
 88,7 H 5,2 N 6,1 M. G. 460. $\mathbf{C_{34}H_{24}N_{2}}$
- 1) $\alpha \beta$ -Di[1-Naphtylimido]- $\alpha \beta$ -Diphenyläthan. Sm. 218—219° (M. 9, 692). — III, 285. C 83,6 — H 4,9 — N 11,5 — M. G. 488. $\mathbf{C}_{34}\mathbf{H}_{24}\mathbf{N}_{4}$
 - 1) 6-Phenylamido-5-Phenylrosindulin[5]. Sm. 1920 (A. 256, 254). IV, 1298. 2) 9 - Phenylamido - 5 - Phenylrosindulin[5]. HCl (A. 286, 219). —
 - IV, 1298.
 - 3) 2-Phenylamido-9-Phenylrosindulin[9]. HCl, (2HCl, PtCl₄) (A. 286, 219). **— IV**, *1298*.
 - 4) 10-Phenylamido-9-Phenylrosindulin[9] (B. 29, 2758). IV, 1298.
 - 5) isom. Phenylamidophenylrosindulin. HCl, (2 HCl, PtCl₄) (A. 272, 327). — IV, 1298. C 87,6 — H 5,6 — O 6,8 — M. G. 466.
- $C_{84}H_{26}O_{2}$ 1) $\alpha\beta$ -Dioxy- $\alpha\beta$ -Diphenyl- $\alpha\beta$ -Dinaphtyläthan? Sm. 61° (B. 13, 1360). —
- C34H26O4 1) Dibenzyläther d. Phenolphtalein. Sm. 150° (B. 26 [2] 232; M. 17,
- 433). II, 1983. C 74,7 — H 4,8 — O 20,5 — M. G. 546. 1) **Tetracetat d. Verb.** $\mathbf{C}_{28}\mathbf{H}_{18}\mathbf{O}_{4}$ (aus Resorcin u. Benzylchlorid). Sm. 90 $C_{34}H_{26}O_{8}$
- bis 100° (B. 31, 311). C 60,5 H 3,8 O 35,6 M. G. 674.
- $C_{34}H_{26}O_{15}$ 1) Eichenroth (M. 1, 270). — III, 587.
- C 88,3 H 5,6 N 6,1 M. G. 462. $\mathbf{C}_{34}\mathbf{H}_{26}\mathbf{N}_{2}$ 1) 1-Phenylamido-2, 3, 4, 5-Tetraphenylpyrrol. Sm. 207° (A. 269, 117).
- IV, 786. C 83,3 H 5,3 N 11,4 M. G. 490. $C_{34}H_{26}N_4$ 1) 2, 3-Di [Phenylamido] -1, 4-Diphenylimido -1, 4-Dihydronaphtalin.
- Sm. 169° (A. **256**, 253). IV, 1273. C 78,8 — H 5,0 — N 16,2 — M. G. 518. $C_{34}H_{26}N_{6}$
- 1) Verbindung (aus Benzalazin). Sm. 207° (J. pr. [2] 58, 386).
- C 81,6 H 5,6 O 12,8 M. G. 500. $\mathbf{C}_{34}\mathbf{H}_{28}\mathbf{O}_{4}$ 1) Dibenzoat d. Alkohol C₂₀H₁₈O₂. Sm. 185—186° (B. 9, 311). — II, 1145.
- C 79,1 H 5,4 O 15,5 M. G. 516. $\mathbf{C}_{34}\mathbf{H}_{28}\mathbf{O}_{5}$ 1) αγε-Tribenzoyl-βδ-Di[2-Furanyl]pentan (Difuraltriacetophenon). Sm.
 - 175° (B. 29, 2249). III, 730. 2) isom. Difuraltriacetophenon. Sm. 211—212° (B. 29, 2250). — III, 730.
- C 76,7 H 5,2 O 18,1 M. G. 532. $C_{34}H_{28}O_6$ 1) Aethylanhydrodibenzilacetessigsäure. Sm. 216°. Ba, Ag (Soc. 67, 739).
 - 2) Aethylester d. Anhydrodibenzilacetessigsäure. Sm. 210-211° (Soc. 69, 737).
- C 72,3 H 4,9 O 22,7 M. G. 564. $C_{34}H_{28}O_{8}$
- 1) Acetat d. α -Verb. $C_{26}H_{20}O_4$ (Am. 5, 343). III, 10. 2) Acetat d. β -Verb. $C_{26}H_{20}O_4$ (Am. 5, 344). III, 10.

C₈₄H₂₈O₉

 $C_{34}H_{35}N_{3}$

 $\mathbf{C}_{34}\mathbf{H}_{36}\mathbf{O}_{4}$

C 70.3 - H 4.8 - O 24.8 - M. G. 580.

1) Tetrabenzoat d. Dulcitan (A. ch. [4] 27, 163). — II, 1142. C34H28O10 C 68,4 - H 4,7 - O 26,8 - M. G. 596. Tetrabenzoat d. Glykose. Sm. 141° (H. 14, 344). — II, 1143.
 Tetrabenzoat d. Lävulose. Sm. 108° (M. 10, 397). — II, 1143. C 59,0 — H 4,0 — O 37,0 — M. G. 692.

1) Anhydrid d. Eichengerbsäure (M. I, 270). — III, 587.
C 51,8 — H 3,5 — O 44,7 — M. G. 788.

1) Glykotannin (J. 1858, 256; A. 90, 340; 170, 74). — II, 1926.
C 87,9 — H 6,0 — N 6,0 — M. G. 464. C34H28O16 C,4H,28O,28 $C_{34}H_{28}N_{2}$ 1) Verbindung (aus 4-Nitroso-1-Dimethylamidobenzol u. 4-Methylphenyl-2-Naphtylamin). Sm. 224—225° (B. 21, 727). — IV, 1096. C 82.9 - H 5.7 - N 11.4 - M. G. 492. $\mathbf{C}_{34}\mathbf{H}_{28}\mathbf{N}_4$ 1) 1,2,3,4-Tetra[Phenylamido]naphtalin. Sm. 1910 (A. 256, 242; B. **21**, 679). — IV, 1273. C 78,5 — H 5,4 — N 16,1 — M. G. 520. $\mathbf{C_{84}H_{28}N_6}$ 1) 1, 3 - Di [Phenylhydrazon] - 2 - [α -Phenylhydrazonäthyl] - 2, 3-Dihydroinden. Sm. 163—167° (B. 27, 109). — IV, 788. C 81,3 — H 6,0 — O 12,7 — M. G. 502. $\mathbf{C}_{34}\mathbf{H}_{30}\mathbf{O}_4$ 1) Verbindung (aus Phenylaceton). Sm. 209° u. Zers. (A. 291, 281). C 72,1 — H 5,3 — O 22,6 — M. G. 566. $C_{34}H_{30}O_{8}$ 1) Tetracetat d. $\alpha \alpha \beta \beta$ -Tetra[P-Oxyphenyl] äthan (A. 202, 134). II, 1039. C 57,5 — H 4,2 — O 38,3 — M. G. 710. C84H80O17 1) Anhydrid d. Eichengerbsäure. Ba (M. 1, 270; B. 14, 1826; Bl. [3] 19, 584). — III, 587. C 76,1 — H 6,0 — O 17,9 — M. G. 536.

1) Dibenzoat d. Diisoeugenol. Sm. 161° (B. 15, 2068; 24, 2874). — $C_{34}H_{32}O_6$ II, 1151. $C_{84}H_{82}O_7$ C'73,9 - H 5,8 - O 20,3 - M. G. 5521) Dibenzoylguajakonsäure. Sm. 81—83° (C. 1897 [1] 167). C 61.4 - H 4.8 - O 33.7 - M. G. 664. $\mathbf{C}_{34}\mathbf{H}_{32}\mathbf{O}_{14}$ 1) Verbindung (aus Hesperitin). Na, K (Soc. 73, 1035). C 87.2 - H 6.8 - N 6.0 - M. G. 468. $\mathbf{C}_{34}\mathbf{H}_{32}\mathbf{N}_{2}$ 1) 1,3-Di[Dibenzylamido] benzol. Sm. 80—81° (Soc. 55, 602). — IV, 573. 2) 1,4-Di[Dibenzylamido] benzol. Sm. 149° (Soc. 55, 600). — IV, 586. $\mathbf{C}_{34}\mathbf{H}_{32}\mathbf{N}_{4}$ C 82,2 — H 6,4 — N 11,3 — M. G. 496. $1)\ 2,5-\mathrm{Di}[4-\mathrm{Methylphenylamido}]-1,4-\mathrm{Di}[4-\mathrm{Methylphenylimido}]-1,4-\mathrm{Di}-1,$ hydrobenzol. Sm. 238° (B. 8, 1031; 20, 2480; A. 243, 286; 262, 249). TV. 1245.
C 77,8 — H 6,1 — N 16,0 — M. G. 524.

1) Verbindung (aus Carbodi-p-Tolylimid u. Phenylhydrazoncarbodiphenyl-1990 2 1 4 HCl. (3 + 4 HCl + 2 PtCl₄) (B. 21, 2277). $C_{34}H_{32}N_6$ IV, 1225. C 80.6 - H 6.7 - O 12.7 - M. G. 506. $\mathbf{C}_{34}\mathbf{H}_{34}\mathbf{O}_{4}$ 1) Dibenzoat d. $\beta\beta$ -Di[4-Oxyphenyl]oktan. Sm. 114° (J. r. 23, 505). **– II**, 1151. 2) Dibenzoat d. Dithymol. Sm. 209-210° (215°) (J. r. 14, 141; B. 23, 503). — II, *1151*. C 75,8 — H 6,3 — O 17,8 — M G 538. $C_{34}H_{34}O_6$ 1) Dibenzoylguajakharzsäure. Sm. 132—135° (131°) (M. 18, 718; C. 1897 [1] 167). C 86,8 — H 7,2 — N 6,0 — M. G. 470. $\mathbf{C_{34}H_{34}N_2}$

1) 1,3-Diphenyl-5,6-Di[4-Isopropylphenyl]-1,2-Dihydro-1,2-Diazin.

αα-Di[4-Dimethylamidophenyl]-α-[1-Methylphenylamido-P-Naphtyl] methan. Sm. 87°. (2HCl, PtCl₄), Pikrat (B. 22, 1893). — IV, 1214. C 80,3 — H 7,1 — O 12,6 — M. G. 508.

1) Tetramethyläther d. $\alpha \alpha \beta \beta$ -Tetra[?-Oxy-?-Methylphenyl]äthen. Sm.

2) Tetraäthyläther d. $\alpha \alpha \beta \beta$ -Tetra[4-Oxyphenyl]äthen. Sm. 120—121°

Sm. 162—163° (B. 26, 64; A. 289, 323). — IV, 786.

C 84,1 - H 7,2 - N 8,7 - M. G. 485.

195° (B. 28, 2875).

(B. 28, 2874).

3) Dimethylester d. Bis-Dihydrosantinsäure. Sm. 130,5-131° (G. 23 C84H86O4 [1] 60). — II, 2036. C 86,4 — H 7,6 — N 5,9 — M. G. 472.

 $\mathbf{C}_{34}\mathbf{H}_{36}\mathbf{N}_{2}$

1) $\alpha \beta$ -Di[4-Isopropylbenzylidenamido]- $\alpha \beta$ -Diphenyläthan. (B. 22, 2303). - IV, 979.2) 4,4'-Di[4-Isopropylbenzylidenamido]-3,3'-Dimethylbiphenyl. Sm.

152° (A. 258, 377). — IV, 982. C 85,4 — H 7,9 — O 6,7 — M. G. 478.

 $C_{34}H_{38}O_{2}$ 1) $\alpha\alpha$ -Di[3-Oxy-4-Isopropyl-1-Methylphenyl]- $\beta\beta$ -Diphenyläthan. Sm. 224° (Å. 279, 332). — II, 1008. C 80,0 — H 7,4 — O 12,6 — M. G. 510.

C₈₄H₃₈O₄

1) Tetraäthyläther d. $\alpha \alpha \beta \beta$ -Tetra[4-Oxyphenyl]äthan. Sm. 163–164° (B. 28, 2875).

 $\dot{\mathbf{C}}$ 59,5 — $\dot{\mathbf{H}}$ 5,5 — $\dot{\mathbf{O}}$ 35,0 — $\dot{\mathbf{M}}$. G. 686. C34H38O15 1) Socaloïn + $5 \text{H}_2\text{O}$ (C. 1898 [2] 118, 212). C 70,8 — H 6,9 — O 22,2 — M. G. 576. $C_{34}H_{40}O_{8}$

1) Dimethyläther d. Pinoresinotannol (M. 18, 498).

C 55.4 - H 5.4 - O 39.1 - M. G. 736. $C_{84}H_{40}O_{18}$

 Tetracetylfraxinusgerbsäure. Sm. oberh. 100° (M. 3, 752). — III, 682.
 C 80,9 — H 7,9 — N 11,1 — M. G. 504. $\mathbf{C_{84}H_{40}N_4}$

1) $\alpha \alpha \beta \beta$ -Tetra [4-Dimethylamidophenyl] äthen. Sm. 310-315° (B. 28, 2876). — IV, 1305. C 77,0 — H 7,9 — O 15,1 — M. G. 530.

 $C_{84}H_{42}O_5$ 1) Anhydrid d. Podocarpinsäure (A. 170, 278).

2) Diäthylester d. d-Dehydrosantonigensäureanhydrid (G. 25 [2] 293).

3) Verbindung (aus Podocarpinsäure) (A. 170, 275). — II, 1685. C 53,0 — H 5,4 — O 41,6 — M. G, 770.

 $\mathbf{C}_{84}\mathbf{H}_{42}\mathbf{O}_{20}$

 Heptaacetylamygdalinsäure (A. 154, 349). — II, 2108.
 C 80,6 — H 8,3 — N 11,1 — M. G. 506. $\mathbf{C}_{\mathbf{84}}\mathbf{H}_{42}\mathbf{N}_{\mathbf{4}}$

1) $\alpha \alpha \beta \dot{\beta}$ -Tetra[4-Dimethylamidophenyl] athan. Sm. 90°; Sd. 300°. (4Cl, 2PtCl₄), Pikrat (B. 13, 2199). — IV, 1304. C 78,3 — H 8,3 — N 13,4 — M. G. 521. $C_{34}H_{43}N_5$

1) Verbindung (aus α-Oxy-4,4'-Tetramethyldiamidodiphenylmethan). Sm.

185° (B. **27**, 1408). — Π , 1079. C 74,2 — H 8,4 — O 17,4 — M. G. 550. C34H46O6

1) Diäthylester d. d-Disantonigen Säure. Sm. 1830 (G. 25 [1] 509). — II, 2036. C 68,2 —

– H 7,7 — O 24,1 — M. G. 598. $C_{34}H_{46}O_{9}$

1) Crocetin (B. 17, 2231). — III, 602. C 64,8 — H 7,3 — O 27,9 — M. G. 630. C34H46O11

1) Crocetin (J. 1858, 475). — III, 579. C 49.6 - H 5.6 - O 44.8 - M. G. 822. $C_{34}H_{46}O_{23}$

Sm. 131—132° (A. 270, 79). — 1) Dekaacetat d. α-Glykoheptose. **I**, 1057.

C 83,6 - H 9,8 - O 6,5 - M. G. 488. $C_{34}H_{48}O_{2}$ 1) Benzoat d. Sitosterin. Sm. 145-145,5° (M. 18, 559). C 68,0 — H 8,0 — O 24,0 — M. G. 600.

C34H48O9 1) Bryonin, siehe $C_{48}H_{80}O_{19}$. — III, 573. C 69,6 — H 8,5 — O 21,8 — M. G. 586. $\mathbf{C}_{84}\mathbf{H}_{50}\mathbf{O}_{8}$

1) Pana-Resitannol (B. 28 [2] 1056).

C 85,7 - H 10,9 - O 3,4 - M. G. 476.C₃₄H₅₂O

1) Benzyläther d. Cholesterin. Sm. 78° (H. 15, 44). — II, 1072. C 82,9 — H 10,6 — O 6,5 — M. G. 492.

 $C_{84}H_{52}O_{2}$

C34H52O9

1) Benzoat d. Koprosterin. Sm. 114—115° (B. 29, 477; H. 22, 401). C 67,5 — H 8,6 — O 23,8 — M. G. 604.
1) Gratiosoleretin (J. 1858, 518). — III, 593. C 83,6 — H 10,6 — N 5,7 — M. G. 488.
1) 2,8-Diamyl-3,9-Dihexyl-4,10-Naphtisodiazin (Diamyldihexylphenanthylis). Sm. 50, 510, (0.10). Dick (B. 24, 1793). $\mathbf{C}_{84}\mathbf{H}_{52}\mathbf{N}_{2}$ throlin). Sm. 50-51°. (2HCl, PtCl₄ + 2H₂O), Pikrat (B. 24, 1731). -IV, 1019.

C₈₄H₅₄O₉ C 67.3 - H 8.9 - O 23.8 - M. G. 606.

1) Verbindung (aus Saponin) (Z. 1867, 633). — III, 610. C 63,9 — H 8,5 — O 27,6 — M. G. 638. $\mathbf{C}_{34}\mathbf{H}_{54}\mathbf{O}_{11}$ 1) Digitoxin, siehe auch $C_{31}H_{50}O_{10}$ (B. 31, 2457).

'C,4H,54O,14

C 59,5 — H 7,9 — O 32,6 — M. G. 686. 1) Tampiein. Sm. 130° (Z. 1870, 667). — III, 613. C 82,2 — H 11,3 — O 6,4 — M. G. 496.

C34H56O2

1) Acetat d. Alkohols $C_{99}H_{54}O$. Sm. 120—121° (Soc. 61, 918). — II, 1076. C 63,8 — H 8,7 — O 27,5 — M. G. 640. C34H56O11

1) Hydrogratiosoleretin (J. 1858, 518). — III, 593.

C 56,7 — H 7,8 — O 35,5 — M. G. 720. C34H56O16 1) Jalapin. Sm. oberh. 150° (A. 95, 129; 116, 289; J. r. 25, 137). — III, 594.

C84H56O21

111, 502.
2) Turpethin (A. 139, 42). — III, 614.
C 51,0 — H 7,0 — O 42,0 — M. G. 800.
1) Ericolin (J. 1852, 685; 1853, 573 Anm.; 1883, 1402). — III, 582.
C 55,1 — H 8,1 — O 36,8 — M. G. 740. C34H60O17

1) Tampicinsäure (Z. 1870, 667). — III, 613. C 54,0 — H 7,9 — O 38,1 — M. G. 756. C34H60O18

1) Jalapinsäure (früher C₆₈H₁₁₈O₃₅). Sm. 120°. Ba, Ba, (A. 95, 136; 116, 301; B. 27 [2] 736).

2) Turpethinsäure. Sm. 168°. Ba (A. 139, 46; C. 1895 [2] 790). — III, 614.

C34H62O9 - H 10,1 — O 23,5 — M. G. 614.

1) Anhydrid d. Oxyrocellsäure. Sm. 121° (J. pr. [2] 57, 260).

C34H62O11 $\mathbf{C}_{34}\mathbf{H}_{66}\mathbf{O}_{4}$

1) Annydria d. Oxyrocensaure. Sm. 121 (J. pr. [2] 51, 200). C 63,2 — H 9,6 — O 27,2 — M. G. 646.

1) Convallarin (J. 1858, 519). — III, 578. C 75,8 — H 12,2 — O 11,9 — M. G. 538.

1) Diacetat d. Coccerylalkohol. Sm. 48—50° (B. 20, 960). — I, 414. C 80,3 — H 13,4 — O 6,3 — M. G. 508. $\mathbf{C}_{34}\mathbf{H}_{68}\mathbf{O}_{2}$

1) Dicetylessigsäure. Sm. 69—70°. Ag (A. 206, 365). — I, 450. 2) Säure (aus Bienenwachs). Sm. 91° (J. r. 8, 96, 325; B. 9, 278, 279). 3) Cetylester d. Stearinsäure. Sm. 55—60° (J. 1858, 49). — I, 445.

4) Oktadekylester d. Palmitinsäure. Sm. 59° (B. 16, 3023). — I, 443. 5) Geomyriein. Sm. 80—83° (J. 1852, 648). — I, 689. C 82,6 — H 14,2 — O 3,2 — M. G. 494.

C34H70O

1) Verbindung (aus Hummelwachs). Sm. 75° (H. 26, 58).

C24-Gruppe mit drei Elementen.

C₃₄H₁₆O₅Br₆ 1) Verbindung (aus 3,4,5-Trioxyphenyl-4-Oxy-1-Naphtylketon). Sm. 293° (A. 269, 316). — III, 256.

 $\overset{\bullet}{\text{C}}$ 74,5 - H 3,6 - O 11,7 - N 10,2 - M. G. 548. C₃₄H₂₀O₄N₄

1) Di[2-Oxy-1-Naphtylazo]phenanthrenchinon (B. 26, 850). — IV, 1481. 2) Di 4-Oxy-1-Naphtylazo phenanthrenchinon (B. 26, 850). — IV, 1481. $C_{34}H_{20}O_{12}S_3$ 1) Melinointrisulfonsäure. $K_3 + xH_2O$, $Ca_3 + xH_2O$, Ba_3 (B. 16, 2836;

17, 500). — II, 1009. C 74,7 — H 4,1 — O 5,8 — N 15,4 — M. G. 546. $\mathbf{C}_{34}\mathbf{H}_{22}\mathbf{O}_{2}\mathbf{N}_{6}$

1) Di[2-Amido-1-Naphtylazo]phenanthrenchinon (B. 26, 850). —

IV, 1481. C 74,2 — H 4,0 — O 11,6 — N 10,2 — M. G. 550. $\mathbf{C}_{34}\mathbf{H}_{22}\mathbf{O}_4\mathbf{N}_4$

1) Verbindung (aus d. Verb. $C_{34}H_{26}O_4N_4$). Sm. 260—265° (B. 15, 1972). - III, 394.

1) Dibenzoat d. Di[2-Oxynaphtyl]-?-Sulfid. Sm. 208° (B. 27, 2545). — $C_{34}H_{22}O_4S$

C34H22O4S2 1) Dibenzoat d. Di[2-Oxynaphtyl]-?-Disulfid. Sm. 1870 (B. 23, 3367). - II, 986.

1) Dibenzoat d. Di[1-Oxynaphtyl]-?-Trisulfid. Sm. 194° (B. 23, 3369). $C_{34}H_{22}O_4S_3$

C 70,1 - H 3,8 - O 16,5 - N 9,6 - M. G. 582 $C_{34}H_{22}O_6N_4$

1) Verbindung (aus 1,2-Naphtochinon-4-Toluid) (B. 15, 1971). — III, 394. C 71.6 — H 3,8 — O 19,7 — N 4,9 — M. G. 570. $\mathbf{C}_{34}\mathbf{H}_{22}\mathbf{O}_{7}\mathbf{N}_{2}$

1) Fluoresceinbisphenylcarbamat. Sm. 195° (B. **26** [2] 232). — II, 2061. C 67,8 — H 3,6 — O 23,9 — N 4,6 — M. G. 602. $\mathbf{C}_{84}\mathbf{H}_{22}\mathbf{O}_{9}\mathbf{N}_{2}$ 1) Farbstoff (aus Fluoresceïnchlorid u. 5-Amido-2-Oxybenzol-1-Carbonsäure)

(B. 32, 83).

C 73,3 - H 4,1 - O 20,1 - N 2,5 - M. G. 557. C34H23O7N

1) Phenylamid d. 3,4,5-Tribenzoxylbenzol-l-Carbonsäure. Sm. 1810 (Bl. [3] 9, 849). — II, 1923.

 \dot{C} 77,8 — H 4,6 — O 12,2 — N 5,3 — M. G. 524. $\mathbf{C}_{34}\mathbf{H}_{24}\mathbf{O}_{4}\mathbf{N}_{2}$

1) Aethylenimid d. $\alpha\beta$ -Diphenyläthen- $\alpha\beta$ -Dicarbonsäure (Ae. d. Diphenylmaleïnsäure). Sm. noch nicht bei 270° (B. **26**, 2479). — II, 1897. C 75,6 — H 4,4 — O 14,8 — N 5,2 — M. G. 540. $\mathbf{C}_{34}\mathbf{H}_{24}\mathbf{O}_5\mathbf{N}_2$

1) 2,6-Di[Dibenzoylamido]-1-Oxybenzol. Sm. 182° (A. 205, 83).

II, 1178. C 73,4 — H 4,3 — O 17,3 — N 5,0 — M. G. 556. 1) Phenolphtaleïnbisphenylcarbamat. Sm. 135° (B. 26 [2] 232).— II, 1983.

C34H24O8S2 1) Verbindung (aus Rubbadin) (B. 25, 1891). — II, 658. C 78,0 - H 4,8 - 0.9,2 - N 8,0 - M. G. 523.C34H25O8N8

C34H24O6N2

 $C_{34}H_{28}O_2N_2$

1) Diphenyltribenzoylguanidin. Sm. 185° (B. 8, 383). — II, 1173.

2) 1-Naphtyloxydhydrat d. 8-[1-Naphtyl] amido-2-Methyl-5.10-Naphtdiazin-7-Carbonsäure. Chlorid, Bromid, Jodid, Nitrat, Sulfat (B. 31, 1787). — IV, *1186*. C 73,5 — H 4,5 —

- O 14,4 - N 7,6 - M. G. 555. $C_{84}H_{25}O_5N_3$

1) Benzoat d. 2,4,6-Tri[Benzoylamido]-1-Oxybenzol. Sm. 256º (A. 254, 257). — II, 1178.

C 74,2 - H 4,7 - O 5,8 - N 15,3 - M. G. 550. $C_{34}H_{26}O_2N_6$

1) β -Naphtolazo-p-Benzolazo-m-Xylolazo- β -Naphtol (Soc. 43, 439). —

C34H36O4N4

TV, 1438. C 73,6 — H 4,7 — O 11,5 — N 10,1 — M. G. 554. 1) Dibenzoat d. 4,4'-Bi[5-Oxy-3-Methyl-1-Phenylpyrazol]. Sm. 194 bis 196° (A. 266, 130; B. 29, 1660, 2170). — IV, 1263.

Verbindung (aus Essigsaurealdehyd u. 1-Phenylazo-2, 4-Dioxynaphtalin). Sm. 258° u. Zers. (B. 21, 2205). — IV, 1449.
 Verbindung (aus d. Verb. C₃₄H₂₂O₃N₄) (B. 15, 1971). — III, 394. C 75,3 — H 4,8 — O 14,8 — N 5,1 — M. G. 542.
 Benzylidencinchoxinsäure. — + 2 CHCl₃, Ca + 4 H₂O, Ba + 3 H₂O, Ag

 $C_{34}H_{26}O_5N_2$

(A. 270, 341). — IV, 347. C 80,1 — H 5,3 — O 6,3 — N 8,2 — M. G. 509. $C_{34}H_{27}O_2N_3$

1) 1,1-Dinaphtylamid d. 1-Naphtylamidobernsteinsäure. Sm. 276 bis 277° u. Zers. (B. 25, 968). — II, 614.

2) 2,2-Dinaphtylamid d. 2-Naphtylamidobernsteinsäure. Sm. 250° u.

Zers. (B. 25, 971). — II, 623. 3) 1,1-Dinaphtylamid d. 1-Naphtylimidodiessigsäure. Sm. 200—202°

(B. **23**, 2004). — II, 613. C 69,7 — H 4,6 — O 13,7 — N 12,0 — M. G. 585. C34H27O5N5

1) Di[4-Nitrobenzyliden]rosanilin. Sm. 235-240° (B. 28, 208). — III, 16.

C 87.6 - H 6.0 - O 3.4 - N 3.0 - M. G. 466. $C_{34}H_{28}ON_2$

1) 2-Oxy-1-Phenylamido-2,3,4,5-Tetraphenyl-2,3-Dihydropyrrol. Sm. 201° (A. 269, 120). — IV, 787.

2) Verbindung (aus Dibenzoylstilben u. Phenylhydrazin). Sm. bei 1960 u. Zers. (A. 269, 126). — IV, 787. C 82,3 — H 5,6 — O 6,4 — N 5,6 — M. G. 496.

1) 1,3-Di[Benzoyl-4-Methylphenylamido] benzol. Sm. 1620 (J. pr. [2]

33, 222). — IV, 573.
2) 1,4-Di[Benzoyl-2-Methylphenylamido] benzol. Sm. 235° (J. pr. [2]

34, 68). — IV, 594. 3) 1,4-Di[Benzoyl-4-Methylphenylamido]benzol. Sm. 222° (J. pr. [2]

33, 233). — IV, 594. C 69,8 — H 4,8 — O 10,9 — N 14,4 — M. G. 584.

C34H28O4N6 1) Base (aus 1,4-Phtalyldiamidobenzol). HCl, (2 HCl, PtCl₄) (B. 10, 1164). - IV, 505. C 75,7 - H 5,4 - O 5,9 - N 13,0 - M. G. 539.

C84H29O2N5 1) Diacetylanilinschwarz (B. 11, 1096). — III, 676. C 71,0 — H 5,0 — O 16,7 — N 7,3 — M. G. 575. $\mathbf{C}_{34}\mathbf{H}_{29}\mathbf{O}_{6}\mathbf{N}_{3}$

1) Glauconinsäure. Na (B. 31, 691). — IV, 1220. C 75,8 — H 5,6 — O 3,0 — N 15,6 — M. G. 538.

C₈₄H₃₀ON₆ 1) α-Acetyl-α-Phenyl-β-Di[Phenylimidophenylamidomethyl] hydrazin. Sm. 274° (B. 26, 1182). — IV, 1224.

 $C_{84}H_{30}O_6N_4$ C 69,1 - H 5,1 - O 16,3 - N 9,5 - M. G. 590.1) Tetracetyl- $\alpha\beta$ -Di[Phenylhydrazon]- $\alpha\beta$ -Di[2-Oxyphenyl]äthan. Sm. 244° (A. **305**, 185). C 63,9 — H 4,7 — $\begin{array}{c} \mathbf{C_{84}H_{30}O_{9}N_{4}} & \begin{array}{c} \mathbf{C_{63,9}-H} \ 4.7 \ - \ 0 \ 22,6 \ - \ N \ 8,8 \ - \ M. \ G. \ 638. \\ 1) \ \mathbf{Phenylcarbamidmetasaccharin.} & \mathbf{Sm.} \ 210^{\circ} \ (B. \ 18, \ 2608). \ - \ \mathbf{II}, \ 372. \\ 2) \ \mathbf{Phenylcarbamidisosaccharin.} & \mathbf{Sm.} \ 181^{\circ} \ (B. \ 18, \ 2609). \ - \ \mathbf{II}, \ 373. \\ \mathbf{C_{34}H_{30}O_{14}N_{2}} & \mathbf{C} \ 59,2 \ - \ \mathbf{H} \ 4,3 \ - \ 0 \ 32,5 \ - \ \mathbf{N} \ 4,0 \ - \ M. \ G. \ 690. \\ 1) \ \mathbf{Verbindung} \ (aus \ Papaverinsaure). & \mathbf{Sm.} \ 192-194^{\circ}. \ 2 \ \mathbf{HCl}, \ (4 \ \mathbf{HCl}, \mathbf{PtCl_{4}}). \end{array}$ $+8H_2O$), Ba, Ag₂ (\dot{M} . 17, 500). C 70,7 - H 5,4 - O 16,6 - N 7,3 - M. G. 577. $C_{34}H_{31}O_6N_3$ 1) Hydroglauconinsäure. Sm. 192° u. Zers. (B. 31. 689). — IV, 1218. C 76,7 — H 6,0 — O 12,0 — N 5,3 — M. G. 532.
1) Diäthylester d. 1,3-Di[2-Methyl-5-Phenylpyrryl]benzol-1°,3°-Dicarbonsäure. Sm. 185° (B. 19, 3161). — IV, 1093. $C_{34}H_{32}O_4N_2$ $\begin{array}{c} \textbf{C}_{34}\textbf{H}_{32}\textbf{O}_{4}\textbf{Cl}_{4} \ 1) \\ \textbf{Tetra\"{a}} \textbf{Thyl\"{a}} \textbf{ther} \ \ \textbf{d.} \ \ \alpha\alpha\beta\beta-\textbf{Tetra} \textbf{[P-Chlor-P-Oxyphenyl]\"{a}} \textbf{then.} \ \ \textbf{Sm.} \\ 258-259^{\circ} \ (B. \ \textbf{28}, \ 2876). \\ \textbf{C}_{34}\textbf{H}_{33}\textbf{O}_{3}\textbf{N}_{3} \ \ \ \textbf{C} \ 76.8 \ - \ \textbf{H} \ 6.2 \ - \ 0 \ 9.0 \ - \ \textbf{N} \ 7.9 \ - \ \textbf{M.} \ \textbf{G.} \ 531. \end{array}$ 1) Aethylisocyminyltribenzoylguanidin. Sm. 165° (A. 221, 175). II, 1173. $C_{34}H_{34}O_2N_2$ C 81,3 - H 6,8 - O 6,3 - N 5,6 - M. G. 5021) Di[Diphenylamid] d. Camphersäure. Sm. 252° (Bl. [3] 15, 985). C 74,7 — H 6,2 — O 8,8 — N 10,3 — M. G. 546. $\mathbf{C}_{34}\mathbf{H}_{34}\mathbf{O}_{3}\mathbf{N}_{4}$ 1) Diäthylester d. Diphenylhydrazondiphenacylacetessigsäure. Sm. 88-92° (B. **22**, 3227). — **IV**, 719. C 72,6 — H 6,0 — O 11,4 — N 10,0 — M. G. 562. $\mathbf{C}_{34}\mathbf{H}_{34}\mathbf{O}_{4}\mathbf{N}_{4}$ 1) $\alpha \alpha \beta \beta$ -Tetra [4-Acetylamidophenyl] äthan. Sm. 336 – 337° (A. 296, 2) Tetrabenzoyltriäthylentetramin. Sm. 228-229° (B. 23, 3717). -II. 1169. 3) Benzidindifuralanilin. 2HCl (A. 239, 357). - IV, 967. 4) Tetra [Methylphenylamid] d. Aethan - $\alpha \alpha \beta \beta$ - Tetracarbonsäure. Sm. 231° (B. 31, 1827). C 70,6 - H 5,9 - O 13,8 - N 9,7 - M. G. 578. $C_{34}H_{34}O_5N_4$ 1) Hämatoporphyrin (B. 25 [2] 867). 1) Victoriablau 4 R. 2 + PtCl, (B. 22, 1891). — IV, 1214. C 81,4 — H 7,0 — O 3,2 — N 8,4 — M. G. 501. $\mathbf{C}_{34}\mathbf{H}_{34}\mathbf{N}_{3}\mathbf{C}\mathbf{1}$ C34H35ON3 1) α -Oxy- $\alpha\alpha$ -Di[4-Dimethylamidophenyl]- α -[1-Methylphenylamido-P-Naphtyl]methan. Sm. 77°. Pikrat (B. 22, 1892). — II, 1095. 2) α-[4-Benzoylamidophenyl]-αα-Di[2-Methyl-1,2,3,4-Tetrahydro-chinolyl-6-]methan (B. 24, 1718). — IV, 1212.

C 59,6 — H 5,1 — O 21,0 — N 14,3 — M. G. 685.

Tetraspartidtrianilid. Sm. 245—260° (A. 303, 212).

C 72,3 — H 6,4 — O 11,3 — N 9,9 — M. G. 564. $C_{34}H_{35}O_9N_7$ $\mathbf{C}_{34}\mathbf{H}_{36}\mathbf{O}_4\mathbf{N}_4$ 1) Acetylderivat d. Base C₂₈H₃₀ON₄ (aus Benzylenimid). Sm. 125° (B. 28, 1652). C 71,8 — H 6,3 — O 16,9 — N 4,9 — M. G. 568. $\mathbf{C}_{34}\mathbf{H}_{36}\mathbf{O_6N_2}$ 1) Pseudomorphin + $3H_2O$ (Dehydromorphin). Sm. 245° u. Zers. HCl + $6H_2O$, $2HCl + 2(4)H_2O$, $(2HCl, PtCl_4 + 8H_2O)$, $2HJ + 2H_2O$, $H_2SO_4 + 6H_2O$, $H_2Cr_2O_7 + 6H_2O$, Oxalat + $6H_2O$, Ditartrat + $12H_2O$ (A. 141, 87; 176, 195; 222, 234; 234, 255; 235, 231; 294, 206, 214; A. Spl. 8, 267; B. 13, 86, 91; 19, 1761; Bl. 4, 176; J. pr. [2] 33, 560; Fr. 24, 642) — III. 970 642). — III, 910. C34H36O9N2 C 66,2 - H 5,8 - O 23,4 - N 4,5 - M. G. 616. $\begin{array}{c} \textbf{C}_{34}\textbf{H}_{36}\textbf{O}_{9}\textbf{N}_{2} & \textbf{C}_{50,2} = \textbf{H}_{5,8} = \textbf{U}_{25,4} = \textbf{N}_{4,5} = \textbf{M}_{50,6} & \textbf{G}_{50,6} \\ 1) \text{ Sekisanin. Sm. bei } 200^{\circ}. & (2\,\text{HCl}, \text{PtCl}_{4}) & (\textit{C}_{50,6} = \textbf{11}_{50,6}) \\ 2) \text{ Tetracetylhelicinanilidtoluid } (\textit{A}_{50,6} = \textbf{11}_{50,6}) & \textbf{H}_{50,6} & \textbf{H}_{50,6} \\ \textbf{C}_{34}\textbf{H}_{37}\textbf{O}_{5}\textbf{N}_{4} & \textbf{1}_{50,6} & \textbf{Urofuscohämatin} + 8\,\textbf{H}_{2}\textbf{O}_{70,6} & \textbf{G}_{70,6} & \textbf{G}_{70,6} \\ \textbf{C}_{34}\textbf{H}_{38}\textbf{O}_{9}\textbf{N}_{10} & \textbf{C}_{50,6} & \textbf{H}_{50,6} & \textbf{G}_{70,6} \\ \textbf{C}_{34}\textbf{H}_{38}\textbf{O}_{9}\textbf{N}_{10} & \textbf{C}_{50,6} & \textbf{H}_{50,6} & \textbf{G}_{70,6} \\ \textbf{C}_{34}\textbf{H}_{38}\textbf{O}_{9}\textbf{N}_{10} & \textbf{C}_{50,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} \\ \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} \\ \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} \\ \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} \\ \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} \\ \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} \\ \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} \\ \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} \\ \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} \\ \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} \\ \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} \\ \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} \\ \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} \\ \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} \\ \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} \\ \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} \\ \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} \\ \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} \\ \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} \\ \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} \\ \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} \\ \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} \\ \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} \\ \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} & \textbf{C}_{10,6} \\ \textbf{C}_{10,6} & \textbf{C}_{$

 $\mathbf{C}_{34}^{\bullet}\mathbf{H}_{40}\mathbf{O}_{25}\mathbf{N}_{10}$ C 41,3 — H 4,0 — U 40,5 — N 12,2 ... 1) Verbindung (aus Harnstoff) (Bl. 38, 68; B. 30, 2458). — I, 1384.

C, H, O, N $C_{34}H_{45}O_{10}N$

 $C_{34}H_{47}O_{11}N$

C 54,3 — H 5,4 — O 38,3 — N 1,9 — M. G. 751.

1) Heptacetylamygdalin (A. 154, 339). — III, 570.
C 65,1 — H 7,2 — O 25,5 — N 2,2 — M. G. 627.

1) Pyropseudoaconitin. HJ (80c. 71, 358).
C 63,2 — H 7,3 — O 27,3 — N 2,2 — M. G. 645.

1) Aconitin (Acetylbenzoylaconin). Sm. 193—194. HCl + 3(3½)H₂O, (HCl, AuCl₃), HBr + 2½, H₂O, HJ + 3½, H₂O, HNO₃ + 5½, H₂O, 2 + 3 HNO₃.
Lit. bedeutend. — III. 772. Lit. bedeutend. - III, 772.

2) Pikropseudoaconitin + H_2O (Veratrylpseudoaconin). Sm. 210° (199°). (HCl, AuCl₃), HBr + $3\,H_2O$, HNO₃ (B. 29, 855; Soc. 31, 356). — III, 775. C 66,7 — H 7,8 — O 20,9 — N 4,6 — M. G. 612. 1) Lappaconitin. Sm. 205,1° (C. 1895 [1] 1184). C 81,3 — H 9,9 — O 3,2 — N 5,6 — M. G. 502. 1) $\beta\beta$ -Diphenylhydrazid d. Behenolsäure. Sm. 104—105° (B. 25, 2670).

C₃₄H₄₈O₈N₂

C34H50ON2

TV, 667. C 68,7 — H 8,8 — O 21,2 — N 2,3 — M. G. 603. $C_{34}H_{53}O_8N$

1) Cevadillin. (HCl, AuCl₃), (HJ, HgJ₃) (Soc. 33, 338). — III, 950. 1) 4,4'-Biphenylendi [uns-Diisoamylthioharnstoff]. α-Modif. Sm. 1620. C34H54N4S2

β-Modif. Sm. 123° (B. 27, 1560). — IV, 965. C 70,8 — H 10,4 — O 13,9 — N 4,9 — M. G. 576. Samandarin. 2HCl (Z. 1867, 62). — III, 931. $C_{34}H_{60}O_5N_2$

C₃₄-Gruppe mit vier Elementen.

1) Verbindung (aus 1,4-Benzochinondiamidobenzoësäure) (Bl. [3] 13, 749). $\mathbf{C}_{34}\mathbf{H}_{23}\mathbf{O}_{8}\mathbf{N}_{2}\mathbf{C}\mathbf{1}$ **– III**, 343.

1) Chlor-1-Naphtylat d. 8-[1-Naphtyl]amido-2-Methyl-5,10-Napht- $\mathbf{C}_{34}\mathbf{H}_{24}\mathbf{O}_{2}\mathbf{N}_{3}\mathbf{C}\mathbf{1}$ diazin-7-Carbonsäure (B. 31, 1787). — IV, 1186.

 Brom-1-Naphtylat d. 8-[1-Naphtyl]amido-2-Methyl-5,10-Napht-diazin-7-Carbonsäure (B. 31, 1788). — IV, 1186. $\mathbf{C}_{34}\mathbf{H}_{24}\mathbf{O}_{2}\mathbf{N}_{3}\mathbf{Br}$

1) Di[4-(1-Oxynaphtyl)azobenzyl]sulfid. Sm. 1980 u. Zers. (B. 28, $C_{34}H_{26}O_2N_4S$ 1340). **— IV**, *1436*.

2) Di[4-(2-Oxynaphtyl)azobenzyl]sulfid. Sm. 237° (B. 28, 1340). — IV. 1436.

1) 4-[Chlor-4-Aethoxylphenylat] d. 6-Oxy-2,3-Diphenyl-1,4-Napht- $\mathbf{C}_{34}\mathbf{H}_{29}\mathbf{O}_{2}\mathbf{N}_{2}\mathbf{C}\mathbf{1}$

 $\mathbf{C}_{34}\mathbf{H}_{31}\mathbf{O}_{7}\mathbf{N}_{4}\mathbf{F}\mathbf{e}$

 $\mathbf{C}_{34}\mathbf{H}_{36}\mathbf{O}_{4}\mathbf{N}_{2}\mathbf{Cl}_{2}$ $\mathbf{C}_{34}\mathbf{H}_{37}\mathbf{O}_5\mathbf{N}_2\mathbf{C}\mathbf{I}$

1) 4-[Chlor-4-Aethoxylphenylat] d. 6-Oxy-2,3-Diphenyisodiazin-6-Aethyläther (B. 27, 2361). — IV, 1093.

1) Urorubrohämatin + 8H₂O (B. 7, 1171). — III, 667.

1) Base (aus Morphin) (Soc. 26, 215). — III, 901.

1) Base (aus Morphin) (Soc. 26, 215). — III, 901.

1) Hämochromogen (B. 25 [2] 867).

1) Dipropyläther d. Verb. C₂₈H₂₆O₂N₇Cl (B. 31, 1412).

1) Dipropyläther d. Verb. C₂₈H₂₆O₂N₇Br (B. 31, 1413).

1) Base (aus Morphin) (Soc. 26, 215). — III. 901. $\mathbf{C}_{34}\mathbf{H}_{37}\mathbf{O}_{5}\mathbf{N}_{3}\mathbf{F}e \\ \mathbf{C}_{34}\mathbf{H}_{38}\mathbf{O}_{2}\mathbf{N}_{7}\mathbf{C}\mathbf{l}$ $\mathbf{C}_{34}^{\circ\dagger}\mathbf{H}_{38}^{\circ\circ}\mathbf{O}_{2}^{\bullet}\mathbf{N}_{7}^{\bullet}\mathbf{Br}$

1) Base (aus Morphin) (Soc. 26, 215). — III, 901.

1) Verbindung (aus Morphin). 2 HJ (Soc. 25, 151, 504). — III, 901.

1) Tribromlappaconitin. Sm. 98° (C. 1895 [1] 1184). $\mathbf{C}_{34}\mathbf{H}_{39}\mathbf{O}_{6}\mathbf{N}_{2}\mathbf{C}1$ $\mathbf{C}_{34}\mathbf{H}_{41}\mathbf{O}_{5}\mathbf{N}_{2}\mathbf{J}$ $\mathbf{C_{34}H_{45}O_8N_2Br_3}$

1) Bromäthylat d. Veratrin (Am. 20, 371). C₈₄H₅₄O₆NBr

C₃₅-Gruppe mit einem Element.

C35 H60

C,5H,72

C 87,5 — H 12,5 — M. G. 480.
1) Nicen. Sm. 182—183° (B. 28 [2] 236).
C 85,4 — H 14,6 — M. G. 492.
1) norm. Pentatriakontan. Sm. 74,7°; Sd. 331°₁₅ (B. 15, 1715). — I, 107.

C₃₅-Gruppe mit zwei Elementen.

C 73.9 - H 3.5 - O 22.5 - M. G. 568.C35H20O8 1) Tribenzoat d. 1,2,3-Trioxy-9,10-Anthrachinon. Sm. 2070 (M. 18, 298).

2) Tribenzoat d. 1,2,7-Trioxy-9,10-Anthrachinon. Sm. 183-185° (J. 1873, 452). — III, 436.

 $\mathbf{C}_{35}\mathbf{H}_{56}\mathbf{O}_4$

C35 H56 O14

C 73,7 — H 3,9 — O 22,4 — M. G. 570.

1) α,2-Lakton d. 2-Oxy-4,2',4'-Tribenzoxyldiphenylmethan-α-Carbonsäure. Sm. 165° (Soc. 71, 1088).

C 71,7 — H 3,7 — O 24,6 — M. G. 586. C₈₅H₂₂O₈ $\mathbf{C}_{35}\mathbf{H}_{22}\mathbf{O}_{9}$ 1) Tribenzoylphlobaphen (A. 202, 277). — III, 588. C 91,3 — H 5,2 — O 3,5 — M. G. 460. $\mathbf{C}_{35}\mathbf{H}_{24}\mathbf{O}$ 1) Verbindung (aus Phenanthrenchinon u. Benzaldehyd). Sm. 329,5° (Soc. 37, 661). — III, 446. C 82,6 — H 4,7 — O 12,6 — M. G. 508. $\mathbf{C}_{35}\mathbf{H}_{24}\mathbf{O}_{4}$ 1) Dibenzoat d. Di[2-Oxynaphtyl] methan. Sm. 158-159° (B. 25, 3480). II, 1152. C 71,4 - H 4,1 - O 24,5 - M. G. 588.C₃₅H₂₄O₉ Dibenzoat d. Katechuretin? (Bl. 4, 8). — III, 686.
 Tribenzoat d. Baptigenin. Sm. 208° (C. 1897 [2] 430). C 84,0 — H 4,8 — N 11,2 — M. G. 500. $\mathbf{C}_{35}\mathbf{H}_{24}\mathbf{N}_{4}$ 1) Base (aus 2,3,4,5-Tetraamido-1-Methylbenzolsulfat u. Benzil). Sm. 222 bis 225° (B. 23, 3218). — IV, 1306. C 91,5 — H 5,4 — N 3,0 — M. G. 459. C₃₅H₂₅N Pentaphenylpyridin. Sm. 239-240° (B. 26, 440). - IV, 478.
 C 88,6 - H 5,5 - N 5,9 - M. G. 474. $\mathbf{C}_{35}\mathbf{H}_{26}\mathbf{N}_2$ 1) 1,1'-Benzylidendi[2-Phenylindol]. Sm. 262—263° (B. 21, 1074). **IV**, 413. C 87,5 — H 5,8 − O 6,7 — M. G. 480. $\mathbf{C}_{85}\mathbf{H}_{28}\mathbf{O}_{2}$ 1) αε-Diketo-αβγδε-Pentaphenylpentan (Benzamaron). Sm. 217—218° (Z. 1871, 127; B. 21, 1356, 2935; 26, 437, 444). — III, 313. 2) Isobenzamaron. Sm. 179—180° (B. 26, 437). — III, 313. C 82,0 — H 5,5 — O 12,5 — M. G. 512. $C_{85}H_{28}O_4$ 1) Dibenzoat d. ?-Dioxy-?-Dimethyltriphenylmethan. Sm. 91,50 (A. **257**, 72). — II, 1152. C 67,3 — H 4,5 — O 28,2 — M. G. 624. C₃₅H₂₈O₁₁ 1) Dibenzoat d. Katechin (Bl. 4, 6). — III, 686. C 58,2 — H 4,1 — O 37,7 — M. G. 722. 1) Acetylderivat d. Podophylloquercetin. Sm. 180—182° (B. 24 [2] $\mathbf{C}_{35}\mathbf{H}_{30}\mathbf{O}_{17}$ 1) Acceptate Avair at a Pottophylioquerecent Sin. 160 162 (B. 22 12) 646). — III, 645. (C 87,9 — H 6,3 — N 5,8 — M. G. 478.

1) Dibenzylamarin. Sm. 139—140°. HCl, (2HCl, PtCl₄ + 2H₂O), HJ, (HJ,J₂) (B. 13, 1420; 15, 2329; 18, 1853). — III, 24. (C 63,4 — H 5,1 — O 31,4 — M. G. 662. $\mathbf{C}_{35}\mathbf{H}_{30}\mathbf{N}_{2}$ C35H84O18 1) Hexacetat d. Verb. $C_{23}H_{24}O_8$ (aus 3,5-Dioxy-1-Methylbenzol oder $C_{22}H_{20}O_8$). Sm. 185° (Am. 9, 135; Soc. 73, 401). — Π , 962. C 57,9 — H 4,7 — O 37,4 — M. G. 726. C35H34O17 1) Rubrophlobaphen (Z. 1870, 180). — III, 689. C35H34N4 C 82,3 - H 6,7 - N 11,0 - M. G. 5101) ?-Di[4-Methylphenylamido]-1,4-Di[4-Methylphenylimido]-2-Methyl-1) P-Dip-Internylphenylamido]-1,4-Dip-Internylphenylamido]-2-Internyl-1,4-Dihydrobenzol? (B. 17, 82). — IV, 1246.
C 80,0 — H 6,7 — N 13,3 — M. G. 525.
1) Toluidinschwarz (B. 11, 1097). — III, 676.
C 88,4 — H 8,6 — N 2,9 — M. G. 475.
1) P-Tri[4-Isopropylbenzyl]pyridin. Sm. 299—302° u. Zers. (A. 280, 70). $C_{85}H_{35}N_{5}$ $\mathbf{C}_{35}\mathbf{H}_{41}\mathbf{N}$ — IV, 477. C 85,7 — H 8,6 — N 5,7 — M. G. 490. $\mathbf{C}_{35}\mathbf{H}_{42}\mathbf{N}_{2}$ 1) Benzyliden-3,5-Diisopropylindol. Sm. 162-165° u. Zers. (B. 21, 3435). · IV, 234. C 83.3 - H 10.3 - O 6.3 - M. G. 504. $\mathbf{C}_{35}\mathbf{H}_{52}\mathbf{O}_{2}$ Benzoat d. Chironol. Sm. 186° (B. 28 [2] 1056).
 Benzoat d. Homocholesterin. Sm. 246° u. Zers. (G. 19, 211). — II, 1144. C 85 H 52 O6 C 73,9 — H 9,2 — O 16,9 — M. G. 568. 1) Verbindung (aus Lärchenschwammharz) (J. 1875, 862). — III, 560. C 82,7 — H 11,0 — O 6,3 — M. G. 508.
1) Echiretin. Sm. 52° (A. 178, 73). — III, 630. C 77,8 — H 10,4 — O 11,8 — M. G. 540. $C_{35}H_{56}O_{2}$

1) Elemisäure. Sm. 215°. K + 18H, 0, Ag (J. 1878, 983). — II, 1878. C 60,0 — H 8,0 — O 32,0 — M. G. 700.

1) Digitalin (oder C₅H₈O₂) (B. 31, 2461).

- C 64,2 H 8,9 O 26,9 M. G. 654.C35H58O11
- 1) neutr. Pentaäthylester d. Chlolecamphersäure (B. 19, 1525). I, 727. C 59,9 — H 8,2 — O 31,9 — M. G. 702.

 1) Perseïtheptabutyrat (A. ch. [6] 19, 13). — I, 424. C 42,4 — H 5,9 — O 51,7 — M. G. 990. C35H58O14

 $\mathbf{C}_{35}\mathbf{H}_{58}\mathbf{O}_{32}$

1) Arabinose (Soc. 45, 54). — I, 1101.

1) Verbindung (aus Asphalt). Sd. 225°. — III, 565. C 76,1 — H 12,3 — O 11,6 — M. G. 552. C₃₅H₅₈S C35H68O4

1) Tritriakontan-q q-Dicarbonsäure (Dicetylmalonsäure). Sm. 86-87°. Ag (A. 206, 364). — I, 691. C 73,9 — H 12,0 — O 14,1 — M. G. 568. 1) Glycerindipalmitin. Sm. 59° (61°) (A. ch. [3] 41, 240; Am. 6, 226). —

 $C_{35}H_{68}O_5$

I. 444. \vec{C} 83,0 — H 13,8 — O 3,2 — M. G. 506.

 $C_{35}H_{70}O$

1) Stearon. Sm. 87,80 (88,40) (J. 1855, 514; B. 15, 1715; Soc. 57, 538). — I, 1006. C 80,5 - H 13,4 - O 6,1 - M. G. 522.

C35H70O2 1) Isoamylester d. Melissinsäure $C_{30}H_{60}O_2$. Sm. 69° (A. 183, 356). —

C₂₅-Gruppe mit drei Elementen.

C 68.5 - H 3.1 - O 26.1 - N 2.3 - M. G. 613. $\mathbf{C}_{35}\mathbf{H}_{19}\mathbf{O}_{10}\mathbf{N}$

1) Tribenzoat d. P-Nitro-1, 2, 3-Trioxy-9, 10-Anthrachinon. Sm. 2090

(M. 18, 299). C 72,2 — H 3,8 — O 19,2 — N 4,8 — M. G. 582. $\mathbf{C}_{35}\mathbf{H}_{22}\mathbf{O}_{7}\mathbf{N}_{2}$

1) 1,5-Dibenzoat d. 1-Benzoylhydroxylamido-5-Hydroxylamido-9,10-

 $\mathbf{C}_{35}\mathbf{H}_{24}\mathbf{ON}_{4}$

 $\mathbf{C}_{35}\mathbf{H}_{26}\mathbf{ON}_{2}$

Anthrachinon. Sm. 228° (B. 29, 2936).
C 81,4 — H 4,6 — O 3,1 — N 10,9 — M. G. 516.

1) Verbindung (aus Benzil). Sm. 242° (B. 25, 283). — III, 285.
C 85,7 — H 5,3 — O 3,3 — N 5,7 — M. G. 490.
1) 2-Benzoyl-1,3,4,6-Tetraphenyl-1,2-Dihydro-1,2-Diazin. Sm. 139 bis 140° (A. 289, 328). — IV, 1082. C 83,0 — H 5,1 — O 6,3 — N 5,5 — M. G. 506.

 $C_{35}H_{26}O_2N_2$

 $\mathbf{C}_{35}\mathbf{H}_{26}\mathbf{O}_{3}\mathbf{N}_{4}$

1) Dibenzoylamarin. Sm. oberh. 360° (B. 18, 3083). — III, 25. C 76,3 — H 4,7 — O 8,7 — N 10,2 — M. G. 550.

1) Verbindung (aus d. 3-[2-Oxybenzyliden]amidobenzol-1-Carbonsäure) (A. 218, 188). — III, 74.

C 80,0 - H 5,1 - O 12,2 - N 2,7 - M. G. 525. $C_{35}H_{27}O_4N$

1) P-Nitro- αs -Diketo- $\alpha \beta \gamma \delta s$ -Pentaphenylpentan (m-Nitrobenzamaron). Sm. 220° (A. 275, 58). — III, 313. C 68,5 — H 4,4 — O 15,7 — N 11,4 — M. G. 613.

 $\mathbf{C}_{35}\mathbf{H}_{27}\mathbf{O}_{6}\mathbf{N}_{5}$

1) Verbindung (aus 2-Amidobenzol-1-Carbonsäure) (J. pr. [2] 36, 380). — II, 1246. C 85,4 — H 5,7 — O 3,2 — N 5,7 — M. G. 492.

 $\mathbf{C}_{35}\mathbf{H}_{28}\mathbf{ON}_{2}$ 1) Benzylbenzoylamarin (B. 18, 3084). — III, 25.

2) isom. Benzoylbenzylamarin. Sm. 318° (B. 18, 3084). — III, 25.

 $\mathbf{C}_{35}\mathbf{H}_{28}\mathbf{O}_{3}\mathbf{N}_{2}$

C 80,1 — H 5,3 — O 9,2 — N 5,3 — M. G. 524.

1) Imabenzil. Sm. 194° (*J. pr.* [1] 35, 461; *B.* 16, 891; *A.* 228, 343; *Soc.* 49, 476). — III, 283.

C 74,0 — H 4,9 — O 11,3 — N 9,8 — M. G. 568.

 $\mathbf{C}_{35}\mathbf{H}_{28}\mathbf{O}_4\mathbf{N}_4$

Verbindung (aus Aceton u. 1-Phenylazo-2,4-Dioxynaphtalin). Sm. 245 bis 250° (B. 21, 2205). — IV, 1449. C 77,9 — H 5,4 — O 8,9 — N 7,8 — M. G. 539.

 $C_{35}H_{29}O_3N_3$

1) α-Benzoyldi [2-Benzoylamidobenzyl]amin. Sm. 218° (J. pr. [2] 55, 362). — IV, 628. C 75,7 — H 5,2 — O 11,5 — N 7,6 — M. G. 555. 1) 3'-Nitro-5²,5³-Di[Benzoylamido]-2², 2³-Dimethyltriphenylmethan.

C35H29O4N3

Sm. 146° (B. 21, 3211). — IV, 1047.

2) 4'-Nitro-5², 5³-Di[Benzoylamido]-2², 2³-Dimethyltriphenylmethan.

Sm. 152° (B. 21, 3208). — IV, 1048. $\mathbf{C}_{85}\mathbf{H}_{29}\mathbf{N}_{2}\mathbf{C}$ 1 1) Chlorbenzylat d. Benzyllophin. Sm. 235°. 2 + ZnCl₂ (Soc. 67, 36).

— III, 27.

 $\mathbf{C}_{85}\mathbf{H}_{79}\mathbf{N}_{9}\mathbf{S}$

C 85,0 — H 6,1 — O 3,2 — N 5,7 — M. G. 494.
1) Dibenzyllophinammoniumhydrat. Sm. 170°. Salze siehe (Soc. 67, $\mathbf{C}_{35}\mathbf{H}_{30}\mathbf{ON}_{2}$ 36). — III, 27. C 82,3 - H 5,9 - O 6,3 - N 5,5 - M. G. 510. $\mathbf{C}_{35}\mathbf{H}_{30}\mathbf{O}_{2}\mathbf{N}_{2}$ 1) 6',62-Di[Benzoylamido]-3',32-Dimethyltriphenylmethan, Sm. 1960 1) 0,0°-Diperzoyramido]-0,3°-Dimensylvirphonylmony (J. pr. [2] 36, 261). — IV, 1047. C 75,6°-H 5,7°-O 8,6°-N 10,0°-M. G. 556. 1) Azurin. Sm. 250,5°. Pikrat (B. II, 598). — IV, 620. C 76,8°-H 6,0°-O 14,6°-N 2,6°-M. G. 547. 1) Saliretazin. Zers. über 300° (B. 27, 1802). — II, 1109. C 74,5°-H 6,4°-O 14,2°-N 4,9°-M. G. 564. C35 H32 O3 N4 $C_{35}H_{33}O_5N$ C₈₅H₈₆O₅N₂ C 74,5 — H 6,4 — O 14,2 — N 4,9 — M. G. 564.

1) Diäthylester d. αε-Di[Phenylamido]-γ-Oxy-αε-Diphenyl-β-Penten-βδ-Dicarbonsäure. Sm. 139° (B. 31, 1391).

2) Diäthylester d. αε-Di[Phenylamido]-γ-Keto-αε-Diphenylpentan-βδ-Dicarbonsäure. Sm. 117—118° (B. 31, 1390).

C 66,9 — H 5,7 — O 22,9 — N 4,5 — M. G. 628.

1) Acetylphloridzinanilid (A. 156, 10). — III, 601.

C 72,1 — H 6,5 — O 16,5 — N 4,8 — M. G. 582.

1) Monomethyläther d. Pseudomorphin + 7 H₂O. Sm. 257—260°. 2HCl + 4H₂O, (2HCl, PtCl₄), H₂SO₄ (A. 294, 211).

C 68,6 — H 6,5 — O 15,7 — N 9,1 — M. G. 612.

1) Ergotinin. HCl, HBr (A. ch. [5] 17, 493; J. 1877, 943, 944). — III, 881.

C 69,6 — H 7,5 — O 15,9 — N 7,0 — M. G. 603.

1) Yohimbenin. Sm. 135° (C. 1899 [1] 530).

C 62,6 — H 6,7 — O 28,6 — N 2,1 — M. G. 671. $C_{35}H_{36}O_9N_2$ $\mathbf{C}_{35}\mathbf{H}_{38}\mathbf{O}_{6}\mathbf{N}_{2}$ $C_{35}H_{40}O_6N_4$ $C_{35}H_{45}O_6N_3$ C 62,6 - H 6,7 - O 28,6 - N 2,1 - M. G. 671. $\mathbf{C}_{35}\mathbf{H}_{45}\mathbf{O}_{12}\mathbf{N}$ 1) Acetylapoaconitin. Sm. 180—181° (Soc. 33, 324). — III, 773. C 61,0 — H 6,8 — O 30,2 — N 2,0 — M. G. 689. C35H47O13N 1) Diacetylbenzoylaconin (Soc. 67, 459). — III, 774.

1) Capsacutin (C. 1897 [2] 593).

1) Imperialin = (C₃₅H₆₀O₄N)_x. Sm. 254°. HCl, (2HCl, PtCl₄), (HCl, AuCl₈)

(B. 21, 3284). — III, 887. $C_{35}H_{54}O_4N_3$ $\mathbf{C}_{35}^{0}\mathbf{H}_{60}\mathbf{O}_{4}\mathbf{N}$ $\mathbf{C}_{85}\mathbf{H}_{67}\mathbf{O}_{4}\mathbf{Cl}$ 1) Glycerindipalmitochlorhydrin. Sm. 44° (A. ch. [3] 41, 240; B. 9, 1933). — **I**, 444. 1) Dibromstearon. Sm. 72° (J. 1855, 517). — I, 1006. C 76,2 — H 12,5 — O 8,7 — N 2,5 — M. G. 551. $\mathbf{C}_{35}\mathbf{H}_{68}\mathbf{OBr}_{2}$ $\mathbf{C}_{35}\mathbf{H}_{69}\mathbf{O}_{3}\mathbf{N}$ 1) Aesthesin (J. pr. [2] 25, 27). — III, 574. C 80,6 — H 13,6 — O 3,1 — N 2,7 — M. G. 521. $\mathbf{C}_{35}\mathbf{H}_{71}\mathbf{ON}$ 1) Stearonoxim. Sm. 62—63° (M. 5, 243). — I, 1031. C 78,4 — H 13,4 — O 3,0 — N 5,2 — M. G. 536. 1) sym. Diheptadekylharnstoff. Sm. 75° (B. 21, 2491). — I, 1300. 1) sym. Diheptadekylthioharnstoff. Sm. 94° (B. 21, 2490). — I, 1321. $\mathbf{C}_{35}\mathbf{H}_{72}\mathbf{ON}_{2}$

C₃₅-Gruppe mit vier Elementen.

1) Benzoylamarinbenzoylchlorid. Sm. 3120 (B. 18, 3082). — III, 25. C35H27O2N2C1 1) Benzylamarinbenzoylchlorid. Sm. 340-350° (B. 18, 3084). $\mathbf{C}_{35}\mathbf{H}_{29}\mathbf{ON}_{2}\mathbf{Cl}$ III, 25. 2) Chlorbenzylat d. Benzoylamarin. Sm. 351° (B. 18, 3083). Verbindung (aus d. 4-Aethoxylphenylamid d. Benzolsulfonsäure). Sm. 158° (A. 265, 188). — II, 721.
 s-Di-d-Cocainthioharnstoff. Sm. 63° (B. 27, 1885). — III, 868.
 Jodmethylat d. Acetylbenzoylakonin (J. d. Aconitin). Sm. 219,5° C35H34O6N2S $\mathbf{C}_{35}\mathbf{H}_{42}\mathbf{O}_{8}\mathbf{N}_{4}\mathbf{S}$ $C_{35}H_{50}O_{11}NJ$ (Soc. **61**, 404). — III, 773. 1) Jodallylat d. Veratrin + H₂O. Sm. 235-236° (Am. 20, 372). $\mathbf{C}_{35}\mathbf{H}_{54}\mathbf{O}_{9}\mathbf{NJ}$

C₃₅-Gruppe mit fünf Elementen.

 $\mathbf{C}_{35}\mathbf{H}_{35}\mathbf{O}_{4}\mathbf{N}_{4}\mathbf{ClFe}$ 1) β -Hämin. — IV, 1619.

C₃₆-Gruppe mit zwei Elementen.

C 84.4 - H 3.1 - 0 12.5 - M. G. 512. $\mathbf{C}_{36}\mathbf{H}_{16}\mathbf{O}_{4}$

1) Verbindung (aus Dianhydrobisdiketodihydroinden). Sm. noch nicht bei 320° (B. 31, 2089, 2937).
C 76,3 — H 3,9 — O 19,8 — M. G. 566.

C36H22O7

1) Säure (aus 2-[2-Oxynaphtyl] benzol-1-Carbonsäure). Sm. 149° (B. 16, 305). - II, 2067.

C 74,2 - H 3,8 - O 22,0 - M.G. 582.C36 H22O8

1) Tribenzoat d. Apigenin. Sm. 210—212° (Soc. 71, 809). 2) Tribenzoat d. 7,8-Dioxy-2-[3-Oxyphenyl]-1,4-Benzpyron. Sm. 173° (B. 29, 2434). C 72,2 — H 3,7 — O 24,1 — M. G. 598. 1) Dipulvinsäure. Sm. 211° (B. 30, 1984; J. pr. [2] 57, 440). C 76,1 — H 4,2 — O 19,7 — M. G. 568.

 $C_{36}H_{22}O_{9}$

 $C_{36}H_{24}O_7$

- Dibenzoat d. α-Orcinphtaleïn. Sm. 284—285° (B. 29, 2632).
 Dibenzoat d. β-Orcinphtaleïn. Sm. 244—245° (B. 29, 2637).
 C 78,0 H 4,7 O 17,3 M. G. 554. C36 H26 O6
 - 1) Dibenzoat d. o-Kresolphtalein. Sm. 195-196° (A. 202, 157). -II, 1987. C 73,7 — H 4,4 — O 21,8 — M. G. 586.

C₃₆H₂₆O₈

1) Dibenzoat d. Brenzkatechinphtaleïndimethyläther (B. 22, 2199). —

C 60,5 - H 3,6 - O 35,9 - M. G. 714. $\mathbf{C}_{36}\mathbf{H}_{26}\mathbf{O}_{16}$

 $\mathbf{C}_{36}\mathbf{H}_{27}\mathbf{N}_{5}$

C₃₆H₂₈O₃

 $C_{36}H_{28}O_{6}$

 $\mathbf{C}_{36}\mathbf{H}_{28}\mathbf{N}_{6}$

 $C_{36}H_{29}N_5$

C36H30O13

69, 738).

 Verbindung (aus Lokansäure). Ba (B. 18, 3426). — III, 597.
 C 86,2 — H 5,4 — N 8,4 — M. G. 501. $C_{36}H_{27}N_3$

1) Nigrosin. HCl (J. 1879, 1161). — III, 678.

C 81,7 — H 5,1 — N 13,2 — M. G. 529. 1) Phenylamidophenylindulin. Sm. 245—250°. HCl (A. 266, 259; B. **29**, 371). — **IV**, 1326.

2) Anilidophenylamidophenylindulin (oder C₄₂H₃₂N₆). Sm. 286—288°. HCl, HBr (Soc. 43, 117; A. 266, 261; B. 29, 370). — IV, 1327.
 3) Phenylamidophenylmauveïn. Sm. 202° u. Zers. (A. 286, 207). —

IV, 1285.

4) Verbindung (aus 2-Amidodiphenylamin). Sm. 258-259° (B. 29, 1606). - IV, 1280.

C 85.0 - H 5.5 - O 9.4 - M. G. 508.1) Verbindung (aus Desoxybenzoïn). Sm. 1980 (A. 275, 81). — III, 226.

C 77,7 — H 5,0 — O 17,3 — M. G. 556. 1) Tribenzoylderivat d. $\alpha \beta \gamma$ -Trioxypropan- $\alpha \gamma$ -Diphenyläther. Fl. (B.

19, 66). — II, 1146. C 79,4 — H 5,2 — N 15,4 — M. G. 544.

1) Base (aus Anilidophenylchinondiimid). Sm. 235° (B. 26, 384). — IV, 1332. C 81,3 - H 5,5 - N 13,2 - M. G. 531.

1) Phenylanilinschwarz. HCl, (2HCl, PtCl₄), HJ, Pikrat (B. 9, 1168; 11, 1096). — III, 676. C 84,7 — H 5,9 — O 9,4 — M. G. 510.

 $\mathbf{C}_{36}\mathbf{H}_{30}\mathbf{O}_{3}$ 1) Diacetyl-ε-Isodypnopinakolin. Sm. 98° (Bl. [3] 15, 1177).

C 73,2 — H 5,1 — O 21,7 — M. G. 590. 1) Diäthylester d. $\alpha\delta$ -Dibenzoxyl- $\alpha\delta$ -Diphenyl- $\alpha\gamma$ -Butadiën- $\beta\gamma$ -Dicar-C36H30O8 bonsäure. Sm. 204° (B. 30, 1997).

C 64,5 - H 4,5 - O 31,0 - M. G. 670.1) Anhydrid d. Katechugerbsäure $C_{36}H_{34}O_{15}$ (M. 2, 551). — III, 687. 2) Anhydrid d. α -Usninsäure. Sm. 189° (A. 284, 160). — II, 2057.

C36H30O16 C 60.2 - H 4.2 - O 35.6 - M. G. 718.

1) Fisetinglykosid. Sm. 215-217° (Soc. 71, 1196). C 77,1 — H 5,7 — O 17,1 — M. G. 560. C36H32O6 Sm. 237°. Ba, Ag (Soc. 1) Isobutylanhydrodibenzilacetessigsäure.

2) Aethylester d. Aethylanhydrodibenzilacetessigsäure. Sm. 1670 (Soc.

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C36H32O10
                                   C 69,2 - H 5,1 - O 25,6 - M. G. 624.
                             1) Tetrabenzoat d. Inositdimethyläther. Sm. 250° (A. ch. [6] 12, 568).
                                      - II, 1143.
                                   C 62,8 - H 4,6 - O 32,6 - M. G. 688.
   C36H32O14
                             1) Anhydrid d. Katechugerbsäure C<sub>36</sub>H<sub>34</sub>O<sub>15</sub> (M. 2, 551). — III, 687.
                                  C 72,7 — H 5,7 — O 21,5 — M. G. 594.
   C36H34O8
                             1) Dibenzoat d. Aloresinotannol (C. 1898 [2] 118).
   C36H34O15
                                   C 61,2 - H 4,8 - O 34,0 - M. G. 706.
                            C 51,2 — H 4,5 — O 54,0 — M. G. 700.

1) Katechugerbsäure (M. 2, 551). — III, 687.
C 58,5 — H 4,6 — O 36,9 — M. G. 738.

1) Lävulose-Phloroglucid. Zers. bei 250° (B. 28, 26; C. 1896 [2] 485).
C 55,0 — H 4,3 — O 40,7 — M. G. 786.

1) Hexacetylcarminsäure. Sm. 210° u. Zers. (B. 30, 1760, 1765).
C 80,4 — H 6,5 — N 13,0 — M. G. 537.
   C<sub>96</sub>H<sub>34</sub>O<sub>17</sub>
   C<sub>36</sub>H<sub>34</sub>O<sub>20</sub>
   \mathbf{C}_{86}\mathbf{H}_{85}\mathbf{N}_{5}
                            1) Phenyltetra [2-Methylphenyl] diguanid. Sm. 111°. (2HCl, PtCl<sub>4</sub>) (A.
                                 286, 367).
  \mathbf{C}_{36}\mathbf{H}_{36}\mathbf{O}_{6}
                                  C 76,6 - H 6,4 - O 17,0 - M. G. 564.
                            1) Diisoeugenolacetophenon. Sm. 119—120° (B. 27, 2463). — III, 133. C 61,0 — H 5,1 — O 33,9 — M. G. 708.
  C36H36O15
                            1) Gyrophorsäure (A. 70, 218; 300, 356). — II, 1754. C 53,7 — H 4,4 — O 41,8 — M. G. 804.
  C_{36}H_{36}O_{21}
                            1) Lokansäure. NH<sub>4</sub>, Ba, Pb (B. 18, 3421). — III, 597. C 78,3 — H 6,5 — N 15,2 — M. G. 552.
  \mathbf{C}_{36}\mathbf{H}_{36}\mathbf{N}_{6}
                            1) Verbindung (aus Phenylhydrazoncarbodi-p-Tolylamin). Sm. 163°. 3+4HCl, (3+4HCl+2PiCl<sub>4</sub>) (B. 21, 2276). — IV, 1226. C 80,9 — H 7,1 — O 12,0 — M. G. 524.
  \mathbf{C}_{86}\mathbf{H}_{88}\mathbf{O}_{4}
                           1) Dibenzoat d. Dithymoläthan. Sm. 190° (B. 11, 288). — II, 1152. C. 55,8 — H 4,9 — O 39,3 — M. G. 774. 1) d-Galaktose-Phloroglucid. Zers. bei 210° (B. 28, 26).
 C<sub>86</sub>H<sub>38</sub>O<sub>19</sub>
                            2) d-Mannose-Phloroglucid (B. 28, 26).
 C<sub>36</sub>H<sub>40</sub>O<sub>16</sub>
                           1) Pikrotoxin, siehe C_{15}H_{16}O_8. — III, 643. C 75,8 — H 7,4 — O 16,8 — M. G. 570.
 \mathbf{C}_{36}\mathbf{H}_{42}\mathbf{O}_{6}
                           1) Helleborin (oder C<sub>6</sub>H<sub>10</sub>O). Sm. oberh. 250° u. Zers. (A. 135, 61; C.
                                1897 [2] 764). — III, 593.
C 61,4 — H 6,8 — O 31,8 — M. G. 704.
 C_{86}H_{48}O_{14}
                          1) Anhydrid d. Betulinamarsäure. Sm. 181° (A. 182, 375). — III, 621. C 49,0 — H 5,6 — O 45,4 — M. G. 882.

1) Caramelen. BaO, PbO (A. ch. [3] 52, 365). — I, 1106. C 86,9 — H 10,3 — N 2,8 — M. G. 497.

1) Cholesteryl-1-Naphtylamin. Sm. 202° (J. r. 10, 356). — II, 600. C 83,7 — H 10,1 — O 6,2 — M. G. 516.
 C36H50O25
 \mathbf{C}_{86}\mathbf{H}_{51}\mathbf{N}
 \mathbf{C_{36}}\mathbf{H_{52}}\mathbf{O}_{2}
                           1) Cinnamylat d. Cholesterin. Sm. 149° (H. 22, 403). C 58,4 — H 7,0 — O 34,6 — M. G. 740.
 C36H52O16
                           1) Betulinamarsäure. Ca<sub>2</sub>, Pb<sub>2</sub>, Cu<sub>2</sub> (A. 182, 375). — III, 621. C 83,4 — H 10,4 — O 6,2 — M. G. 518.
 \mathbf{C}_{\mathbf{86}}\mathbf{H}_{\mathbf{54}}\mathbf{O}_{\mathbf{2}}

    Cinnamylat d. Koprosterin. Sm. 169° (H. 22, 401).
    C74,2 — H 9,3 — O 16,5 — M. G. 582.
    Betulinsäure. Sm. 195°. Pb<sub>3</sub> (A. 182, 375). — III, 621.
    Triacetat d. Gentiol. Sm. 175—180° (M. 12, 483). — III, 633.
    C 53,6 — H 6,7 — O 39,7 — M. G. 806.
    Dekaäthylester d. Hexan-αββγγδδεεζ-Dekacarbonsäure. Fl. (B. 21, 2115). — I 872

C36H54O6
\mathbf{C}_{36}\mathbf{H}_{54}\mathbf{O}_{20}
                                 2115). — I, 873.
C_{86}H_{54}S
                          1) Verbindung (aus Asphalt). Sd. 265°. - III, 565.
                          1) Verbindung (aus Sterosin) (A. 189, 356). — III, 562.
C 74,0 — H 9,6 — O 16,4 — M. G. 584.
\mathbf{C}_{86}^{\circ}\mathbf{H}_{55}^{\circ}\mathbf{Br}_{8}
C36H56O6
                          1) Diäthylester d. Chinovasäure. Sm. 127—130° (B. 17, 869). — II, 1860. C 55,7 — H 7,2 — O 37,1 — M. G. 776.
\mathbf{C}_{86}\mathbf{H}_{56}\mathbf{O}_{18}
                         C 55,7 — H 7,2 — U 57,1 — M. G. 170.

1) Cyclamin, siehe C_{20}H_{34}O_{10}. — III, 579.
C 54,5 — H 7,1 — O 38,4 — M. G. 792.
1) Cyclamsäure (J. 1887, 2305). — III, 579.
1) Verbindung (aus Asphalt). Sd. 233°. — III, 565.
C 82,8 — H 11,1 — O 6,1 — M. G. 522.
C36H56O19
C36H56S
C36H58O2
                         1) Desoxyphoronpinakon. Sm. 194-195° (A. 296, 323).
                         2) Anhydrid d. Betulin. - III, 621.
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C 80.3 - H 10.8 - O 8.9 - M. G. 538.C36H58O3 1) α-Storesin. Sm. 160-168°. K (A. 188, 208; 189, 356; B. 15, 2624). **- III**, 562. 2) \$\text{\textit{\textit{9-Storesin.}}}\$ Sm. 140-145°. K (A. 188, 209, 210). — III, 562. C 59,2 — H 7,9 — O 32,9 — M. G. 730.

1) Verbindung (aus Caïncin) (Z. 1867, 538). — III, 573. C 45,3 — H 6,1 — O 48,6 — M. G. 954.

1) Flohsamenschleim (A. 51, 48, 175, 219, 248, 143). — I, 1103. $C_{36}H_{58}O_{15}$ C₃₆H₅₈O₂₉ Verbindung (aus Asphalt). Sd. 221°. — IIII, 565.
 C 82,4 — H 11,4 — O 6,2 — M. G. 524. $C_{36}H_{58}S$ $\mathbf{C}_{36}\mathbf{H}_{60}\mathbf{O}_{2}$ 1) α -Lactucerol $+2H_2O$. Sm. $166-181^{\circ}$ (A. 234, 243; 244, 270). -II, 1067. β-Lactucerol + 2 H₂O (A. 234, 249). — II, 1068.
 C 80,0 — H 11,1 — O 8,9 — M. G. 540.
 Caperin. Sm. 243° (B. 30, 365; J. pr. [2] 57, 431).
 C 75,5 — H 10,5 — O 14,0 — M. G. 572. $\mathbf{C}_{36}\mathbf{H}_{60}\mathbf{O}_3$ $C_{36}H_{60}O_{5}$ 1) Verbindung (aus Dammarharz). K₂. — III, 555. C 44,4 — H 6,2 — O 49,4 — M. G. 972. $C_{36}H_{60}O_{30}$ 1) Fongose (Bl. [3] 17, 926). C 43,7 — H 6,1 — O 50,2 — M. G. 988. $\mathbf{C}_{36}\mathbf{H}_{60}\mathbf{O}_{31}$ 1) Oxycellulose (A. 267, 368; siehe auch A. 272, 289; Soc. 43, 22). C 71,3 — H 10,2 — O 18,5 — M. G. 606. C36H62O7 C 71,3 — H 10,2 — O 18,5 — M. G. 606.

1) Verbindung (aus Dammarharz). — III, 555.
C 43,6 — H 6,3 — O 50,1 — M. G. 970.

1) Achroodextrin (oder C₆H_{1,0}C₅) (H. 2, 188; B. 26, 2537, 2545). — I, 1090.
2) Amylodextrin + H₂O (Z. 1869, 446; 1870, 346; J. 1874, 881; H. 2, 188; J. pr. [2] 28, 497; A. 210, 299; B. 26, 2537, 2544). — I, 1089.
3) Cyclamose (C. 1897 [1] 230).
4) Inulin. + 3 BaO (B. 26 [2] 233).
5) Luktorin + H O (B. 17, 686). — I, 1004 $\mathbf{C}_{36}\mathbf{H}_{62}\mathbf{O}_{31}$ 5) Laktosin + $H_{2}O$ (B. 17, 686). — I, 1104. 6) α-Maltodextrin (Soc. 71, 514). C 69,2 - H 10,2 - O 20,5 - M. G. 624.C36 H64 O8 1) Phyllinsäure (Bl. 28, 148). — II, 2112. C 74,7 — H 11,4 — O 13,8 — M. G. 578. 1) Betuloretinsäure. Sm. 94°. Ag. — I, 778. 2) einbas. Diricinusölsäure (Bl. [3] 11, 280; B. 24 [2] 72). 3) zweibas. Diricinusölsäure. Fl. (Bl. [3] 11, 282). C 43,5 — H 6,6 — O 49,9 — M. G. 994. C36H66O5 $C_{36}H_{66}O_{31}$ 1) Gentianose. Sm. 210° (207—209°) (H. 6, 137; Bl. [3] 19, 200). — I, 1071. C 74,5 — H 11,7 — O 13,8 — M. G. 580. 1) Ceropinsäure? Ba + H₂O (J. 1853, 570). — I, 772. C₃₆H₆₈O₅ C 76,3 - H 12,4 - O 11,3 - M. G. 566. $\mathbf{C}_{36}\mathbf{H}_{70}\mathbf{O}_4$ Dicetylester d. Bernsteinsäure. Sm. 58° (J. 1859, 406). — I, 656.
 C 74,2 — H 12,0 — O 13,7 — M. G. 582. $\mathbf{C}_{36}\mathbf{H}_{70}\mathbf{O}_{5}$ 1) Anhydrid d. β-Oxyheptadekan-α-Carbonsäure. Fl. (J. r. 18, 47). — I, 579. C 70,4 — H 11,4 — O 18,2 — M. G. 614. $\mathbf{C}_{36}\mathbf{H}_{70}\mathbf{O}_{7}$

1) Anhydrodioxystearinsäure. Sm. 50-55° (Bl. [3] 13, 240).

2) Verbindung (aus Dioxystearinsäure u. Ricinusölsäure). Sm. 70-73° (Bl.

C 83.1 - H 13.8 - O 3.1 - M. G. 520.

 $C_{36}H_{72}O$

1) Alkohol (aus Cochenillefett). Sm. 66,6° (M. 6, 893). — I, 256.

C₃₆-Gruppe mit drei Elementen.

C 40,5 - H 0,6 - O 40,5 - N 18,4 - M. G. 1066. $C_{36}H_6O_{27}N_{14}$ 1) Salpetersaures Tetrazoresorufin (A. 162, 283, siehe auch B. 17, 1865; **18**, 587). — Π , 934. C 69,7 — H 3,2 — O 18,1 — N 9,0 — M G. 620.

 $\mathbf{C}_{36}\mathbf{H}_{20}\mathbf{O}_7\mathbf{N}_4$ 1) Verbindung (aus 1,4-Dioxybenzol-2,3,5,6-Tetracarbonsäureanhydrodiphenylhydrazid). Sm. 140° (A. 258, 280). — IV, 733.

C₃₆H₂₁O₁₇Cl₁₃ 1) Tridekachlorlävulosephloroglucid (C. 1896 [2] 485).
C₃₆H₂₃O₁₇Br₁₁ 1) Undekabromlävulosephloroglucid (C. 1896 [2] 485).

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C 75,5 — H 4,2 — O 5,6 — N 14,7 — M. G. 572. $\mathbf{C}_{36}\mathbf{H}_{24}\mathbf{O}_{2}\mathbf{N}_{6}$

1) β -Naphtolazo-p-Benzolazo- α -Naphtalinazo- β -Naphtol. Sm. oberh. 295° (Soc. 43, 437). — IV, 1439.

 Verbindung (aus Rubbadin) (B. 25, 1892). — II, 658.
 C 65,5 — H 3,8 — O 24,3 — N 6,4 — M. G. 659. $\mathbf{C}_{36}\mathbf{H}_{24}\mathbf{O}_{10}\mathbf{S}_{2}$

 $\mathbf{C}_{38}^{\mathbf{H}_{25}}\mathbf{O}_{10}\mathbf{N}_{3}$ C 65,5 — H 5,8 — U 24,5 — N 5,4 II. G. 566. 19 Triphenylamidoformiat d. Quercetin. Sm. 200—205° (B. 18, 2609). — ÎII, 605. C 74,7 — H 4,5 — O 11,1 — N 9,7 — M. G. 578.

 $C_{36}H_{26}O_4N_4$

1) Diacetat d. 1,1'-Dioxy-4,4'-Diphenylazo-2,2'-Binaphtyl. Sm. 264 bis 265° (B. **30**, 2661). — IV, 1428. C 83,5 — H 5,2 — O 3,1 — N 8,1 — M. G. 517.

 $\mathbf{C}_{36}\mathbf{H}_{27}\mathbf{ON}_{3}$

1) Phtalyldiphenylaspartid (2 Modifik.). α-Modif. Sm. 273°; β-Modif. Sm. 285—286° (G. 16, 19). — II, 1812.

 $C_{38}H_{27}O_{10}Cl_31$) Tetrabenzoat d. Chloralose. Sm. 138° (*Bl.* [3] 11, 38). — II, 1143. 2) Tetrabenzoat d. Parachloralose (Bl. [3] 11, 41).

C 83,1 - H 5,4 - O 6,1 - N 5,4 - M. G. 520. $\mathbf{C}_{36}\mathbf{H}_{28}\mathbf{O}_{2}\mathbf{N}_{2}$

1) $\alpha \beta$ -Di[Benzoyl-2-Naphtylamido]äthan. Sm. 202—203° (B. 25, 3270). **— II**, 1169.

C 76,1 - H 4,9 - O 14,1 - N 4,9 - M. G. 568. $C_{36}H_{28}O_5N_2$

1) Benzoat d. α -Dibenzoylamido- β -[Benzoyl-2-Oxyphenylamido]äthan. Sm. 63-65° (B. 27, 932). — II, 1176. C 70,6 — H 4,6 — O 15,7 — N 9,1 — M. G. 612.

C36H28O6N4

1) Verbindung (aus Benzoylamidoessigsäurcäthylester). Ca, Ba (B. 22, 1961; **25**, 1570). — **II**, 1186.

C 54.0 - H 3.5 - O 18.0 - N 24.5 - M. G. 800.

 $C_{38}H_{28}O_9N_{14}$ C 54,0 — H 5,5 — U 10,0 — H 24,0 (A. 162, 287, siehe auch B, 18, 588). **— II**, 934.

C 76.2 - H 5.1 - O 11.3 - N 7.4 - M. G. 567. $C_{36}H_{29}O_4N_8$

1) 1,1,1-Trinaphtylamid d. Citronensäure. Sm. 129° (B. 19, 2617). —

2) 2, 2, 2-Trinaphtylamid d. Citronensäure. Sm. 215° (B. 19, 2615). —

C'65,2 - H 4,4 - O 24,1 - N 6,3 - M. G. 663. $C_{36}H_{29}O_{10}N_3$

1) Tetrabenzoyldisuccinimidodihydroxamsäure. Sm. 1230 (B. 24, 3437). II, 1210.

 $\mathbf{C}_{36}\mathbf{H}_{30}\mathbf{ON}_{4}$ C 80.9 - H 5.6 - O 3.0 - N 10.5 - M. G. 534.

1) Acetylderivat d. $\alpha \delta$ -Di[Phenylhydrazon] $\alpha \beta \delta$ -Triphenyl- β -Buten.

Sm. 110—120° u. Zers. (A. 269, 127). — IV, 786.

1) Oxyd (aus Triphenyloxyphosphoniumhydrat). Sm. 153,5°; Sd. oberh. 360° (B. 15, 803; 18, 2120; A. 229, 305). — IV, 1659.

C 78,5 — H 5,4 — O 5,8 — N 10,2 — M. G. 550.

1) 2,2'-Di[2-Oxy-1-Naphtylazo]-3,5,3',5'-Tetramethylbiphenyl (B. 28, $\mathbf{C}_{86}\mathbf{H}_{30}\mathbf{OP}_{2}$

 $\mathbf{C}_{36}\mathbf{H}_{30}\mathbf{O}_{2}\mathbf{N}_{4}$

2802). — IV, 1439. C 78,0 — H 5,4 — O 11,5 — N 5,1 — M. G. 554.

 $\mathbf{C}_{36}\mathbf{H}_{30}\mathbf{O}_{4}\mathbf{N}_{2}$

1) 2-Nitrophenyldi[β -Benzoyl- α -Phenyläthyl]amin (Dibenzalacetophenon-2-Nitranilin). Sm. 243° (B. 31, 351).

2) 3-Nitrophenyldi [β-Benzoyl-α-Phenyläthyl]amin. Sm. 238—240° u. Zers. (B. 31, 351).

3) 4 - Nitrophenyldi $[\beta$ - Benzoyl - α - Phenyläthyl] amin. Sm. $251-252^{\circ}$ (B. **31**, 351).

 $C_{36}H_{30}O_4N_5$ 1) Isatinblau? $\mathbf{C}_{36}\mathbf{H}_{30}\mathbf{O}_{7}\mathbf{N}_{2}$

1) Isatinblau? Zers. bei 230° (B. 24, 1369). — IV, 16. C 71,7 — H 5,0 — O 18,6 — N 4,6 — M. G. 602. 1) Benzylidenchininoxinsäure. Sm. 270°. Ag₂ (A. 276, 280). — IV, 362. C 65,2 — H 4,5 — O 21,8 — N 8,5 — M. G. 662.

 $C_{36}H_{30}O_{9}N_{4}$

1) Hydrodiazorssorufin. 3HCl (A. 162, 279). C 61,8 — H 4,7 — O 27,5 — N 6,0 — M. G. 466. $\mathbf{C}_{36}\mathbf{H}_{38}\mathbf{O}_{12}\mathbf{N}_{3}$

1) Triäthylester d. Tricarbanilidophloroglucintricarbonsäure. Zers. bet 155° (Sm. 195°) (B. **23**, 271). — II, 2089. C 73,0 — H 6,1 — O 16,2 — N 4,7 — M. G. 592.

 $\mathbf{C}_{36}\mathbf{H}_{36}\mathbf{O}_{6}\mathbf{N}_{2}$

1) Tetraäthylbenzidindiphtalsäure. Ag₂ (A. 258, 365). — IV, 967. $\mathbf{C}_{36}\mathbf{H}_{36}\mathbf{O}_{6}\mathbf{N}_{6}$

 $\mathbf{C}_{86}\mathbf{H}_{38}\mathbf{O}_5\mathbf{N}_4$

C 66,7 — H 5,6 — O 14,8 — N 12,9 — M. G. 648.

1) Tri[Phtalylpiperazin] (J. pr. [2] 53, 22).

C 71,3 — H 6,3 — O 13,2 — N 9,2 — M. G. 606.

1) Tetracetylderivat d. Base $C_{28}H_{30}ON_4$ (aus Benzylenimid) (B. 28, 1652).

 $\mathbf{C}_{36}\mathbf{H}_{39}\mathbf{O}_{16}\mathbf{N}_{3}$ C 56,2 - H 5,1 - O 33,3 - N 5,4 - M. G. 769.1) Säure (aus Polyporus igniarius) (A. 275, 91).

C 72,5 - H 6,7 - O 16,1 - N 4,7 - M. G. 596. $C_{36}H_{40}O_6N_2$

1) Dimorphinäthylenäther. Sm. 1880 (C. 1899 [1] 705).

2) Dicodathin (Aethylenäther d. Morphin). Zers. oberh. 2000 (A. ch. [5] 27, 281). — III, 908. C 70.6 — H 6.5 — O 18.3 — N 4.6 — M. G. 612.

C36H40O7N9

 $\mathbf{C}_{36}\mathbf{H}_{42}\mathbf{O}_{6}\mathbf{N}_{2}$

1) Acetyldimorphin. (2HCl, PtCl₄) (Soc. 27, 1038). — III, 899. C 72,2 - H 7,0 — 0 16,0 - N 4,7 — M. G. 598. 1) Dicodeïn + $2H_2O$. $2HCl + 6H_2O$ (Soc. 25, 506; 28, 312, 696; A. 77, 357). — III, *906*.

 $C_{36}H_{43}O_{10}N_7$

C 58,9 — H 5,8 — O 21,8 — N 13,4 — M. G. 733.

1) Uromelanin (J. 1868, 828; H. 8, 89; Bl. 51, 159). — III, 6666.

 $C_{36}H_{44}O_4S_2$ 1) Verbindung (aus Thiophenol u. Dehydrocholsäure). Sm. bei 220° (B. 20, 1980). — II, *1969*. С 68,3 — H 7,0 — O 20,2 — N 4,4 — M. G. 632.

 $\mathbf{C}_{36}\mathbf{H}_{44}\mathbf{O}_{8}\mathbf{N}_{2}$

1) **Methylpseudomorphin** (B. 13, 93). — III, 911. C 68,6 — H 7,3 — O 15,2 — N 8,9 — M. G. 630. $C_{36}H_{46}O_6N_4$

1) Di[Phenylhydrazid] d. Biliansäure (B. 20, 1985). — IV, 731.

C₃₆H₄₇O₁₁N

 $\mathbf{C}_{36}\mathbf{H}_{49}\mathbf{O}_{12}\mathbf{N}$

1) Di Fiendynydrazid d. Bhransadre (b. 20, 1965). — IV, 731. C 64,6 — H 7,0 — O 26,3 — N 2,1 — M. G. 669. 1) Apopseudoaconitin + H₂O. Sm. 102—103° (wasserfrei). (HCl, AuCl₃), HNO₃ (Soc. 33, 151). — III, 775. C 62,9 — H 7,1 — O 28,0 — N 2,0 — M. G. 687. 1) Pseudoaconitin + H₂O (Acetylveratrylpseudoaconin). Sm. 210—212° (104—105°). (HCl, AuCl₃), HBr + 2H₂O, HJ, (HJ, HgJ₂), HNO₃ + 3 H₂O, CHNS (Soc. 33, 151; 71, 351; B. 29, 854; C. 1895 [1] 1185; 1895 [2] 536). — III 775 536). — III, 775.

 $C_{36}H_{51}O_6N$ C 72.8 - H 8.6 - O 16.2 - N 2.4 - M. G. 593.

1) Diacetat d. Glycyrrhetin. Sm. 217° (J. 1880, 1030). — III, 592.

C₃₆H₅₂O₂Br₄ 1) αβ-Dibrom-β-Phenylpropionat d. Dibromcholesterin. Sm. 139° (H. **22**, 403).

 $C_{36}H_{54}O_2Br_2$ 1) $\alpha\beta$ -Dibrom- β -Phenylpropionat d. Koprosterin. Sm. 165—166° (H. **22**, 402).

C 70,8 - H 8,8 - O 15,7 - N 4,6 - M. G. 610. $\mathbf{C}_{36}\mathbf{H}_{54}\mathbf{O}_{6}\mathbf{N}_{2}$

1) Triäthylester d. Phenylhydrazoncholansäure (H. 25, 315).

C 51.8 - H 6.5 - O 38.4 - N 3.3 - M. G. 834. $\mathbf{C}_{36}\mathbf{H}_{54}\mathbf{O}_{20}\mathbf{N}_{2}$

1) Verbindung (aus Milchzucker u. Amidobenzol) (B. 4, 836). — II, 448. C₃₆H₅₅O₁₃N₂ 1) Cynoctonin. Sm. 137° (C. 1895 [1] 1185).

C 60,8 — H 7,9 — O 29,2 — N 2,0 — M. G. 711. 1) Glycyrrhizinbitter (J. 1880, 1031). — III, 592. $\mathbf{C}_{86}\mathbf{H}_{57}\mathbf{O}_{13}\mathbf{N}$

C₃₆H₃₁O₄Cl 1) Verbindung (aus Dammarharz). — III, 555.

 $\mathbf{C}_{36}^{\bullet}\mathbf{H}_{69}\mathbf{O}_{42}\mathbf{S}_{5}$ 1) Säure (aus β -Chlorcampher). Ba₂ (Bl. [3] 4, 722). — III, 499. $\mathbf{C}_{36}\mathbf{H}_{69}\mathbf{O}_{7}\mathbf{N}_{19}$ C 49,1 — H 7,8 — O 12,7 — N 30,3 — M. G. 879. 1) Sturin. $4 + 11 \text{ H}_2\text{SO}_4$ (*C.* 1898 [1] 1061; *H.* 25, 173). C 76,6 — H 12,8 — O 5,7 — N 4,9 — M. G. 564. $\mathbf{C}_{36}\mathbf{H}_{72}\mathbf{O}_{2}\mathbf{N}_{2}$

1) sym. Septdekylstearylharnstoff. Sm. 112° (B. 15, 761). — I, 1304.

C₃₆-Gruppe mit vier Elementen.

 $C_{36}H_{20}O_{10}Br_4S_2$ 1) Verbindung (aus Rubbadin) (B. 25, 1892). — II, 658.

1) Verbindung (aus $C_{36}H_{28}O_6N_4$). Sm. $240-241^{\circ}$ (B. 25, 1186). — $\mathbf{C}_{\mathbf{36}}\mathbf{H}_{\mathbf{24}}\mathbf{O}_{\mathbf{6}}\mathbf{N}_{\mathbf{4}}\mathbf{Br}_{\mathbf{2}}$ II, 1186.

1) Verbindung (aus 1,3 Dioxybenzol) (B. 17, 1873). — II, 915. 1) Trisulfonbiphenylstickoxyd. Sm. 178° (B. 13, 389). — II, 226. $\mathbf{C}_{36}\mathbf{H}_{25}\mathbf{O}_{10}\mathbf{N}_{2}\mathbf{Br}$

C36H27O7NS 1) 2-Naphtylamid d. Phosphorsäuretri[Oxyessigsäure]. Sm. 192 bis 196° (A. 279, 69). $\mathbf{C}_{36}\mathbf{H}_{30}\mathbf{O}_{7}\mathbf{N}_{3}\mathbf{P}$

1) Pentachloruromelanin (J. 1868, 829). — III, 666. $\mathbf{C}_{36}\mathbf{H}_{38}\mathbf{O}_{10}\mathbf{N}_{7}\mathbf{Cl}_{5}$

1) Dijodmethylat d. Pseudomorphin + 4H₂O (B. 13, 93). — III, 911. $\mathbf{C}_{36}\mathbf{H}_{42}\mathbf{O}_{6}\mathbf{N}_{2}\mathbf{J}_{2}$ 1) Salzsaures Hydramidotetrazoresorufin (A. 162, 286; siehe auch $\mathbf{C}_{36}\mathbf{H}_{43}\mathbf{O}_{9}\mathbf{N}_{14}\mathbf{Cl}_{9}$ B. 18, 587). — II, 934.

 $C_{36}H_{52}O_{13}N_{2}Br_{3}$ 1) Tribromeynoctonin (C. 1895 [1] 1185).

 $C_{36}H_{69}O_{18}N_9Br_9$ 1) Verbindung (aus Horn) (J. 1879, 871). — IV, 1585. $C_{36}H_{69}O_{13}N_9Br_3$ 1) Verbindung (aus Fleisch) (J. 1879, 870). — IV, 1585. $C_{36}H_{76}O_6N_6Fe$ 1) Imidoferrocyanwasserstoffisoamyläther. 2HCl (B. 21, 935). — I, 1489.

C₃₇-Gruppe mit zwei Elementen.

 $C_{37}H_{26}O_{8}$ C 74.2 - H 4.3 - O 21.4 - M. G. 598.

1) Tribenzoat d. Di[4,6-Dioxy-2-Methylphenyl]essigsäurelakton. Zers. bei 200° (Soc. **73**, 401). C 82,1 — H 5,0 — N 12,9 — M. G. 541.

 $\mathbf{C}_{37}\mathbf{H}_{27}\mathbf{N}_{5}$

1) Benzylidenamidophenylindulin. Sm. 261-262° (A. 286, 201). IV, 1326.

C37 H29 N3 $C \pm 66,2 - H \pm 5,6 - N \pm 8,2 - M. G. \pm 515.$

Triphenylmauvanilin (Z. 1867, 237). — III, 678.
 C 88,4 — H 6,0 — N 5,6 — M. G. 502.

 $\mathbf{C}_{37}\mathbf{H}_{30}\mathbf{N}_{2}$ 1) Benzylidendi [7-Methyl-2-Phenylindol]. Sm. 255—256° (B. 25, 2871).

 $\mathbf{C}_{37}\mathbf{H}_{34}\mathbf{O}_{10}$

Benzyhdendi [7-Methyl-2-Phenyhddol]. Sin. 255-250 (B. 25, 251).
 IV, 417.
 C 69,6 — H 5,3 — O 25,1 — M. G. 638.
 Tetrabenzoat d. Anhydro-αγε-Trioxy-ββδδ-Tetra [Oxymethyl] pentan. Sm. 153-154° (B. 27, 1089; A. 289, 50). — II, 1143.
 C 67,9 — H 5,2 — O 26,9 — M. G. 654.
 Tribenzoat d. Coniferin. Sm. 80° (H. 14, 367). — III, 577.
 C 89,5 — H 7,3 — O 3,2 — M. G. 496.
 Verbindung (con Beyenlanthonsithelector). Sd. Shor 250° (L. mr. [2])

C₃₇H₃₄O₁₁

 $C_{37}H_{38}O$

1) Verbindung (aus Benzolcarbonsäureäthylester). Sd. über 350° (J. pr. [2] 4, 448). — II, 1139. C 87,1 — H 7,4 — N 5,5 — M. G. 510. 1) 4',4°-Di[Aethylbenzylamido]triphenylmethan. Sm. 115—116° (B. 22,

 $\mathbf{C}_{37}\mathbf{H}_{38}\mathbf{N}_{2}$

589). — IV, 1044.

2) Base (aus Benzaldehyd u. Aethylphenylhydrazin u. Benzylchlorid). (2HCl, PtCl₄) (A. 252, 276). — IV, 1044.
C 58,7 — H 5,3 — O 36,0 — M. G. 756.

C87 H40 O17

 $\mathbf{C}_{37}\mathbf{H}_{50}\mathbf{O}_{25}$

1) Hexacetylnataloin (Bl. 18, 182). — III, 618. C 49,7 — H 5,6 — O 44,7 — M. G. 894. 1) Farbstoff (aus d. Weichselkirsche) (J. 1870, 879). — III, 615. C 79,3 — H 9,3 — O 11,4 — M. G. 560. C37 H52 O4

1) Benzoat d. Urson. Sm. 214° (M. 14, 261). — III, 649. C 83,8 — H 10,2 — O 6,0 — M. G. 530.

C₈₇H₅₄O₉

Benzoat d. α-Amyrin. Sm. 192° (B. 20, 1244; 23, 3189). — III, 556.
 Benzoat d. β-Amyrin. Sm. 230° (B. 20, 1245; 23, 3189; A. 271, 218).

C₃₇H₅₆O₁₈

- III, 556. C 56,3 - H 7,1 - O 36,5 - M. G. 788. 1) Helleboreïn, siehe auch C₂₆H₄₄O₁₅ (C. 1897 [2] 764). C 81,9 - H 12,2 - O 5,9 - M. G. 542.

C₃₇H₆₆O₂

1) Myricylester d. Benzolcarbonsäure. Sm. 70° (Bl. [3] 11, 186). C37 H66 O4 C 77,3 - H 11,5 - O 11,1 - M. G. 574.

 Dimyricylester d. Oxalsaure. Sm. 91° (Bl. [3] 11, 186).
 C 55,5 — H 8,5 — O 36,0 — M. G. 800. C₃₇H₆₈O₁₈ 1) Bryoresin (Bl. [3] 9, 1055). — III, 573.

C₃₇-Gruppe mit drei Elementen.

 $C_{37}H_{25}ON_3$ C 84,3 — H 4,7 — O 3,0 — N 8,0 — M. G. 527. 1) Carbazolblau. K_3 (B. 12, 1403; 20, 1903). — IV, 393. $C_{37}H_{25}O_{10}Cl_3$ 1) Tribenzoat d. Trichlorbarbaloin (C. 1898 [2] 582).

C 86,4 - H 5,1 - O 3,1 - N 5,4 - M. G. 514.C₃₇H₂₆ON₂

1) Phenyl-2, 2, 2-Trinaphtylharnstoff. Sm. 168° (B. 24, 2924). — II, 618. $\mathbf{C}_{37}\mathbf{H}_{26}\mathbf{O}_4\mathbf{N}_6$ C 71,8 - H 4,2 - O 10,4 - N 13,6 - M. G. 618.

1) Verbindung (aus Benzaldehyd u. Isatamidobenzol-3-Carbonsäureamid) (A. 218, 193). — II, 1605.

- $\mathbf{C}_{87}\mathbf{H}_{97}\mathbf{ON}_{5}$ C 79,7 - H 4,8 - O 2,9 - N 12,6 - M. G. 557.
- 1) 2-Oxybenzylidenamidophenylindulin (A. 286, 201). IV, 1326. $\mathbf{C}_{37}\mathbf{H}_{28}\mathbf{O}_2\mathbf{N}_4$ C 79,3 — H 5,0 — O 5,7 — N 10,0 — M. G. 560.
- 1) α -Phenyl- $\alpha \alpha$ -Di[5-Keto-1,3-Diphenyl-4,5-Dihydropyrazolyl-4-]-
- 1) 4-Phenyl-tat-Dips-Reto-1, 5-Diphenyl-1, 5-Dinydropyrazolyr-1-j-methan. Sm 220° (B. 20, 2548). IV, 1305.
 1) 4-Chlorphenylat d. 6-[4-Methylphenyl]amido-2, 3-Diphenyl-1, 4-Naphtisodiazin (B. 25, 2005). IV, 1218.
 C 80,7 H 5,4 O 8,7 N 5,1 N 6. 550. $\mathbf{C}_{37}\mathbf{H}_{28}\mathbf{N}_{3}\mathbf{C}\mathbf{l}$
- $\mathbf{C}_{37}\mathbf{H}_{30}\mathbf{O}_{3}\mathbf{N}_{2}$
- 1) Cinnimabenzil. Sm. 1880 (Soc. 49, 470). III, 286. 1) Tri[4-Phenylamidophenyl]chlormethan (Diphenylaminblau) (B. 23, $\mathbf{C}_{37}\mathbf{H}_{30}\mathbf{N}_{3}\mathbf{Cl}$
- 1963). IV, 1196. C 78,2 H 5,6 O 11,3 N 4,9 M. G. 568. $\mathbf{C}_{37}\mathbf{H}_{32}\mathbf{O}_4\mathbf{N}_2$ 1) **4-Nitro-2-Methylphenyldi**[β -Benzoyl- α -Phenyläthyl]amin (Dibenzal-
- acetophenonnitrotoluidin). Sm. 203° (B. 31, 350). C 74,5 H 5,4 O 10,7 N 9,4 M. G. 596. 1) Diacetylderivat d. Verb. C₃₃H₂₈O₂N₄. Sm. 257° (G. 22 [2] 239). $\mathbf{C}_{37}\mathbf{H}_{32}\mathbf{O}_{4}\mathbf{N}_{4}$
- 1) Methylenhexaphenyldiphosphoniumdijodid. Sm. 230—231° u. Zers. $\mathbf{C}_{37}\mathbf{H}_{32}\mathbf{J}_{2}\mathbf{P}_{2}$ (B. 15, 804; A. 229, 318). — IV, 1661. C 76,1 — H 5,7 — O 11,0 — N 7,2 — M. G. 583.
- $\mathbf{C}_{37}\mathbf{H}_{33}\mathbf{O}_{4}\mathbf{N}_{3}$ 1) 3'-Nitro-22, 23-Di[Benzoylamido]-32, 52, 33, 53-Tetramethyltriphenylmethan? Sm. 185—186° (B. 21, 3217). — IV, 1048.
 - 2) 4'-Nitro-2', 23-Di[Benzoylamido]-3', 52, 38, 53-Tetramethyltriphenylmethan? Sm. 191—192° (B. 21, 3216). — IV, 1049. C 78,4 — H 6,0 — O 5,6 — N 9,9 — M. G. 566.
- $\mathbf{C}_{37}\mathbf{H}_{34}\mathbf{O}_{2}\mathbf{N}_{4}$ 1) α -[4-Dibenzoylamidophenyl]imidodi[4-Dimethylamidophenyl]me-
- than. Sm. 180—181° (*J. pr.* [2] **50**, 416). **IV**, 1174. C 68,1 H 5,5 O 22,1 N 4,3 M. G. 652.

 1) **Xanthalin.** Sm. 206°. 2 HCl + 4 H₂O (*B.* 26 [2] 592). **III**, 923. C 67,9 H 5,8 O 22,0 N 4,3 M. G. 654. $\mathbf{C}_{37}\mathbf{H}_{36}\mathbf{O}_{9}\mathbf{N}_{2}$
- $\mathbf{C}_{37}\mathbf{H}_{38}\mathbf{O}_{9}\mathbf{N}_{2}$
- $C_{37}H_{47}O_{13}N$
- C 67,9 = H 5,8 = O 22,0 = N 4,3 = M. G. 694.

 1 Hydroxanthalin. Sm. 137° (B. 26 [2] 593). III, 923.

 C 62,3 = H 6,6 = O 29,2 = N 1,9 = M. G. 713.

 1) Triacetylpyroaconitin. Sm. 204° (Soc. 67, 463). III, 774.

 C 60,7 = H 6,7 = O 30,6 = N 1,9 = M. G. 731.

 1) Triacetylbenzoylaconin. Sm. 255—256° (Soc. 67, 460; B. 27, 732). $C_{37}H_{49}O_{14}N$ III, 774.
- 2) isom. Triacetylbenzoylaconin. Sm. 162° (Soc. 67, 461).
- 33, 338; J. 1883, 1351). — III, 949.

C₂₇-Gruppe mit vier Elementen.

- $\mathbf{C}_{37}\mathbf{H}_{28}\mathbf{O_4N_3Cl}$ 1) Tribenzoylderivat d. Verb. $\mathbf{C}_{16}\mathbf{H}_{16}\mathbf{ON_3Cl}$ (B. 31, 1414).
- 1) Thioharnstoff d. 8-[4-Amidophenyl]amido-5-Oxy-1, 2, 3, 4-Tetra- $\mathbf{C}_{37}\mathbf{H}_{42}\mathbf{O}_{2}\mathbf{N}_{4}\mathbf{S}$ hydronaphtalin-5-Aethyläther. Sm. 201° (B. 31, 905).
- 1) Di[Jodmethylat] d. Pseudomorphinmonomethyläther + 4 H₂O (A. $\mathbf{C}_{37}\mathbf{H}_{44}\mathbf{O}_{6}\mathbf{N}_{2}\mathbf{J}_{2}$ 294, 213).
- 1) Jodmethylat d. Pseudomorphinmonomethyläthermethyloxyd- $\mathbf{C}_{37}\mathbf{H}_{45}\mathbf{O}_{7}\mathbf{N}_{2}\mathbf{J}$ hydrat + 4 H₂O (A. 294, 213).

C₃₈-Gruppe mit zwei Elementen.

- C 69,5 H 3,6 O 26,8 M. G. 656. $C_{38}H_{24}O_{11}$ 1) Pyrogallolbenzein + 5H₂O (A. 257, 61). - II, 1043.
- C 89.7 H 4.7 N 5.5 M. G. 508. Hydrophenylcarbazoakridin. Sm. 172° (G. 20, 414). — IV, 472.
 C 76,8 — H 4,4 — O 18,8 — M. G. 594. $\mathbf{C}_{38}\mathbf{H}_{24}\mathbf{N}_{2}$
- C38H26O7 1) Verbindung (aus Resorcinbenzeïn) (A. 217, 235). — II, 1123.

 $\mathbf{C}_{38}\mathbf{H}_{26}\mathbf{O}_{9}$ C 72,8 - H 4,1 - O 23,0 - M. G. 626.

1) Rhizocarpinsäure. Sm. 170° (B. 30, 363). C38H26O10 C 71,0 - H 4,0 - O 24,9 - M. G. 642.

1) Tribenzoat d. Quercetindimethyläther. Sm. 204-2050 (Soc. 67, 498). - III, 604.

C38H26O17 C 60,5' - H 3,4 - O 36,1 - M. G. 754.

 Eichenroth. K₈ (A. 240, 339, 340). — III, 587. C 84,8 — H 4,8 — N 10,4 — M. G. 538. $\mathbf{C}_{38}\mathbf{H}_{26}\mathbf{N}_{4}$

1) s-αβ-Anilidophenylnaphtindulin (Naphtylblau). HCl (A. 262, 238; **272**, 334). — **IV**, *1303*. C 78,3 — H 5,2 — O 16,5 — M. G. 582.

C38 H30 O6

1) Triacetat d. $\alpha\beta\beta$ -Tri[1-0xynaphtyl]äthan (A. 243, 167). — II, 1029. C 72,4 — H 4,7 — O 22,9 — M. G. 630. 1) Resorcinbenzeïn (A. 217, 234; J. pr. [2] 48, 387). — II, 1123. C38 H30 O9

 $\mathbf{C}_{38}\mathbf{H}_{30}\mathbf{N}_{8}$ C 76,2 - H 5,0 - N 18,7 - M. G. 598

1) Diformazylbenzol. Sm. 185-190° (A. 300, 256). - IV, 1403. C 85,1 - H 6,0 - O 8,9 - M. G. 536. $C_{38}H_{32}O_{3}$

1) αγε-Tribenzoyl-βδ-Diphenylpentan. α-Modif. Sm. 198°; β-Modif. Sm.

 $C_{38}H_{32}O_{12}$

256° (B. 29, 1493, 1494, 1495, 2246 Anm.). — III, 322. C 67,1 — H 4,7 — O 28,2 — M. G. 680. 1) Hexacetat d. Verb. $\mathbf{C}_{26}\mathbf{H}_{20}\mathbf{O}_{6}$ (Am. 9, 132). — III, 11. C 85,9 — H 6,2 — N 7,9 — M. G. 531. $\mathbf{C}_{38}\mathbf{H}_{33}\mathbf{N}_{3}$

1) 4', 42, 43 - Tri[Phenylamido] - ? - Methyltriphenylmethan (Triphenylleukanilin) (J. 1863, 418). — IV, 1198.

 $\mathbf{C}_{38}\mathbf{H}_{34}\mathbf{O}_{11}$ C 68,5 - H 5,1 - O 26,4 - M. G. 666.1) Tetracetat d. Chrysarobin. Sm. 228-230° (A. 212, 34; B. 21, 438).

III, 453.

C 66,9' - H 5,0 - O 28,1 - M. G. 682. $C_{38}H_{34}O_{12}$

1) Diäthylester d. Tetrabenzoylschleimsäure. Sm. 124° (M. 14, 487).

C 77,5 - H 6,1 - O 16,3 - M. G. 588. $C_{38}H_{36}O_{6}$

1) Aethylester d. Isobutylanhydrodibenzilacetessigsäure. Sm. 2020 (Soc. 69, 740). C 59,4 — H 5,2 — O 35,4 — M. G. 768.

C38H40O17

1) Leprarin (A. **297**, 310). C 84,6 — H 7,6 — N 7,8 — M. G. 539. $\mathbf{C}_{38}\mathbf{H}_{41}\mathbf{N}_{3}$

1) 42, 43 - Di [Dimethylamido] - 5' - Dibenzylamido - 2' - Methyltriphenylmethan. Sm. 120° (B. 24, 3129). — IV, 1198. C 81,1 — H 7,5 — O 11,4 — M. G. 562.

C38 H42 O4

1) Diacetat d. $\alpha\alpha$ -Di[3-Oxy-4-Isopropyl-1-Methylphenyl]- $\beta\beta$ -Diphenyläthan. Sm. 1520 (A. 279, 332). — II, 1008. C 80.8 - H 7.8 - O 11.4 - M. G. 564. $C_{38}H_{44}O_4$

1) Tetrapropyläther d. $\alpha \alpha \beta \beta$ -Tetra[4-Oxyphenyl]äthen. Sm. 139—140° (B. 28, 2875).

2) Tetraäthyläther d. $\alpha \alpha \beta \beta$ -Tetra[?-Oxy-?-Methylphenyl] äthen. Sm.

214° (B. **28**, 2875). C 80,8 — H 9,2 — N 9,9 — M. G. 564. $C_{38}H_{52}N_4$

1) Diphenylhydrazon d. Onoketon (B. 29, 2988). - IV, 784.

 $\mathbf{C}_{38}\mathbf{H}_{62}\mathbf{O}_{3}$ C 80,6 - H 11,0 - O 8,4 - M. G. 566.

1) Monacetat d. α-Lactucerol. Sm. 202—207° (A. 244, 270). — II, 1068. $\mathbf{C}_{38}\mathbf{H}_{62}\mathbf{O}_{11}$ C 65,7 - H 8,9 - O 25,4 - M. G. 694.1) Chinovin, siehe C₈₀H₄₈O₈.

 $C_{38}H_{64}O_3$ C 80.3 - H 11.3 - O 8.4 - M. G. 568.

1) Verbindung (aus Gentiana verna). Sm. 115-117° (M. 12, 484). -III, 633.

 $\mathbf{C}_{38}\mathbf{H}_{64}\mathbf{O}_{18}$ C 56.4 — H 7.9 — O 35.6 — M. G. 808.

C38H66O4

1) Paristyphnin (J. 1860, 543). — III, 599. C 77.8 — H 11,3 — O 10,9 — M. G. 586. 1) Monomyricylester d. Benzol-1,2-Dicarbonsäure. Sm. 79° (Bl. [3] 11, 186). — II, *1793*.

C28 H66 O17

C 57,4 — H 8,3 — O 34,2 — M. G. 794. 1) Pikroeroein. Sm. 75° (B. 17, 2233). — III, 602. $C_{38}H_{66}S$ 1) Verbindung (aus Asphalt). Sd. 170°. — III, 565. $\mathbf{C}_{38}\mathbf{H}_{71}\mathbf{N}$ C 84,3 - H 13,1 - N 2,6 - M. G. 541.

1) Dicetylamidobenzol. (2HCl, PtCl,) (A. 83, 31). — II, 336. C 71,3 — H 11,2 — O 17,5 — M. G. 640.

C38H74O4

1) Mannitandipalmitat (A. ch. [3] 47, 323). — I, 444. C 76,8 — H 12,4 — O 10,8 — M. G. 594. 1) $\alpha \delta$ -Dicetylbutan- $\alpha \delta$ -Dicarbonsäure. Sm. 41— 43° (Soc. 65, 1016). 2) isom. $\alpha \delta$ -Dicetylbutan- $\alpha \delta$ -Dicarbonsäure. Sm. 32— 34° (Soc. 65, 1017). 3) Distearat d. $\alpha \beta$ -Dioxyäthan. Sm. 76° (A. ch. [3] 55, 436). — I, 445.

C_{ss}-Gruppe mit drei Elementen.

- IV, 578.

 $\mathbf{C}_{38}\mathbf{H}_{72}\mathbf{O}_{7}$

C 77,5 — 11 4,8 — 0 8,2 — N 9,5 — M. G. 588. $\mathbf{C}_{38}\mathbf{H}_{28}\mathbf{O}_{3}\mathbf{N}_{4}$

Verbindung (aus d. Diazoderivat d. Diamidophenylnaphtoläthyläther).
 Sm. 153-154° (Soc. 55, 605). — IV, 1440.

 $\mathbf{C}_{38}\mathbf{H}_{30}\mathbf{O}_{2}\mathbf{S}$ 1) Di[4-Diphenylmethylphenyl]sulfon. Sm. 68° (Bl. [3] 11, 506). — II, 1089.

1) Sulfon d. α -Oxytriphenylmethan. Sm. 78° (Bl. [3] 11, 507). — II, 1112. C 83,4 — H 6,0 — O 2,9 — N 7,7 — M. G. 547.

1) Triphenylrosanilin. Sm. 100°. Chlorid, Sulfat (A. 132, 162; B. 10, 1847; J. 1862, 696; 1863, 417; 1867, 963). — II, 1092. C₃₈H₃₀O₄S C38H33ON3

2) Benzoylderivat d. α-[2-Methyl-6-Chinolyl]-αα-Di[2-Methyl-1, 2-Di-

 $C_{38}H_{34}O_5N_2$

hydro-6-Chinolyl] methan (B. 24, 1705). — IV, 1219. C 76,1 — H 5,7 — O 13,4 — N 4,7 — M. G. 598. 1) Diäthylester d. Benzylidencinchoxinsäure. Sm. 120° (A. 270, 344).

- IV, 347.

1) Aethylenhexaphenyldiphosphoniumdibromid. Sm. oberb. 300° (B. $\mathbf{C}_{38}\mathbf{H}_{34}\mathbf{Br}_{2}\mathbf{P}_{2}$ 15, 804). — IV, 1661.

 Verbindung (aus Acetanilid). Sm. 227—229° (Am. 9, 217). — II, 362.
 C 73,1 — H 6,4 — O 2,6 — N 17,9 — M. G. 624. $\mathbf{C}_{38}\mathbf{H}_{36}\mathbf{N}_{4}\mathbf{Cl}_{7}$ $\mathbf{C}_{38}\mathbf{H}_{40}\mathbf{ON}_{8}$

1) Phenylhydrazonderivat d. Filixsäure. Sm. 198° (B. 21, 2965). —

 $\mathbf{C}_{38}\mathbf{H}_{44}\mathbf{O}_{2}\mathbf{N}_{4}$

IV, 719. C 77,5 - H 7,5 - O 5,4 - N 9,5 - M. G. 588. 1) Dicinchonin. Sm. 40°. 2HCl, (2HCl, PtCl₄ + 4H₂O), Rhodanat (A. **227**, 154). — III, 861.

C 63.3 - H 6.1 - O 26.7 - N 3.9 - M. G. 720. $\mathbf{C}_{38}\mathbf{H}_{44}\mathbf{O}_{12}\mathbf{N}_{2}$ 1) Helicoïdindianilid (A. 154, 37). — III, 69.

 $C_{38}H_{44}O_{16}Cl_{11}$ $\mathbf{C}_{38}\mathbf{H}_{46}\mathbf{O}_{2}\mathbf{N}_{4}$

1) Helicoldindianiid (A. 154, 57). — 111, 59.

1) Verbindung (aus Hanf) (Soc. 43, 19; 55, 204). — I, 1080.

C 77,3 — H 7,8 — O 5,4 — N 9,5 — M. G. 590.

1) Dihydrodicinchonin. Sm. 257—258°. H₂SO₄ (J. pr. [2] 8, 293; A. 108, 348; B. 11, 312; Soc. 26, 1179; M. 16, 325). — III, 835.

C 643 — H 6,6 — O 27,1 — N 2,0 — M. G. 709.

1) Dibenzoylaconin. Sm. 265°. (HCl, AuCl₈), HBr (C. 1896 [1] 208). — $C_{38}H_{47}O_{12}N$

C 64,1 - H 6,9 - O 27,0 - N 2,0 - M. G. 711. $C_{88}H_{49}O_{12}N$

1) Acetylapopseudoaconitin + H₂O. Sm. 115° (Soc. 33, 151). — III, 775. C 62,6 — H 7,0 — O 28,5 — N 1,9 — M. G. 729. 1) Diacetylaconitin (oder $C_{47}H_{49}O_{14}N$). Sm. 158°. (HCl, AuCl₃) (Soc. 67, $\mathbf{C}_{38}\mathbf{H}_{51}\mathbf{O}_{13}\mathbf{N}$ 462). — III, 773.

1) Verbindung (aus Micrococcus prodigiosus) (B. 25 [2] 759). — III, 669. $\mathbf{C}_{38}\mathbf{H}_{56}\mathbf{O}_5\mathbf{N}$

C₃₈-Gruppe mit vier Elementen.

 $\mathbf{C}_{38}\mathbf{H}_{24}\mathbf{O}_{14}\mathbf{N}_{6}\mathbf{S}$ 1) Sulfon d. Trinitrotriphenylmethan (Bl. [3] 11, 508). C₃₈H₂₄O₁₈N₆S 1) Sulfon d. α-Oxytrinitrotriphenylmethan. Sm. 100-110° (Bl. [3] 11, 508). — II, 1112.

- 1) Verbindung (aus 4,4'-Di[Dimethylamido]diphenylthioketon) (B. 20, 3294). III, 192. $\mathbf{C}_{38}\mathbf{H}_{46}\mathbf{O}_{4}\mathbf{N}_{4}\mathbf{S}$
- $C_{aa}H_{4a}O_{6}N_{2}Cl_{2}$ 1) Dicode in a thylenchlorid + 4H₂O. 2 + PtCl₄ (B. 27 [2] 509). III, 905.
- $C_{38}H_{46}O_{6}N_{2}Br_{2}1$) Dicodeïnäthylenbromid + $4H_{2}O$. Sm. $177-179^{\circ}$ (B. **27** [2] 509). - III, 905.

C₂₉-Gruppe mit zwei Elementen.

- $C_{39}H_{26}O_{2}$ C 89,0 — H 4,9 — O 6,1 — M. G. 526.
- 1) Verbindung (aus Dibiphenylenäthen). Sm. 250—252° (A. 290, 244). C 53,1 H 3,4 O 43,5 M. G. 882.
- C39 H30 O24
- 1) polym. Sordidin. Sm. 236—237° (G. **24** [2] 328). II, 2059. C 69,0 H 5,7 N 5,3 M. G. 526. C39 H30 N2
- 1) Phenylhydrazonderivat d. Verb. C₃₃H₂₄0. Sm. 250° (Soc. 51, 526).
- $\mathbf{C}_{39}\mathbf{H}_{30}\mathbf{N}_{6}$ C 80,4' - H 5,2 - N 14,4 - M. G. 582.
- C39H34O11
- 1) Hexaphenylmelamin. Sm. oberh. 300° (B. 18, 3219). II, 452. C 69,0 H 5,0 O 26,0 M. G. 678.
 1) Dibenzoyleupittonsäure. Sm. 232° (B. 12, 2219). II, 2092. C 83,9 H 6,1 N 10,0 M. G. 558. $\mathbf{C}_{39}\mathbf{H}_{34}\mathbf{N}_{4}$
- 1) Verbindung (aus uns-Phenylbenzylhydrazin u. Harnstoff). Sm. 108-109° $(G. \ \mathbf{27} \ [2] \ 243)$. — IV, 811. C 71,2 — H 5,3 — N 23,4 — M. G. 657. $C_{39}H_{35}N_{11}$
- 1) Verbindung (Base aus Acetamid u. Phenylcyanamid). Sm. 222°. 2 HCl
- (M. 5, 457) II, 450.C 60,0 H 7,2 O 32,8 M. G. 780. C39H56O16
- 1) Tetraacetylstrophanthin (oder $C_{48}H_{68}O_{20}$). Sm. 236—238° (M. 19, 397). 1) Verbindung (aus Lärchenschwammharz) = $(C_{39}H_{63}O_4)_x$ (J. 1875, 862). $\mathbf{C}_{39}\mathbf{H}_{63}\mathbf{O}_{4}$ - III, 560.
- C39H64O2
- C 82,9 H 11,3 O 5,7 M. G. 564.

 1) Diacetylilicen. Sm. 219,5° (B. 28 [2] 236).

 1) Verbindung (aus Asphalt). Sd. 178°. III, 565.

 C 75,5 H 11,6 O 12,9 M. G. 620. $\mathbf{C}_{39}\mathbf{H}_{70}\mathbf{S}$ C39 H72 O5
- 1) Glycerindioleïn (A. ch. [3] 41, 250). I, 526. C 71,8 H 11,0 O 17,2 M. G. 652. C39H72O7
 - 1) Glycerinricinelaïdin. Sm. 43° (45°) (A. 60, 322; 85, 282; J. 1855, 523). — I, *613*. C 73,4 — H 11,6 — O 15,0 — M. G. 638.
- C39H74O6
- 1) Glycerintrilaurin (Laurostearin). Sm. 45° (A. 41, 330; 53, 390; 66, 290; J. pr. [2] 42, 375; A. ch. [6] 11, 226). I, 441. C 67,2 H 12,2 O 10,6 M. G. 608. C39H76O4
- 1) Diäthylester d. Dicetylmalonsäure (A. 206, 363). C39H76O5
 - C 75,2 H 11,9 O 12,9 M. G. 624. 1) Glycerindistearin. Sm. 76,4° (58°). NH₄ (A. ch. [3] 41, 226; J. pr. [2] 28, 227). — I, 445.

C₃₉-Gruppe mit drei Elementen.

 $\mathbf{C}_{39}\mathbf{H}_{28}\mathbf{O}_4\mathbf{N}_4$ C 76,0 - H 4,5 - O 10,4 - N 9,1 - M. G. 616.Verbindung (aus Benzaldehyd u. 1-Phenylazo-2, 4-Dioxynaphtalin) (B. 17, 1812; 21, 2205). — IV, 1449.

- ${f C_{39} H_{29} N_{11} Br_6}$ 1) Verbindung (aus d. Base ${f C_{39} H_{35} N_{11}}$) (M. 5, 453). II, 450. ${f C_{39} H_{32} ON_6}$ C 78,0 H 5,3 O 2,7 N 14,0 M. G. 600.
 - 1) α -Benzoyl- α -Phenyl- β -Di[Phenylimidophenylamidomethyl] hydra**zin.** Sm. 149° (B. **26**, 1187). — IV, 1224. C 71,8 — H 4,9 — O 14,7 — N 8,6 — M. G. 652.
- $C_{39}H_{32}O_6N_4$
 - 1) Diacetylderivat d. Verb. C₃₅H₂₆O₃N₄. Sm. 220° u. Zers. (A. 218,
- 191; B. 16, 1232). III, 74.

 1) Thioharnstoffderivat d. 4-Amidotriphenylmethan. Sm. 123° (A. $\mathbf{C}_{39}\mathbf{H}_{32}\mathbf{N}_{2}\mathbf{S}$ **241**, 368). — II, 641.
- $C_{39}H_{33}O_4Br_{11}$ 1) Verbindung (aus Strophantidin). Sm. 160° (B. 31, 541). 1) Phosphat d. 4-Oxydiphenylmethan. Sm. 93-940 (J. 1873, 440). - $\mathbf{C}_{39}\mathbf{H}_{33}\mathbf{O}_{4}\mathbf{P}$
- II, 897. C 78,9 H 5,9 O 8,1 N 7,1 M. G. 593. $C_{39}H_{35}O_3N_3$ 1) Julolvioletbase. HCl, (2 HCl, PtCl₄) (B. 25, 121). — IV, 194.
- C 78,5 H 6,7 O 5,4 N 9,4 M. G. 596. $\mathbf{C}_{39}\mathbf{H}_{40}\mathbf{O}_{2}\mathbf{N}_{4}$
 - 1) Phenyldi[4 Oxy 5 Isopropyl 2 Methylazobenzol] methan (Triphenylmethandisazothymol). Sm. 170° (G. 15, 46). — IV, 1425.
 - 2) Phenyldi [4-Oxy-6-Isopropyl-3-Methylazobenzol] methan. Sm. 130°. Ag₂ (G. 15, 307). — IV, 1426. C 65,7 — H 5,6 — O 24,7 — N 3,9 — M. G. 712.
- $\mathbf{C}_{39}\mathbf{H}_{40}\mathbf{O}_{11}\mathbf{N}_{2}$ 1) Triacetylphloridzinanilid (A. 156, 10). — III, 601.
- C 75,7 H 7,4 O 7,8 N 9,1 M. G. 618. 1) Cupreïn-Chinin + 4 $_2$ O. Sm. 177° (wasserfrei). (4 $_2$ Cl, 2 $_2$ Ctl, H2SO, $C_{39}H_{46}O_3N_4$ $+6H_2O$, Tartrat $+2H_2O$ (A. 225, 98; 226, 242; 230, 72; Soc. 41, 61).
- **III**, 823. $\mathbf{C}_{89}\mathbf{H}_{48}\mathbf{O}_4\mathbf{N}_4$
- $C_{39}H_{51}O_{10}Br_{5}$
- C 73,6 H 7,5 O 10,1 N 8,8 M. G. 636.

 1) Cupre inhydrochinin + 2 H₂O (A. 241, 259). III, 860.

 1) Verbindung (aus Strophantidin). Sm. 126° (B. 31, 541).

 C 60,5 H 6,6 O 31,0 N 1,8 M. G. 773. $C_{39}H_{51}O_{15}N$ 1) Tetracetylbenzoylaconin. Sm. 211°. (HCl, AuCl₃) (Soc. 67, 461). —
- III, 774. $\mathbf{C}_{39}\mathbf{H}_{53}\mathbf{O}_{10}\mathbf{N}$ C 67.3 — H 7.6 — O 23.0 — N 2.0 — M. G. 695.
- 1) Benzoylcevadin + 1½, H, O. Sm. 170-180°. (HCl, AuCl₃) (Soc. 33, 338). - III, 949.
- $\mathbf{C}_{39}\mathbf{H}_{54}\mathbf{O}_{10}\mathbf{Br}_{2}$
- Verbindung (aus Strophantidin). Sm. 163° (B. 31, 541).
 Verbindung (aus Ricinusöl) (Bl. [3] 6, 640).
 Distearylglycerinphosphorsäure. Sm. 62,5°. (NH₄)₂, Na₂ (J. pr. [2] $\mathbf{C}_{39}\mathbf{H}_{70}\mathbf{O}_{9}\mathbf{S}$ C₈₉H₇₇O₈P 28, 233). — I, 446.

C₃₀-Gruppe mit vier Elementen.

- 1) Tri[4-Benzoylamidophenyl]phosphinoxyd + H₂O. Sm. 166-168° $\mathbf{C}_{30}\mathbf{H}_{30}\mathbf{O}_{4}\mathbf{N}_{3}\mathbf{P}$
- (wasserfrei) (A. 229, 331). IV, 1660. 1) Triphosphat d. 4'-Oxy-2-Methylazobenzol. Sm. 116° (B. 24, 368). $\mathbf{C}_{89}\mathbf{H}_{83}\mathbf{O}_4\mathbf{N}_6\mathbf{P}$ • IV, 1413.
 - 2) Triphosphat d. 4'-Oxy-4-Methylazobenzol. Sm. 140° (B. 24, 365). - IV, 1413.
- 1) Julolviolet. $2 + PtCl_4$ (B. 25, 121). IV, 194. $\mathbf{C}_{39}\mathbf{H}_{36}\mathbf{O}_{3}\mathbf{N}_{3}\mathbf{C}\mathbf{l}$
- 1) 1-Naphtylamid d. Phosphorsäuretri [α-Oxypropionsäure]. Sm. 166 $\mathbf{C}_{39}\mathbf{H}_{36}\mathbf{O}_7\mathbf{N}_3\mathbf{P}$ bis 169° (A. 279, 98).
- 1) Jodäthylat d. Taxin (B. 23, 467). III, 948. $C_{39}H_{57}O_{10}NJ$
- 1) Chlorid d. Distearylglycerinphosphorsänre. Sm. 24° (J. pr. [2] C₃₉H₇₅O₆Cl₂P 28, 233). — I, 446.

C₄₀-Gruppe mit einem Element.

- C 94,9 H 5,1 M. G. 506. C40 H26 1) Kohlenwasserstoff (aus Picensäure). Sm. 235° (A. 284, 76).
- C 88,2 H 11,8 M. G. 544. C40 H64 1) Tetraterebenten (aus Terpentinöl). Sm. oberb. 100° (A. ch. [5] 6, 42). - III, 540.

C40 H70 C 87,3 — H 12,7 — M. G. 550. 1) Fichtelit. Sm. 46° (A. 37, 304; 103, 236).

C₄₀-Gruppe mit zwei Elementen.

 $\mathbf{C}_{40}\mathbf{H}_{22}\mathbf{O}_7$ C 78,2 - H 3,6 - O 18,2 - M. G. 614.1) Verbindung (aus 1-Oxynaphtalin u. Benzol-1, 2, 4, 5-Tetracarbonsäure) (B. 6, 1069). — II, 2073.

1) Verbindung (aus Naphtalin) (C. r. 94, 534). C 75,9 — H 3,8 — O 20,2 — M. G. 632. $C_{40}H_{23}J$ C40 H24 O8 Verbindung (aus 1-Oxynaphtalin u. Benzol-1, 2, 4, 5-Tetracarbonsäure).
 Sm. 245° (B. 6, 1068). — Π, 2073.
 C 77,7 — H 4,2 — O 18,1 — M. G. 618.
 Verbindung (aus d. α, 2'-Lakton d. α-Oxy-α-[2, 4-Dioxyphenyl]-αα-Diphenylmethan-2'-Carbonsäure).
 Sm. 285° (B. 14, 1862). — Π, 1986.
 C 75,7 — H 4,1 — O 202 — M. G. 634. $C_{40}H_{26}O_{7}$ $C_{40}H_{26}O_8$ 1) Tetrabenzoat d. 1,3,1',3,'-Tetraoxybiphenyl. Sm. 1990 (M. 10, 722). - II, 1153. C 79.5 - H 4.6 - O 15.9 - M. G. 604. $\mathbf{C}_{40}\mathbf{H}_{28}\mathbf{O}_{6}$ 1) Tribenzoat d. s-Trioxytriphenylmethan (A. 166, 288). — II, 1152. C 65,4 - H 4,1 - O 30,5 - M. G. 734.C40 H30 O14 C 65,4 — H 4,1 — C 50,5 — M. G. 154.

Hämatoxylinphtaleïn (B. 12, 1652). — III, 665.

C 61,4 — H 3,8 — O 348 — M. G. 782.

1) Hemlockroth (B. 17, 1125). — III, 684.

C 76,9 — H 5,1 — O 18,0 — M G. 624.

1) Dipiperonaltriacetophenon. Sm. 253—257° (B. 29, 1894). • C 65,2 — H 4,3 — O 30,4 — M. G. 736. $C_{40}H_{30}O_{17}$ $C_{40}H_{32}O_7$ $\mathbf{C}_{40}\mathbf{H}_{32}\mathbf{O}_{14}$ 1) Anhydrid d. Eichengerbsäure C₂₀H₂₀O₉ (M. 4, 527). — III, 589. $\mathbf{C}_{40}\mathbf{H}_{34}\mathbf{O}_{15}$ C 63.7 - H 4.5 - O 31.8 - M. G. 754. Anhydrid d. Eichengerbsäure C₂₀H₂₀O₉ (M. 4, 527). — III, 589.
 Verbindung (aus Phloroglucinvanilleïn) (M. 3, 641). — II, 1046. 3) Verbindung (aus Pyrogallolvanilleïn) (M. 3, 640). — II, 1046. C 62,2 — H 4,7 — O 33,1 — M. G. 772. $C_{40}H_{36}O_{16}$ Anhydrid d. Eichengerbsäure C₂, H₂₀O₉ (M. 4, 527). — III, 589.
 C 56,3 — H 4,2 — O 39,4 — M. G. 852. $\mathbf{C}_{40}\mathbf{H}_{36}\mathbf{O}_{21}$ 1) Anhydrooktacetylcarminsäure. Sm 155—165° (B. 30, 1761, 1765). C 62,0 — H 4,9 — O 33,1 — M. G. 774.

1) c-Katechin + H₂O (Bl. 30, 567). — III, 682. C 60,8 — H 4,8 — O 34,4 — M. G. 790. C40 H38 O16 $\mathbf{C}_{40}\mathbf{H}_{38}\mathbf{O}_{17}$ 1) Anhydrid d. Eichengerbsäure $C_{20}H_{20}O_{9}$ (M. 4, 526). — III, 589. C 59,6 — H 4,7 — O 35,7 — M. G. 806. 1) α -Katechin + 2 $H_{2}O$. Sm. 204—205° (Bl. 30, 567). — III, 682. C 86,9 — H 7,2 — O 5,8 — M. G. 552. $\mathbf{C}_{40}\mathbf{H}_{38}\mathbf{O}_{18}$ C40 H40 O2 Säure (aus Phenylessigsäure). Sd. über 360° (A. 221, 49).
 C 70,6 — H 5,9 — O 23,5 — M. G. 680. $\mathbf{C}_{40}\mathbf{H}_{40}\mathbf{O}_{10}$ C 70,5 — H 5,9 — O 23,5 — M. G. 680.

1) Erythroresinotannol (C. 1897 [1] 422).
C 79,0 — H 7,2 — N 13,8 — M. G. 608.

1) 1,2-Phenylendiauramin. Sm. 305° (J. pr. [2] 50, 429). — IV, 1175.
C 63,7 — H 6,6 — O 29,7 — M. G. 754.

1) Harz (aus Opponax) (A. 44, 335). — III, 560.
C 80,5 — H 8,7 — O 10,7 — M. G. 596.
D Dispused A. Oncol. Sm. 175—190° (B. 29, 2986). $\mathbf{C}_{40}\mathbf{H}_{44}\mathbf{N}_{6}$ C40H50O14 $\mathbf{C}_{40}\mathbf{H}_{52}\mathbf{O}_4$ 1) Dibenzoat d. Onocol. Sm. 175-190° (B. 29, 2986). 1) Dibenzoat d. Onocol. Sm. 175—190° (B. 29, 2986).
C 49.7 — H 5,6 — O 44,7 — M. G. 966.
l) Hendekaacetylmelezitose. Sm. 117° (J. r. 21, 420). — I, 1071.
l) Hendekaacetylraffinose. Sm. 99—101° (B. 23, 1443). — II, 1072.
l) Hendekaacetyltriglykose. Sm. 212° (B. 12, 1942). — I, 1077.
C 77,9 — H 9,1 — O 13,0 — M. G. 616.
l) Harz (aus Muskatnussöl) (B. 6, 147). — III, 543.
C 81,9 — H 9,9 — O 8,2 — M. G. 586.
l) Anhydrid d. Isasylvinsöne. Fast, 34, 248, 250° (B. 22, 1021). $\mathbf{C}_{40}\mathbf{H}_{54}\mathbf{O}_{27}$

C40 H56 O5 C40 H58 O8

1) Anhydrid d. Isosylvinsäure. Fest; 8d. 248-250° (B. 23, 1921). -II, 1438.

C. 77,7 - H. 9,4 - O. 12,9 - M. G. 618. $\mathbf{C}_{40}\mathbf{H}_{58}\mathbf{O}_{5}$ 1) Anhydrid d. Säure C₂₀H₃₀O₃ (aus Colophonium). Sm. 143° (J. r. 20, 477). — II, *1674*. 2) Säureanhydrid (aus Colophonium). Sin. 159-160° (J. r. 20, 477). -II, 1674. C 70,4 — H 8,5 — O 21,1 — M. G. 682. C40 H58 O9 1) **Harz** (aus Sagapenum) (A. 44, 336). — III, 561. C 83,9 — H 10,5 — O 5,6 — M. G. 572. $\mathbf{C}_{40}\mathbf{H}_{60}\mathbf{O}_{2}$ 1) Succinoabietinol. Sm. 124° (C. 1895 [1] 556). Verbindung (aus Santelöl). Sd. oberh. 350° (Bl. 37, 303). — III, 549.
 C 75,5 — H 9,4 — O 15,1 — M. G. 636. C40 H60 O6 1) Harz (aus Sandarak) (A. 44, 331). — III, 561. C 83,6 — H 10,8 — O 5,6 — M. G. 574.

1) Harz (aus Copal) (Berz. J. 11, 265). — III, 555.

2) Harz (aus Mastix) (A. 44, 328). — III, 560.

C 81,4 — H 10,5 — O 8,1 — M. G. 590.

Harz (aus Copal) (Berz. J. 11, 265). — III, 555. $C_{40}H_{62}O_{2}$ $\mathbf{C}_{40}\mathbf{H}_{62}\mathbf{O}_{3}$ 2) Verbindung (aus Santelöl). Sd. 340° (*Bl.* 37, 303). — III, 549. C 79,2 — H 10,2 — O 10,6 — M. G. 606. $C_{40}H_{62}O_4$ 1) Harz (aus Mastix) (A. 44, 328). — III, 560. C 77,2 — H 10,0 — O 12,8 — M. G. 622. C40H62O5 1) Harz (aus Copal) (Berx. J. 11, 265). — III, 554. 2) Harz (aus Sandarak) (A. 44, 330). — III, 561. C 75,2 — H 9,7 — O 15,1 — M. G. 638. $\mathbf{C}_{40}\mathbf{H}_{62}\mathbf{O}_{6}$ Dammaran (aus Kauriecopal) (A. 47, 353). — III, 555.
 Harz (aus Euphorbium) (A. 44, 338). — III, 558.
 Harz (aus Sandarak) (A. 44, 331). — III, 561. C 73,4 — H 9,5 — O 17,1 — M. G. 654. C40 H62 O7 1) Dammarsäure (A. 47, 354). — III, 555. C 79,0 — H 10,5 — O 10,5 — M. G. 608. C40H64O4 1) Diacetat d. α-Lactucerol. Sm. 196—210° (A. 234, 248; 244, 270). — II, 1068. Diacetat d. β-Lactucerol. Sm. 230° (A. 234, 250). — II, 1068.
 C 76,9 — II 10,3 — O 12,8 — M. G. 624. $C_{40}H_{64}O_5$ 1) Diacetat d. Betulin. Sm. 217° (A. 182, 372). — III, 621. C 57,7 — H 7,7 — O 34,6 — M. G. 832. 1) Caïncin (Caïncasäure). Pb₂ (Bers. J. 11, 223; Z. 1867, 537; J. 1850, 387; 1862, 488, 538). — III, 573. $\mathbf{C}_{40}\mathbf{H}_{64}\mathbf{O}_{18}$ 1) Tetraterebentenhydrochlorid (A. ch. [5] 6, 47). — III, 541. $\mathbf{C}_{40}\mathbf{H}_{65}\mathbf{Cl}$ C 58,7 - H 8,1 - O 33,2 - M. G. 658. $\mathbf{C}_{40}\mathbf{H}_{66}\mathbf{O}_{7}$ 1) Harz (aus Cistus creticus) (A. 44, 334). — III, 559. 1) Tetraterebentendihydrochlorid (A. ch. [5] 6, 46). — III, 541. $\mathbf{C}_{40}\mathbf{H}_{66}\mathbf{Cl}_{2}$ $\mathbf{C}_{40}\mathbf{H}_{66}\mathbf{Cl}_4$ 1) Tetrachlorfichtelit (A. 103, 246). 1) Tetraterebentendihydrobromid (A. ch. [5] 6, 47). — III, 541. $\mathbf{C}_{40}\mathbf{H}_{66}\mathbf{Br}_{2}$ C 58,5 - H 8,3 - O 33,2 - M. G. 820.C40 H68 O17 1) Gratiosoletin (J. 1858, 518). — III, 592. 1) Dichlorfichtelit (A. 103, 246).
1) Dibromfichtelit (A. 103, 247). $\mathbf{C}_{40}\mathbf{H}_{68}\mathbf{Cl}_2$ $\mathbf{C}_{40}\mathbf{H}_{68}\mathbf{Br}_{2}$ Verbindung (aus Asphalt). Sd. 188°. — III, 565.
 Bromfichtelit (A. 103, 247).
 C 84,8 — H 12,4 — O 2,8 — M. G. 566. $\mathbf{C}_{40}\mathbf{H}_{68}\mathbf{S}$ $\mathbf{C}_{40}\mathbf{H}_{69}\mathbf{Br}$ $C_{40}H_{70}O$ 1) Quassol + H_2O . Sm. $149-151^{\circ}$ (C. 1895 [1] 435). C 78,2 - H 11,4 - O 10,4 - M. G. 614. $\mathbf{C}_{40}\mathbf{H}_{70}\mathbf{O}_{4}$ 1) Dicetylester d. Benzol-1, 2-Dicarbonsäure. Sm. 42-43° (B. 30, 783). C 57.3 - H 8.3 - O 34.4 - M. G. 838. $\mathbf{C}_{40}\mathbf{H}_{70}\mathbf{O}_{18}$ 1) Parillin + xH,O. Sm. 210° u. Zers. (J. 1877, 906). — III, 599. C 48,1 — H 7,0 — O'44,9 — M. G. 998.
1) Crocin (B. 17, 2230; A. 278, 357). C 70,4 — H 10,8 — O 18,8 — M. G. 682. $\mathbf{C}_{40}\mathbf{H}_{70}\mathbf{O}_{28}$

1) αδ-Dicetylbutan-ααδδ-Tetracarbonsäure. Ca, Ag₂ (Soc. 65, 1114).

C40H74O8

C₄₀-Gruppe mit drei Elementen.

 $\mathbf{C}_{40}\mathbf{H}_{13}\mathbf{O}_{10}\mathbf{Br}_7\mathbf{1}$) Verbindung (aus Tetrabromfluoresceïn) (A. 183, 60). — II, 2064. $\mathbf{C}_{40}\mathbf{H}_{26}\mathbf{O}_{13}\mathbf{S}_4$ 1) Di[2-Naphtylester-6-Sulfonsäure] d. 2,2-Dinaphtyläther-6,6-Disulfonsäure. K₂ (B. 14, 1481). — II, 891. C 54.9 — H 3,0 — O 29,3 — N 12,8 — M. G. 874. $\mathbf{C}_{40}\mathbf{H}_{26}\mathbf{O}_{16}\mathbf{N}_{8}$ Verbindung (aus Chinoxalindicarbonsäure). Zers. bei 170° (B. 27, 2186).
 C 85,0 — H 4,8 — O 2,8 — N 7,4 — M. G. 565. $\mathbf{C}_{40}\mathbf{H}_{27}\mathbf{ON}_3$ 1) 4-[1-Naphtyl]imido-2,3-Di[1-Naphtyl]amido-1-Keto-1,4-Dihydronaphtalin. Sm. 212° (Å. 272, 354). — IV, 1166. C 84,5 — H 4,9 — O 5,6 — N 4,9 — M. G. 568. $\mathbf{C}_{40}\mathbf{H}_{28}\mathbf{O}_{2}\mathbf{N}_{2}$ 1) 1,3-Di[Benzoyl-2-Naphtylamido]benzol. Sm. 215° (B. 26, 981). IV, 574. 2) 1,4-Di[Benzoyl-2-Naphtylamido] benzol. Sm. 220° (B. 22, 1082). — IV, 594. 3) Verbindung (aus Flavindulin u. Desoxybenzoïn) (B. 31, 3076). C 80,0 — H 4,7 — O 10,6 — N 4,7 — M. G. 600. $C_{40}H_{28}O_4N_2$ 1) 1,4-Di[2,5-Diphenyl-1-Pyrryl]benzol-1³,4³-Dicarbonsäure. Sm. oberh. 300° (B. 22, 3095). — IV, 450. 1) 1-Tetranaphtylester d. Kieselsäure. Sd. 425-430°₁₃₀ (B. 18, 1696). $\mathbf{C}_{40}\mathbf{H}_{28}\mathbf{O}_4\mathbf{Si}$ **– II**, 858. 2) 2-Tetranaphtylester d. Kieselsäure. Sd. 430° (B. 18, 1697). — 1) Thio- β -Tetranaphtyldiamin. Sm. 287° (u. 303°) u. Zers. (B. 21, 2811). $\mathbf{C}_{40}\mathbf{H}_{28}\mathbf{N}_{2}\mathbf{S}$ - II, 869. C 72,5 - H 4,5 - O 14,5 - N 8,5 - M. G. 662. $\mathbf{C}_{40}\mathbf{H}_{30}\mathbf{O}_{6}\mathbf{N}_{4}$ 1) Dibenzoat d. 4,4'-Di[2,5-Dioxyphenylazo]-3,3'-Dimethylbiphenyl (B. **26**, 1911). — **IV**, 1447. C 77,3 — H 5,0 — O 15,5 $C_{40}H_{31}O_6N$ - N 2,2 - M. G. 621. 1) Verbindung (aus d. Verb. C₂₀H₁₅O₃Cl). Sm. 267° u. Zers. (Soc. 59, 22). — II, 1908. C 69,0 — H 4,6 — O 18,4 — N 8,0 — M. G. 696. $\mathbf{C}_{40}\mathbf{H}_{32}\mathbf{O}_{8}\mathbf{N}_{4}$ 1) Diacetylderivat d. Verb. $C_{36}H_{28}O_6N_4$. Sm. 201—202° (B. 25, 1569). - II, 1186. 1) 1-Naphtylamid d. Kieselsäure (Soc. 55, 482). — II, 605. 2) 2-Naphtylamid d. Kieselsäure (Soc. 55, 481). — II, 615. C 85,9 — H 5,9 — O 5,7 — N 2,5 — M. G. 559. $\mathbf{C}_{40}\mathbf{H}_{32}\mathbf{N}_{4}\mathbf{Si}$ $\mathbf{C}_{40}\mathbf{H}_{33}\mathbf{O_2N}$ 1) 1-Naphtyldi [β -Benzoyl- α -Phenyläthyl] amin. Sm. 180° (B. 31, 352). C 63,0 — H 4,5 — O 25,2 — N 7,3 — M. G. 762. $\mathbf{C}_{40}\mathbf{H}_{34}\mathbf{O}_{12}\mathbf{N}_{4}$ 1) Diäthylester d. Tetracarbphenylamidobenzol-1,4-Dicarbonsäure. Sm. 258-260° (B. 23, 267). — II, 2068. C 79,0 — H 5,9 — O 10,5 — N 4,6 — M. G. 608. 1) Diäthylester d. 4,4'-Di[2-Methyl-5-Phenyl-1-Pyrazolyl]biphenyl- $\mathbf{C}_{40}\mathbf{H}_{36}\mathbf{O}_4\mathbf{N}_2$ 4⁸,4⁸'-Dicarbonsäure. Sm. 178—179⁰ (B. 19, 3161). — IV, 357. 1) Phosphororsellinsäure (G. 14, 462). — II, 1753. $\mathbf{C}_{40}\mathbf{H}_{\mathbf{3}6}\mathbf{O}_{24}\mathbf{P}_{4}$ 1) Thiotetraphenyl [3-Methylphenyl] diguanidin. Sm. 106° (B. 20, 675). $\mathbf{C}_{40}\mathbf{H}_{36}\mathbf{N}_{6}\mathbf{S}$ · II, 821. C 81,4 - H 6,4 - O 2,7 - N 9,5 - M. G. 590. 1) Oxyd (aus d. Base $C_{20}H_{10}NCl) + 4H_2O$. Sm. 130° (220° wasserfrei). $4H_2SO_4 + 8H_2O$ (Bl. [3] 11, 1034). - IV, 1046. C 68,4 - H 5,4 - O 18,2 - N 8,0 - M. G. 702. $\mathbf{C}_{40}\mathbf{H}_{38}\mathbf{ON}_{4}$ $\mathbf{C}_{40}\mathbf{H}_{38}\mathbf{O}_{8}\mathbf{N}_{4}$ 1) ?-Tetra [Diacetylamido]-1,3,5-Triphenylbenzol. Sm. 156-158° (B. 23, 2535). — IV, 1304. 2) isom. ?-Tetra[Diacetylamido]-1,3,5-Triphenylbenzol. Sm. 142-1430 2) isom. P-Tetra [Diacetylamido] -1, 3, 5-Triphenylbenzol. Sm. 142—145° $(B. \ 23, 2536). - IV, 1304.$ C 68,6 - H 5,7 - O 13,7 - N 12,0 - M. G. 700. 1) Phyllotaonin $(A. \ 278, 341; \ 284, 92; \ 288, 210; Soc. 56, 279). - III, 658.$ C 67,9 - H 5,8 - O 20,4 - N 5,9 - M. G. 707. 1) p-Aethoxylglauconinsäure. Na $(B. \ 31, 693). - IV, 1220.$ C 61,7 - H 5,4 - O 18,5 - N 14,4 - M. G. 778. 1) Tetraspartidtetraanilid. Zers. oberb. 235° $(A. \ 303, \ 212).$ C $(40, H_{43}O_8C1)$ 1) Verbindung (aus Chekenon). Sm. $(180-181)^{\circ}$ $(B. \ 21, \ 21, \ 22, \ 341).$

C 76,2 - H 7,3 - O 7,6 - N 8,9 - M. G. 630.C40 H46 O8 N4

1) Diconehinin. 2(2 HCl, PtCl₄) + 4H₂O (B. 10, 2155; 16, 59, 60). — III, 861. C 70.4 - H 6.7 - O'11.8 - N 4.1 - M. G. 682 $C_{40}H_{46}O_8N_2$

1) Diacetyldicodeïn (Soc. 25, 507). — III, 906. 2) Acetylbutyryldimorphin. 2HCl + 8H₂O (Soc. 28, 20). — III, 899. C 57,3 — H 5,5 — O 17,2 — N 20,0 — M. G. 838. $\mathbf{C}_{40}\mathbf{H}_{46}\mathbf{O}_{9}\mathbf{N}_{12}$

1) Tetraspartotetraphenylhydrazid (A. 303, 201). C 61,8 — H 6,0 — O 12,3 — N 19,8 — M. G. 777. C40 H47 O6 N11

1) 4-Nitroso-1-Dimethylamidobenzolhydrocyanid + Nitrobenzol (M. 6, 537). — II, 330.

C = 65.5 - H = 6.4 - O = 26.2 - N = 1.9 - M. G. 733.C40 H47 O12 N

1) Benzoylapoaconitin. Sm. bei 130° (Soc. 33, 324). — III, 773.

C₄₀H₄₇O₂₈Br₄1) Säure (aus 3-Brom-4-Oxybenzolmethyläther-1-Carbonsäureäthylester). Sm. 149—150°. Ba₈ + 21 H₂O (G. II, 406). — II, 1537. C 74,1 — H 7,4 — O 9,9 — N 8,6 — M. G. 648. l) Chinin-Conchinin + $2^{1}/_{2}(3)$ H₂O. + C₆H₆ (A. 243, 146; J. 1883, 1347). $\mathbf{C}_{40}\mathbf{H}_{48}\mathbf{O}_4\mathbf{N}_4$

- III, 824.

C 71,0 - H 7,1 - O 9,5 - N 12,4 - M. G. 676. $\mathbf{C}_{40}\mathbf{H}_{48}\mathbf{O}_4\mathbf{N}_6$

1) 1,3-Dinitrobenzol + 2 Molec. Di[4-Dimethylamidophenyl]methan. Sm. 74° (R. 7, 227). — IV, 974. C 65,6 — H 6,5 — O 8,7 — N 19,1 — M. G. 732.

 $\mathbf{C}_{40}\mathbf{H}_{48}\mathbf{O}_{4}\mathbf{N}_{10}$

1) 4-Nitroso-1-Dimethylamidobenzolhydrocyanid + Benzol (M. 6, 537). **– II**, 330.

 $C_{40}\overline{H_{49}}O_{4}N_{11}$ $C 64\dot{3} - H 6\dot{6} - O 8\dot{6} - N 20\dot{5} - M.G. 747.$

1) 4-Nitroso-1-Dimethylamidobenzolhydrocyanid + Amidobenzol (M. **6**, 537). — **II**, *330*. **C** 73,9 — **H** 7,7 — **O** 9,8 — **N** 8,6 — **M**. G. 650.

1) Conchininhydrochinin $+ 2^{1}/_{2}$ H₂O (A. 241, 259). — III, 860. 1) Tetra[4-tert. Butylphenylester] d. Kieselsäure. Sd. 380°₁₂₀ (B. 18, $\mathbf{C}_{40}\mathbf{H}_{52}\mathbf{O}_{4}\mathbf{Si}$

1692). — II, 765. 2) Tetra[2-Methyl-5-Isopropylphenylester] d. Kieselsäure. Sd. 380

bis 390°_{118} (B. 18, 1694). — II, 767. 3) Tetra[3-Methyl-6-Isopropylphenylester] d. Kieselsäure. Sm. 47 bis

 $C_{40}H_{52}O_5N_2$

 $C_{40}H_{53}O_{14}N$

19 Triacetylaconitin (oder C₈₉H₅₁O₁₅N). Sm. 207° (Soc. 67, 462). III, 773.

C 66.8 - H 7.5 - O 17.8 - N 7.8 - M. G. 718.

C40H54O8N4 1) Nitrocampherchinin + H₂O. Sm. 131° u. Zers. (Bl. 49, 97). — III, 813. C 63,5 — H 7,4 — O 25,4 — N 3,7 — M. G. 756.
1) Myoctonin. Sm. 143,6° (C. 1895 [1] 1184). C 51,7 — H 6,0 — O 36,2 — N 6,0 — M. G. 928. $\mathbf{C}_{40}\mathbf{H}_{56}\mathbf{O}_{12}\mathbf{N}_{2}$

 $\mathbf{C}_{40}\mathbf{H}_{56}\mathbf{O}_{21}\mathbf{N}_{4}$

C40 H50 O4 N4

 $\begin{array}{c} \textbf{C}_{40}\textbf{H}_{61}\textbf{O}_{21}\textbf{N}_{4} & \textbf{1} & \textbf{Kolamin} & \textbf{(C. 1898 [2] 217)}. \\ \textbf{C}_{40}\textbf{H}_{61}\textbf{O}_{2}\textbf{N} & \textbf{C} & \textbf{81,8} - \textbf{H} & \textbf{10,4} - \textbf{0} & \textbf{5,4} - \textbf{N} & \textbf{2,4} - \textbf{M}. \textbf{G. 587}. \\ \textbf{1)} & \textbf{Solanidin} & (\textbf{oder} & \textbf{C}_{26}\textbf{H}_{41}\textbf{O}_{2}\textbf{N}). & \textbf{Sm. 191}^{\circ}; & \textbf{subl.} & \textbf{HCl} + \textbf{H}_{2}\textbf{O}, & \textbf{H}_{2}\textbf{SO}_{4} + \\ \textbf{8} & \textbf{H}_{2}\textbf{O} & \textbf{(A. 118, 140;} & \textbf{M. 10, 552;} & \textbf{Fr. 21, 620}. & -\textbf{III, 626}. \\ \textbf{C}_{40}\textbf{H}_{63}\textbf{O}_{2}\textbf{Cl}_{3} & \textbf{1)} & \textbf{Verbindung} & (\textbf{aus Caryophyllin}) & \textbf{(B. 13, 800)}. & -\textbf{III, 626}. \\ \textbf{M. 13} & \textbf{Solon.} & \textbf{III, 626}. \\ \end{array}$

 $\mathbf{C_{40}^{40}H_{68}O_3^{80}Cl}^3$ 1) Verbindung (aus Caryophyllin) (B. 13, 800). — III, 626. $\mathbf{C_{40}^{40}H_{64}O_4N_2}$ C 75,5 — H 10,0 — O 10,0 — N 4,4 — M. G. 636.

 $\mathbf{C}_{40}\mathbf{H}_{64}\mathbf{O}_4\mathbf{N}_2$

1) Chlorophyll (aus Spinat) (C. 1895 [1] 656). $\mathbf{C}_{40}\mathbf{H}_{66}\mathbf{O}_4\mathbf{Cl}_4$ 1) Dicetylester d. 3,4,5,6-Tetrachlorbenzol-1,2-Dicarbonsäure. Sm. 49-50° (B. 30, 786).

C₄₀H₇₆O₄Si 1) Tetramenthylester d. Kieselsäure. Sm. S2°; Sd. 350°₁₅₅ (B. 18, 1695). - III, 466.

C₄₀-Gruppe mit vier Elementen.

 $C_{41}H_{34}O_{11}$

C41-Gruppe mit zwei Elementen.

C 89,4 — H 5,4 $\stackrel{\checkmark}{-}$ N 5,1 — M. G. 550. C41 H30 N2 1) 2,4,5-Triphenyl-1,3-Di[1-Naphtyl]-2,3-Dihydroimidazol (B. 27, 571). C 83,7 — H 5,4 — O 10,9 — M. G. 588. C41 H82 O4

1) Dibenzoat d. $\beta\beta$ -Di[?-Oxyphenyl]- $\alpha\gamma$ -Diphenylpropan (B. 25, 1275). - II, 1152.

C 70,3 - H 4,6 - O 25,1 - M. G. 700.C41 H29 O11

1) Tetrabenzoylhelicin (A. 154, 26). — III, 69.

2) Pentabenzoat d. Galaktose. Sm. 165° (M. 10, 397; J. r. 23, 377).

3) Pentabenzoat d. Glykose. Sm. 179° (M. 10, 396; H. 14, 337). — II, 1143.

4) Pentabenzoat d. Lävulose. Sm. 78—79° (J. r. 23, 375). — II, 1143. C 70,1 — H 4,8 — O 25,1 — M. G. 702.

1) Tetrabenzoat d. Salicin (A. 154, 8). — C 64,2 — H 4,4 — O 31,3 — M. G. 766. - III, 609. C41H34O15

1) Ratanhiatannoform (C. 1896 [1] 560). C41 H38 O8 C 85.1 - H 6.6 - O 8.3 - M. G. 578.

1) $\beta \theta$ -Diketo- ε -Aethanoyl- $\gamma \delta \varepsilon \zeta \eta$ -Pentaphenylnonan? Sm. 175° (M. **19**, 416).

2) $\alpha \gamma \varepsilon$ -Tri[4-Methylbenzoyl]- $\beta \delta$ -Diphenylpentan (Dibenzaltri-Methyl-p-Tolylketon). Sm. 228° (B. 29, 2247). C 83,1 — H 11,5 — O 5,4 — M. G. 592.

 $C_{41}H_{68}O_{2}$ 1) Dipropionylilicen. Sm. 209° (B. 28 [2] 236). C 78,8 — H 10,9 — O 10,3 — M. G. 624. $\mathbf{C}_{41}\mathbf{H}_{68}\mathbf{O}_4$

1) a-Copal-Resen. Sm. 75—77° (C. 1896 [2] 796). C 42,7 — H 5,9 — O 51,4 — M. G. 1152. 1) Arabinose (Soc. 45, 54). — I, 1101. C 82,3 — H 12,4 — O 5,3 — M. G. 598. C41H68O87

 $\mathbf{C}_{41}\mathbf{H}_{74}\mathbf{O}_{2}$

1) Benzoat d. Verbindung $C_{34}H_{70}O$ (aus Hummelwachs). Sm. 55° (H. 26, 59). C 73,9 — H 11,7 — O 14,4 — M. G. 666. 1) Glycerinacetodistearin. Sm. 28–30° (J. pr. [2] 28, 230). — I, 446. C41 H78 O6

C41-Gruppe mit drei Elementen.

C 87,2 — H 5,0 — O 2,8 — N 5,0 — M. G. 564. C41H28ON2 1) 2-Tetranaphtylharnstoff. Sm. 287-288° (294-295°) (B. 23, 1542,

2162). — II, 618. C 79,9 — H 5,2 — O 10,4 — N 4,5 — M. G. 616. $C_{41}H_{32}O_4N_2$

1) Benzoat d. 3,5-Di[4-Methylphenylbenzoylamido]-1-Oxybenzol. Sm.

 $\mathbf{C}_{41}\mathbf{H}_{33}\mathbf{O}_{10}\mathbf{N}$

1) Belizola (d. 9,0 517 metri sprend) 1 262 – 264° (G. 20, 335). — II, 1178. C 70,4 — H 4,7 — O 22,9 — N 2,0 — M. G. 699. 1) Pentabenzoylglykosamin. Sm. 203° (M. 12, 436; siehe auch B. 19, 320; H. 14, 359). — II, 1195. C 65,0 — H 4,6 — O 21,1 — N 9,2 — M. G. 757.

 $\mathbf{C}_{41}\mathbf{H}_{35}\mathbf{O}_{10}\mathbf{N}_{5}$

1) Phenylearbamidsaccharin. Sm. 230-240° u. Zers. (B. 18, 2607). -II, 372.

 $\mathbf{C}_{41}\mathbf{H}_{37}\mathbf{O}_{10}\mathbf{N}_{5}$ C 64,8 -- H 4.8 - 0 21.1 - N 9.2 - M. G. 759.

1) Phenylamidoformiat d. Quercit. Sm. 120-140° (B. 18, 2606). -

 $C_{83,5} - H_{6,6} - O_{2,8} - N_{7,1} - M_{6,6}$ $\mathbf{C}_{41}\mathbf{H}_{39}\mathbf{ON}_{3}$

 $\mathbf{C}_{41}\mathbf{H}_{39}\mathbf{O}_{11}\mathbf{N}_{5}$

1) Tri[4-Methylphenyl]rosanilin. Chlorid (A. 132, 290). — II, 1093. C 63,3 — H 5,0 — O 22,6 — N 9,0 — M. G. 777.

1) Phenylamidoformiat d. Mannit. Sm. 260° u. Zers. (B. 18, 970). — II, 372. Phenylamidoformiat d. Duleit. Sm. 250—252° (B. 18, 971). — II, 372. C 77,0 — H 6,4 — O 10,0 — N 6,6 — M. G. 639.

 $\mathbf{C}_{41}\mathbf{H}_{41}\mathbf{O}_{4}\mathbf{N}_{3}$

1) 3'-Nitro-5², 5³-Di[Benzoylamido]-2², 2³-Diisobuthyltriphenylmethan. Sm. 113—114° (B. 21, 3215). — IV, 1049.
2) 4'-Nitro-5²,5³-Di[Benzoylamido]-2²,2³-Diisobuthyltriphenylmethan.
Sm. 125—126° (B. 21, 3214). — IV, 1049.

CALHASO, N.

C 68,9 — H 5,9 — O 13,4 — N 11,8 — M. G. 714.

1) Methyläther d. Phyllotaonin. Sm. 210° (4. 278, 337). — III, 658.

C 69,5 — H 6,2 — O 20,3 — N 4,0 — M. G. 708. $C_{41}H_{44}O_9N_2$

1) Triacetat d. Pseudomorphinmonomethyläther. (2HCl, PtCl₄) (A. 294, 217).

C 69,0 - H 6,6 - O 22,5 - N 1,9 - M. G. 713.C41H47O10N

1) Dibenzoylapopseudoaconin (Soc. 33, 330). — III, 776. C 65,9 - H 6,7 - O 8,6 - N 18,8 - M. G. 746. $\mathbf{C}_{41}\mathbf{H}_{50}\mathbf{O}_{4}\mathbf{N}_{10}$

1) 4-Nitroso-1-Dimethylamidobenzolhydrocyanid + Methylbenzol (M.

 $\mathbf{C}_{41}\mathbf{H}_{76}\mathbf{O}_{6}\mathbf{N}_{12}$

6, 537). — II, 330. C 59,1 — H 9,1 — O 11,5 — N 20,2 — M. G. 832. 1) Benzylidentetraönanthohexaureid (A. 151, 197). — III, 33. $C_{41}H_{81}O_9N$

C 67,3 — H 11,1 — O 19,7 — N 1,9 — M. G. 731.

1) Phrenosinhydrat (J. pr. [2] 25, 27). — III, 574.

C 58,5 — H 10,0 — O 11,4 — N 20,0 — M. G. 840. $\mathbf{C}_{41}\mathbf{H}_{84}\mathbf{O}_{6}\mathbf{N}_{12}$

1) Oenanthohexureïd. Sm. 150° (A. 151, 190). — I, 1314.

C₄₁-Gruppe mit vier Elementen.

 $C_{41}H_{24}ON_2S_2$ 1) Dithio- β -Tetranaphtylharnstoff. Sm. oberh. 350° (B. 24, 2918). II, 870.

C₄₂-Gruppe mit zwei Elementen.

C 70,2 — H 3,1 — O 26,7 — M. G. 718. $C_{42}H_{22}O_{12}$

 $\mathbf{C}_{42}\mathbf{H}_{30}\mathbf{O}_{13}$

 $C_{42}H_{86}O_{16}$

1) Tetrabenzoylellagsäure (M. 13, 54). — II, 2085. C 67,9 — H 4,0 — O 28,0 — M. G. 742. 1) Katechuretin + 6 H₂O (A. 128, 291; 186, 337). — III, 686. C 79,8 — H 5,0 — O 15,2 — M. G. 632. $C_{42}H_{32}O_6$

1) Renzilbenzoïn. Sm. 134—135° (B. 19, 1866). — III, 281. C 81,3 — H 5,2 — N 13,5 — M. G. 620.

 $C_{42}H_{32}N_6$ 1) Base (aus Phenosafranin), siehe auch C₃₆H₂₇N₅. HCl, HBr (B. 29, 371).

— IV, 1327. C 83,0 — H 5,4 — N 11,5 — M. G. 607. $C_{42}H_{83}N_5$

 $C_{42}H_{34}O_{10}$

1) Azobenzoïlid (A. 38, 331). — III., 27. C 72,2 — H 4,9 — O 22,9 — M. G. 698. 1) Tribenzoylguajacinsäure. Sm. 155—158° (C. 1897 [1] 167). C 64,8 — H 4,4 — O 30,8 — M. G. 778.

 $\mathbf{C}_{42}\mathbf{H}_{34}\mathbf{O}_{15}$

1) Katechinanhydrid (A. 186, 336). — III, 686. C 63,5 - H 4,3 - O 32,2 - M. G. 794. $\mathbf{C}_{42}\mathbf{H}_{34}\mathbf{O}_{16}$

1) Katechin (aus Acajouholz). Sm. 164-1650 (Bl. 30, 568). - III, 687.

 $C_{42}H_{34}O_{17}$ C 62,2 - H 4,2 - O 33,6 - M. G. 810.

C42H36O10

C 62,2 — H 4,2 — U 55,0 — M. G. 810.

1) Fichtenroth (B. 17, 1128). — III, 681.
C 72,0 — H 5,1 — O 22,9 — M. G. 700.

1) Pentabenzoat d. Alkohols C₇H₁₆O₅ (aus Diallylcarbinol). Fl. (J. pr. [2] 41, 62). — II, 1142.
C 67,4 — H 4,8 — O 27,8 — M. G. 748.

 $C_{42}H_{36}O_{18}$

1) Tribenzoylphloridzin (A. 156, 11). — III, 600. C 63,3 — H 4,5 — O 32,2 — M. G. 796.

1) Katechin (aus braunem Katechu). Sm. 140° (Bl. 28, 146). — III, 687. 2) Katechin (aus gelbem Katechu). Sm. 188—190° (Bl. 28, 146). —

III, 687. C 84,6 — H 6,0 — N 9,4 — M. G. 596. $C_{42}H_{36}N_4$

1) Verbindung (Base aus d. Phenylamid d. Benzolcarbonsäure). Sm. 2170 (B. 10, 1720). $\stackrel{\longleftarrow}{-}$ II, 1162. C 67,2 $\stackrel{\frown}{-}$ H 5,1 $\stackrel{\frown}{-}$ O 27,7 $\stackrel{\frown}{-}$ M. G. 750.

 $\mathbf{C}_{42}\mathbf{H}_{38}\mathbf{O}_{13}$ 1) Acetylderivat d. Chrysophanhydranthron. Sm. 230-231° (B. 21, 437). — III, 453. C 63,3 — H 4,7 — O 32,1 — M. G. 798. 1) b-Katechin + H₂O. Sm. 176—177° (Bl. 30, 567). — III, 682.

 $\mathbf{C}_{42}\mathbf{H}_{38}\mathbf{O}_{16}$

C42 H40 O5 C 80.8 - H 6.4 - O 12.8 - M. G. 624.

1) Diäthyläther d. 2,2'-Dioxydibenzylidentriacetophenon. Sm. 190 bis 192° (B. **29**, 1893).

2) Diäthyläther d. 3,3'-Dioxydibenzylidentriacetophenon. Sm. 225° (B. **29**, 1894).

3) Diäthyläther d. 4, 4'- Dioxydibenzylidentriacetophenon. Sm. 253 bis 257° (B. 29, 1894). C 56,0 — H 4,9 — O 39,1 — M. G. 900. 1) Oktacetylruberythrinsäure. Sm. 230° (B. 20, 2244). — III, 607. C 54,9 — H 5,0 — O 40,1 — M. G. 918.

C42H44O22

 $\mathbf{C}_{42}\mathbf{H}_{46}\mathbf{O}_{23}$

1) Oktacetat d. 2-Oxybenzol-1-Carbonsäureglykosid. Sm. 110-111° (Am. 5, 173). — II, 1493. C 62,4 — H 5,9 — O 31,7 — M. G. 808. $C_{42}H_{48}O_{16}$ 1) Hexacetat d. Coriamyrtin + 3 H₂O. Sm. unter 100° (Z. 1866, 665). — III, 579.

C 51,2 - H 4,9 - O 43,9 - M. G. 984.C49 H48 O27

 $\mathbf{C}_{42}\mathbf{H}_{50}\mathbf{O}_{22}$

1) Lokaonsäure. NH₄, (NH₄)₂, K₂, Ba, Pb (B. 18, 3419). — III, 597. C 55,6 — H 5,5 — O 38,9 — M. G. 906.
1) Oktacetylhelicoïdin. Sm. 80° (A. 154, 29). — III, 69. C 80,6 — H 8,2 — N 11,2 — M. G. 625. $\mathbf{C}_{42}\mathbf{H}_{51}\mathbf{N}_{5}$ 1) $\alpha \alpha \alpha \beta \beta$ -Penta [4-Dimethylamidophenyl]äthan + H₂O (A. 206, 121). -

C42H56O15

 $\mathbf{C}_{42}\mathbf{H}_{64}\mathbf{O}_{10}$

 $\mathbf{C}_{42}\mathbf{H}_{66}\mathbf{O}_{12}$

1) aaap-Penta[4-Dimethylamidophenylathan + 1,0 (A. 206, 121). — IV, 1327.
C 63,0 — H 7,0 — O 30,0 — M. G. 800.
1) Cnicin (A. 44, 298). — III, 628.
C 69,2 — H 8,8 — O 22,0 — M. G. 728.
1) Myroxofluorin (C. 1897 [1] 421).
C 66,1 — H 8,6 — O 25,2 — M. G. 762.
1) Hexaisoamylester d. Benzolhexacarbonsäure. Fl. (J. 1862, 281). — II. 2105. II, 2105. C 79,2 — H 10,7 — O 10,1 — M. G. 636.

C42 H68 O4

 Dipropionat d. α-Luctucerol. Sm. 152° (A. 234, 249). — II, 1068. C 83,1 — H 11,6 — O 5,3 — M. G. 606. $\mathbf{C}_{42}\mathbf{H}_{70}\mathbf{O}_{2}$

1) Echitein. Sm. 195° (A. 178, 69). — III, 630. C 82,6 — H 12,1 — O 5,2 — M. G. 610. $C_{42}H_{74}O_{2}$

1) Palmitat d. Cholesterin. Sm. 78° (*H.* 21, 342). 2) Palmitat d. Phytosterin. Sm. 82° (*B.* 29 [2] 38). C 72,8 — H 11,0 — O 16,2 — M. G. 692.

 $C_{42}H_{76}O_{7}$ 1) Mannitandiolein (A. ch. [3] 47, 326). — I, 526. C 72,6 — H 11,2 — O 16,1 — M. G. 694. 1) Glykosedistearat (A. ch. [3] 60, 96). — I, 1049. C 72,4 — H 11,5 — O 16,1 — M. G. 696. C49H78O7

C42 H80 O7

1) Dulcitandistearat (Berthelot, Chim. org. synth. 2, 210). — I, 447.
2) Pinitdistearat (Berthelot, Chim. org. synth. 2, 216). — I, 446.
3) Quercitdistearat (Berthelot, Chim. org. synth. 2, 219). — I, 446.
C 81,3 — H 13,5 — O 5,2 — M. G. 620.

C42H84O2 1) Myricylester d. Laurinsäure. Sm. 69-70° (Bl. [3] 11, 186).

C₄₂-Gruppe mit drei Elementen.

 $C_{42}H_{21}O_{8}N$ C 85,9 - H 3,6 - O 8,2 - N 2,3 - M. G. 587.

1) Phenylamidodianhydrobisdiketohydroinden (B. 31, 2089). $\mathbf{C}_{42}\mathbf{H}_{24}\mathbf{O}_{17}\mathbf{Br}_{10}$

1) Bromfichtenroth (B. 17, 1129). — III, 681. C 77,8 — H 4,3 — O 4,9 — N 13,0 — M. G. 648. $\mathbf{C}_{43}\mathbf{H}_{28}\mathbf{O}_{2}\mathbf{N}_{6}$

1) Verbindung (aus o-Dinitrodibenzyl-p-Toluidin) (B. 25, 3579).

 $\mathbf{C}_{42}\mathbf{H}_{29}\mathbf{O}_{6}\mathbf{N}_{7}$ C 69.3 - H 4.0 - O 13.2 - N 13.5 - M. G. 727.

1) Tri[4-Nitrobenzyliden]hydrocyanrosanilin. Sm. 144—145° (B. 28, 210). — III, 16.

 $\mathbf{C}_{42}\mathbf{H}_{30}\mathbf{O}_{6}\mathbf{S}_{3}$ 1) Tribenzoat d. β-Trithio-2-Oxybenzaldehyd. Sm. 218° (A. 277, 346). — III, 71. 2) Tribenzoat d. β-Trithio-3-Oxybenzaldehyd. Sm. 146° (A. 277,

347). — III, 81.

- 3) Tribenzoat d. β -Trithio-4-Oxybenzaldehyd. Sm. 225° (A. 277, 350; C42H30O6S3
- B. 29, 141). III, 84.
 1) Disulfid d. 2-Merkapto-1,4,5-Triphenylimidazol (A. 284, 31). $\mathbf{C}_{42}\mathbf{H}_{30}\mathbf{N}_{4}\mathbf{S}_{2}$ III, 225.
- C 76,4 H 4,8 O 14,5 N 4,2 M. G. 660. $C_{42}H_{32}O_6N_2$
- 1) Dibenzoat d. $\alpha\beta$ -Di[Benzoylamido]- $\alpha\beta$ -Di[2-Oxyphenyl]äthan. Sm. 246—248° (Soc. 45, 682; B. 17, 2408). — II, 994; III, 287. C 76,6 — H 5,2 — O 9,7 — N 8,5 — M. G. 658. $C_{42}H_{34}O_4N_4$
- 1) Verbindung (aus Dibenzaldiphenylhydrotetrazon). Sm. 165-168° (G.
- $C_{42}H_{34}O_8N_4$
- 27 [2] 289). IV, 749. C 69,8 H 4,7 O 17,7 N 7,8 M. G. 722. l) Tetracetat d. Verb. C₃₄H₂₆O₄N₄. Sm. 190—191° (B. 15, 1971). —
- 1) Tribenzyläther d. α-Trithio-4-Oxybenzaldehyd. Sm. 127° (B. 29, $C_{42}H_{36}O_3S_3$ 142). — III, 84.
 - 2) Tribenzyläther d. β -Trithio-4-Oxybenzaldehyd. Sm. $198-199^{\circ}$ $+2C_6H_6$ (B. 29, 143). — III, 84.
- 1) Azobenzoylschwefelwasserstoff? (A. 38, 327). III, 28. $C_{42}H_{36}N_4S_3$
- C 82,0 H 6,0 O 5,2 N 6,8 M. G. 615. 1) Benzalimid. Sm. 247° (B. 22, 1598). III, 28. $\mathbf{C}_{42}\mathbf{H}_{37}\mathbf{O}_{2}\mathbf{N}_{3}$
- $\mathbf{C}_{42}\mathbf{H}_{38}\mathbf{N}_{6}\mathbf{S}_{2}$ 1) Dithiodiphenyltetratolyldiguanidin. Sm. 118-119° (B. 20, 674). - II, 821.
- 1) Tetraäthyläther d. 2,3,5,6-Tetramerkapto-1,4-Benzochinondi- $\mathbf{C}_{42}\mathbf{H}_{40}\mathbf{O}_{6}\mathbf{S}_{6}$ benzoyldithiobenzoylacetal. Sm. 131—132° (Am. 19, 293). C 52,7 — H 4,2 — O 28,4 — N 14,6 — M. G. 956.
- $\mathbf{C}_{42}\mathbf{H}_{40}\mathbf{O}_{17}\mathbf{N}_{10}$
- 1) Oktaspartoanilid (B. 30, 2452).
- 1) Jodmethylat d. Tribenzylrosanilin (B. 6, 264). II, 1093. $\mathbf{C}_{42}\mathbf{H}_{40}\mathbf{N}_{3}\mathbf{J}$
- C 67,9 H 5,7 O 15,1 N 11,3 M. G. 742. $C_{42}H_{42}O_7N_6$
- Acetat d. Phyllotaonin (A. 278, 342). III, 658.
 C 69,2 H 6,0 O 13,2 N 11,5 M. G. 728.
 Aethyläther d. Phyllotaonin. Sm. bei 200° (A. 278, 339; 288, 210). $\mathbf{C}_{42}\mathbf{H}_{44}\mathbf{O}_{6}\mathbf{N}_{6}$
- C 73,5 H 6,7 O 11,7 N 8,1 M. G. 686. $C_{42}H_{46}O_5N_4$
- $\mathbf{C}_{42}\mathbf{H}_{46}\mathbf{O}_7\mathbf{N}_4$
- 1) Verbindung (aus d. Base $C_{17}H_{18}N_2$) (J. pr. [2] 36, 234): II, 510. C 70,2 H 6,4 O 15,6 N 7,8 M. G. 718. 1) Apovellosol. 4 HBr + 5 H₂O, 4 HJ + 5 H₂O (A. 282, 261). III, 924. C 59,1 H 5,6 O 18,8 N 16,4 M. G. 852. $\mathbf{C}_{42}\mathbf{H}_{48}\mathbf{O}_{10}\mathbf{N}_{10}$
- 1) Phenylhydrazonderivat d. Glykuronsäure. Sm. 114-115° (H. 11,
- 395). IV, 726. C 68,1 H 7,0 O 17,3 N 7,6 M, G. 740. $\mathbf{C}_{42}\mathbf{H}_{52}\mathbf{O}_{8}\mathbf{N}_{4}$ 1) Phenylhydrazinderivat d. Quassiin. Zers. bei 250° (G. 18, 169). —
- III, 647. C 71,0 II 7,6 O 13,5 N 7,8 M. G. 710. $\mathbf{C}_{42}\mathbf{H}_{54}\mathbf{O}_{6}\mathbf{N}_{4}$
- 1) Apovellosidin. Sm. 154°. (4HCl, $PtCl_4$), $3HBr + 6H_2O$ (A. 282, 262). - III, 924.
- $\mathbf{C}_{42}\mathbf{H}_{63}\mathbf{O}_{14}\mathbf{N}$
- C 62,6 H 7,8 O 27,8 N 1,7 M. G. 805.

 1) β-Medicagophyll + 3 H₂O (C. 1895 [1] 655).

 1) Tribromechiteïn. Sm. 150° (A. 178, 72). III, 630.

 C 70,8 H 9,6 O 15,7 N 3,9 M. G. 712.

 1) Delphinoidin. 2 HCl, (2 HCl, 2 AuCl₃), 2 HNO₃, H₂SO₄, Acetat (J. 1877, $\mathbf{C}_{42}\mathbf{H}_{67}\mathbf{O}_{2}\mathbf{Br}_{3}$ $\mathbf{C}_{42}\mathbf{H}_{68}\mathbf{O}_7\mathbf{N}_2$
 - 896; Fr. 12, 219; 20, 118). III, 880.
- 1) Dioxyricinolsäureglycerinsulfat (B. 16, 2455; siehe auch M. 8, 214). $C_{42}H_{78}O_{16}S$ **— I**, 761.

C48-Gruppe mit vier Elementen.

- $\mathbf{C_{42}H_{28}O_6N_4Br_{11}}$ 1) Verbindung (aus Amidobenzol u. Xanthogallol). Sm. $204-205^{\circ}$ (A.
- 245, 336). II, 1014. 1) Dibenzoylderivat d. Verb. C₂₈H₂₈O₂N₇Cl (B. 31, 1411). $\mathbf{C}_{42}\mathbf{H}_{34}\mathbf{O}_{4}\mathbf{N}_{7}\mathbf{C}\mathbf{I}$ 1) Sulfon d. Pararosanilinacetat (bl. [3] 11, 509).
- $\mathbf{C}_{42}\mathbf{H}_{40}\mathbf{O}_6\mathbf{N}_6\mathbf{S}$ $C_{42}H_{67}O_{13}N_{10}Br$ 1) Verbindung (aus Nackenband) (J. 1879, 870). — IV, 1585. $C_{42}H_{79}O_{13}NP$ 1) Cephalin (B. 9, 950). — I, 343.
- 1) Lecithin. (2HCl, PtCl₄) (A. 148, 77). I, 343. $\mathbf{C}_{42}\mathbf{H}_{84}\mathbf{O}_{9}\mathbf{NP}$ RICHTER, Lex. d. Kohlenstoffverb.

 $C_{43}H_{86}O_{2}$

C₄₃-Gruppe mit zwei Elementen.

C 73,5 — H 3,7 — O 22,8 — M. G. 702.

1) Tetrabenzoat d. Fisetin. Sm. 184—185° (180—181°) (B. 19, 1745; C. 1896 [2] 741; Soc. 71, 1195). — III, 584.

2) Tetrabenzoat d. Luteolin. Sm. 200—201° (Soc. 69, 210). — III, 585. C 89,9 — H 5,2 — N 4,9 — M. G. 574. C48H26O10 $\mathbf{C}_{43}\mathbf{H}_{30}\mathbf{N}_2$ 1) 1,1'-Benzylidendi[$2-\alpha$ -Naphtylindol]. Sm. 246° (A. 272, 205). — IV, 465. C 72,3 — H 5,3 — O 22,4 — M. G. 714. C43 H38 O10 C 72,3 — H 5,3 — O 22,4 — M. G. 714.

1) Tribenzoat d. Kosin (C. 1897 [2] 1077).
C 71,5 — H 6,4 — O 22,1 — M. G. 722.
1) Xanthoresinotannol (C. 1897 [1] 421).
C 62,8 — H 6,1 — O 31,1 — M. G. 822.
1) Hexaacetat d. Kosin (J. 1874, 900). — III, 634.
C 78,7 — H 11,6 — O 9,6 — M. G. 656.
1) Distearat d. 3,5-Dioxy-1-Methylbenzol (A. 112, 362). — II, 961.
C 64,5 — H 9,5 — O 26,0 — M. G. 800.
1) Lichenstearinsäure, siehe C. H. O. C43 H46 O10 C43H50O16 $\mathbf{C}_{43}\mathbf{H}_{76}\mathbf{O}_{4}$ C43H76O13 1) Lichenstearinsäure, siehe $C_{14}H_{24}O_{3}$.

C 75,9 — H 12,3 — O 11,8 — M. G. 680.

1) Glycerindiarachin. Sm. 75° (A. ch. [3] 47, 358). — I, 447.

C 81,4 — H 13,6 — O 5,0 — M. G. 634. C43H84O5

C43-Gruppe mit drei Elementen.

1) Cerylester d. Palmitinsäure. Sm. 79° (B. 3, 639). — I, 443.

1) Benzoylapopseudoaconitin + H₂O. (HCl, AuCl₂), HNO₃ (Soc. 33, 151). - III, 775. C₄₂H₇₄O₁₁Cl₂1) Chlorid d. Lichenstearinsäure. Fl. (B. 23, 463). — I, 625.

C₄₃-Gruppe mit vier Elementen.

 bas. Chininglycerophosphat + 7 H₂O (C. 1898 [1] 782).
 Oxyproteïnsäure. Ba₄ (C. 1897 [2] 619, 957). - IV, 1603. $C_{43}H_{57}O_{10}N_4P$ $\mathbf{C}_{43}^{1}\mathbf{H}_{82}^{1}\mathbf{O}_{31}^{1}\mathbf{N}_{14}^{1}\mathbf{S}$

C44-Gruppe mit einem Element.

C 91,3 — H 8,7 — M. G. 578.

1) ζ-Abietin (Z. 1866, 35). — II, 1436.
C 91,0 — H 10,0 — M. G. 580.
1) ε-Abietin (Z. 1866, 35). — II, 1436.
C 90,7 — H 9,3 — M. G. 582.
1) δ-Abietin (Z. 1866, 35). — II, 1436.
C 90,4 — H 9,6 — M. G. 584.
1) γ-Abietin (Z. 1866, 35). — II, 1436.
C 90,1 — H 9,9 — M. G. 586.
1) β-Abietin (Z. 1866, 35). — II, 1436.
C 89,8 — H 10,2 — M. G. 588.
1) α-Abietin. Sd. 295—303° (Z. 1866, 35). — II, 1436. $\mathbf{C}_{44}\mathbf{H}_{50}$ C44H59 $C_{44}H_{54}$ C44H58 $\mathbf{C}_{44}\mathbf{H}_{58}$ C44H60

C44-Gruppe mit zwei Elementen.

C44H28O9 C 75,4 — H 4,0 — O 20,6 — M. G. 700.

1) 2-[2,3-Dibenzoxylphenyl] äther d. 2-Oxy-1,4-Dibenzoxylnaphtalin. Sm. 203-205° (B. 30, 2566).

- C 75,2 H 4,3 O 20,5 M. G. 702. C44H30O9
- 1) Diacetat d. Verbindung $C_{40}H_{28}O_{7^{*}}$ Sm. 245° (B. 14, 1863). II, 1986. C 66,1 H 3,8 O 30,1 M. G. 798. $C_{44}H_{30}O_{15}$
- 1) Säure (aus Phenol) (G. 14, 103). II, 649. C 76,5 H 4,9 O 18,5 M. G. 690. C44H34O8
- 1) Tetrabenzylester d. 1-Phenylbenzol-2, 3, 5, 6-Tetracarbonsäure. Sm. 114—118° (Am. 20, 106).
- C44H34O9
- C 74,8 H 4,8 O 20,4 M. G. 706.

 1) Verbindung (aus Phenanthroxylenacetessigsäureäthylester). Sm. 227° (Soc. 59, 14). II, 1908.
 C 86,0 H 6,2 O 7,8 M. G. 614.
- $\mathbf{C}_{44}\mathbf{H}_{38}\mathbf{O}_3$
- C 65,0 = H 6,2 = 0 7,5 = H. G. 614. 1) Aethylester d. β-Acetyl αααγγγ-Hexaphenylpropan-β-Carbon-säure. Sm. 159,5–160,5° (Λ. 227, 111). Π, 1730. C 65,5 H 4,7 0 29,8 M. G. 806. $\mathbf{C}_{44}\mathbf{H}_{38}\mathbf{O}_{15}$
- 1) Sacculmin (G. 10, 121, 240, 355). I, 1109. C 65,3 H 4,9 O 29,7 M. G. 808.
- $\mathbf{C}_{44}\mathbf{H}_{40}\mathbf{O}_{15}$
 - 1) Benzoylderivat d. Pikrotoxinin. Sm. 237—238° (A. 222, 343). III, 643.
- $C_{44}H_{42}O$ C 90,1 - H 7,2 - O 2,7 - M. G. 586.
- 1) Aether d. β -Oxy- $\alpha\alpha\alpha$ -Triphenyl- β -Methylpropan. Sd. 256° (J. pr. [2] **41**, 525). — II, 904. C 81,7 — H 8,4 — O 9,9 — M. G. 646. $\mathbf{C}_{44}\mathbf{H}_{54}\mathbf{O}_{4}$
- 1) Dithymoläthylenchinhydron. Sm. 214-215° (B. 7, 1199; Soc. 31, 263). — II, 999.
- 1) Tribrom-α-Abietin (Z. 1866, 35). II, 1436. C44H57Br3
- C 60,4 H 6,6 O 33,0 M. G. 874.

 1) Heptaacetat d. Ouabaïn. Sm. 310° (Bl. [3] 19, 939). $\mathbf{C}_{44}\mathbf{H}_{58}\mathbf{O}_{18}$
- $\mathbf{C}_{44}\mathbf{H}_{58}\mathbf{Br}_{2}$
- 1) Dibrom-α-Abietin (Z. 1866, 35). II, 1436. C 59,2 H 6,7 O 34,1 M. G. 892. 1) Heptaacetat d. Ouabaïn. Sm. 270—275° (C. 1898 [1] 512). C 80,4 H 9,8 O 9,8 M. G. 656. C44H60O19
- C44H64O4
- $\mathbf{C}_{44}\mathbf{H}_{64}\mathbf{O}_{13}$
- 1) Diacetat d. Succinoabietinol. Sm. 92° (C. 1895 [1] 556). C 66,0 H 8,0 O 26,0 M. G. 800. 1) Colocyntheïn (J. 1858, 532; 1861, 757; Fr. 24, 154). III, 577. C 78,1 H 10,1 O 11,8 M. G. 676.
- $C_{44}H_{68}O_5$ 1) Hydroabietinsäure. Sm. $140-145^{\circ}$. Na₂ + 3 H₂O, Ca, Pb, Ag₂ (Z. 1866,
- 34). II, 1978. C 62,0 H 8,0 O 30,0 M. G. 852. $\mathbf{C}_{44}\mathbf{H}_{68}\mathbf{O}_{16}$
- 1) Tetraäthylester d. Betulinamarsäure. Sm. 117° (A. 182, 378). III, 621. C 79,8 — H 10,6 — O 9,6 — M. G. 662. C44H70O4
- 1) Dibenzoat d. Coccerylalkohol. Sm. 60-62° (B. 20, 961). II, 1142. C 50,5 — H 6,7 — O 42,8 — M. G. 1046. $\mathbf{C}_{44}\mathbf{H}_{70}\mathbf{O}_{28}$
- 1) Crocin (aus Safran) (B. 17, 2230; 21, 988; A. 278, 357). III, 602. C 83,0 11,9 O 5,0 M. G. 636. $C_{44}H_{76}O_{2}$
- 1) Oleat d. Cholesterin. Sm. 42° (H. 21, 332, 340).
- C 82,8 H 12,2 O 5,0 M G 638. C44H78O2 1) Stearat d. Cholesterin. Sm. 82° (65°) (A. ch. [3] 56, 57; H. 21, 345).
- **II**, 1073. Stearat d. Isocholesterin. Sm. 72° (J. pr. [2] 7, 174). — II, 1075.
 C 80,2 — H 12,5 — O 7,3 — M. G. 658.
- $\mathbf{C}_{44}\mathbf{H}_{82}\mathbf{O}_3$ 1) Anhydrid d. Brassidinsäure. Sm. 28-29° (B. 19, 3325). - I, 529.
 - 2) Anhydrid d. Erukasäure (B. 19, 3325). I, 528.

C. - Gruppe mit drei Elementen.

- $\mathbf{C_{44}H_{28}O_{15}S_4}$ 1) Galleïntetrabenzolsulfonat. Sm. 187—188°. II, 2088. $\mathbf{C_{44}H_{29}O_{10}N_3}$ C 69,6 H 3,8 O 21,1 N 5,5 M. G. 759.
- **Verbindung** (aus 5-Amidonaphtalin-1-Carbonsäure). Sm. 285° (B. 19, 1983). II, 1451. C 81,7 - H 4,6 - O 4,9 - N 8,7 - M. G. 646.
- $\mathbf{C_{44}H_{30}O_2N_4}$ 1) 1,1'-Binaphtyl-3,4,3',4'-Dichinontetraanilid. Sm. 248-250°. 211Cl (B. 17, 3022). — III, 397.

1) Verbindung (aus Resorcin u. 1-Methylbenzol-4-Carbonsäure-3-Sulfonsäure) $C_{44}H_{30}O_{10}S$ $+4H_2O$ (Am. 16, 520; 17, 568).

 $C_{44}H_{30}O_{16}S$ 1) Verbindung (aus Pyrogaliol u. 1-Methylbenzol-4-Carbonsäure-3-Sulfon-

säure) (Am. 16, 527). C 85,1 — H 5,2 — O 5,2 — N 4,5 — M. G. 620. $C_{44}H_{32}O_2N_2$

1) Verbindung (aus Desylessigsäure u. Anilin). Sm. noch nicht bei 300°

C44H32O8S4 C44H34O2N4

Verbindung (aus Desylessigsaure u. Annin). Sin. Boen Men. (A. 269, 141). — IV, 443.
 Rubbadin. Zers. bei 160° (B. 25, 1877). — II, 657.
 C 81,3 — H 5,2 — O 4,9 — N 8,6 — M. G. 650.
 Verbindung (aus 1 Phenylamido 2-Keto-4,5-Diphenyl-2,3-Dihydropyrrol). Sm. 238 – 243° (A. 269, 138). — IV, 699.
 Verbindung (aus Rubbadin) (B. 25, 1884). — II, 658.
 C 80,6 — H 5,5 — O 9,8 — N 4,3 — M. G. 656.
 Dijsthylaston d. 1 4 - Dij 2,5 - Diphenyl-1-Pyrryllhenzol-13 43 - Dicar-

 $\mathbf{C}_{44}\mathbf{H}_{34}\mathbf{O}_{8}\mathbf{S}_{3}$ $\mathbf{C}_{44}\mathbf{H}_{36}\mathbf{O}_{4}\mathbf{N}_{2}$

C 80,6 — H 5,5 — O 9,8 — N 4,3 — M. G. 656.

1) Diäthylester d. 1,4-Di[2,5-Diphenyl-1-Pyrryl] benzol-1³,4³-Dicarbonsäure. Sm. 249-250° (B. 22, 3095). — IV, 450.
C 80,4 — H 5,9 — O 7,3 — N 6,4 — M. G. 657.

1) Acetylbenzalimid. Sm. 178° (B. 22, 1599). — III, 28.
C 81,4 — H 7,2 — O 4,9 — N 6,5 — M. G. 649.

1) Verbindung (aus d. Chlorid d. ?-Diäthylamidonaphtalin-2-Carbonsäure). Sm. 130° (Soc. 41, 185). — II, 1459.
C 70,2 — H 6,9 — O 19,1 — N 3,7 — M. G. 752.

1) Aethylpapaveriniumoxyd. Sm. 175—180° (wasserfrei) (M. 9, 752; 10, 678). — IV. 441.

C44H39O3N3

C44H47O2N3

 $\mathbf{C}_{44}\mathbf{H}_{52}\mathbf{O}_{9}\mathbf{N}_{2}$

678). — IV, 441.

 $\mathbf{C}_{44}\mathbf{H}_{60}\mathbf{O}_{4}\mathbf{Si}$ 1) Tetra[4-(tert.) Amylphenylester] d. Kieselsäure. Sd. 390-397 0 118

 $\mathbf{C}_{44}\mathbf{H}_{60}\mathbf{O}_{12}\mathbf{N}_{2}$ $C_{44}H_{63}O_{18}N$

1) Tetra[4-(tert.) Amylphenylester] d. Kieselsäure. Sd. 390—397°₁₁₈ (B. 18, 1692). — II, 775. C 65,3 — H 7,4 — O 23,8 — N 3,5 — M. G. 808.

1) Lyeaconitin. Sm. 116,4° (C. 1895 [1] 1184). C 59,1 — H 7,0 — O 32,2 — N 1,6 — M. G. 893.

1) Glycyrrhizinsäure. NH₄, (NH₄)₃, K, K₃, Ba₃, Pb₃ (A. 48, 347; 59, 224; 118, 236; 197, 116; J. 1878, 930; 1879, 921; 1885, 1772; B. 9, 1158). — III, 591. C 78,8 — H 9,7 — O 9,5 — N 2,0 — M. G. 671.

1) Diacetylsolanidin. Sm. 203° (A. 195, 322; M. 10, 558). — III, 613. C 75,0 — H 11,9 — O 9,1 — N 4,0 — M. G. 704.

1) Hydrazid d. Oxybrassidinsäure. Sm. 56° (B. 26, 1872).

 $\mathbf{C}_{44}\mathbf{H}_{65}\mathbf{O}_{4}\mathbf{N}$

C44H84O4N2

C44-Gruppe mit vier Elementen.

 $C_{44}H_{26}O_{20}N_6S_3$ 1) Hexanitrorubbadin (B. 25, 1886). — II, 658.

 $C_{44}H_{58}O_{5}N_{4}J_{2}$ 1) Delydrocorydalinwasserstoffhexasulfid (C. 1898 [2] 115). $C_{44}H_{58}O_{5}N_{4}J_{2}$ 1) Di[Jodmethylat] d. Apovellosidin. Sm. 262° (A. 282, 264). III, 924.

C45-Gruppe mit einem Element.

 $C_{45}H_{72}$ C 88,3 — H 11,7 — M. G. 612 1) Dammaryl. Sm. 190° (J. 1847/48, 741). — III, 555.

C₄₅-Gruppe mit zwei Elementen.

C45H32O2 C 89,4 — H 5,3 — O 5,3 — M. G. 604.

1) Verbindung (aus Isobiphenylenketon). Sm. 79-80° (B. 21, 2007). III, 242.

C45H6BO $C \pm 66,8 - H \pm 10,6 - O \pm 2,6 - M. G. 622.$

1) Verbindung (Keton aus Isovaleriansäure). Sd. über 360° (A. 202, 329). C 75,2 — H 9,2 — O 15,6 — M. G. 718. 1) Sandarakolsäure. Sm. 140° (152°). Cu, Ag (B. 29 [2] 687; C. 1896 C45H66O7

[2] 184). — III, 561.

- $C_{45}H_{72}O_{3}$
- $\mathbf{C}_{45}\mathbf{H}_{72}\mathbf{O}_{15}$
- C 81,8 H 10,9 O 7,3 M. G. 660. 1) Dammarylsäure. Sm. 60° (J. 1847/48, 741). III, 555. C 63,4 H 8,4 O 28,2 M. G. 852.
- 1) Diacetat d. Rottlerin. Sm. 130—135° (Soc. 63, 979). III, 671. C 79,6 H 10,9 O 9,4 M. G. 678. C 79,6 H 7,5 O 41,9 M. G. 1068. C 50,6 H 7,5 O 41,9 M. G. 1068.
- $C_{45}H_{74}O_4$
- $\mathbf{C}_{45}\mathbf{H}_{80}\mathbf{O}_{28}$
- $C_{45}H_{86}O_{6}$
- 1) Convolvulinsäure. Sm. $150-155^{\circ}$. Ba + $2\text{H}_2\text{O}$ (C. 1897 [1] 419). C 74,8 H 11,9 O 13,3 M. G. 722. 1) Glycerintrimyristin. Sm. 55° (A. 37, 153; 91, 369; 202, 173; J. 1859, 366; B. 18, 1982, 2013; 19, 1433; J. pr. [2] 31, 306; A. ch. [6] 11, 227). **— İ**, 441.

C₄₅-Gruppe mit drei Elementen.

- $\mathbf{C}_{45}\mathbf{H}_{28}\mathbf{N}_{2}\mathbf{Br}_{6}\mathbf{1})$ 9-Phenylhydrazon- β -Dibromfluoren + 2 Molec. β -Dibromfluoren.
- Sm. 134—144° (*M.* 16, 815). IV, 778. C 81,4 H 5,0 O 7,2 N 6,3 M. G. 663. $C_{45}H_{33}O_3N_3$
 - 1) 1,3,5-Tri[Phenylbenzoylamido]benzol. Sm. oberh. 300° (G. 20, 341).
- C 55,7 H 3,5 O 14,8 N 26,0 M. G. 970.
- 1) Tribenzoat d. Verb. C₂₄H₂₂O₈N₁₈. Sm. 193-195° (B. 27, 942).
- 1) 4-Tribenzoat d. Trithio-3-Methoxyl-4-Oxybenzol-1-Carbonsäure- $C_{45}H_{36}O_9S_3$ **aldehyd** (Trithiobenzoylvanillin). Sm. 164° (B. **29**, 144). — III, 104. C 77,1 — H 6,3 — O 4,6 — N 12,0 — M. G. 700.
- $\mathbf{C}_{45}\mathbf{H}_{44}\mathbf{O}_{2}\mathbf{N}_{6}$
- 1) Verbindung (aus Carvakrolbidiazotriphenylmethan) (G. 15, 311). -IV, 1426. C 62,8 — H 5,6 — O 18,6 — N 13,0 — M. G. 860.
- $\mathbf{C}_{45}\mathbf{H}_{48}\mathbf{O}_{10}\mathbf{N}_{8}$
- 1) Phenylosazon d. Kaffeegerbsäure $C_{21}H_{28}O_{14}$. Sm. 180° (C. 1897 [2] 351). C 56.8 H 5.6 O 30.3 N 7.3 M. G. 951.
- $\mathbf{C}_{45}\mathbf{H}_{53}\mathbf{O}_{18}\mathbf{N}_{5}$
- 1) 2,4,6-Trinitro-3-Pseudobutyl-1-Methylbenzol + Amidobenzol. Sm. 64° (B. 24, 2838). — II, 313.

C₄₅-Gruppe mit vier Elementen.

- $C_{45}H_{38}O_{6}N_{6}S_{3}$ 1) Verbindung (aus d. Chlorid $C_{27}H_{28}O_{6}N_{3}Cl_{3}S_{3}$). Sm. 196° (Am. 9, 346). **— II**, 1175.
- C₄₅H₅₄O₁₀Cl₈P 1) Santonsäureverbindung. Sm. 198° (J. 1880, 895). II, 1789.

C₄₆-Gruppe mit zwei Elementen.

- C 86.5 H 0.9 O 12.5 M. G. 638. $\mathbf{C}_{46}\mathbf{H}_{6}\mathbf{O}_{5}$
- 1) Pyrographitoxyd (A. ch. [6] 20, 23). II, 2021. C 67,0 H 3,9 O 29,1 M. G. 824.
- C46H32O15
- 1) Tetracetat d. Pyrogallolbenzein. Sm. 208° (A. 257, 63). II, 1044. C 82,4 H 5,1 N 12,5 M. G. 670.

 1) Base (aus Mandelsäure u. 1,2-Diamidonaphtalin). Sm. noch nicht bei 360° C46 H34 N6
- (B. **25**, 955). IV, 1333. C 77,7 H 6,5 O 15,8 M. G. 710. C46H46O7
 - 1) Verbindung (aus Tri[2-Oxy-1-Methylphenyl]äthan) (A. 257, 327). —
 - 2) Verbindung (aus Tri[3-Oxy-1-Methylphenyl]äthan) (A. 257, 328). —
 - II, 1029. 3) Verbindung (aus Tri[4-Oxy-1-Methylphenyl]äthan) (A. 257, 329). II, 1029.
- C 64,9 H 6,8 O 28,2 M. G. 850.C46H58O15
- 1) Tribenzoylpurginsäure (C. 1897 [1] 419). C 55,1 H 6,6 O 38,3 M. G. 1002. C46H66O24 1) Acetylderivat d. Saponin. Sm. 159-162° (A. 218, 250). - III, 610.

C46H68O10 C 70.8 - H 8.7 - O 20.5 - M. G. 780.

1) Myroxol (C. 1897 [1] 421). C 67,7 — H 8,8 — O 23,5 — M. G. 816. C46H72O12

1) Verbindung (aus Schellack). Mg₂ (M. 9, 158). — III, 559. C 85,7 — H 11,8 — O 2,5 — M. G. 644.

C48 H78 O 1) Icacin (oder $C_{47}H_{78}O$). Sm. 175° (A. 180, 256; 192, 181). — III, 557. C 83,1 — H 12,1 — O 4,8 — M. G. 664.

C46H80O2 1) Palmitat d. β-Amyrin. Sm. 75° (A. 271, 216). — III, 556. C 74,2 — H 10,8 — O 15,0 — M. G. 744.

C46H80O7

 Distearylsalicylsäureglycerid (C. 1899 [1] 369).
 C 53,3 — H 8,1 — O 38,6 — M. G. 1036.
 Gratiosolin (J. 1858, 518). — III, 592.
 C 81,7 — H 13,6 — O 4,7 — M. G. 676. C46H84O25

 $\mathbf{C}_{46}\mathbf{H}_{92}\mathbf{O}_{2}$

1) Myricylester d. Palmitinsäure. Sm. 72° (75°) (A. 71, 160; Bl. [3] 11, 186). — I, 443.

C46-Gruppe mit drei Elementen.

C 76,1 - H 4,8 - O 13,2 - N 5,8 - M. G. 725. $C_{46}H_{35}O_6N_3$ 1) β -Naphtoglauconinsäure + $\frac{1}{2}$ H₂O. Na + 8H₂O, K + 8H₂O (B. 31,

695). — IV, 1221.

 Dimethylrubbadin. Zers. oberh. 210° (B. 25, 1884). — II, 657.
 C 75,9 — H 5,1 — O 13,2 — N 5,8 — M. G. 727. C46H36O8S4 $C_{46}H_{37}O_6N_3$

1) Hydro-β-Naphtoglauconinsäure + 5H₂O. Sm. 231° u. Zers. (wasser-

C48H42O27P4 C46H45O3N7

 $\mathbf{C}_{46}\mathbf{H}_{46}\mathbf{O}_{9}\mathbf{N}_{8}$

 Hydro-β-Naphtoglauconinsaure + 5H₂O. Sin. 251 u. Zeis. (wfrei) (B. 31, 694). — IV, 1221.
 Triacetylphosphororsellinsäure (G. 14, 462). — II, 1753. C 74,3 — H 6,0 — O 6,5 — N 13,2 — M. G. 743.
 Triäthylidenrosanilin (A. 140, 112). — II, 1093. C 64,6 — H 5,4 — O 16,9 — N 13,1 — M. G. 854.
 Phenyltetraspartotetraanilid. Sm. 130° u. Zers. (A. 303, 213). C 71,3 — H 7,0 — O 14,5 — N 7,2 — M. G. 774.
 Appyrellesin Sm. 60 – 70° 4 HBr. 4 HJ. 4 HJ. O (A. 282, 256; 1) $\mathbf{C}_{46}\mathbf{H}_{54}\mathbf{O}_{7}\mathbf{N}_{4}$ 1) Apovellosin. Sm. $60-70^{\circ}$. 4HBr, $4\text{HJ} + 4\text{H}_2\text{O}$ (A. 282, 256; B. 26, 1085). — III, 923. C 77,1 — H 8,4 — O 6,7 — N 7,8 — M. G. 716.

 $\mathbf{C}_{46}\mathbf{H}_{60}\mathbf{O}_{3}\mathbf{N}_{4}$

1) Diäthylidencinchoxin. Sm. bei 95°. (2HCl, PtCl₄) (A. 269, 292). —

1) Diathly intensition of the control of the contro $C_{46}H_{74}O_4N_2$ $\mathbf{C}_{46}\mathbf{H}_{83}\mathbf{O}_{15}\mathbf{N}$

C46-Gruppe mit vier Elementen.

C46H36O6N4Br11 1) Verbindung (aus 4-Amido-1-Methylbenzol u. Xanthogallol) (A. 245, 336). — II, *1014*.

1) Sesquijodäthylat d. Cinchotenin. Sm. 1830 u. Zers. (M. 15, 792). $\mathbf{C}_{46}\mathbf{H}_{63}\mathbf{O}_{6}\mathbf{N}_{4}\mathbf{J}_{3}$ **— III**, 841.

C47-Gruppe mit zwei Elementen.

C₄₇H₃₀O₁₁

C 73,2 — H 3,9 — O 22,9 — M. G. 770.

1) Pentabenzoat d. Maklurin (P. d. 2,4,6,3'4'-Pentaoxydiphenylketon). Sm. 155—156° (B. 27, 1996). — III, 207.

C 71,2 — H 4,5 — O 24,2 — M. G. 792.

C47 H36 O12

1) Pentabenzoylarbutin. Sm. 159-165° (A. 154, 241; H. 14, 369). -

C47 H36 N4 $C \pm 6.0 - H \pm 5.5 - N \pm 8.5 - M. G. \pm 656.$

1) Verbindung (aus Benzoïnphenylhydrazon). Sm. 215-216° (Am. 16, 114).

 $C_{47}H_{42}O_{16}$

C 65.4 — H 4.9 — O 29.7 — M. G. 862.

1) Pentabenzoat d. Rohrzucker. Sm. 106° (H. 14, 348). — II, 1143. C 74,2 — H 8,9 — O 16,8 — M. G. 760. C47H68O8 1) Acetylsandarakolsäure (C. 1896 [2] 184).

C47 H88 O5

C 77,0 — H 12,0 — O 10,9 — M. G. 732.

1) Glycerindierucin. Sm. 47° (B. 19, 3322; J. pr. [2] 42, 370). — I, 528.

2) Glycerindibrassidin. Sm. 65° (67°) (B. 19, 3324; J. pr. [2] 42, 370). **— I,** 528.

C₄₇-Gruppe mit drei Elementen.

C 78,3 - H 6,0 - O 8,8 - N 7,8 - M. G. 720 $\mathbf{C}_{47}\mathbf{H}_{36}\mathbf{O}_{4}\mathbf{N}_{4}$

1) Verbindung (aus d. Verb. $C_{33}H_{28}O_2N_4$). Sm. 168° (G. 22 [2] 241). — IV, 751. C 76,2 -

C47 H44 O3 N6

C 76,2 — H 5,9 — O 6,5 — N 11,3 — M. G. 740.

1) Verbindung (aus Isocarbopyrotritarsäureäthylester u. uns-Diphenylhydrazin). Sm. 187° (B. 27, 1163). — IV, 722.

C 56,7 — H 7,0 — O 30,6 — N 5,6 — M. G. 994.

 $\mathbf{C_{47}H_{70}O_{19}N_4}$ 1) Hemicollin. Cu (H. 2, 299). — IV, 1626.

C₄₈-Gruppe mit zwei Elementen.

 $C_{48}H_{18}O$ C 94,4 - H 2,9 - O 2,6 - M. G. 610.

 Aldehydharz (A. ch. [6] 9, 423). — I, 921.
 C 73,8 — H 3,6 — O 22,6 — M. G. 780. $\mathbf{C}_{48}\mathbf{H}_{28}\mathbf{O}_{11}$

1) Tetrabenzoat d. Hydrogallein. Sm. 231° (A. 209, 264; B. 14, 1327).

— II, 2093. С 75,2 — H 3,9 — О 20,9 — М. G. 766. C48H30O10

1) Tetrabenzoat d. Brenzkatechinphtalein. Sm. 201-2020 (B. 22, 2197). **– II**, 2065.

 $\mathbf{C}_{48}\mathbf{H}_{32}\mathbf{Br}_{2}$ 1) Verbindung (aus 1,3-Dibrombenzol) (M. 7, 45). — II, 57.

2) Verbindung (aus 1,4-Dibrombenzol) (M. 7, 42). — II, 58. C 71,6 — H 4,5 — O 23,9 — M. G. 804. C48 H36 O12

C48H38O12

1) Hexabenzoat d. Inosit. Sm. 258° (A. ch. [6] 12, 103). — II, 1143.
2) Hexabenzoat d. r-Inosit. Sm. 253° (A. ch. [6] 22, 277). — II, 1143.
C 71,4 — H 4,7 — O 23,8 — M. G. 806.
1) Hexabenzoat d. Dulcit. Sm. 147° (A. ch. [4] 27, 163). — II, 1142.
2) Hexabenzoat d. Mannitan. Sm. 124—125° (149°) (J. pr. [2] 36, 354;

M. 10, 394). — II, 1142. C 62,7 — H 4,1 — O 33,1 — M. G. 918. C48 H38 O19

1) Capranid (J. pr. [2] 57, 426). C 82,5 — H 5,4 — N 12,0 — M. G. 698. $\mathbf{C}_{48}\mathbf{H}_{38}\mathbf{N}_{6}$

1) Base (aus Phenyl-β-Milchsäure u. 1,2-Diamidonaphtalin). Sm. noch nicht

bei 360° (B. 25, 956). — IV, 1333. C 81,1 — H 7,6 — O 11,3 — M. G. 710. C48H54O5

1) Aldehydharz (A. ch. [6] 9, 423). — I, 921. C 62,3 — H 6,5 — O 31,2 — M. G. 924. 1) Polychroït (Z. 1867, 555). — III, 602. C 72,0 — H 8,0 — O 20,0 — M. G. 800. C48H60O18

 $\mathbf{C}_{48}\mathbf{H}_{64}\mathbf{O}_{10}$

1) Aldehydharz (A. ch. [6] 9, 423). — I, 921. C 69,2 — H 7,7 — O 23,1 — M. G. 832. $\mathbf{C}_{48}^{\cdot}\mathbf{H}_{64}\mathbf{O}_{12}$ 1) Aldehydharz (A. ch. [6] 9, 423). — I, 921.

C 83.5 - H 9.6 - O 6.9 - M. G. 690. $\mathbf{C}_{48}\mathbf{H}_{66}\mathbf{O}_{8}$

 Verbindung (aus Cholsäure). Fl. (H. 10, 197). — I, 783.
 C 52,1 — H 5,9 — O 41,9 — M. G. 1106.
 Xanthorhamnin + x H₂O (α-Rhamnegin). + 2 C₂H₆O, K₄, Pb₂ (Berx. J. 24, 505; J. 1858, 474; 1868, 775; A. 196, 310). — III, 615.
 C 55,2 — H 6,5 — O 38,3 — M. G. 1044. $C_{48}H_{66}O_{29}$

C48H68O25 1) Acetylderivat d. Saponin. α-Verb. Sm. 97-100°; β-Verb. Sm. 142 bis 145° (A. 218, 251). — III, 610.

- C 62.8 H 7.6 O 29.6 M. G. 918. $C_{48}H_{70}O_{17}$ C 62,8 — H 7,6 — O 29,6 — M. G. 918.

 1) Theveresin + 2H₂O. Sm. 140° (J. 1868, 769). — III, 613.
 C 46,4 — H 5,9 — O 47,7 — M. G. 1242.

 1) Pyrodextrin. + BaO, + PbO (J. 1857, 494). — I, 1107.
 C 82,0 — H 11,1 — O 6,8 — M. G. 702.

 1) Anhydrid d. Cholylsäure. Sm. 75—80° (M. 19, 3; C. 1898 [2] 495).
 C 60,0 — H 8,3 — O 31,7 — M. G. 960.

 1) Bryonin (oder C₃₄H₄₈O₉) (J. 1858, 521; Bl. [3] 9, 1054). — III, 573.
 C 43,8 — H 6,2 — O 49,9 — M. G. 1314.
 1) Synanthrin. Sm. 170° (B. 26 [2] 691).
 C 72,5 — H 11,3 — O 16,1 — M. G. 794.
 1) Tetraäthylester d. α δ-Dicetylbutan-α α δ δ-Tetracarbonsöure. Sm. 69 59 $\mathbf{C}_{48}\mathbf{H}_{74}\mathbf{O}_{37}$
- $\mathbf{C}_{48}\mathbf{H}_{78}\mathbf{O}_{3}$
- $\mathbf{C}_{48}\mathbf{H}_{80}\mathbf{O}_{19}$
- $\mathbf{C}_{48}\mathbf{H}_{82}\mathbf{O}_{41}$
- $\mathbf{C}_{48}\mathbf{H}_{90}\mathbf{O}_{8}$ 1) Tetraäthylester d. $\alpha \delta$ -Dicetylbutan- $\alpha \alpha \delta \delta$ -Tetracarbonsäure. Sm. 69.5°
- $C_{48}\overline{H_{94}}O_2$
- (Soc. 65, 1114). C 82,0 H 13,4 O 4,6 M. G. 702. 1) Myricylester d. Oelsäure. Sm. 65° (Bl. [3] 11, 186). C 81,8 H 13,6 O 4,5 M. G. 704. $C_{48}H_{96}O_{2}$
- Myricylester d. Stearinsäure. Sm. 78° (Bl. [3] 11, 186).
 C 83,6 H 14,4 N 2,0 M. G. 689.
- $\mathbf{C}_{48}\mathbf{H}_{99}\mathbf{N}$ 1) Tricetylamin. Sm. 39°. (2HCl, PtCl₄) (A. 83, 25). — I, 1139.

C₄₈-Gruppe mit drei Elementen.

- $\mathbf{C}_{48}\mathbf{H}_{32}\mathbf{O}_{19}\mathbf{N}_{6}$ C 57,8 — H 3,2 — O 30,5 — N 8,4 — M. G. 996. 1) Säure (aus 2,4-Dinitrophenylacetessigsäureäthylester). Ag $_3+3\,\mathrm{H}_2\mathrm{O}$ (A.
- 220, 142). II, 1659. 1) Diacetylrubbadin (B. 25, 1882). II, 657. $C_{48}H_{36}O_{10}S_4$
- 1) bas. Isohämateinsulfat (B. 15, 2340). III, 666. $\mathbf{C}_{48}\mathbf{H}_{36}\mathbf{O}_{21}\mathbf{S}$
- $\mathbf{C}_{48}\mathbf{H}_{36}\mathbf{O}_{23}\mathbf{S}_{2}$
- 1) Verbindung (aus Isobrasileïndisulfat) (B. 15, 2344). III, 655.

 C 76,8 H 5,1 O 10,7 N 7,4 M. G. 750.

 1) Verbindung (aus Anhydroacetonbenzilearbonsäure u. Phenylhydrazin).

 Zers. oberh. 200° u. Zers. (Soc. 71, 144). IV, 712.

 C 81,7 H 5,5 O 6,8 N 6,0 M. G. 705. $\mathbf{C}_{48}\mathbf{H}_{38}\mathbf{O}_{5}\mathbf{N}_{4}$
- $\mathbf{C}_{48}\mathbf{H}_{39}\mathbf{O}_{8}\mathbf{N}_{3}$ 1) 1,3,5-Tri[4-Methylphenylbenzoylamido] benzol. Sm. $281-282^{\circ}$ (G.
- **20**, 327). $\stackrel{\leftarrow}{-}$ **IV**, 1125. C 63,1 H 4,3 O 15,8 N 16,8 M. G. 913. $\mathbf{C}_{48}\mathbf{H}_{39}\mathbf{O}_{9}\mathbf{N}_{11}$
- 1) Amisatin (J. pr. [1] 35, 125). II, 1609. C 73,0 H 4,9 O 20,3.— N 1,8 M. G. 789. $\mathbf{C}_{48}\mathbf{H}_{39}\mathbf{O}_{10}\mathbf{N}$
- 1) Tetrabenzoylhelicintoluid (A. 154, 36). III, 69. $\mathbf{C}_{48}\mathbf{H}_{39}\mathbf{O}_{18}\mathbf{N}$
- C 62,8 H 4,3 O 31,4 N 1,5 M. G. 917. 1) Hämateïn, siehe $C_{16}H_{12}O_{6}$ (4. 178, 92). III, 665. C 52,1 H 3,8 O 39,0 N 5,1 M. G. 1106. $\mathbf{C}_{48}\mathbf{H}_{42}\mathbf{O}_{27}\mathbf{N}_{4}$
- 1) Tannon (C. 1898 [1] 216). C 74,2 H 5,7 O 16,5 N 3,6 M. G. 776. $\mathbf{C}_{48}\mathbf{H}_{44}\mathbf{O}_{8}\mathbf{N}_{2}$
- 1) Dibenzoat d. Pseudomorphin. (2HCl, PtCl,) (A. 294, 216). C 80,9 H 6,7 O 4,5 N 7,9 M. G. 712.
- $\mathbf{C}_{48}\mathbf{H}_{48}\mathbf{O}_{2}\mathbf{N}_{4}$ 1) p-Tetramethyldiamidodiphenyltetramethyldiamidoanthranol. Sm.
- $\mathbf{C}_{48}\mathbf{H}_{58}\mathbf{O}_{13}\mathbf{N}_{16}$ C 54,0 — H 5,4 — U 19,5 — N 21,0 — H 6,6 S87). Amidohydroazoresorufinäther. 12HCl (B. 18, 587). $\mathbf{C}_{48}\mathbf{H}_{50}\mathbf{O}_{9}\mathbf{N}_{2}$ C 71,3 — H 7,4 — O 17,8 — N 3,5 — M. G. 808.
- 1) Tetracetylthymolchroin (B. 21, 253). II, 774.
- $\mathbf{C}_{48}\mathbf{H}_{80}\mathbf{O}_{40}\mathbf{J}$ 1) Jodstärke (Bl. [3] 7, 678). — I, 1085.

C₄₈-Gruppe mit vier Elementen.

- $C_{48}H_{18}O_{33}N_{14}Cl_2$ 1) Hexacetyltetrazoresorufinchlorid? (A. 162, 290). II, 934. C₄₈H₃₀O₁₀Br₆S₄ 1) Hexabromdiacetylrubbadin. Zers. oberhalb 300° (B. 25, 1882). II, 658.
- $\mathbf{C}_{48}\mathbf{H}_{33}\mathbf{O}_{12}\mathbf{N}_{2}\mathbf{Br}$ 1) Anhydrid d. Brom- α -Tetra[1,3-Dioxybenzol]dichroïnäther (B. **21**, 2482). — **II**, *931*.

- 1) Brom-α-Tetra[1,3-Dioxybenzol] dichroïnäther (B. 21, 2480). C48H85O18N2Br II, 931.
- Verbindung (aus Rubbadin) (B. 25, 1888). II, 658. $C_{48}H_{36}O_{18}N_6S_2$
- 1) Verbindung (aus Amidobenzol u. PCl₃). Sm. 208º (Am. 6, 95). C48H50ON8P4
- 1) Verbindung (aus d. Verb. C₃₆H₄₄O₄S₂). Zers. bei 210—220° (B. 20, $C_{48}H_{56}O_2N_4S_2$ 1981). - IV, 719.
- 1) Jodmethylat d. Apovellosin. Sm. 265° (A. 282, 260). III, 924. $\mathbf{C}_{48}\mathbf{H}_{60}\mathbf{O}_{7}\mathbf{N}_{4}\mathbf{J}_{2}$

C40-Gruppe mit zwei Elementen.

- C 69.5 H 4.0 O 26.5 M. G. 846.C49 H84 O14
- 1) Pentabenzoat d. Hamamelitannin. Sm. 125—132° (C. 1898 [2] 375). C 73,9 H 6,0 O 20,1 M. G. 796.
- $\mathbf{C}_{49}\mathbf{H}_{48}\mathbf{O}_{10}$ 1) Verbindung (aus Oxybenzol u. Kohlensäure). Sm. 37° (27°) (A. 148, 49; J. pr. [2] 25, 464). — II, 662. C 85,5 — H 9,9 — O 4,6 — M. G. 688. 1) Dibenzoylilicen. Sm. 188° (B. 28 [2] 236).
- C49H68O2

C₄₀-Gruppe mit drei Elementen.

- C₄₉H₃₆N₃Cl 1) 4',4²,4³-Tri[1-Naphtylamido] triphenylchlormethan (B. 23, 1965). —
- TV, 1196. C 71,8 H 4,5 O 11,7 N 12,0 M. G. 819. $C_{49}H_{37}O_6N_7$
 - Verbindung (aus Benzylenimid u. 4-Nitrobenzol-1-Carbonsäurealdehyd). Sm. 175° (B. 28, 1654). IV, 187.
 Verbindung + H₂O (aus Benzylenimid u. 4-Nitrobenzol-1-Carbonsäurealdehyd). Sm. bei 150° (B. 28, 1654). IV, 187.

C₅₀-Gruppe.

- C 92,9 H 7,1 M. G. 646. C50 H46
 - 1) Kohlenwasserstoff (aus Phtalsäureanhydrid u. Benzylchlorid). Sm. 72 bis 73° (A. **248**, 68). — II, 305. C 83,1 — H 3,6 — O 13,3 — M. G. 722.
- C50H26O6
- 1) Verbindung (aus 1-Oxynaphtalin u. Benzol-1,2,4,5-Tetracarbonsäure). Sm. oberh. 360° u. Zers. (B. 6, 1066). — II, 2074. C₅₀H₂₈O₇
- c onern. 500° u. Lers. (B. 6, 1006). 11, 2074.
 C 81,1 H 3,8 0 15,1 M. G. 740.
 1) Verbindung (aus 1-Oxynaphtalin u. Benzol-1,2,4,5-Tetracarbonsaure).
 3 Modif.; α-Modif. Sm. oberh. 360°; β-Modif. Sm. oberh. 360°; γ-Modif. Sm. 265° (B. 6, 1067). II, 2074.
 C 69,8 H 4,2 O 26,0 M. G. 860.
 1) Pentabenzoat d. Aeskulin. Sm. 130° (A. 161, 75; B. 13, 1953). III, 567.
- C50 H36 O14 III, 567. C 72,6 — H 6,0 — O 21,3 — M. G. 826.
- C50 H50 O11 1) Benzoat d. Xanthoresinotannol (C. 1897 [1] 421).
- C 82,0 H 9,3 O 8,7 M. G. 732.

 1) Dibenzoat d. α-Lactucerol. Sm. 156° (A. 244, 271). II, 1068.

 C 53,5 H 6,6 O 39,9 M. G. 1122. C50H68O4
- $\mathbf{C}_{50}\mathbf{H}_{74}\mathbf{O}_{28}$ 1) Tetradekaäthylester d. Oktan-αββγγδδεεζζηηθ-Tetradekacarbon-
- **säure.** Fl. (B. **21**, 2116). **I**, 873. C 75,6 H 10,3 O 14,1 M. G. 794.
- $C_{50}H_{82}O_7$ 1) Anhydrid d. Choleïnsäure (B. 20, 1050). — I, 735. C 72,6 — H 9,9 — O 17,4 — M. G. 826.
- C50H82O9
- 1) Verbindung (aus Cholsäure) (B. 20, 1050). I, 783. C 88,0 H 7,3 O 4,7 M. G. 732. C₅₀H₁₀₀O₂ 1) Myricylester d. Arachinsäure. Sm. 84° (Bl. [3] 11, 186). C 89,8 — H 7,8 — O 2,4 — M. G. 718.
- C50H102O 1) Tarchonylalkohol. Sm. 82° (G. 12, 227).

C52H40O24

 $\mathbf{C}_{50}\mathbf{H}_{33}\mathbf{O_{3}N_{5}}$ C 81,6 — H 4,5 — O 4,3 — N 9,5 — M. G. 735.

1) Verbindung (aus 1-Diazonaphtalinchlorid) (Soc. 37, 747). — IV, 1540. C 55,9 — H 4,4 — O 25,3 — N 14,3 — M. G. 1073.

 $\mathbf{C}_{50}\mathbf{H}_{47}\mathbf{O}_{17}\mathbf{N}_{11}$ C 55,9 — H 4,4 — O 20,5 — N 12,5 1) Oktaspartidotrianilid. Zers. oberh. 245° (A. 303, 203).

C 75,4 — H 7,5 — O 10,0 — N 7,0 — M. G 796.

1) Anetholchinin + 2H₂O (A. 123, 382). — III, 813.
C 75,0 — H 8,0 — O 10,0 — N 7,0 — M. G. 800.
1) Anetholhydrochinin + 2H₂O (A. 241, 261). — III, 860. $\mathbf{C}_{50}\mathbf{H}_{60}\mathbf{O}_{5}\mathbf{N}_{4}$ $\mathbf{C}_{50}\mathbf{H}_{64}\mathbf{O}_{5}\mathbf{N}_{4}$

C₅₁-Gruppe.

 $C_{51}H_{98}O_6$ C 75,9 — H 12,2 — O 11,9 — M. G. 804. 1) Glycerintripalmitin. Sm. 61,5° (A. 36, 54; J. 1855, 519; B. 15, 253; Am. 6, 230; A. ch. [3] 41, 240. — I, 444. C 72,8 — H 5,7 — O 11,4 — N 10,0 — M. G. 840.

 $\mathbf{C}_{51}\mathbf{H}_{48}\mathbf{O}_{6}\mathbf{N}_{6}$

 Phenylhydrazon d. Rottlerin (G. 24 [1] 6). — III, 671.
 C 71,6 — H 6,7 — O 16,8 — N 4,9 — M. G. 855.
 Trimorphin = (C₁₇H₁₉O₃N)₃. HCl (Soc. 26, 221). — III, 900. $\mathbf{C}_{51}\mathbf{H}_{57}\mathbf{O}_{9}\mathbf{N}_{3}$

C₅₂-Gruppe.

C 59,5 — H 3,8 — O 36,6 — M. G. 1048.

1) Heptacetylphlobaphen (A. 240, 588) - III, 588. C52H42O C 91,5 - H 6,2 - O 2,3 - M. G. 682.1) Verbindung (aus α -Benzpinakolin) = $C_{26}H_{22} + C_6H_6$. + $2C_6H_6$ (B. 29, 2159). — III, 265. C 60,1 — H 4,4 — O 35,5 — M. G. 1038. Sm. 208°. C52 H46 O23 1) Verbindung (aus Kastaniengerbsäure). - III, 685. $\mathbf{C}_{52}\mathbf{H}_{70}\mathbf{O}_{8}$ C 75,9 - H 8,5 - O 15,6 - M. G. 822.1) Benzoylsandarakolsäure (C. 1896 [2] 184). $\mathbf{C}_{52}\mathbf{H}_{82}\mathbf{O}_{23}$ C 58,1 - H 7,6 - O 34,3 - M G. 1074. 1) Aphrodäscin. Ba $+ 5H_2O$ (J. 1862, 491). — III, 571. C 84,3 — H 11,3 — O 4,3 — M. G. 740. $\mathbf{C}_{52}\mathbf{H}_{84}\mathbf{O}_{2}$ 1) Zeorinin $+ 2 H_2^{\prime} O$. Sm. $159 - 161^{\circ} (182 - 184^{\circ} \text{ wasserfrei})$ (J. pr. [2] 58, 484). 2) Isozeorinin. Sm. 184—185° (J. pr. [2] 58, 485).
 1) Verbindung (aus Cholesterylchlorid). Zers. oberh. 230° (J. r. 8, 236). C52H85C1 $\mathbf{C}_{52}\mathbf{H}_{104}\mathbf{O}_{2}$ C 82,1 - H 13,7 - O 4,2 - M. G. 760.1) Cerylester d. Cerotinsäure (oder C₅₄H₁₀₈O₂). Sm. 81,5° (B. 30, 1415). C 72.6 - H 3.4 - O 22.4 - N 1.6 - M. G. 859. $\mathbf{C}_{52}\mathbf{H}_{29}\mathbf{O}_{12}\mathbf{N}$

1) Pentabenzoat d. Alizarinindigblau. Sm. 175° (A. 276, 30). — IV, 463.

 $\mathbf{C}_{52}\mathbf{H}_{34}\mathbf{O}_{24}\mathbf{Br}_{6}$ 1) Heptacetat d. Hexabromeichenroth (A. 240, 341). - III, 588. $\mathbf{C}_{52}\mathbf{H}_{57}\mathbf{O}_{7}\mathbf{N}_{7}$ C 70,0 — H 6,4 — O 12,5 — N 11,0 — M. G. 891.

1) Alkachlorophyll (Chlorophyllinsäure) (Soc. 45, 60; A. 278, 336; 284, 81, 91). — III, 657. C 67,2 — H 8,9 — O 22,4 — N 1,5 — M. G. 929. 1) Solaneïn + 3³/₄H₂O. Sm. 208° (M. 10, 546). — III, 612.

 $C_{52}H_{83}O_{13}N$

1) Verbindung (aus Cholesterin u. Cholesterindibromid). Sm. 112° (C. 1897 [1] 1128). C 61,2 — H 9,1 — O 28,3 — N 1,4 — M. G. 1019. $\mathbf{C}_{52}\mathbf{H}_{88}\mathbf{O}_{2}\mathbf{Br}_{2}$

C52H93O18N

1) Solanin $+ 4^{1/2}$ H₂O (oder C_{42} H₇₅O₁₅N). Sm. 244°. HCl, (2HCl, PtCl₄), H₂SO₄, Oxalat + 7 H₂O (Berx. J. 2, 114; 6, 259; A. ch. [2] 31, 109; J. 1863, 450; 1873, 817; A. 26, 232; 118, 130; B. 9, 83; 15, 2633; M. 10, 543; Fr. 21, 620; 23, 239). — III, 671.

C 64,1 — H 9,8 — O 24,6 — N 1,4 — M. G. 973. 1) Diisoamylsolanin? (J. 1856, 547). — III, 612. $\mathbf{C}_{52}\mathbf{H}_{95}\mathbf{O}_{15}\mathbf{N}$

 $\mathbf{C}_{52}\mathbf{H}_{46}\mathbf{O}_{22}\mathbf{N}_{2}\mathbf{P}_{4}$ 1) Phenylamid d. Phosphororsellinsäure (G. 14, 462). — II, 1753.

C₅₃-Gruppe.

- C 74,0 H 5,6 O 20,4 M. G. 860.C53H48O11 1) Tribenzoat d. Pinoresinotannol (M. 18, 497).
- $\mathbf{C}_{53}\mathbf{H}_{50}\mathbf{O}_{19}$
- $\mathbf{C}_{53}\mathbf{H}_{51}\mathbf{O}_{20}$ $\mathbf{C}_{53}\mathbf{H}_{84}\mathbf{O}_{19}$
- $\mathbf{C}_{53}\mathbf{H}_{104}\mathbf{O}_{5}$
- C₅₃H₁₀₆O
- $\mathbf{C}_{53}\mathbf{H}_{38}\mathbf{O}_{6}\mathbf{N}_{4}$
- 1) Tribenzoat d. Pinoresinotannol (M. 18, 497).

 C 64,2 H 5,0 O 30,7 M. G. 990.

 1) Quebrachotannoform (C. 1896 [1] 560).

 1) Verbindung (aus Absinth) oder C₅₂H₅₁O₅₀. Sm. 165° (Bl. [3] 19, 1014).

 C 62,1 H 8,2 O 29,7 M. G. 1024.

 1) Camellin (J. 1878, 977). III, 573.

 C 77,5 H 12,7 O 9,8 M. G. 820.

 1) Glycerindicerotin. Sm. 79,5° (C. 1896 [1] 642).

 C 83,9 H 14,0 O 2,1 M. G. 758.

 1) Cerotinon. Sm. 92° (A. 224, 237). I, 1006.

 C 77,0 H 4,6 O 11,6 N 6,8 M. G. 826.

 1) Benzoat d. 3,5-Di[Dibenzoylphenylhydrazido]-1-Oxybenzol. Sm. 176° (B. 22, 2192). IV, 1506.

 C 74,8 H 4,9 O 16,9 N 3,3 M. G. 850.

 1) Tetrabenzoylhelicindianilid (A. 154, 36). III, 69.
- $C_{53}H_{42}O_9N_2$ 1) Tetrabenzoylhelicindianilid (A. 154, 36). — III, 69.

C₅₄-Gruppe.

- C 88,5 H 11,5 M. G. 732. $\mathbf{C}_{54}\mathbf{H}_{84}$
- $\mathbf{C}_{54}\mathbf{H}_{38}\mathbf{O}_{5}$
- C 83,5 = H 11,5 = M. G. 752.
 γ-Cholesterilen. Sm. 127° (A. 66, 9; M. 17, 31). II, 177.
 C 84,6 H 5,0 O 10,4 M. G. 766.
 1) 1-Naphtolbenzein (A. 257, 58). II, 1122.
 2) Tetra[2-Naphtyläther] d. Di[αα-Dioxybenzyl]äther. Sm. oberh. 350° (A. 257, 59). II, 1149.
 C 62,1 H 4,2 O 33,7 M. G. 1044.
 1) Varkindung (av. Eichtenzeth) (P. 17, 1120).
 III. 681.
- $\mathbf{C}_{54}\mathbf{H}_{44}\mathbf{O}_{22}$ 1) Verbindung (aus Fichtenroth) (B. 17, 1129). — III, 681.
- C 60,2 H 4,1 O 35,7 M. G. 1076.C54H44O24
- 1) Heptacetat d. Hemlockroth (B. 17, 1126). III, 685. $\mathbf{C}_{54}\mathbf{H}_{46}\mathbf{O}_{17}$ C 67,1 — H 4,8 — O 28,1 — M. G. 966.
 - 1) Hexabenzoat d. Maltose. Sm. 120° (H. 14, 349). II, 1143. 2) Hexabenzoat d. Milchzucker. Sm. 130-136° (M. 10, 398). -
 - II, 1143. 3) Hexabenzoat d. Rohrzucker. Sm. bei 109° (M. 10, 398). — II, 1143.
 C 65,8 — H 4,9 — O 29,2 — M. G. 984.
- C54H48O18 1) Tetrabenzoylfraxinusgerbsäure (M. 3, 754). — III, 682.
- $\mathbf{C}_{54}\mathbf{H}_{50}\mathbf{O}_{21}$ C 62,7 - H 4,8 - O 32,5 - M. G. 1034.Verbindung, siehe C₁₈H₁₈O₇ α-Usninsäure.
 C 84,3 — H 6,6 — N 9,1 — M. G. 769.
- $\mathbf{C}_{54}\mathbf{H}_{51}\mathbf{N}_{5}$ C 84,3 — H 6,6 — N 9,1 — M. G. 769.

 1) Verbindung (aus Zimmataldehyd) oder C₂₇H₂₄N₂ + ½H₂O. Sm. 106 bis 108° (B. 17, 2110; Bl. [3] 19, 270). — III, 60. C 58,1 — H 7,5 — O 34,4 — M. G. 1116.

 1) Thevetin + 3H₂O. Sm. 170° (J. 1868, 768; B. 15, 253). — III, 613. C 86,4 — H 11,5 — O 2,1 — M. G. 750.

 1) Cholesteryläther. Sm. 195° (M. 17, 38). C 76,6 — H 10,2 — O 13,2 — M. G. 846.

 1) Verbindung (aus Saymold) (H. 24, 346).
- $\mathbf{C}_{54}\mathbf{H}_{84}\mathbf{O}_{24}$
- C54H86O C54H86O7
- 1) Verbindung (aus Scymnol) (H. 24, 346). C 80,8 H 11,1 O 8,0 M. G. 802. $\mathbf{C}_{54}\mathbf{H}_{90}\mathbf{O}_4$
- 1) Fabianol. Sd. 275° (C. 1899 [1] 689). C 77,7 — H 10,8 — O 11,5 — M. G. 834. $\mathbf{C}_{54}\mathbf{H}_{90}\mathbf{O}_{6}$
- 1) Fabianaresen. Sm. bei 280°; subl. (C. 1899 [1] 689). C $55,1^{\circ}$ H $8,2^{\circ}$ O $36,7^{\circ}$ M. G. 1176. 1) Convolvulin, siehe auch $C_{32}H_{62}O_{16}$. Sm. $150-155^{\circ}$ (C. 1897 [1] 418). C $83,3^{\circ}$ H $12,6^{\circ}$ O $4,1^{\circ}$ M. G. 778. C54H96O27
- C54H98O2
- 1) Dioxyhydrofabianaresen (C. 1899 [1] 690). C 82,2 H 13,7 O 4,1 M. G. 788. 1) Cerylester d. Cerotinsäure. Sm. 82° (A. 67, 213; B. 3, 638). $C_{54}H_{108}O_2$ I, 449.

C54H56O9N2 C 74,0 - H 6,4 - O 16,4 - N 3,2 - M. G. 876. 1) Benzylpapaveriniumoxyd. Sm. 165° (M. 9, 333, 756; J. pr. [2] 56, 327). — IV, 441. C 67,4 — H 6,1 — 327). \Rightarrow 1V, 441. C 67,4 — H 6,1 — O 25,0 — N 1,4 — M. G. 961. 1) Tetrabenzoyljapaconin. HNO₃ (Soc. 35, 387). — C 72,2 — H 7,0 — O 16,0 — N 4,7 — M. G. 897. 1) Tricodein (Soc. 25, 507; 27, 101). — III, 906. C 43,1 — H 5,2 — O 47,9 — N 3,7 — M. G. 1502. $C_{54}H_{59}O_{15}N$ - III, 776. C54H68O9N8 $C_{54}H_{78}O_{45}N_4$ 1) Galaktin. 23 PbO (J. 1879, 1130). — III, 894. 1) Hexabromfabianaresen (C. 1899 [1] 690). $\mathbf{C}_{54}\mathbf{H}_{84}\mathbf{O}_{6}\mathbf{Br}_{6}$ 1) Cholesteryläthertetrabromid. Sm. 164—166° u. Zers. (M. 17, 40). C 59,7 — H 8,0 — O 31,0 — N 1,2 — M. G. 1085.

1) Hexacetylsolanin? (A. 195, 321). — III, 612. C54H86OBr C54H87O21N 1) Tribromconvolvulin (C. 1897 [1] 418). $\mathbf{C}_{54}\mathbf{H}_{93}\mathbf{O}_{27}\mathbf{Br}_{3}$ $C_{54}H_{89}O_3N_3Cl_4$ 1) Verbindung (aus Cholesterylchlorid). Sm. 110° (*M.* 15, 108). — II, 1074. $C_{54}H_{89}O_4N_3Cl_2$ 1) Verbindung (aus Cholesterylchlorid). Sm. 147° (*M.* 15, 108). — II, 1074.

C₅₅-Gruppe.

 $\begin{array}{c} \mathbf{C}_{55}\mathbf{H}_{42}\mathbf{N}_3\mathbf{C}\mathbf{I} & 1) & \alpha\text{-Chlortri}[4\text{-Diphenylamidophenyl}] \mathbf{methan} & (B.~19,~758). - \mathbf{IV},~1089. \\ \mathbf{C}_{55}\mathbf{H}_{43}\mathbf{ON}_3 & \mathbf{C}_{86,7} & \mathbf{H}_{5,6} & - \mathbf{O}_{2,1} & \mathbf{N}_{5,5} & - \mathbf{M}_{5,6} & \mathbf{C}_{761}. \\ 1) & \alpha\text{-Oxytri}[4\text{-Diphenylamidophenyl}] \mathbf{methan} & \mathbf{Chlorid} & (B.~19,~758). - \mathbf{IV},~1089. \\ \mathbf{C}_{55}\mathbf{H}_{46}\mathbf{O}_{9}\mathbf{N}_{2} & \mathbf{C}_{75,2} & - \mathbf{H}_{5,2} & - \mathbf{O}_{16,4} & - \mathbf{N}_{3,2} & - \mathbf{M}_{5,6} & \mathbf{G}_{878}. \\ 1) & \mathbf{Tetrabenzoylhelicinditoluid} & (A.~154,~36). - \mathbf{III},~69. \\ \mathbf{C}_{55}\mathbf{H}_{58}\mathbf{O}_{2}\mathbf{N} & \mathbf{O}_{25}\mathbf{N}_{17} & \mathbf{C}_{49,4} & - \mathbf{H}_{14}\mathbf{O}_{14}\mathbf{O}_{16} & \mathbf{IV}_{17}, \mathbf{II}_{125,3} & \mathbf{C}_{49,4} & - \mathbf{H}_{14}\mathbf{O}_{14}\mathbf{O}_{16} & \mathbf{IV}_{17}, \mathbf{II}_{125,3} & \mathbf{IV}_{125,3} & \mathbf{IV}_{125,4}$

C₅₆-Gruppe.

$\begin{array}{c} \mathbf{C}_{56}\mathbf{H}_{34}\mathbf{O}_{17} \\ \mathbf{C}_{56}\mathbf{H}_{34}\mathbf{O}_{17} \\ \mathbf{C}_{56}\mathbf{H}_{36}\mathbf{O}_{29} \\ \mathbf{C}_{56}\mathbf{H}_{48}\mathbf{O}_{29} \\ \mathbf{C}_{56}\mathbf{H}_{80}\mathbf{O}_{8} \\ \mathbf{C}_{56}\mathbf{H}_{80}\mathbf{O}_{8} \\ \mathbf{C}_{56}\mathbf{H}_{80}\mathbf{O}_{8} \\ \mathbf{C}_{56}\mathbf{H}_{80}\mathbf{O}_{8} \\ \mathbf{C}_{56}\mathbf{H}_{80}\mathbf{O}_{8} \\ \mathbf{C}_{56}\mathbf{H}_{96}\mathbf{O} \\ \mathbf{C}_{56}\mathbf{H}_{96}\mathbf{O} \\ \mathbf{C}_{56}\mathbf{H}_{96}\mathbf{O} \\ \mathbf{C}_{56}\mathbf{H}_{96}\mathbf{O} \\ \mathbf{C}_{56}\mathbf{H}_{96}\mathbf{O} \\ \mathbf{C}_{56}\mathbf{C}_{9}\mathbf{H}_{80}\mathbf{O}_{8} \\ \mathbf{C}_{56}\mathbf{C}_{9}C$
1) Heptasalicylosalicylsäure (A. 87, 159; 115, 196; 150, 17). — II, 1498. 2) Verbindung (aus 3-Oxybenzol-1-Carbonsäure). Sm. 160—165° (B. 15, 2588). — II, 1518. C 60,9 — H 4,3 — 0 34,8 — M. G. 1104. 1) Verbindung (aus Fichtenroth) (B. 17, 1129). — III, 681. C 55,4 — H 6,3 — 0 38,3 — M. G. 1212. 1) Acetylderivat d. Saponin. Sm. 135—138° (A. 218, 251). — III, 610. C 76,4 — H 9,1 — 0 14,5 — M. G. 880. 1) Dammarolsäure (C. 1897 [1] 166). C 59,8 — H 7,5 — 0 32,7 — M. G. 1124. 1) Colocynthin (J. 1858, 831; 1861, 757). — III, 577. C 75,6 — H 10,0 — 0 14,4 — M. G. 888. 1) Trachylolsäure. Sm. 165° (168°). K ₂ , Cu (C. 1896 [2] 795). C 85,7 — H 12,2 — 0 2,0 — M. G. 784. 1) Verbindung (aus Bisabol-Myrrhaël). Sd. 230—231° (C. 1897 [2] 428).
2) Verbindung (aus 3-Oxybenzol-1-Carbonsäure). Sm. $160-165^{\circ}$ (B. $15, 2588$). — II, 1518 . C $60,9$ — H $4,3$ — O $34,8$ — M. G. 1104 . 1) Verbindung (aus Fichtenroth) (B. 17, 1129). — III, 681 . C $55,4$ — H $6,3$ — O $38,3$ — M. G. 1212 . 1) Acetylderivat d. Saponin. Sm. $135-138^{\circ}$ (A. $218, 251$). — III, 610 . C $76,4$ — H $9,1$ — O $14,5$ — M. G. 880 . 1) Dammarolsäure (C. 1897 [1] 166). C $59,8$ — H $7,5$ — O $32,7$ — M. G. 1124 . 1) Colocynthin (J. $1858, 831; 1861, 757$). — III, 577 . C $75,6$ — H $10,0$ — O $14,4$ — M. G. 888 . 1) Trachylolsäure. Sm. 165° (168°). K ₂ , Cu (C. 1896 [2] 795). C $85,7$ — H $12,2$ — O $2,0$ — M. G. 784 . 1) Verbindung (aus Bisabol-Myrrhaël). Sd. $230-231^{\circ}$ (C. 1897 [2] 428). Verbindung (aus Opopanax) (C. $1895, [2], 240$)
2) Verbindung (aus 3-Oxybenzol-1-Carbonsäure). Sm. $160-165^{\circ}$ (B. $15, 2588$). — II, 1518 . C $60,9$ — H $4,3$ — O $34,8$ — M. G. 1104 . 1) Verbindung (aus Fichtenroth) (B. 17, 1129). — III, 681 . C $55,4$ — H $6,3$ — O $38,3$ — M. G. 1212 . 1) Acetylderivat d. Saponin. Sm. $135-138^{\circ}$ (A. $218, 251$). — III, 610 . C $76,4$ — H $9,1$ — O $14,5$ — M. G. 880 . 1) Dammarolsäure (C. 1897 [1] 166). C $59,8$ — H $7,5$ — O $32,7$ — M. G. 1124 . 1) Colocynthin (J. $1858, 831; 1861, 757$). — III, 577 . C $75,6$ — H $10,0$ — O $14,4$ — M. G. 888 . 1) Trachylolsäure. Sm. 165° (168°). K ₂ , Cu (C. 1896 [2] 795). C $85,7$ — H $12,2$ — O $2,0$ — M. G. 784 . 1) Verbindung (aus Bisabol-Myrrhaël). Sd. $230-231^{\circ}$ (C. 1897 [2] 428). Verbindung (aus Opopanax) (C. $1895, [2], 240$)
$\begin{array}{l} \mathbf{C}_{58}\mathbf{H}_{48}\mathbf{O}_{24} \\ \mathbf{C}_{58}\mathbf{H}_{48}\mathbf{O}_{24} \\ \mathbf{C}_{56}\mathbf{H}_{60}\mathbf{O}_{8} \\ \mathbf{C}_{56}\mathbf{H}_{80}\mathbf{O}_{8} \\ \mathbf{C}_{56}\mathbf{H}_{96}\mathbf{O} \\ \mathbf{C}_{56}\mathbf{C}_{9$
$\begin{array}{l} \mathbf{C}_{58}\mathbf{H}_{48}\mathbf{O}_{24} \\ \mathbf{C}_{58}\mathbf{H}_{48}\mathbf{O}_{24} \\ \mathbf{C}_{56}\mathbf{H}_{60}\mathbf{O}_{8} \\ \mathbf{C}_{56}\mathbf{H}_{80}\mathbf{O}_{8} \\ \mathbf{C}_{56}\mathbf{H}_{96}\mathbf{O} \\ \mathbf{C}_{56}\mathbf{C}_{9$
$\begin{array}{c} \mathbf{C}_{56}\mathbf{H}_{48}\mathbf{O}_{24} \\ \mathbf{C}_{58}\mathbf{H}_{76}\mathbf{O}_{29} \\ \mathbf{C}_{56}\mathbf{H}_{76}\mathbf{O}_{29} \\ \mathbf{C}_{56}\mathbf{H}_{80}\mathbf{O}_{8} \\ \mathbf{C}_{56}\mathbf{H}_{80}\mathbf{O}_{8} \\ \mathbf{C}_{56}\mathbf{H}_{80}\mathbf{O}_{8} \\ \mathbf{C}_{56}\mathbf{H}_{84}\mathbf{O}_{28} \\ \mathbf{C}_{56}\mathbf{H}_{86}\mathbf{O}_{8} \\ \mathbf{C}_{56}\mathbf{H}_{88}\mathbf{O}_{8} \\ \mathbf{C}_{56}\mathbf{H}_{89}\mathbf{O}_{8} \\ \mathbf{C}_{56}\mathbf{H}_{96}\mathbf{O} \\ \mathbf{C}_{56}\mathbf{H}_{96}\mathbf{O} \\ \mathbf{C}_{56}\mathbf{H}_{96}\mathbf{O} \\ \mathbf{C}_{56}\mathbf{C}_{96}\mathbf{C}_{96}\mathbf{C}_{96} \\ \mathbf{C}_{86}\mathbf{C}_{96}\mathbf{C}_{96}\mathbf{C}_{96} \\ \mathbf{C}_{96}\mathbf{C}_{96}\mathbf{C}_{96}\mathbf{C}_{96} \\ \mathbf{C}_{96}\mathbf{C}_{96}\mathbf{C}_{96}\mathbf{C}_{96} \\ \mathbf{C}_{96}$
$\begin{array}{c} \textbf{C}_{58}\textbf{H}_{76}\textbf{O}_{29} & \textbf{1) Verbindung (aus Fichtenroth) } (\textit{B. 17, 1129}) \textbf{III, } 681. \\ \textbf{C}_{55}\textbf{H}_{80}\textbf{O}_{8} & \textbf{C}_{55}\textbf{4} - \textbf{H } 6,3 - \textbf{O } 38,3 - \textbf{M. G. } 1212. \\ \textbf{1) Acetylderivat d. Saponin. Sm. } 135-138^{\circ} (\textit{A. 218, 251}) \textbf{III, } 610. \\ \textbf{C}_{76}\textbf{H}_{80}\textbf{O}_{8} & \textbf{C}_{76}\textbf{H} + \textbf{H } 9,1 - \textbf{O } 14,5 - \textbf{M. G. } 880. \\ \textbf{1) Dammarolsäure } (\textit{C. 1897 [1] } 166). \\ \textbf{C}_{59}\textbf{S} - \textbf{H } 7,5 - \textbf{O } 32,7 - \textbf{M. G. } 1124. \\ \textbf{1) Colocynthin } (\textit{J. 1858, } 831; \textbf{1861, } 757) \textbf{III, } 577. \\ \textbf{C}_{75}\textbf{6} - \textbf{H } 10,0 - \textbf{O } 14,4 - \textbf{M. G. } 888. \\ \textbf{1) Trachylolsäure. Sm. } 165^{\circ} (168^{\circ}). \textbf{K}_{2}, \textbf{Cu } (\textit{C. 1896 [2] } 795). \\ \textbf{C}_{85},7 - \textbf{H } 12,2 - \textbf{O } 2,0 - \textbf{M. G. } 784. \\ \textbf{1) Verbindung } (\textbf{aus Bisabol-Myrrhaöl). Sd. } 230-231^{\circ} (\textit{C. 1897 [2] } 428). \\ \textbf{Verbindung } (\textbf{aus Opopanax) } (\textit{C. 1895 [2] } 240). \\ \end{array}$
$\begin{array}{c} \textbf{C}_{56}\textbf{H}_{80}\textbf{O}_{8} & \textbf{C}_{56}\textbf{H}_{80}\textbf{O}_{8} & \textbf{C}_{56}\textbf{H}_{80}\textbf{O}_{8} & \textbf{C}_{56}\textbf{H}_{84}\textbf{O}_{28} & \textbf{C}_{56}\textbf{H}_{84}\textbf{O}_{28} & \textbf{C}_{56}\textbf{H}_{88}\textbf{O}_{8} & \textbf{C}_{56}\textbf{H}_{80}\textbf{O} & \textbf{C}_{56}\textbf{H}_{96}\textbf{O} & \textbf{C}_{56}\textbf{H}_{96}\textbf{O} & \textbf{C}_{56}\textbf{H}_{96}\textbf{O} & \textbf{C}_{56}\textbf{O}_{66}\textbf{O}_{66} & \textbf{C}_{56}\textbf{O}_{66}\textbf{O}_{66} & \textbf{C}_{56}\textbf{O}_{66}\textbf{O}_{66} & \textbf{C}_{56}\textbf{O}_{66}\textbf{O}_{66} & \textbf{C}_{56}\textbf{O}_{66}\textbf{O}_{66} & \textbf{C}_{56}\textbf{O}_{66}\textbf{O}_{66} & \textbf{C}_{56}\textbf{O}_{66} & \textbf{C}_{56$
$\begin{array}{c} \textbf{C}_{56}\textbf{H}_{80}\textbf{O}_{8} & \textbf{C}_{56}\textbf{H}_{80}\textbf{O}_{8} & \textbf{C}_{56}\textbf{H}_{80}\textbf{O}_{8} & \textbf{C}_{56}\textbf{H}_{84}\textbf{O}_{28} & \textbf{C}_{56}\textbf{H}_{84}\textbf{O}_{28} & \textbf{C}_{56}\textbf{H}_{88}\textbf{O}_{8} & \textbf{C}_{56}\textbf{H}_{80}\textbf{O} & \textbf{C}_{56}\textbf{H}_{96}\textbf{O} & \textbf{C}_{56}\textbf{H}_{96}\textbf{O} & \textbf{C}_{56}\textbf{H}_{96}\textbf{O} & \textbf{C}_{56}\textbf{O}_{66}\textbf{O}_{66} & \textbf{C}_{56}\textbf{O}_{66}\textbf{O}_{66} & \textbf{C}_{56}\textbf{O}_{66}\textbf{O}_{66} & \textbf{C}_{56}\textbf{O}_{66}\textbf{O}_{66} & \textbf{C}_{56}\textbf{O}_{66}\textbf{O}_{66} & \textbf{C}_{56}\textbf{O}_{66}\textbf{O}_{66} & \textbf{C}_{56}\textbf{O}_{66} & \textbf{C}_{56$
$\begin{array}{llllllllllllllllllllllllllllllllllll$
$\begin{array}{llllllllllllllllllllllllllllllllllll$
1) Dammarolsäure (C. 1897 [1] 166). C 59,8 — H 7,5 — O 32,7 — M. G. 1124. 1) Colocynthin (J. 1858, 831; 1861, 757). — III, 577. C 75,6 — H 10,0 — O 14,4 — M. G. 888. 1) Trachylolsäure. Sm. 165° (168°). K ₂ , Cu (C. 1896 [2] 795). C 85,7 — H 12,2 — O 2,0 — M. G. 784. 1) Verbindung (aus Bisabol-Myrrhaöl). Sd. 230—231° (C. 1897 [2] 428). 2) Verbindung (aus Opopanax) (C. 1895 [2] 240).
C 59,8 - H 7,5 - O 32,7 - M. G. 1124. 1) Colocynthin (J. 1858, S31; 1861, 757) III, 577. C 75,6 - H 10,0 - O 14,4 - M. G. 888. 1) Trachylolsäure. Sm. 165° (168°). K ₂ , Cu (C. 1896 [2] 795). C 85,7 - H 12,2 - O 2,0 - M. G. 784. 1) Verbindung (aus Bisabol-Myrrhaöl). Sd. 230-231° (C. 1897 [2] 428). 2) Verbindung (aus Opopanax) (C. 1895 [2] 240).
C ₅₈ H _{s8} O ₈ C ₅₈ H _{s8} O ₈ C ₅₈ H ₉₈ O
C ₅₆ H ₈₈ O ₈ C ₅₆ H ₉₆ O C ₆
C ₅₈ H ₉₆ O C ₆₈ H ₉₆ O C ₆₈
C ₅₈ H ₉₆ O C 85,7 — H 12,2 — O 2,0 — M. G. 784. 1) Verbindung (aus Bisabol-Myrrhaöl). Sd. 230—231° (C. 1897 [2] 428).
1) Verbindung (aus Bisabol-Myrrhaöl). Sd. 230—231° (C. 1897 [2] 428).
1) Verbindung (aus Bisabol-Myrrhaöl). Sd. 230—231° (C. 1897 [2] 428). 2) Verbindung (aus Oppganax) (C. 1895 [2] 240)
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=
1) Verbinding (aus Brenzkatechin u. 1. Methylbongol 4 Corbonsis 2)
$\sim a_{11} \circ a_{12} \circ a_{11} \circ a_{12} \circ$
C ₅₆ H ₄₆ O ₁₆ S 1) Verbindung (ans Resorgin y 1 Mothylbornel 4 C. l. " a G. l.
C ₅₈ H ₄₆ O ₁₈ S 1) Verbindung (aus Resorcin u. 1-Methylbenzol-4-Carbonsäure-3-Sulfonsäure) (Am. 16, 523).
1) Verbindung (aus Isobidesyl). Sm. 110-112° (B. 21, 1360). — III. 310.

- 1) Verbindung (aus dithiocarbamins. Dibenzylidenammonium) (A. 71, C56H48N4S5 17). — III, 34. C 57,6 - H 4,6 - O 23,3 - N 14,4 - M. G. 1166. $\mathbf{C}_{56}\mathbf{H}_{54}\mathbf{O}_{17}\mathbf{N}_{12}$ 1) Oktaspartotetraanilid. Zers. bei 230-240° (B. 30, 2452; A. 303, 203). $\mathbf{C}_{56}\mathbf{H}_{54}\mathbf{O}_{21}\mathbf{N}_{12}$ C 54,6 - H 4,4 - O 27,3 - N 13,7 - M. G. 1230.1) Tetraanilidooktaspartsäure (A. 303, 204). C 72,1 — H 6,0 — O 18,9 — N 3,0 — M. G. 932. $\mathbf{C}_{56}\mathbf{H}_{56}\mathbf{O}_{11}\mathbf{N}_{2}$ 1) Oxyd d. Papaverinphenacyloxydhydrat. Sm. 186-187° (M. 9, 1042). — IV, 441. C 65.3 — H 10.0 — O 23.3 — N 1.3 — M. G. 1029. C58H103O15N 1) Diäthyldiisoamylsolanin? (J. 1856; 547). — III, 612. Bromderivat d. Verb. C₅₆H₄₅O₁₆S (Am. 16, 524).
 Bromderivat d. Verb. C₅₆H₄₅O₁₆S (Am. 16, 523).
 Verbindung (aus Brom-α-Oreindichröin) (B. 21, 2484). — II, 966. $\mathbf{C}_{56}\mathbf{H}_{34}\mathbf{O}_{16}\mathbf{Br}_{12}\mathbf{S}$
- ${f C}_{56}^{56}{f H}_{85}^{54}{f O}_{16}^{16}{f Br}_{11}^{12}{f S} \\ {f C}_{56}{f H}_{51}{f O}_{13}{f N}_2{f Br} \\ {f C}_{56}{f H}_{68}{f N}_4{f Cl}_4{f S}_3$

1) Verbindung (aus Diisoamyleyaninnitrat). + 2 PtCl₄ (Z. 1867, 343). **- IV**, 315.

 $C_{56}H_{87}O_{20}N_{10}JS_2$ 1) Jodospongin (H. 24, 418). — IV, 1633.

C₅₇-Gruppe.

C57H34O14 C 72,6 — H 3,6 — O 23,8 — M. G. 942. Hexabenzoat d. Myricetin (Soc. 69, 1291). — III, 606.
 C 53,3 — H 5,6 — O 41,1 — M. G. 1284. C57H72O33 1) Bitterstoff (aus Plumiera acutifolia) + 2 H₂O. Sm. 157—158° (C. 1896 [1] 561). C 77,9 — H 11,2 — O 10,9 — M. G. 878. C57H98O6 1) Triglycerid d. Taririnsäure (B. 25 [2] 109; 27 [2] 20). C 77,3 — H 11,7 — O 10,9 — M. G. 884. C57 H104 O6 1) Glycerintriolein. $2 + 3 H_2 SO_4$ (A. ch. [3] 41, 251; B. 15, 253; J. pr. [2] **37**, 68). — **I**, 526. 2) Glycerintrielaidin. Sm. 32° (38°) (A. 35, 177; J. 1852, 511). — I, 527. C 77,0 — H 12,1 — O 10,8 — M. G. 888. C57H108O6 1) Glycerinoleindistearin. Sm. 45-46° (B. 32, 388). 2) Glycerinelaidindistearin. Sm. 61° (B. 32, 393). C 76,8 — H 12,4 — O 10,8 — M. G. 890. C57H110O6 1) Glycerintristearin. Sm. 71,5° (55°) (J. 1852, 507; 1854, 447; A. ch. [3] **41**, 228). — I, 446. C 82,4 — H 13,7 — O 3,9 — M. G. 830. $C_{57}H_{114}O_2$ 1) Myricylester d. Cerotinsäure. Sm. 87º (Bl. [3] 11, 186). Verbindung (aus Leinöl) (C. 1899 [1] 383).
 Glycerinester d. α-Sulfooxystearinsäure. Ba, Cu (J. pr. [2] 37, 86). $\mathbf{C}_{57}\mathbf{H}_{96}\mathbf{O}_{6}\mathbf{Br}_{14}$ C57H108O11S $\mathbf{C}_{57}\mathbf{H}_{110}\mathbf{O}_{15}\mathbf{N}_{2}$ C 64.4 - H 10.4 - O 22.6 - N 2.6 - M. G. 1062.

1) Pyosin. Sm. 238° (H. 17, 453). — III, 602. 1) Glycerinoleindistearinchloridjodid. Sm. 44,5-45,5° (B. 32, 390). C₅₇H₁₀₈O₆ClJ

2) Glycerinelaïdindistearinchloridjodid. Sm. 57—58° (B. 32, 393).

C₅₈-Gruppe.

C 62,7 - H 4,1 - O 33,2 - M. G. 1110.C58H46O28 1) Fustin. Sm. 218—219° u. Zers. (B. 19, 1735). — III, 583. C 71,5 $\stackrel{.}{-}$ H 5,5 $\stackrel{.}{-}$ O 23,0 $\stackrel{.}{-}$ M. G. 974. C58H54O14 1) Tetraisovalerat d. Pyrogallolbenzein. Sm. 227-228° (A. 257, 64). **- II**, 1044. C 72,3 - H 6,0 - O 21,6 - M. G. 962.C58H58O13

Hexacetat d. o-Verbindung C₄₀H₄₆O₇ (A. 257, 329) — II, 1029.
 Hexacetat d. p-Verbindung C₄₃H₄₆O₇ (A. 257, 329). — II, 1029.
 C 54,5 — H 6,7 — O 38,8 — M. G. 1278.

C58H86O81 1) Crocin (J. 1854, 663; 1858, 475). — III, 579.

C 80,6 — H 10,2 — O 9,2 — M. G. 864. 1) Isotrachylolsäure. Sm. 105—107° (C. 1896 [2] 796). C₅₈H₃₈O₂N₄S₃ 1) Verbindung (aus Diisoamylcyaninnitrat) (Z. 1867, 343). — IV, 315.

C₆₀-Gruppe.

C60H100 C 87,8 — H 12,2 — M. G. 820. Pertusaren. Sm. 286° (J. pr. [2] 58, 505).
 C 85,5 — H 14,5 — M. G. 842. C60 H122 1) Kohlenwasserstoff (aus Myricyljodid). Sm. 101-102° (B. 22, 504). - 1, 107. C 59,7 - H 4,5 - O 35,8 - M. G. 1206. C60 H54 O27

C60 H96 O9

1) Humussäure. Ag₈ (J. 1873, 844). — I, 1108. C 75,0 — H 10,0 — O 15,0 — M. G. 960. 1) Triacetat d. Fabianaresen. Sm. 234° (C. 1899 [1] 690). C 61,6 — H 8,2 — O 30,1 — M. G. 1168. $C_{60}H_{96}O_{22}$

1) Saurer Pentaäthylester d. Cholecamphersäure. Sm. 150-170°. Ba₅, Ag₅ (B. 19, 1525). — I, 727. C 86,3 — H 11,8 — O 1,9 — M. G. 834. 1) Copaïvaölhydrat. Sd. 252—260° (M. 2, 512). — III, 540. C 43,5 — H 6,3 — O 50,2 — M. G. 1656. C₆₀H₉₈O

 $\mathbf{C}_{60}\mathbf{H}_{104}\mathbf{O}_{52}$

 $C_{60}H_{120}O_2$

C 43,5 — H 6,3 — O 50,2 — M. G. 1650.

1) Inulenin (B. 26 [2] 233).

C 82,6 — H 13,7 — O 3,7 — M. G. 872.

1) Myricylester d. Melissinsäure. Sm. 92° (Bl. [3] 11, 186).

2) Verbindung (aus Kentuckytabak). Sm. 51° (B. 16, 2433). — I, 457.

C 84,0 — H 14,3 — N 1,6 — M. G. 857.

1) Dimyricylamin. Sm. 78° (A. 183, 351). — I, 1139.

C 67,3 — H 4,5 — O 16,4 — N 11,8 — M. G. 1070.

1) Corchiclin (L 1854, 710, 1860, 570, B. 18, 989). — IV. 1633. $C_{60}H_{123}N$ $\mathbf{C}_{60}\mathbf{H}_{48}\mathbf{O}_{11}\mathbf{N}_{9}$

1) Conchiolin (J. 1854, 710; 1860, 570; B. 18, 989). — IV, 1633. C 65,3 — H 7,8 — O 21,8 — N 5,1 — M. G. 1102.

1) Cacaonin (C. 1898 [2] 217).

1) Hexacetat d. Brom-a-Tetra [1,3-Dioxybenzol]dichroïnäther. Sm. $\mathbf{C}_{60}\mathbf{H}_{86}\mathbf{O}_{15}\mathbf{N}_{4}$ $C_{60}H_{47}O_{19}N_{9}Br$

C₆₁-Gruppe.

C 68,4 — H 4,7 — O 26,9 — M. G. 1070.

1) Heptabenzoat d. Maltose. Sm. 109—115° (J. r. 23, 375). — II, 1143.

2) Heptabenzoat d. Milchzucker. Sm. 200° (J. r. 23, 378). — II, 1143.

C 82,3 — H 8,3 — N 9,4 — M. G. 890. C61 H50 O18

C61 H74 N6 1) Triönanthylidendirosanilin. (2HCl, PtCl₄), (4HCl, 2PtCl₄), H₃AsO₄,

Acetat (Z. 1865, 550; 1867, 176; A. 140, 105). — II, 1093. C 52,1 — H 6,8 — O 41,0 — M. G. 1404. C61 H96 O36 1) Oktacetylconvulvulinsäure (C. 1897 [1] 419).

C₆₂-Gruppe.

C62H44O16 C 71,3 - H 4,2 - O 24,5 - M. G. 10441) Hexabenzoat d. Scoparin. Sm. 148-150° (M. 15, 327). - III, 648.

 $C_{62}H_{85}O_{35}$ Verbindung (aus Saponin). Sm. 82-84° (A. 218, 252). — III, 610.
 C 82,5 — H 10,4 — O 7,1 — M. G. 902. $\mathbf{C}_{62}\mathbf{H}_{94}\mathbf{O}_4$ 1) Dicholerinester d. Benzol-1, 2-Dicarbonsäure. Sm. 182,50 (H. 15, 43). - II, 1794.

C₆₃-Gruppe.

C63 H72 O27 C 60,0 - H 5,7 - O 34,3 - M. G. 1260.1) Verbindung (aus Fraxinusgerbsäure) (M. 3, 759, 760). — III, 682.

C 79,6 — H 12,8 — O 7,6 — M. G. 974. $C_{63}H_{122}O_6$ C₆₃H₁₂₂O₆ C 17,0 — H 12,5 — O 1,0 — M. G. 974. 1) Glycerintriarachin (A. ch. [3] 47, 358). — I, 447. C₆₃H₁₂₄O₅ C 78,8 — H 12,9 — O 8,3 — M. G. 960. 1) Glycerindimelissin. Sm. 93° (C. 1896 [1] 642). C₆₃H₆₀O₃₀N₂Fe1) Blauer Weintraubenfarbstoff (Bl. 32, 103). — III, 673.

C₆₄-Gruppe.

1) Verbindung (aus Asphalt). — III, 565. C 54,4 — H 7,1 — O 22,7 — N 15,8 — M. G. 1412. $C_{64}H_{92}S_3$ $\mathbf{C}_{64}\mathbf{H}_{100}\mathbf{O}_{20}\mathbf{N}_{16}$ 1) Eiweiss (J. 1879, 870). — IV, 1585.

C₆₅-Gruppe.

C 71,3 - H 3,8 - O 24,9 - M. G. 1094.C₆₅H₄₂O₁₇

1) Benzoylderivat d. Podophylloquercetin. Sm. 239° (B. 24 [2] 646). - III, 645.

C 66,1 - H 4,0 - O 29,8 - M. G. 1180. $C_{65}H_{48}O_{22}$

1) Säure (aus Phenol) (G. 14, 103). — II, 649. C 78,6 — H 8,5 — O 12,9 — M. G. 992. 1) Callitrolsäure. Sm. 248°. Cu (B. 29 [2] 687; C. 1896 [2] 184). — C₆₅H₈₄O₈ III, 561.

 $\mathbf{C}_{65}\mathbf{H}_{128}\mathbf{O}_{19}\mathbf{N}_{2}$ C 62,9 - H 10,3 - O 24.5 - N 2,3 - M. G. 1240.1) Pyogenin. Sm. 221—222° (H. 17, 453). — III, 602.

Cee-Gruppe.

C 81,5 - H 0,4 - O 18,1 - M. G. 972. $\mathbf{C}_{66}\mathbf{H}_4\mathbf{O}_{11}$

1) Verbindung (aus Graphit) (A. 114, 20). — II, 2021.

C 73,9 - H 3,7 - O 22,4 - M. G. 1072. C66H40O15 1) Tetrabenzoat d. Pyrogallolbenzein. Sm. 251° (A. 257, 64). —

II, 1044. $\mathbf{C}_{66}\mathbf{H}_{132}\mathbf{O}_{2}$ C 82.9 - H 13.8 - O 3.3 - M. G. 956.

1) Aether d. Psyllostearylalkohol. Sm. 96° (H. 17, 425; 25, 116). C66 H51 O21 N

C 66,4 — H 4,3 — O 28,2 — N 1,1 — M. G. 1193.

1) Verbindung (aus Brasilin) (A. 178, 101). — III, 652.
C 63,7 — H 7,1 — O 27,0 — N 2,2 — M. G. 1244.

1) Japaconitin. Sm. 184—186°. 2 HBr + 5 H₂O, HNO₃ (Soc. 35, 387). $\mathbf{C}_{66}\mathbf{H}_{88}\mathbf{O}_{21}\mathbf{N}_{2}$

— III, 776.

 $\mathbf{C}_{68}\mathbf{H}_{48}\mathbf{O}_{18}\mathbf{N}_{3}\mathbf{Cl}$ 1) Chlor- α -Penta[1, 3-Dioxybenzol]dichroïnäther (B. 21, 2479). II, 931.

C₆₆H₆₈O₉N₈Br₁₁ 1) Verbindung (aus Amidobenzol u. Xantogallolsäure) (A. 245, 346). - II. 1015.

C₆₇-Gruppe.

C 65,3 — H 4,9 — O 29,8 — M. G. 1232. C₆₇H₆₀O₂₈

1) Heptabenzoat d. löslichen Stärke C₁₈H₃₂O₁₆. Sm. oberh. 120° (B. 31, 1793).

C 79,1 — H 6,7 — O 14,2 — M. G. 1016. C67 H68 O9 1) Acetylcallitrolsäure (C. 1896 [2] 184).

C₆₈-Gruppe.

C 68,7 - H 4,4 - O 26,9 - M. G. 1188.C68 H52 O20 1) Hexabenzoylruberythrinsäure (Soc. 65, 187). — III, 607.

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\mathbf{C}_{68}\mathbf{H}_{126}\mathbf{O}_{4}
                                           C 81,1 - H 12,5 - O 6,4 - M. G. 1006.
                                     1) Dimyricylester d. Benzol-1,2-Dicarbonsäure. Sm. 79° (Bl. [3] 11,
                                     186). — II, 1794.

C 60,3 — H 5,0 — O 20,1 — N 14,5 — M. G. 1352.

1) Oktoaspartidohexaanilid. Zers. bei 125° (A. 303, 205).

C 71,6 — H 6,7 — O 16,8 — N 4,9 — M. G. 1140.
 \mathbf{C}_{68}\mathbf{H}_{68}\mathbf{O}_{17}\mathbf{N}_{14}
 C_{68}H_{76}O_{12}N_4
                                     1) Tetramorphin = (C_{17}H_{19}O_3N)_4. 2H_2SO_4 (Soc. 26, 221; 28, 314; A.
                                          55, 96; 68, 359). — III, 900.
C 73,0 — H 7,0 — O 10,0 — N 10,0 — M. G. 1118.
 \mathbf{C}_{68}\mathbf{H}_{78}\mathbf{O}_{7}\mathbf{N}_{8}
                                     1) Hämatolin (B. 17, 2272). — IV, 1620.
C 73,4 — H 7,2 — O 14,4 — N 5,0 — M. G. 1112.
\mathbf{C}_{68}\mathbf{H}_{80}\mathbf{O}_{10}\mathbf{N}_{4}
                                   1) Verbindung (aus Codeïn). ^{4}HJ (^{J}. 1871, 780). — III, 907. ^{6}C 72,9 — H 7,8 — O 14,3 — N 5,0 — M. G. 1120. 1) Verbindung (aus Codeïn) (^{J}. 1871, 780). — III, 907. 1) Melanin + ^{1}/<sub>2</sub> H<sub>2</sub>O (^{C}. 1897 [1] 1063). 1) Sarkomelaninsäure + ^{2}/<sub>2</sub> H<sub>2</sub>O (^{C}. 1897 [1] 1063). 1) Sarkomelaninsäure + ^{2}/<sub>2</sub> H<sub>2</sub>O (^{C}. 1897 [1] 1063). 1) Sarkomelaninsäure + ^{2}/<sub>2</sub> H<sub>2</sub>O (^{C}. 1897 [1] 1063).
C_{68}H_{88}O_{10}N_4
C_{68}H_{27}O_{26}N_{10}S
C_{68}H_{34}O_{26}N_{10}S
\mathbf{C}_{68}\mathbf{H}_{67}\mathbf{O}_{26}\mathbf{N}_{13}\mathbf{S}
C_{68}H_{75}O_{12}N_4Br 1) Bromtetramorphin (J. 1871, 779). — III, 907. C_{68}H_{81}O_{10}N_4J 1) Verbindung (aus Codeïn) (J. 1871, 780). — III, 907.
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C₆₉- Gruppe.

∪ ₆₉ H ₁₂₈ ∪ ₆	1) Glycerintrierucin. Sm. 31° (\$\bar{B}\$. 20, 2386; \$J. pr. [2] 42, 371). — I, 528. 2) Glycerintribrassidin. Sm. 47° (\$B\$. 19, 3321; \$J. pr. [2] 42, 372). — I, 528.
	0 0

70 11
$C_{70}H_{140}O_{2}$ C 83,0 — H 13,8 — O 3,2 — M. G. 1012.
1) Verbindung (aus Kentuckytabak). Sm. 63° (B. 16, 2433). — I, 457.
$C_{70}H_{138}O_{12}N_2$ $C_{70,1} - H_{11,5} - O_{16,0} - N_{2,3} - M_{6,1198}$
1) Kerasin (Homocerebrin). Sm. 156° (155°) (J. pr. [2] 24, 326, 333;
[2] 25 , 37; H. 17 , 443). — III, 574.
$\mathbf{C}_{70}\mathbf{H}_{140}\mathbf{O}_{13}\mathbf{N}_{2}$ $\mathbf{C}_{69,1}+\mathbf{H}_{11,5}=0$ 17,1 $\mathbf{N}_{2,3}=\mathbf{M}_{6}$ G. 1216.
1) Cerebrin. Sm. 176° (J. pr. [2] 24, 325, 328; [2] 25, 19; [2] 53, 49,
80; H. 17, 441). — III, 574.
$C_{70}H_{50}O_8N_7Cl$ 1) Hexabenzoylderivat d. Verb. $C_{99}H_{99}O_9N_7Cl$ (B. 31, 1411).
$C_{70}H_{50}O_{8}N_{7}Br$ 1) Hexabenzoylderivat d. Verb. $C_{28}H_{26}O_{2}N_{7}Br$ (B. 31, 1413).
$C_{70}H_{64}O_{10}N_8H_{62}$ 1) Haminsaure (J. pr. [2] 29, 342). — IV, 1617.
C ₇₀ H ₇₉ O ₁₂ N ₄ Cl 1) Verbindung (aus Bromtetramorphin). 4HCl (J. 1871, 779).
III, 907,
$C_{70}H_{111}O_{33}N_{31}P_4$ 1) Salmonucle insaures Protamin (H. 23, 409). — IV, 1623.
$C_{70}H_{185}O_{12}N_2Br_8$ 1) Tribromkerasin (H. 17, 448).
C ₇₀ H ₁₃₇ O ₁₃ N ₂ Br ₃ 1) Tribromcerebrin (H. 17, 448).
10 10 10 2 5 7

C₇₁-Gruppe.

 $\mathbf{C}_{71}\mathbf{H}_{112}\mathbf{O}_{59}$ C 44,6 — H 5,9 — O 49,4 — M. G. 1908. 1) Arabinose (Soc. $45,\ 54$). — I, 1101.

C₇₂-Gruppe.

 $C_{72}H_{62}O_{31}$ C 60,8 - H 4,3 - O 34,9 - M. G. 1422. 1) Anhydrid d. Sorbinosephloroglucid (C. 1896 [2] 486).

C 59.3 = H 4.5 - O 36.2 - M. G. 1458. $C_{72}H_{66}O_{33}$ 1) Anhydrid d. Lävulosephloroglucid (C. 1896 [2] 486). C 53,7 - H 5,6 - O 40,7 - M. G. 1610. $\mathbf{C}_{72}\mathbf{H}_{90}\mathbf{O}_{41}$ 1) Acetylxanthorhamnin (J. 1868, 776). — III, 615. C 53,5 - H 6,9 - O 39,6 - M. G. 1616. $\mathbf{C}_{72}\mathbf{H}_{112}\mathbf{O}_{40}$ 1) Saporubrin (C. 1897 [1] 302). C 55,6 — H 7,3 — O 37,1 — M. G. 1554. $\mathbf{C}_{72}\mathbf{H}_{114}\mathbf{O}_{36}$ 1) Nonacetat d. Convolvulin. Sm. 112-115° (C. 1897 [1] 418). C 80,0 — H 11,1 — O 8,9 — M. G. 1080. 1) Dicaperin + H_2O . Sm. $227-228^{\circ}$ (248—250° wasserfrei) (J. pr. [2] C72H120O6 **57**, 433). C 43,2 — H 6,3 — O 50,5 — M. G. 1998. C72H126O63 $\begin{array}{c} \textbf{C}_{72}\textbf{H}_{126}\textbf{O}_{63} & \textbf{C}_{43,2} - \textbf{II} \ \textbf{C}_{53} - \textbf{O} \ \textbf{50},5 - \textbf{M}. \ \textbf{G}. \ \textbf{1998}. \\ \textbf{I} \ \textbf{Helianthenin}. \ \textbf{Sm}. \ \textbf{176}^{6} \ (\textbf{B}. \ \textbf{26} \ [2] \ 691). \\ \textbf{C}_{72}\textbf{H}_{84}\textbf{O}_{12}\textbf{N}_{4} & \textbf{C}_{72}\textbf{C}_{72} - \textbf{H} \ \textbf{7},0 - \textbf{O} \ \textbf{16},1 - \textbf{N} \ \textbf{4},7 - \textbf{M}. \ \textbf{G}. \ \textbf{1196}. \\ \textbf{1} \ \textbf{Tetracodein} \ (\textbf{Soc. 25}, 506; \ \textbf{27}, \ 107; \ \textbf{28}, 324). - \textbf{III}, 906. \\ \textbf{C}_{72}\textbf{H}_{14}\textbf{O}_{15}\textbf{P}_{2} & \textbf{1} \ \textbf{Chlortetracodein}. \ \textbf{4HCl} \ (\textbf{J}. \ \textbf{1871}, \ 778). - \textbf{III}, 907. \\ \textbf{C}_{72}\textbf{H}_{83}\textbf{O}_{12}\textbf{N}_{4}\textbf{Br} \ \textbf{1} \ \textbf{Bromtetracodein}. \ \textbf{4HBr} \ (\textbf{J}. \ \textbf{1871}, \ 778). - \textbf{III}, 907. \\ \textbf{C}_{12}\textbf{H}_{83}\textbf{O}_{12}\textbf{N}_{4}\textbf{Br} \ \textbf{1} \ \textbf{Stopping translation}. \ \textbf{4HBr} \ (\textbf{J}. \ \textbf{1871}, \ 778). - \textbf{III}, 907. \\ \textbf{C}_{13}\textbf{C} \ \textbf{M}_{13}\textbf{C} \ \textbf{1} \ \textbf{ON} \ \textbf{S} \ \textbf{1} \ \textbf{ON} \ \textbf{S} \ \textbf{1} \ \textbf{ON} \ \textbf{S} \ \textbf{1} \ \textbf{ON} \ \textbf{S} \ \textbf{1} \ \textbf{ON} \ \textbf{S} \ \textbf{1} \ \textbf{ON} \ \textbf{S} \ \textbf{1} \ \textbf{ON} \ \textbf{S} \ \textbf{1} \$ $C_{72}H_{103}O_{88}N_{19}S$ 1) Oxytrinitroalbumin (J. pr. [2] 5, 436). — IV, 1593. $C_{72}H_{106}O_{87}N_{24}S_2$ 1) Hexanitroalbumin sulfonsäure (J. pr. [2] 3, 183). — IV, 1594. $C_{72}H_{109}O_{28}N_{21}S$ 1) Trinitroalbumin (J. pr. [2] 5, 434). — IV, 1593. $C_{72}H_{112}O_{22}N_{18}S$ 1) Albumin. Lit. bedeutend. — IV, 1589. (2) Pepton. Ag₂ (J. Th. 1883, 24). — IV, 1639.

 $\begin{array}{c} {\bf C_{72}H_{112}O_{25}N_{18}S_2\ 1)} \ \ {\bf Albuminsulfons\"{a}ure} \ \ (J.\ pr.\ [2]\ 3,\ 184).\ -\ {\bf IV},\ 1593. \\ {\bf C_{72}H_{118}O_{25}N_{24}S} \ \ 1) \ \ {\bf Hexaamidoalbuminsulfons\"{a}ure} \ \ (J.\ pr.\ [2]\ 3,\ 184).\ -\ {\bf IV},\ 1594. \\ {\bf C_{72}H_{112}O_{26}N_{18}S} \ \ 1) \ \ {\bf Oxyprotsulfons\"{a}ure} \ \ (M.\ 6,\ 111).\ -\ {\bf II},\ 2111. \end{array}$

C73-Gruppe.

 $\mathbf{C}_{73}\mathbf{H}_{100}\mathbf{O}_{32}$ C 58,9 — H 6,7 — O 34,4 — M. G. 1488. 1) Tetrabenzoylconvolvulinsäure. Sm. 115-118° (C. 1897 [1] 419).

C_{74} -Gruppe.

 $\mathbf{C}_{74}\mathbf{H}_{79}\mathbf{O}_{9}\mathbf{N}_{8}\mathbf{Br}_{11}$ 1) **Verbindung** (aus 4-Amido-1-Methylbenzol u. Xanthogallolsäure) (4. **245**, 346). — II, 1015. $C_{74}H_{112}O_{22}N_{20}S$ 1) Albumincyanid + $3H_2O$ (J. pr. [2] 16, 65). — IV, 1593.

C_{75} - Gruppe.

C 75,4 — H 4,5 — O 20,1 — M. G. 1194. C75H54O15 1) Dibenzoat d. Rottlerin (G. 24 [1] 6). — III, 671 C 68,7 - H 4,3 - O 27,0 - M. G. 1292. $\mathbf{C}_{75}\mathbf{H}_{56}\mathbf{O}_{21}$

1) Heptabenzoylruberythrinsäure (Soc. 65, 187). — III, 607. C 78.5 — H 8.9 — O 13.6 — M. G. 1146. $\mathbf{C}_{75}\mathbf{H}_{102}\mathbf{O}_{9}$

 $\mathbf{C}_{75}\mathbf{H}_{108}\mathbf{O}_{30}$

1) Tribenzoat d. Fabianaresen. Sm. 61° (C. 1899 [1] 690). C 60,5 — H 7,3 — O 32,2 — M. G. 1488. 1) Tribenzoat d. Convolvulin. Sm. 125—131° (C. 1897 [1] 418).

C₇₆-Gruppe.

C 49,7 — H 6,8 — O 25,3 — N 18,2 — M. G. 1836. $\mathbf{C}_{76}\mathbf{H}_{124}\mathbf{O}_{29}\mathbf{N}_{24}$ 1) Leim. — IV, 1626. $\mathbf{C}_{76}\mathbf{H}_{112}\mathbf{O}_{26}\mathbf{N}_{22}\mathbf{S}$ 1) Cyalbidin $(J.\ pr.\ [2]\ \mathbf{16},\ 66)$. — IV, 1593. $\mathbf{C}_{76}\mathbf{H}_{164}\mathbf{O}_{14}\mathbf{N}_{3}\mathbf{P}$ 1) Verbindung $+\ 2\ \mathrm{CdCl}_{2}\ (B.\ \mathbf{9},\ 948)$. — IV, 1619.

C_{78} -Gruppe.

1) Verbindung (aus 1,2-Dibrombenzol). Sm. 280-290° (M. 14, 328). C78H52Br2 **– II**, 57.

2) Verbindung (aus 1,3-Dibrombenzol) (M. 7, 45; 14, 332). — II, 57. 3) Verbindung (aus 1,4-Dibrombenzol) (M. 7, 42; 14, 332). — II, 58.

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RICHTER, Lex. d. Kohlenstoffverb.

 $\mathbf{C}_{80}\mathbf{H}_{34}\mathbf{O}_{36}\mathbf{N}_{16}$

C 76,2 — H 12,1 — O 11,7 — M. G. 1228. $\mathbf{C}_{78}\mathbf{H}_{148}\mathbf{O}_{9}$

1) Dulcitantetrastearat (Berthelot, Chim. org. synth. 2, 210).
2) Mannitantetrastearat (A. ch. [3] 47, 324). — I, 446.
3) Pinnittetrastearat (Berthelot, Chim. org. synth. 2, 216). — I, 446.
C 79,0 — H 12,8 — O 8,1 — M. G. 1184.
1) Glycerintricerotin. Sm. 76,5—77° (C. 1896 [1] 642).
C 47,6 — H 9,2 — O 26,1 — N 17,1 — M. G. 1964.

C78H152O6 $\mathbf{C}_{78}\mathbf{H}_{180}\mathbf{O}_{32}\mathbf{N}_{24}$

1) Gelatine (C. 1895 [1] 962).

 $C_{78}H_{122}O_{24}N_{20}S$ 1) Serumalbumin (aus Pferdeblut) (C. 1897 [1] 1063). — IV, 1594.

C₈₀-Gruppe.

C 83.5 - H 4.0 - O 12.5 - M. G. 1150.C₈₀H₄₆O₉

1) Verbindung (aus Idrialin) (J. 1879, 367). — II, 279. C 82,3 — H 3,9 — O 13,7 — M. G. 1166.

C₈₀H₄₆O₁₀

C₈₀H₅₄O₂

C 82,3 — H 3,9 — O 13,7 — M. G. 1100.

1) Oxyidrialin (B. II, 1580). — II, 279.
C 91,8 — H 5,1 — O 3,1 — M. G. 1046.

1) Idrialin (A. 5, 16; 24, 336; 52, 100; A. ch. [2] 66, 143; J. 1879, 366; B. 11, 1579). — II, 279.
C 80,5 — H 8,7 — O 10,7 — M. G. 1192.

1) β-Naphtolcampher. Fl. (Bl. [3] 4, 726). — III, 487.
C 82,8 — H 10,3 — O 6,9 — M. G. 1160.
C 82,8 — H 10,3 — O 6,9 — M. G. 1160.
C 82,8 — H 10,3 — O 6,9 — M. G. 1160.
C 82,8 — H 10,3 — O 6,9 — M. G. 1160.
C 82,8 — H 10,3 — O 6,9 — M. G. 1160.
C 82,8 — H 10,3 — O 6,9 — M. G. 1160.
C 82,8 — H 10,3 — O 6,9 — M. G. 1160.

C₈₀H₁₀₄O₈

C₈₀H₁₂₀O₅ '

1) Succinoabietinsäure. Sm. 145°. Pb, Ag₂ (B. 28 [2] 611; C. 1895 [1] 555).

C 62,0 - H 8,0 - O 30,0 - M. G. 1548. $\mathbf{C}_{80}\mathbf{H}_{124}\mathbf{O}_{29}$

C 52,0 — H 5,0 — O 50,0 — M. G. 1548.

1) Butyrylderivat d. Saponin. Sm. 68 — 72° (A. 218, 253). — III, 610. C 53,5 — H 1,9 — O 32,1 — N 12,5 — M. G. 1794.

1) Hexadekanitroidrialin (J. 1879, 366). — II, 279.

1) Oktadekabromidrialin (J. 1879, 366). — II, 279.

1) Dodekabromidrialin (J. 1879, 366). — II, 279.

C 62,3 — H 2,8 — O 24,9 — N 10,0 — M. G. 1541.

1) Undekanitroidrialin (J. 1879, 266). — II, 270.

 $\begin{matrix}\mathbf{C}_{80}\mathbf{H}_{36}\mathbf{O}_{2}\mathbf{B}\mathbf{r}_{18}\\\mathbf{C}_{80}\mathbf{H}_{42}\mathbf{O}_{2}\mathbf{B}\mathbf{r}_{12}\end{matrix}$ $\mathbf{C}_{80}\mathbf{H}_{43}\mathbf{O}_{24}\mathbf{N}_{11}$

1) Undekanitroidrialin (J. 1879, 366). — II, 279. C 62,4 — H 5,3 — O 17,7 — N 14,6 — M. G. 1538. 1) Oktoaspartooktoanilid. Zers. bei 130° (A. 303, 205). C 60,1 — H 5,4 — O 17,0 — N 17,5 — M. G. 1598. $\mathbf{C}_{80}\mathbf{H}_{82}\mathbf{O}_{17}\mathbf{N}_{18}$

 $\mathbf{C}_{80}\mathbf{H}_{86}\mathbf{O}_{17}\mathbf{N}_{20}$

1) Oktoaspartotetraanilidtetraphenylhydrazid. Sm. 210° u. Zers. (B.

30, 2452; A. 303, 204). — IV, 704. C 57,9 — H 5,4 — O 16,4 — N 20,3 — M. G. 1658. C80 H90 O17 N24

1) Oktoaspartophenylhydrazid. Sm. 200-205° u. Zers. (B. 30, 2452; A. 303, 199). — IV, 704. C 70,4 — H 6,7 — O 18,8 — N 4,1 — M. G. 1364.

 $C_{80}H_{92}O_{16}N_4$

 $\begin{array}{c} \textbf{C}_{80}\textbf{H}_{12}\textbf{O}_{24}\textbf{N}_{26}\textbf{S} & \textbf{1} & \textbf{O.} & \textbf{1} & \textbf{1} & \textbf{0.} & \textbf{1} &$

C₈₂-Gruppe.

C82H100O46 C 54,1 - H 5,5 - O 40,4 - M. G. 1820.

1) Acetylderivat d. Xanthorhamnin (B. 20, 2245). — III, 616. C₈₂H₆₄O₂₆N₃Cl 1) Okacetat d. Chlor-α-Penta[1,3-Dioxybenzol]dichroïnäther (B. 21, 2480). — II, 931.

C_{84} -Gruppe.

C84H64O82 C 63,6 - H 4,0 - O 32,3 + M. G. 1584.1) **Triacetyllävosin.** Sm. 80° (Bl. [3] 5, 724).

C₈₆-Gruppe.

C86H46O25 C 69,8 — H 3,1 — O 27,1 — M. G. 1478. 1) Verbindung (aus Trioxyfluorondicarbonsäure). Sm. 250,5 - 252,5 ° (B. 31, 270).

C_{89} - Gruppe.

C₈₉H₁₄₂O₇₄ C 44,6 - H 6,0 - O 49,4 - M. G. 2394.1) Arabinsäure. CaO, BaO (Soc. 45, 54). — I, 1101.

Con-Gruppe.

C_{92} - Gruppe.

C92H182O6 C 79,9 — H 13,2 — O 6,9 — M. G. 1382. 1) Cocerylester d. Cocerinsäure. Sm. 106° (B. 18, 1879). — I, 580.

C_{93} -Gruppe.

 $C_{93}H_{182}O_6$ C 80,1 - H 13,0 - O 6,9 - M. G. 1394.1) Glycerintrimelissin. Sm. 89° (C. 1896 [1] 642).

C₉₆-Gruppe.

C 55,7 — H 4,9 — O 39,4 — M. G. 2070. 1) Verbindung (aus Caramel). BaO, 2BaO, PbO (A. ch. [3] 52, 371). C96H102O51 - I, 1106. C 50,3 - H 7,1 - O 42,6 - M. G. 2290.

C₉₆H₁₆₂O₈₁

1) Pseudoinulin. + 6 BaO, + 8 BaO, + 19 PbO (B. 26 [2] 233).
1) Jodstärke? (B. 26 [2] 696).

 $\mathbf{C}_{96}\mathbf{H}_{160}\mathbf{O}_{80}\mathbf{J}_{3}$

1) Blaue Jodcholsäure. K+xH₂O (B. 20, 686; 28, 385, 783). 1) Jodstärke (B. 20, 691; 26 [2] 696; 27 [2] 603; J. Th. 1888, 21). $\mathbf{C}_{96}\mathbf{H}_{161}\mathbf{O}_{20}\mathbf{J}_{5}$ $\mathbf{C}_{96}\mathbf{H}_{161}\mathbf{O}_{80}\mathbf{J}_{5}$ - I, 1085.

1) Proteïnochromogen (B. 28, 560; 31, 1608). — IV, 1640. $\mathbf{C}_{96}\mathbf{H}_{119}\mathbf{O}_{31}\mathbf{N}_{21}\mathbf{S}$ $\mathbf{C}_{96}\mathbf{H}_{116}\mathbf{O}_{31}\mathbf{N}_{21}\mathbf{Cl}_{3}\mathbf{S}$ 1) Chloroproteinochromogen (B. 31, 1604). — IV, 1640.

C₉₈-Gruppe.

C 66,6 — H 5,3 — O 15,4 — N 12,7 — M. G. 1766. 1) Triphenyloktoaspartoanilid. Sm. 120—125° (A. 303, 208). C98H94O17N16

\mathbf{C}_{100} — \mathbf{C}_{867} -Gruppen.

C 50,7 — H 6,2 — O 25,2 — N 17,9 — M. G. 2415. $C_{102}H_{149}O_{38}N_{31}$

Collagen (H. 2, 299). — IV, 1624.
 C 50,3 — H 6,2 — O 25,6 — N 17,8 — M. G. 2433.

 $\mathbf{C}_{102}\mathbf{H}_{151}\mathbf{O}_{39}\mathbf{N}_{31}$

 $\mathbf{C}_{102}\mathbf{H}_{206}\mathbf{O}_{19}\mathbf{N}_{4}$ $\mathbf{C}_{102}\mathbf{H}_{150}\mathbf{O}_{31}\mathbf{N}_{30}\mathbf{S}$

 $\mathbf{C}_{104}\mathbf{H}_{98}\mathbf{O}_{17}\mathbf{N}_{16}$

C105 H96 O33

C₁₀₈H₁₇₄O₈S $\mathbf{C}_{108}\mathbf{H}_{194}\mathbf{O}_{29}\mathbf{N}_{28}$

C 50,3 = H 5,2 = O 25,6 = N 17,8 = M. G. 2433. 1) Leim. — IV, 1626. C 68,4 = H 11,5 = O 17,0 = N 3,1 = M. G. 1790. 1) Enkephalin (J. pr. [2] 24, 327, 337; [2] 25, 37). — III, 574. 1) Deuteroalbumose + 5H₂O (C. 1897 [1] 1063). 2) Hemialbumose (C. 1897 [1] 1063). 3) Heterofibrinose + 5H₂O (C. 1897 [1] 1063). 4) Protofibrinose + 5H₂O (C. 1897 [1] 1062). 1) Echinochrom (B. 25 [2] 867). C 67,8 = H 5,3 = O 14,8 = N 12,1 = M. G. 1842. 1) Tetraphenyloktospartocktoanilid. Sm. bei 170° (4, 303, 209).

 $C_{102}H_{99}O_{12}N_{12}S_{2}Fe$

1) Tetraphenyloktoaspartooktoanilid. Sm. bei 170° (A. 303, 209).

C 66.9 - H 5.1 - O 28.0 - M. G. 1884.

1) Hexabenzoat d. Verb. $C_{63}H_{72}O_{27}$ (aus Fraxinusgerbsäure) (M. 3, 760). — III, 682.

1) Dysfibrinose + 4H₂O (C. 1897 [1] 1063). 1) Deuteroalbumose (aus Myosin) (C. 1897 [1] 1063). — IV, 1596. 1) Jekorin (J. pr. [2] 33, 425; J. Th. 1887, 284; H. 20, 481). — $\mathbf{C}_{105}\mathbf{H}_{156}\mathbf{O}_{33}\mathbf{N}_{30}\mathbf{S}$ $\mathbf{C}_{105}\mathbf{H}_{178}\mathbf{O}_{36}\mathbf{N}_{30}\mathbf{S}$ $\mathbf{C}_{105}\mathbf{H}_{185}\mathbf{O}_{46}\mathbf{N}_{5}\mathbf{SP}_{3}\mathbf{Na}_{3}$

Verbindung (aus Dammarharz). — III, 555.
 C 55,2 — H 8,3 — O 19,8 — N 16,7 — M. G. 2346.
 Casein. Salze siehe (Z. 1865, 415, 641). — IV, 1604.

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1) Säure (aus Pepton). Ba<sub>2</sub> (M. 19, 213). — IV, 1639.
1) Fibrin (C. 1897 [1] 1062). — IV, 1601.
1) Myosin (C. 1897 [1] 1063). — IV, 1596.
1) Protabbumose (aus Myosin) (C. 1897 [1] 1063). — IV, 1596.
1) Amphopepton (C. 1897 [1] 1063). — IV, 1640.
2) Antipepton + 1½H<sub>2</sub>O (C. 1897 [1] 1063). — IV, 1640.
3) C 68,8 — H 5,3 — O 14,2 — N 11,7 — M. G. 1918.
1) Pentaphenyloktoaspartooktoanilid. Sm. bei 160° (A. 303, 209).
1) Fibrinogen (C. 1897 [1] 1062). — IV, 1600.
1) Deuteroalbumose + H<sub>2</sub>O (C. 1897 [1] 1063).
2) Protalbumose + ½H<sub>2</sub>O (C. 1897 [1] 1063).
3) Hemipepton (aus Serumalbumin) + ½H<sub>2</sub>O (C. 1897 [1] 1063).
4) C 77,7 — H 12,3 — O 10,0 — M. G. 1760.
1) Mannitanhexastearat (A. ch. [3] 47, 326). — I, 447.
1) Myoglobulin + ½H<sub>2</sub>O (C. 1897 [1] 1063).
1) Fibrinoglobulin (C. 1897 [1] 1062).
1) Heteroalbumose + ½H<sub>2</sub>O (C. 1897 [1] 1063).
1) Paraglobulin + ½H<sub>2</sub>O (C. 1897 [1] 1063).
1) Paraglobulin + ½H<sub>2</sub>O (C. 1897 [1] 1063).
1) Paraglobulin + ½H<sub>2</sub>O (C. 1897 [1] 1063).
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1) Paraglobulin + ½H<sub>2</sub>O (C. 1897 [1] 1063).
1) Paraglobulin + ½H<sub>2</sub>O (C. 1897 [1] 1063).
2) Potablumose + 129 H<sub>2</sub>O (C. 1897 [1] 1063).
3) Paraglobulin + ½H<sub>2</sub>O (C. 1897 [1] 1063).
     C108H140O43N28
     C<sub>108</sub>H<sub>162</sub>O<sub>34</sub>N<sub>30</sub>S
     \mathbf{C}_{108}\mathbf{H}_{172}\mathbf{O}_{33}\mathbf{N}_{30}\mathbf{S}
     \mathbf{C}_{108}\mathbf{H}_{174}\mathbf{O}_{34}\mathbf{N}_{35}\mathbf{S}
     C<sub>108</sub>H<sub>178</sub>O<sub>43</sub>N<sub>30</sub>S
     \mathbf{C}_{110}\mathbf{H}_{102}\mathbf{O}_{17}\mathbf{N}_{18}
     \mathbf{C}_{111}\mathbf{H}_{168}\mathbf{O}_{35}\mathbf{N}_{35}\mathbf{S}
     \mathbf{C}_{111}\mathbf{H}_{176}\mathbf{O}_{38}\mathbf{N}_{30}\mathbf{S}
     \mathbf{C}_{111}\mathbf{H}_{176}\mathbf{O}_{44}\mathbf{N}_{30}\mathbf{S}
     C114H216O11
    \mathbf{C}_{114}\mathbf{H}_{174}\mathbf{O}_{36}\mathbf{N}_{30}\mathbf{S}
    \mathbf{C}_{114}\mathbf{H}_{176}\mathbf{O}_{37}\mathbf{N}_{30}\mathbf{S}
    \mathbf{C}_{114}^{114}\mathbf{H}_{176}^{176}\mathbf{O}_{38}^{18}\mathbf{N}_{30}^{18}\mathbf{S}
\mathbf{C}_{117}^{114}\mathbf{H}_{182}^{182}\mathbf{O}_{38}^{18}\mathbf{N}_{30}^{18}\mathbf{S}
    \mathbf{C}_{120}^{\mathbf{H}_{187}}\mathbf{O}_{37}^{\mathbf{N}_{27}}\mathbf{S} \\ \mathbf{C}_{136}^{\mathbf{H}_{136}}\mathbf{O}_{16}^{\mathbf{N}_{8}}

    Base (aus Morphin) (Soc. 26, 215). — III, 901.
    C 72,7 — H 6,6 — O 15,7 — N 5,0 — M. G. 2244.
    Diapotetramorphin (Soc. 25, 653). — III, 901.

     \mathbf{C}_{136}\mathbf{H}_{148}\mathbf{O}_{22}\mathbf{N}_{8}

    Kieselsäureester (aus Bettfedern). Sm. bei 52° (C. 1897 [2] 666).
    Base (aus Morphin) (Soc. 26, 215). — III, 901.
    Base (aus Morphin) (Soc. 26, 215). — III, 901.

    C_{136}H_{236}O_8Si
    \mathbf{C}_{136}^{\circ}\mathbf{H}_{145}^{\circ}\mathbf{O}_{20}\mathbf{N}_{8}\mathbf{Cl}
     \mathbf{C}_{136}\mathbf{H}_{154}\mathbf{O}_{24}\mathbf{N}_{8}\mathbf{Cl}_{9}

    Dese (aus Morphin) (Soc. 26, 213). — 111, 901.
    Verbindung (aus Oxyhämoglobin) (B. 29, 821). — IV, 1619.
    Jodstärke (J. Th. 1888, 21). — I, 1085.
    Syntonin (Parapepton) (A. 73, 125; 111, 201; 144, 68; J. Th. 1877, 10; J. 1884, 617; 1869, 803; H. 5, 158; B. 14, 2698; J. pr. [2] 44, 345; M. 4, 105). — IV, 1634.
    Albumin (aus Algar). — IV, 1534.

     \mathbf{C}_{138}\mathbf{H}_{140}\mathbf{O}_{22}\mathbf{N}_{16}\mathbf{F}\mathbf{e}_{4}
    \mathbf{C}_{144}^{130}\mathbf{H}_{240}^{120}\mathbf{O}_{120}^{7}\mathbf{J}_{7}^{7}\\ \mathbf{C}_{144}^{144}\mathbf{H}_{224}^{120}\mathbf{O}_{42}\mathbf{N}_{36}\mathbf{S}

    Albumin (aus Algen). — IV, 1589.
    Opalisin (H. 26, 308). — IV, 1606.
    C 65,4 — H 5,6 — O 29,0 — M. G. 2864.

    \mathbf{C}_{144}\mathbf{H}_{270}\mathbf{O}_{48}\mathbf{N}_{34}\mathbf{S}
     \mathbf{C}_{150}\mathbf{H}_{292}\mathbf{O}_{68}\mathbf{N}_{43}\mathbf{S}_{6}\mathbf{P}
C_{156}H_{160}O_{52}
                                                                                                           1) Tribenzoat d. Saporubrin. Sm. 208—210° (C. 1897 [1] 302).
1) Desamidoalbuminsäure (C. 1897 [1] 1063).
    \mathbf{C}_{160}\mathbf{H}_{230}\mathbf{O}_{05}\mathbf{N}_{27}\mathbf{S}_{2}
                                                                                                          1) Mucin (aus Rindssehnen). K<sub>5</sub> (H. 10, 66). — IV, 1610.
1) Protagon. Sm. bei 200<sup>6</sup> (B. 12, 129; H. 9, 169). — I, 343.
1) Artolin. 2 HCl (C. 1898 [2] 1102). — IV, 1603.
1) Albumin. Cu; Cu<sub>2</sub> (H. 5, 206). — IV, 1589.
1) Glutolin (C. 1898 [2] 1105). — IV, 1626.
C 45,1 — H 6,1 — O 48,8 — M. G. 5896.
1) Erythrodextrin — H O (R. 28, 28, 2527, 2544).
   \begin{array}{c} \mathbf{C}_{160}^{100}\mathbf{H}_{256}^{250}\mathbf{O}_{80}\mathbf{N}_{39}^{27}\mathbf{S} \\ \mathbf{C}_{160}\mathbf{H}_{308}\mathbf{O}_{35}\mathbf{N}_{5}\mathbf{P} \\ \mathbf{C}_{185}\mathbf{H}_{288}\mathbf{O}_{58}\mathbf{N}_{50}\mathbf{S} \end{array}
    \mathbf{C}_{204}^{\mathsf{1}}\mathbf{H}_{322}^{\mathsf{2}}\mathbf{O}_{66}^{\mathsf{3}}\mathbf{N}_{52}^{\mathsf{3}}\mathbf{S}_{2}^{\mathsf{3}}
     C_{204}H_{336}O_{70}N_{50}S
     \mathbf{C}_{216}\mathbf{H}_{360}\mathbf{O}_{180}
                                                                                                          1) Erythrodextrin + H<sub>2</sub>O (B. 26, 2537, 2544).

1) Serumalbumin (oder C<sub>44</sub> H<sub>719</sub>O<sub>139</sub> N<sub>115</sub>S<sub>6</sub>) (H. 26, 479).

1) Jodalbumin (H. 24, 171). = TV, 1593.

1) Albumin (H. 14, 165; 15, 457; 16, 190; 24, 170; C. 1898 [2]
    \mathbf{C}_{225}\mathbf{H}_{360}\mathbf{O}_{70}\mathbf{N}_{58}\mathbf{S}_{3}
     \mathbf{C}_{227}\mathbf{H}_{370}\mathbf{O}_{75}\mathbf{N}_{58}\mathbf{J}_{4}\mathbf{S}_{2}
    C_{239}H_{386}O_{78}N_{58}S_2
                                                                                                                          436). — IV, 1590.
                                                                                                         1) Melanoïdinsäure (C. 1897 [1] 1063). — IV, 1594.

1) Aeolosomin (C. 1898 [2] 928).

1) Hermerythrin (B. 25 [2] 915).

1) Jodserumalbumin (H. 26, 479).
    \mathbf{C}_{240}\mathbf{H}_{231}\mathbf{O}_{58}\mathbf{N}_{17}\mathbf{S}_{2}
    \mathbf{C}_{420}\mathbf{H}_{630}\mathbf{O}_{152}\mathbf{N}_{103}\mathbf{S}_{2}\mathbf{F}\mathbf{e}
     \mathbf{C}_{427}\mathbf{H}_{761}\mathbf{O}_{153}\mathbf{N}_{135}\mathbf{S}_{2}\mathbf{F}\mathbf{e}
    \mathbf{C}_{450}\mathbf{H}_{693}\mathbf{O}_{132}\mathbf{N}_{116}\mathbf{J}_{11}\mathbf{S}_{4}
    \mathbf{C}_{555}\mathbf{H}_{852}\mathbf{O}_{149}\mathbf{N}_{149}\mathbf{S}_{2}\mathbf{Fe}
                                                                                                            1) Oxyhämoglobin +28 \, \mathrm{H}_2\mathrm{O} (aus Pferdeblut) (H. 8, 361). -
                                                                                                                        IV, 1613.
                                                                                                           1) Chlorocruorin (B. 25 [2] 590).
1) Globulin (aus Blut) (B. 25 [2] 867).
    \mathbf{C}_{560}\mathbf{H}_{845}\mathbf{O}_{167}\mathbf{N}_{143}\mathbf{S}_{3}\mathbf{F}\mathbf{e}
     \mathbf{C}_{621}\mathbf{H}_{814}\mathbf{O}_{169}\mathbf{N}_{175}\mathbf{S}
     \mathbf{C}_{636}\mathbf{H}_{1025}\mathbf{O}_{189}\mathbf{N}_{164}\mathbf{S}_{3}\mathbf{Fe}
                                                                                                           1) Hämoglobin (aus Hundeblut). - IV, 1612.
  C_{867}H_{1363}O_{258}N_{223}S_4Cu 1) Hämocyanin (B. 25 [2] 345, 951).
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Procenttabellen.

Einer Anregung des Herrn Geheimrath Prof. BEILSTEIN zufolge ist die in der ersten Auflage befindliche, damals nur die Kohlenwasserstoffe umfassende Procenttabelle auf die Formen CHO, CHN und CHON ausgedehnt worden.

Sollte es sich als wünschenswerth oder nothwendig herausstellen, auch für weitere Formen, z. B. CHCl, CHBr, CHONS u. s. f., solche Ausrechnungen zu besitzen, so möge diese, die Kräfte des Einzelnen übersteigende, rein mechanische Arbeit jüngeren Fachgenossen vorbehalten bleiben, — waren doch schon allein 90,000 Einzelrechnungen zur Ausführung obiger Arbeit erforderlich. Zunächst wird das gesammelte Zahlenmaterial vollauf genügen, und zwar nicht nur für obige Formen selbst, sondern auch für solche, welche andere Elemente enthalten.

Einige Beispiele werden diese Thatsache veranschaulichen.

Die Relation $\mathbf{0}_2:\mathbf{S}=32:32$ zeigt, dass die Tafeln der CHO- und CHON-Formen ohne Weiteres auch für die CHS- und CHNS-Verbindungen benutzbar sind, indem an Stelle von zwei Atomen Sauerstoff ein Atom Schwefel gesetzt wird. So besitzen beispielsweise gleiches Molekulargewicht und Zusammensetzung die Verbindungen:

On Prof. Beilstein's suggestion the table of percentages which in the first edition only comprised the hydrocarbons has been extended to the forms CHO, CHN and CHON.

Were it desirable or necessary to possess such calculations for other forms, e. g. CHCl, CHBr, CHONS etc., this purely mechanical task, which is beyond the power of a single man, must be reserved for younger men, since 90,000 independent calculations had to be made to accomplish the above task. For the present the collected numerical material will fully suffice not only for the above forms, but also for those containing other elements.

Some examples will illustrate this fact.

The relation $\mathbf{0}_2: \mathbf{S} = 32:32$ indicates that the tables of the **CHO**- and **CHON**-forms can also be used for the compounds of the forms **CHS** and **CHNS** by substituting one atom of sulphur for two atoms of oxygen. Thus for example the following compounds possess eaqual molecular weights;

$$\begin{array}{lll} C_{10}H_{16}O_2 &=& C_{10}H_{16}S \\ C_{10}H_{16}O_4 &=& C_{10}H_{16}S_2 \\ C_{10}H_{16}O_6 &=& C_{10}H_{16}S_3 \\ C_{10}H_{16}O_8 &=& C_{10}H_{16}S_4 \\ C_{10}H_{16}O_2N_2 &=& C_{10}H_{16}N_2S \\ C_{10}H_{16}O_4N_2 &=& C_{10}H_{16}N_2S_2 \\ C_{10}H_{16}O_6N_2 &=& C_{10}H_{16}N_2S_3 \end{array}$$

Suivant le désir de M^r le Prof^r BEILSTEIN, les tables de la composition centésimale qui, dans la 1^{re} édition de cet ouvrage, ne comprenaient que les hydrocarbures, ont été étendues aux formes CHO, CHN et CHON.

Si le besoin se faisait sentir de l'adopter à de nouveaux types tels que CHCl, CHBr, CHONS, l'activité d'un homme serait alors insuffisante, car l'exécution du travail supplémentaire auquel j'ai dû me livrer, a exigé à lui seul plus de 90,000 calculs. Ce travail purement mécanique, doit êtré réservé à des collègues plus jeunes. Le matérial numérique peut en tous cas suffire actuellement non seulement pour les formes mentionnées, mais aussi pour celles qui renferment d'autres éléments.

Quelques exemples éclairciront la

La relation $\mathbf{0}_2: \mathbf{S} = 32:32$ montre que les tables correspondant aux types **CHO** et **CHON**, peuvent également servir pour **CHS** et **CHNS** en remplaçant deux atomes d'oxygène par un atome de soufre. Ainsi les combinaisons suivantes ont le même poids moléculaire et les mêmes compositions:

Per consiglio dell' illustre Prof. BEIL-STEIN, venne estesa la tabella delle composizioni centesimali, che nella prima edizione comprendeva solo gli idrocarburi, anche alle forme CHO, CHN e CHON.

Ove dovesse sembrare desiderabile onecessario il possedere tali calcoli, anche
per altre forme, quali CHCl, CHBr, CHONS,
il lavoro occorrente, puramente meccanico,
ma tale da superare la potenzialità di un
solo individuo, viene lasciato a colleghi
più giovani. Già per la compilazione,
delle tabelle percentuali contenute in
quest'opera si richiesero circa 90,000 singole operazioni. Del resto i valori numerici qui raccolti saranno sufficienti non
solo per le forme stesse per cui turono
calcolati; ma anche per altre contenenti
elementi diversi.

Alcuni esempi faranno comprendere questo fatto.

La relazione $\mathbf{0}_2:\mathbf{S}=32:32$ mostra che le tavole delle forme **CHO** e **CHON** si possono senz'altro adoperare anche per le forme **CHS** e **CHNS**, sostituendo al posto di due atomi d'ossigeno uno di solfo. Così p. es. posseggono un ugual peso molecolare, ed un' identica composizione centesimale i composti:

$$\begin{array}{cccc} C_{10}H_{16}O_2 & \stackrel{\cdot}{=} & C_{10}H_{16}S \\ C_{10}H_{16}O_4 & = & C_{10}H_{16}S_2 \\ C_{10}H_{16}O_6 & = & C_{10}H_{16}S_3 \\ C_{10}H_{16}O_8 & = & C_{10}H_{16}S_4 \\ C_{10}H_{16}O_2N_2 & = & C_{10}H_{16}N_2S \\ C_{10}H_{16}O_4N_2 & = & C_{10}H_{16}N_2S_2 \\ C_{10}H_{16}O_6N_2 & = & C_{10}H_{16}N_2S_3 \end{array}$$

Aus dieser Darlegung wird nunmehr auch ersichtlich, warum in den Procenttabellen auch die auf den ersten Blick überflüssig erscheinenden Sauerstoffprocente wiedergegeben sind — es war dies im Interesse der Schwefelverbindungen nothwendig.

Aber auch die procentuale Zusammensetzung der Formeln CHONS ist man im Stande, aus den Formeln CHON mittelst einer kleinen Rechnung, nämlich durch Theilung der Sauerstoffprocente nach Verhältniss, leicht zu erfahren, z. B. Verhältniss 0:S=1:1

These remarks indicate why in the tables the percentages of oxygen are given which on first sight would seem to be superfluous; this was necessary for the sake of the sulphur compounds.

But also the percentage compositions of the formulae CHONS many readily be derived from the formulae CHON by means of a simple calculation, namely by proportionally dividing the percentages of oxygen, viz. the ratio 0:S=1:1

In gleichem Sinne können für Cl, Br, J u. s. f. enthaltende Formeln die Tafeln der CHO- und CHN-Formen benutzt werden, wenn es sich um annähernde Werthe handelt. Es verhalten sich nämlich:

Similarly for the compounds containing Cl, Br, J etc. the tables of the CHO- and CHN-forms can be used if approximate values suffice. For the following relations exist:

$$\begin{array}{lll} \mathbf{0}_5: \mathbf{Br} &=& 80:80 \\ \mathbf{0}_5: \mathbf{Se} &=& 80:79 \\ \mathbf{0}_8: \mathbf{J} &=& 128:127 \\ \mathbf{N}_5: \mathbf{Cl}_2 &=& 70:71 \end{array}$$

und entsprechen sich in ihrer procentualen Zusammensetzung die Verbindungen:

and the following compounds agree in their percentage composition:

$$\begin{array}{ccccc} \mathbf{C_5H_9Br} & \text{wie} & \mathbf{C_5H_8O_5} \\ \mathbf{C_8H_{10}Se} & , , & \mathbf{C_8H_{10}O_5} \\ \mathbf{C_{10}H_{15}J} & , , & \mathbf{C_{10}H_{14}O_8} \\ \mathbf{C_{12}H_{20}Cl_2} & , , & \mathbf{C_{12}H_{21}N_5} \end{array}$$

allerdings nicht genau, zumeist aber nur

The agreement is not close, but in mit einer bei Analysenzahlen selbstver- most cases lies within the limits of ex-

C'est donc dans l'interet des corps souffrés que les quantités centésimales d'oxygène ont été maintenues dans les tables.

On pourra aussi, par une simple division de la quantité d'oxygène, calculer la forme CHONS au moyen de CHON. Par exemple avec le rapport 0:S = 1:1

Con ciò riesce pure evidente la ragione per cui nelle tabelle trovansi anche le percentuali dell'ossigeno, che a prima vista potrebbero sembrare inutili; ciò fu fatto per facilitare i calcoli relativi ai composti solforati.

Dai valori delle forme CHON si possono inoltre calcolare molto semplicemente quelli relativi alla forme CHONS; basta per ciò ripartire la percentuale dell' ossigeno secondo il rapporto tra ossigeno e solfo; per esempio:

Rapporto 0:S=1:1

D'une manière analogue, les formules des tables CHO et CHN, pourront étré appliquées pour le Cl, Br, S etc. autant qu'il ne s'agira que de valeurs approximatives. En effet, les rapports

In modo uguale, quando non si esigano che valori approssimativi, si possono impiegare le tavole delle forme CHO e CHN pel calcolo delle percentuali relative alle forme contenenti Cl, Br, S etc. Esistono infatti i seguenti rapporti:

$$\begin{array}{lll} \mathbf{0}_5 : \mathbf{Br} &=& 80 : 80 \\ \mathbf{0}_5 : \mathbf{Se} &=& 80 : 79 \\ \mathbf{0}_8 : \mathbf{J} &=& 128 : 127 \\ \mathbf{N}_5 : \mathbf{Cl}_2 &=& 70 : 71 \end{array}$$

atomiques et les compositions centésimales des combinaisons suivantes correspondent presque rigoureusement:

ed i composti seguenti si corrispondono nelle loro percentuali.

$$\begin{array}{ccccc} \mathbf{C_5H_9Br} & \text{wie} & \mathbf{C_5H_8O_5} \\ \mathbf{C_8H_{10}Se} & , & \mathbf{C_8H_{10}O_5} \\ \mathbf{C_{10}H_{15}J} & , & \mathbf{C_{10}H_{14}O_8} \\ \mathbf{C_{12}H_{20}Cl_2} & , & \mathbf{C_{12}H_{21}N_5} \end{array}$$

 $^{1}/_{10}$ $^{-3}/_{10}$ pour cent. Les compositions essa però non presenta per lo più che

Les erreurs d'analyse ne depasseront pas | La corrispondenza non è veramente esatta;

ständlichen Abweichung von ¹/₁₀ bis höchstens ³/₁₀ Procent. Dass auch die procentuale Zusammensetzung hochmolekularer Formeln, sofern sie Multipla vorhandener Formeln sind, z. B.:

perimental errors which amount to 1—3 tenths of a per cent. It need not be mentioned that also the percentage compositions of polymeric compounds may be read off at sight, e. g.:

$${\rm oder} \quad {\rm C_{96}H_{144}O_{12}} \, = \, 12\,{\rm C_8H_{12}0}$$

 $C_{68}H_{84}O_8N_4 = 4C_{17}H_{21}O_2N$

ohne Weiteres abgelesen werden kann, bedarf wohl nicht besonderer Erklärung. Den Rechnungen sind zu Grunde gelegt die abgerundeten Atomgewichte:

$$C = 12$$
 $O = 16$
 $H = 1$ $N = 14$

$$\mathbf{C}_{96}\mathbf{H}_{144}\mathbf{O}_{12} = 12\,\mathbf{C}_{8}\mathbf{H}_{12}\mathbf{0}$$

$$\mathbf{C}_{68}\mathbf{H}_{84}\mathbf{O}_{8}\mathbf{N}_{4} = 4\,\mathbf{C}_{17}\mathbf{H}_{21}\mathbf{0}_{2}\mathbf{N}$$

The calculations are based on the round numbers of the atomic weights:

centésimales de corps à poids moléculaire élevé, peuvent facilement se déduire de celles des formules simples, lorsqu'il s'agit de multiples exacts de ces dernières. Exemple:

$$C_{96}H_{144}O_{12} = 12C_8H_{12}O_{12}$$

ou

$$C_{68}H_{84}O_8N_4 = 4C_{17}H_{21}O_2N$$

Tous les calculs effectués ont eu pour base les poids atomiques arrondis:

deviazioni da $^1/_{10}$ a $^3/_{10}$ per cento; contenute quindi nei limiti d'errori delle analisi. Non occorre poi una speciale spiegazione per intendere che la composizione centesimale di forme molecolari molto complesse può senz'altro esser dedotta, purchè le forme ricercate siano multiple di qualche forma già calcolata;

$${
m C_{96}H_{144}O_{12}} = 12\,{
m C_8H_{12}O}$$
 oppure:

$$C_{68}H_{84}O_8N_4 = 4C_{17}H_{21}O_2N$$

Nei calcoli si sono presi per base i pesi atomici seguenti, ridotti in cifra tonda:

C = 120 = 16N = 14 $\mathbf{H} = 1$

С—Н	C.º/o	H º/0	M.G.	С—Н	C %	H %	M.G.	С—н	C º/o	H º/o	M.G.
$ \begin{array}{c} (1-1)_{n} \\ (1-2)_{n} \\ (1-2)_{n} \\ 1-4 \\ 2-2 \\ 4 \\ 6 \\ 8 \\ 4-2 \\ 4 \\ 6 \\ 8 \\ 10 \\ 5-2 \\ 4 \\ 6 \\ 8 \\ 10 \\ 12 \\ 6-2 \\ 4 \\ 6 \\ 8 \\ 10 \\ 12 \\ 14 \\ 7-2 \\ 4 \\ 6 \\ 8 \\ 10 \\ 12 \\ 14 \\ 6 \\ 8 \\ 10 \\ 12 \\ 14 \\ 16 \\ 8-2 \\ 4 \\ 6 \\ 8 \\ 10 \\ 12 \\ 14 \\ 16 \\ 8-2 \\ 4 \\ 6 \\ 8 \\ 10 \\ 12 \\ 14 \\ 16 \\ 8-2 \\ 4 \\ 6 \\ 8 \\ 10 \\ 12 \\ 14 \\ 16 \\ 8-2 \\ 4 \\ 6 \\ 8 \\ 10 \\ 12 \\ 14 \\ 16 \\ 8-2 \\ 4 \\ 6 \\ 8 \\ 10 \\ 12 \\ 14 \\ 16 \\ 8-2 \\ 4 \\ 6 \\ 8 \\ 10 \\ 12 \\ 14 \\ 16 \\ 8-2 \\ 4 \\ 6 \\ 8 \\ 10 \\ 12 \\ 14 \\ 16 \\ 8-2 \\ 4 \\ 6 \\ 8 \\ 10 \\ 12 \\ 14 \\ 16 \\ 8-2 \\ 4 \\ 6 \\ 8 \\ 10 \\ 12 \\ 14 \\ 16 \\ 8-2 \\ 4 \\ 6 \\ 8 \\ 10 \\ 12 \\ 14 \\ 16 \\ 8-2 \\ 4 \\ 6 \\ 8 \\ 10 \\ 12 \\ 14 \\ 16 \\ 8-2 \\ 4 \\ 6 \\ 8 \\ 10 \\ 12 \\ 14 \\ 16 \\ 8-2 \\ 4 \\ 6 \\ 8 \\ 10 \\ 12 \\ 14 \\ 16 \\ 8-2 \\ 4 \\ 6 \\ 8 \\ 10 \\ 12 \\ 14 \\ 16 \\ 8-2 \\ 4 \\ 6 \\ 8 \\ 10 \\ 12 \\ 14 \\ 16 \\ 8-2 \\ 4 \\ 6 \\ 8 \\ 10 \\ 12 \\ 14 \\ 16 \\ 8 \\ 10 \\ 12 \\ 14 \\ 16 \\ 8 \\ 10 \\ 12 \\ 14 \\ 16 \\ 8 \\ 10 \\ 12 \\ 14 \\ 16 \\ 8 \\ 10 \\ 12 \\ 14 \\ 16 \\ 8 \\ 10 \\ 12 \\ 14 \\ 16 \\ 8 \\ 10 \\ 12 \\ 14 \\ 16 \\ 8 \\ 10 \\ 12 \\ 14 \\ 16 \\ 8 \\ 10 \\ 12 \\ 14 \\ 14 \\ 16 \\ 8 \\ 10 \\ 12 \\ 14 \\ 14 \\ 16 \\ 8 \\ 10 \\ 12 \\ 14 \\ 14 \\ 16 \\ 8 \\ 10 \\ 12 \\ 14 \\ 14 \\ 16 \\ 8 \\ 10 \\ 12 \\ 14 \\ 14 \\ 16 \\ 8 \\ 10 \\ 12 \\ 14 \\ 14 \\ 16 \\ 8 \\ 10 \\ 12 \\ 14 \\ 16 \\ 8 \\ 10 \\ 12 \\ 14 \\ 14 \\ 16 \\ 8 \\ 10 \\ 12 \\ 14 \\ 14 \\ 16 \\ 8 \\ 8 \\ 10 \\ 12 \\ 14 \\ 14 \\ 8 \\ 8 \\ 10 \\ 12 \\ 14 \\ 14 \\ 8 \\ 8 \\ 10 \\ 12 \\ 14 \\ 8 \\ 8 \\ 8 \\ 10 \\ 8 \\ 8 \\ 8 \\ 8 \\ 8 \\ 8 \\ 8 \\ 8 \\ 8 \\ $	92,3 85,7 75,0 92,3 85,7 80,0 94,7 90,0 85,7 81,8 96,8 96,8 93,8 90,9 88,2 85,7 83,3 97,3 94,7 92,3 90,0 87,8 85,7 94,7 92,3 94,7 92,3 94,7 95,3 91,3 85,7 85,7 85,7 85,7 85,7 85,7 85,7 85,7	2,0 4,0 5,9 7,7 9,4 11,1	(13) _n (14) _n 16 26 28 30 38 40 42 44 50 52 64 56 68 70 72 74 76 78 80 82 84 86 88 90 92 94 96 98 100 102 104 106 108 110	8-16 18 9-2 4 6 8 10 12 14 16 18 20 10-2 4 6 8 10 12 14 16 18 20 21 21 4 6 8 10 10 22 24 4 6 8 10 10 10 20 10 10 10 10 10 10 10 10 10 1	85,7 84,2 96,4 94,7 93,1 91,5 90,0 88,5 87,1 85,7 84,4 96,8 95,2 93,8 92,3 90,9 85,6 85,7 84,5 97,1 95,6 94,7 96,8 85,7 84,6 96,8 97,3 99,0 91,7 90,4 88,5 97,3 96,0 97,3 96,0 97,3 96,0 97,3 96,0 97,3 96,0 97,3 96,0 97,3 96,0 97,3 96,0 97,3 96,0 97,3 97,3 97,3 97,3 97,3 97,3 97,3 97,3	14,3 15,8 3,6 5,3 6,9 8,5 10,0 11,5 12,9 14,3 15,6 3,2 4,8 6,2 7,7 9,1 10,4 11,8 13,0 14,3 15,5 1,5 2,9 4,4 5,7 7,7 8,3 9,6 10,8 12,9 13,2 14,3 15,4 1,4 15,7 4,8 15,7 16,8 12,9 16,8 17,7 18,3 18,5 18,5 18,5 18,5 18,5 18,5 18,5 18,5	112 114 110 112 114 116 118 120 122 124 126 128 122 124 126 128 130 132 134 136 138 140 142 134 136 138 140 142 151 152 154 156 148 150 152 154 156 158 160	12—18 20 22 24 26 13—2 4 6 8 10 12 14 16 18 20 22 24 26 28 14—2 4 6 8 10 12 14 16 18 20 22 24 26 8 10 12 14 16 18 18 20 21 14 16 18 18 20 21 14 16 18 18 20 21 14 16 18 20 21 14 16 18 20 21 14 16 18 20 21 14 16 18 20 21 14 16 18 20 21 14 16 18 20 21 14 16 18 20 21 21 14 16 18 20 21 21 21 21 21 21 21 21 21 21 21 21 21	88,9 87,8 86,8 85,7 96,3 95,1 94,0 92,8 91,8 90,7 89,6 88,6 87,7 85,7 85,7 85,7 85,7 95,5 95,5 95,5 94,5 93,3 90,3 89,4 88,5 87,5 88,6 87,7 96,5 95,5 96,5 95,5 96,5 96,5 97,8 97,8 97,8 97,9 97,8 97,8 97,8 97,8	5,3 6,2 7,2 8,2	162 164 166 168 170 158 160 162 164 166 168 170 172 174 176 178 180 182 184 170 172 174 176 178 180 182 184 170 172 174 176 178 180 182 184 170 172 174 176 178 180 182 184 170 172 174 176 178 180 182 184 186 188 198 198 198 198 198 198 198 198 198

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с-н	G º/º	H %	м. с.	С—н	C %	H º/o	M.G.	С—Н	C %	Ħ %	М. G.
15-20 22 24 26 28 30 32 16-2	90,0 89,1 88,2 87,4 86,5 85,7 84,9 99,0 98,0	10,0 10,9 11,8 12,6 13,5 14,3 15,1 1,0 2,0	200 202 204 206 208 210 212 194 196	18-36 38 19-2 4 6 8 10 12 14	85,7 85,0 99,1 98,3 97,4 96,6 95,8 95,0 94,2	14,3 15,0 0,9 1,7 2,6 3,4 4,2 5,0 5,8	252 254 230 232 234 236 238 240 242	21—34 36 38 40 42 44 22—2 4 6	88,1 87,5 86,9 86,3 85,7 85,1 99,8 98,5 97,8	11,9 12,5 13,1 13,7 14,3 14,9 0,8 1,5 2,2	286 288 290 292 294 296 266 268 270
6 8 10 12 14 16 18 20 22 24 26	97,0 96,0 95,0 94,1 93,2 92,3 91,4 90,6 89,7 88,9 88,1	3,0 4,0 5,0 5,9 6,8 7,7 8,6 9,4 10.3 11,1 11,9	198 200 202 204 206 208 210 212 214 216 218	16 18 20 22 24 26 28 30 32 34 36	93,4 92,7 91,9 91,2 90,5 89,8 89,1 88,4 87,7 87,0 86,4	6,6 7,3 8,1 8,8 9,5 10,2 10,9 11,6 12,3 13,0	244 246 248 250 252 254 256 258 260 262 264	8 10 12 14 16 18 20 22 24 26 28	97,1 96,4 95,6 95,0 94,3 93,6 92,9 92,3 91,7 91,0	2,9 3,6 4,4 5,0 5,7 6,4 7,1 7,7 8,3 10,0	272 274 276 278 280 282 284 286 288 290 292
28 30 32 34 17—2 4 6 8	87,3 86,5 85,7 85,0 99,0 98,1 97,1 96,2 95,3	12,7 13,5 14,3 15,0 1,0 1,9 2,9 3,8 4,7	220 222 224 226 206 208 210 212 214	38 40 20—2 4 6 8 10 12 14	85,7 85,1 99,2 98,4 97,6 96,8 96,0 95,2 94,5	13,6 14,3 14,9 0,8 1,6 2,4 3,2 4,0 4,8 5,5	266 268 242 244 246 248 250 252 254	30 32 34 36 38 40 42 44 46	90,4 89,8 89,2 88,6 88,0 87,4 86,8 86,3 85,7	9,6 10,2 10,8 11,4 12,0 12,6 13,2 13,7 14,3 14,8	294 296 298 300 302 304 306 308 310
12 14 16 18 20 22 24 26 28	94,4 93,6 92,7 91,9 91,1 90,3 89,5 88,7 87,9	5,6 6,4 7,3 8,1 8,9 9,7 10,5 11,3 12,1	216 218 220 222 224 226 228 230 232	16 18 20 22 24 26 28 30 32	93,8 93,0 92,3 91,6 90,9 90,2 89,6 88,9 88,2	6,2 7,0 7,7 8,4 9,1 9,8 10,4 11,1 11,8	256 258 260 262 264 266 268 270 272	23-2 4 6 8 10 12 14 16 18	99,3 98,6 97,9 97,2 96,5 95,8 95,2 94,5 93,9 93,2	0,7 1,4 2,1 2,8 3,5 4,2 4,8 5,5 6,1 6,8	278 280 282 284 286 288 290 292 294 296
30 32 34 36 18 -2 4 6 8 10	87,2 86,4 85,7 85,0 99,1 98,2 97,3 96,4 95,6 94,7	12,8 13,6 14,3 15,0 0,9 1,8 2,7 3,6 4,4 5,3	234 236 238 240 218 220 222 224 226 228	34 36 38 40 42 21—2 4 6 8	87,6 87,0 86,3 85,7 85,1 99,2 98,4 97,7 96,9 96,2	12,4 13,0 13,7 14,3 14,9 0,8 1,6 2,3 3,1 3,8	274 276 278 280 282 254 256 258 260 262	20 22 24 26 28 30 32 34 36 38	92,6 92,0 91,4 90,8 90,2 89,6 89,0 88,5 87,9	7,4 8,0 8,6 9,2 9,8 10,4 11,0 11,5 12,1	298 300 302 304 306 308 310 312 314 316
14 16 18 20 22 24 26 28 30 32 34	93,9 93,1 92,3 91,5 90,8 90,0 89,2 83,5 87,8 87,1 86,4	6,1 6,9 7,7 8,5 9,2 10,0 10,8 11,5 12,2 12,9 13,6	230 232 234 236 238 240 242 244 246 248 250	12 14 16 18 20 22 24 26 28 30 32	95,5 94,7 94,0 93,3 92,7 92,0 91,3 90,6 90,0 89,4 88,7	4,5 5,3 6,0 6,7 7,3 8,0 8,7 9,4 10,0 10,6 11,3	264 266 268 270 272 274 276 278 280 282 284	40 42 44 46 48 24—2 4 6 8	87,3 86,8 86,3 85,7 85,2 99,7 98,6 98,0 97,3 96,6 96,0	12,7 13,2 13,7 14,3 14,8 0,7 1,4 2,0 2,7 3,4 4,0	318 320 322 324 290 292 294 296 298 300

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C—I	I C %	H º/0	M.G.	С-Н	C '0/0	H º/(M.G	С—Н	C 0/0	H %	M. G
1 2	66 94,7 8 94,1 00 93,5 92,9 4 92,3 6 91,7 8 91,1 00 90,6 8 88,9 8 88,3 8 88,3 8 88,3 8 88,3 8 88,3 8 88,3 8 88,3 8 88,9 8 88,3 8 88,9 8 98,0 8 96,2 8 94,9 9 94,9 9 94,9 9 94,9 9 94,3	5,3 5,9 6,5 7,7 8,3 8,9 9,4 10,6 11,1 11,7 12,2 13,8 14,3 14,8 0,7 1,3 2,6 3,2 3,4 4,5 1,7 6,2 8,5 9,6 10,7 11,2 11,8 11,8 11,8 11,8 11,8 11,8 11,8	302 304 306 308 310 312 314 316 318 320 322 324 326 338 302 334 336 338 302 334 316 318 310 312 324 326 338 339 331 341 341 341 341 341 341 341	26 28 30 32 34 36 38 40 42 44 46 48 50 52 4 6 8 10 12 14 16 18 20 22 24 9 9 32 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	91,2 90,7 90,2 89,6 89,1 88,6,7 87,7 86,2 99,4 98,8 97,0 96,4 95,9 94,2 93,6 93,6 93,6 93,6 93,6 93,6 93,6 93,6	4,5 6,1 6,7 7,2 7,7 8,2 8,7 9,2	342 344 346 348 350 352 354 366 328 330 332 334 336 338 340 342 344 346 352 364 356 352 364 366 370 372 374 376 378 378 378 3772 378 378 378 378 378 378 378 378 378 378	48 50 52 54 56 58 60 30—2 4 6 8 10 12 14 16 18 20 22 24 9 26 9 9 30 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9 9	89,4 88,9 88,5 88,5 87,5 86,6 86,1 85,7 86,6 99,4 99,8 99,7 96,1 91,6 91,6 91,1 90,6 91,6 91,1 90,6 91,1 90,6 91,1 91,1 91,1 91,1 91,1 91,1 91,1 91	13,9 14,3 14,7 0,6 1,1 1,1 1,6 2,2 2,7 3,2 3,7 4,2 4,2 4,8 5,3 5,8 6,2 6,7 3 3,7 3,8 6,9 8,9 8,9 8,9 8,9 8,9 8,9 8,9 8	374 374 374 378 380 382 384 386 388 390 392 394 356 358 366 363 363 374 376 378 380 392 394 366 372 374 376 378 380 392 394 376 378 380 392 374 376 378 380 380 380 380 370 371 371 371 371 371 371 371 371

C—H	C º/o	H °/ ₀	M.G.	C-	-H	C %	H %	M.G.	С—Н	C º/0	H º/0	M.G.
30-38	90,4	9,6	398	34-	-64	86,4	13,6	472	43-86	85,7	14,3	602
40	90,0	10,0	400		66	86,1	13,9	474	88	85,4	14,6	604
42 44	89,6 89,1	10,4	402		68 70	85,7 85,4	14,3 14,6	476	44-50	91,3	8,7	578
46	88,7	11,3	406	35-	-40	91,3	8,7	478 460	52 54	91,0 90,7	10,0	580
48	88,2	11,8	408		50	89,4	10,6	470	56	90,4	9,6	584
50	87,8	12,2	410		60	87,5	12,5	480	58	90,1	9,9	586
52	87,4	12,6	412		62	87,1	12,9	482	60	89,8	10,2	588
54	87,0	13,0	414		64	86,8	13,2	484	70	88,3	11,7	598
56 58	86,5	13,5 13,9	416 418		66 68	86,4 86,1	13,6 13,9	486	80 88	86,8	13,2 14,3	608
60	85,7	14,3	420		70	85,7	14,3	490	90	85,7 85,4	14,5	618
62	85.3	14,7	422		72	85,4	14.6	492	45 - 72	88,3	11,7	612
31-50	88,2	14,7 11,8	422	36-	-36	92,3	7,7	468	80	87,1	12,9	620
52	87,8	12,2	424		40	91,5	8,5	472	90	85,7	14,3	630
54 56	87,3	12,7 13,1	426 428	1	50	89,6	10,4	482	92	85,4	14,6	632
58	86,9 86,5	13,5	430		60 70	87,8 86,1	12,2	492 502	4690 92	86,0	14,0	642
60	86,1	13,1	432		72	85,7	14,3	504	94	85,5	14,5	646
62	85,7	14,3.	434		74	85,4	14,6	506	47-92	86,0	14,0	656
64	85,3	14,7	436	37-		89,9	10,1	494	94	85,7	14,3	658
32-24	94,1	5,9	408		60	881	11,9	504	96	85,5	14,5	660
26 28	93,7 93,2	6,3	410 412	1	70 72	86.4	13,6 14,0	514 516	48-94 96	86,0 85,7	14,0 14,3	670
30	92,8	7,2	414		74	85,7	14,3	518	98	85,4	15,6	674
32	92,3	7,7	416		76	85,4	14,6	520	50-46	92,9	7,1	646
40	90,6	9,4	424	38-	-40	91,9	8,1	496	50	92,3	7,7	650
50	88,5	11,5	434		50	90,1	9,9	506	60	90,9	9,1	660
52	88,1	11,9 12,3	4 36 4 38		60 70	88,4	11,6	516 526	70 80	89,6 88,2	10,4	680
54 56	87,7 87,3	12,7	440		72	86,4	13,6	528	90	87,0	13,0	690
58	86,9	13,1	442		74	86,0	14,0	530	100	85,7	14,3	700
60	86,5	13,5	444		76	85,7	14,3	532	102	85,5	14,5	702
62	.86,1	13,9	446		78	85,4	14,6	534	51-102	85,7	14,3	714 716
64	85,7	14,3	448	39-	-60 70	88,6	11,4 13,0	528	104 52—106	85,5 85,5	14,5	730
66 3350	85,3 88,8	14,7	450 446		78	85,7	14,3	546	53-106	85,7	14,3	742
52	88,4	11,6	448		80	85,4	14,6	548	108	85.5	14,5	744
54	88,0	12.0	450	40-	-2 6	94,9	5,1	506	54-84	88,5	11,5	732
56	87,6	12,4	452		40	92,3	7,7	520	108	85,7	14,3 14,5	756 758
58	87,2	12,8	454		50	90,6	9,4	530 540	110 55—110	85,5 85,7	14,3	770
60 62	86,8	13,2	456 458		60 64	88,9	11,1	544	112	85,5	14,5	772
64	86,1	13,9	460		70	87,3	12.7	550	56-112	85,7	14,3	784
66	85,7	14,3	462		80	85,7	14,3	560	114	85,5	14,5	786
68	85,4	14,6	464	1	82		14,6	562	57-114		14,3	798
34-36	91,9	8,1	444	41-	-80	86,0	14,0	572 574	116 58-116		14,3	812
38	91,5	8,5	446 448		82 84		14,3	576	118	85,5	14,5	814
40 50	91,1 89,1	8,9	458	42-		86,3	13,7	584	59-118	85,7	14,3	826
56	87,9	12,1	464		82		14,0	586	120	85,5	14,5	828
58	88,3	11,7	466		84	85,7	14,3	588	60-100 120		12,2	820
60	87,2	12,8	468	140	86		14,6	590 596	120		14,5	842
62	86,8	13,2	470	43-	–80	86,6	10,4	000	1	, ,,,		
	1	t .	1	1								

C-H-0	C º/0	H ⁰ / ₀	0 %	M.G.	C—H—O	C º/0	H º/0	O º/o	M.G.
1-2-1 2 3 1-4-1 2 2-2-1 2 3 4 5 6 2-4-1 2 3-2-1 2 3-2-1 2 3 4 5 5 3-4-1 2 3 4 5 5 6 3-4-1 2 3 4 5 5 6 3-4-1 2 3 4 4 5 5 6 3 4 5 5 6 6 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	0°% 40,0 26,1 19,4 37,5 25,0 57,1 41,4 32,4 26,7 22,6 19,7 54,5 40,0 31,6 26,1 22,2 38,7 66,7 51,4 41,9 35,3 30,5 64,3 50,0 26,5 62,1 48,7 40,0 34,6 30,0 26,5 62,1 48,7 40,0 34,6 30,0 29,5 66,1 48,7 40,0 34,6 30,0 29,5 66,0 47,4 39,1 33,3 72,7 58,6	H% 6,7 4,3 3,2 12,5 8,8 4,4 2,7 2,2 1,9 6,7 5,2 4,3 3,7 13,0 9,7 7,1 5,6 4,5 3,8 3,2 1,9 10,3 8,1 6,7 5,4 9,1 10,3 10,5 8,7 7,4 3,0 2,4 2,0	53,3 69,6 77,4 50,0 66,7 38,1 55,2 64,9 71,1 75,5 78,7 36,4 53,3 69,6 74,1 34,8 51,6 62,8 62,8 62,8 62,8 64,4 45,7 70,6 66,7 70,6 66,7 70,6 43,2 53,3 60,6 61,6 66,7 70,6 43,2 53,3 60,6 61,6 61,6 61,6 61,6 61,6 61,6 61,6	M.G. 30 46 62 32 48 42 58 -74 90 106 122 44 60 76 92 108 46 62 21 88 104 120 136 58 74 90 106 122 88 104 120 136 68 21 18 66 82 98	C—H—O 6 4-4-1 2 3 4 5 6 7 4-6-1 2 3 4 5 6 8 4-8-1 2 3 4 5 4-10-1 2 3 4 5 6 7 5-4-1 2 3 4 5 6 7 5-4-1 2 3 4 5 6 7 5-4-1 2	C% 32,9 70,6 57,1 48,0 41,4 36,4 32,4 368,6 55,8 47,1 40,7 35,8 47,1 40,7 35,8 47,1 40,7 35,8 47,1 40,7 35,8 46,9 41,7 54,5 46,9 41,7 37,5 53,6 46,9 41,7 37,5 34,0 31,2 73,2 61,2	H % 1,4 5,9 4,8 4,0 3,4 3,0 2,7 2,4 8,6 7,0 5,9 5,1 4,5 4,0 3,3 11,1 9,1 7,7 6,7 5,9 13,5 11,1 9,4 8,2 2,6 2,1 1,8 1,6 1,4 1,2 1,1 5,0 4,2 3,6 3,1 2,8 2,5 2,4 2,1 7,3 6,1	0% 65,7 23,5 38,1 48,0 55,2 60,6 64,9 68,3 22,8 37,2 47,0 54,2 59,7 64,0 70,3 22,2 36,4 46,1 53,3 58,8 21,6 35,6 45,3 552,5 20,5 34,1 43,6 50,8 64,4 20,0 33,3 60,8 64,4 20,0 33,3 60,8 64,4 60,0 63,6 66,7 19,5	M.G. 146 68 84 100 116 132 148 164 150 182 72 88 104 120 136 74 90 106 122 78 94 110 126 142 158 174 80 96 128 144 160 176 192 82 82

	1								
C—H—O	C º/o	H 0/0	0 %	M.G.	C-H-0	C %	H º/0	0 %	M.G.
5-6-5 6 7 8 5-8-1 2 3 4 5 6 7 8 9 5-10-1 2 3 4	41,1 37,0 33,7 30,9 71,4 60,0 51,7 45,4 40,5 36,6 33,3 69,8 58,8 50,8 44,8 40,0	4,1 3,7 3,4 3,1 9,5 8,0 6,9 6,1 5,4 4,9 4,5 4,1 3,8 1,6 9,5 7,4 6,7	54,8 59,3 62,9 66,0 19,1 32,0 41,4 48,5 54,1 58,5 62,2 65,3 67,9 18,6 31,4 40,7 47,8 53,3	148 164 180 196 212 86 102 118 134 150	6-8-8 9 6-10-1 2 3 4 5 6 7 8 9 6-12-1 2 3 4 5	34,6 32,1 73,5 63,2 55,4 49,3 44,4 40,5 37,1 34,3 31,9 72,0 62,1 54,5 48,7 43,9 40,0 36,7	3,8 3,6 10,2 8,8 7,7 6,9 6,2 5,6 5,2 4,4 12,0 10,3 9,1 8,1 7,3 6,7 6,7 6,1	61,6 64,3 16,3 28,0 36,9 43,8 49,4 53,9 57,7 61,0 27,6 36,4 43,2 48,8 53,3 57,1	208 224 98 114 130 146 162 178 194 210 226 100 116 132 148 164 180 196
5—12—1 2 3 4 5 6—2—1 2 3 4 5	36,2 68,2 57,7 50,0 44,1 39,5 80,0 67,9 59,0 52,2 46,8	6,0 13,6 11,5 10,0 8,8 7,9 2,2 1,9 1,6 1,4 1,3	57,8 18,2 30,8 40,0 47,1 52,6 17,8 30,2 39,4 46,4 51,9	166 88 104 120 136 152 90 106 122 138 154	$\begin{array}{c c} & 8 \\ 9 \\ 6-14-1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 6-16-14 \\ 7-2-1 \end{array}$	34,0 31,6 70,6 61,0 53,8 48,0 43,4 39,6 36,4 23,1 82,4	5,6 5,3 13,7 11,8 10,4 9,3 8,4 7,7 7,1 5,1	60,4 63,1 15,7 27,2 35,8 42,7 48,2 52,7 56,5 71,8 15,7	212 228 102 118 134 150 166 182 198 312 102
6 7 8 6-4-1 2 3 4 5	42,3 38,7 35,6 78,3 66,7 58,1 51,4 46,1 41,9	1,2 1,1 1,0 4,3 3,7 3,2 2,9 2,6 2,3	56,5 60,2 63,4 17,4 29,6 38,7 45,7 51,3 55,8	170 186 202 92 108 124 140 156 172	2 3 4 5 6 7 8 9 7–4–1	71,2 62,7 56,0 50,6 46,2 42,4 39,3 36,5	1,7 1,5 1,3 1,2 1,1 1,0 0,9 0,9	27,1 35,8 42,7 48,2 52,7 56,6 59,8 62,6	118 134 150 166 182 198 214 230
6-6-1 2 3 4 5	38,3 35,3 32,7 76,6 65,5 57,1 50,7 45,6 41,4	2,3 2,1 1,9 1,8 6,4 5,4 4,8 4,2 3,8 3,4	59,6 62,8 65,5 17,0 29,1 38,1 45,1 50,6 55,2	188 204 220 94 110 126 142 158 174	7-4-1 2 3 4 5 6 7 8 9	80,8 70,0 61,8 55,3 50,0 45,6 42,0 38,9 36,2 33,9	3,8 3,3 2,9 2,6 2,4 2,2 2,0 1,8 1,7 1,6	15,4 26,7 35,3 42,1 47,6 52,2 56,0 59,3 62,1 64,5	104 120 136 152 168 184 200 216 232 248
7 8 9 10 12 6-8-1 2 3 4 5 6 7	37,9 35,0 32,4 30,3 26,7 75,0 64,3 56,3 50,0 45,0 40,9 37,5	3,1 2,9 2,7 2,5 2,2 8,3 7,1 6,2 5,6 5,0 4,5 4,2	59,0 62,1 64,9 67,2 71,1 16,7 28,6 37,5 44,4 50,0 54,6 58,3	190 206 222 238 270 96 112 128 144 160 176 192	7-6-1 2 3 4 5 6 7 8 9 10 11 7-8-1	79,3 68,8 60,9 54,5 49,4 45,2 41,6 38,5 35,9 33,6 31,6 77,8	5,6 4,9 4,3 3,9 3,5 3,2 3,0 2,7 2,6 2,4 2,2 7,4	15,1 26,2 34,8 41,6 47,0 51,6 55,4 58,7 61,5 64,0 66,2 14,8	106 122 138 154 170 186 202 218 234 250 266 108

C-H-O	C % 67,8	H º/o	O º/o	M. G.	C—H—O	C º/o	H º/0	0 %	M.G.
3		6.4	1			1	<u> </u>		
7	60,0 53,8 48,8 44,7 41,2 38,2 35,6 33,3 76,4 66,7 59,1 53,2 44,2 40,8 37,8 35,3 37,5 47,8 40,4 37,5 37,5 47,8 40,4 37,5 57,5 51,9 47,2 43,8 40,0 37,2 46,7 56,7	5,7,16,4,29,6,4,4,3,6,4,3,3,3,4,5,2,9,7,4,4,3,5,4,4,5,5,4,4,5,5,4,4,5,5,4,4,5,5,4,4,5,5,4,4,5,5,4,4,5,5,4,6,6,6,8,2,7,6,6,8,8,2,7,6,7,2,1,1,0,9,9,1,1,1,1,2,1,1,0,9,9,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1	25,8 34,3 41,0 46,5 51,1 54,9 58,2 61,5 65,7 14,5 25,4 33,8 40,5 50,5 54,4 57,7 60,5 54,4 57,7 60,5 63,0 33,4 40,4 45,0 45,0 45,0 45,0 45,0 45,0 45	124 140 156 172 188 204 220 236 252 268 110 126 142 158 174 190 206 222 238 254 112 128 144 160 176 192 208 224 240 114 130 146 162 178 194 210 226 116 132 148 164 180 196 212 114 130 146 162 178 194 210 226 116 132 148 164 180 196 212 148 180 196 212 148 180 196 212 114 130 146 162 178 194 210 226 178 194 210 226 178 194 210 226	8-4-6 7 8 9 10 11 8-6-1 2 3 4 5 6 7 8 9 10 11 12 8-8-1 2 3 4 5 6 7 8 9 10 11 12 8-10-1 2 3 4 5 6 7 8 9 10 11 12 8-12-1 2 3 4 5 6 7 8 9 10 11 12 8-12-1 2 3 4 5 6 7 8 9 10 11 12 8-12-1 2 3 4 5 6 7 8 9 10 11 12 8-12-1 2 3 4 5 6 7 8 9 10 11 12 8-12-1 2 3 4 5 6 7 8 9 10 11 12 8-12-1 2 3 4 5 6 7 8 9 10 11 12 8-12-1 2 3 4 5 6 7 8 9 10 11 12 8-12-1 2 3 4 5 6 7 8 9 10 11 12 8-12-1 2 3 4 5 6 7 8 9 10 11 12 8-12-1 2 3 4 5 6 7 8 9 10 11 12 8-12-1 2 3 4 5 6 7 8 9 10 11 12 8-12-1 2 3 4 5 6 7 8 9 10 11 12 8-12-1 2 3 3 4 5 6 7 8 9 10 11 12 8-12-1 2 3 3 4 5 6 7 8 9 10 11 12 8-12-1 2 3 4 5 6 7 8 9 10 11 12 8-12-1 2 3 3 4 5 6 7 8 9 10 11 12 8-12-1 2 3 3 4 5 6 7 8 9 10 11 12 8-12-1 2 3 3 4 5 6 7 8 9 10 11 12 8-12-1 2 3 3 4 5 6 7 8 9 10 11 12 8-12-1 2 3 3 4 5 6 7 8 9 10 11 12 8-12-1 2 3 3 4 5 6 7 8 9 10 11 12 8-12-1 2 3 3 4 5 6 7 8 9 9 10 11 12 8-12-1 2 3 3 4 5 6 7 8 9 9 10 11 12 8-12-1 2 3 3 4 5 6 7 8 9 9 10 11 12 8-12-1 2 3 3 4 5 6 7 8 9 9 10 11 12 8-12-1 2 3 3 4 5 6 7 8 9 9 10 11 12 8-12-1 2 3 3 4 5 6 7 8 9 9 10 11 12 8-12-1 2 3 3 4 5 6 7 8 9 9 10 11 12 8-12-1 2 3 3 4 5 6 7 8 9 9 10 11 12 8-12-1 2 8-12	49,0 45,3 42,1 39,4 36,9 34,8 81,4 71,6 64,0 57,8 52,7 48,5 44,7 39,0 36,6 32,6 63,2 57,1 52,8 44,5 44,5 44,5 44,5 44,5 44,5 44,5 66,3 32,6 66,4 34,6 66,4 34,6 66,4 34,6 66,4 34,6 66,4 34,6 44,6 4	2,0 1,7 1,5 1,5 1,5 1,5 1,5 1,5 1,5 1,5 1,5 1,5	49,0 52,8 56,2 59,0 61,6 63,7 13,5 32,0 38,6 44,0 48,5 44,5 55,5 61,1 63,3 38,1 55,3 31,6 63,3 31,6 63,3 31,6 63,3 31,6 63,3 31,6 63,3 31,6 63,3 31,6 63,3 31,6 63,3 31,6 63,3 31,6 63,7 31,6 31,6 31,6 31,6 31,6 31,6 31,6 31,6	196 212 228 244 260 276 118 134 150 166 182 198 214 230 246 262 278 294 120 136 152 168 184 200 216 232 248 264 280 296 312 138 154 170 186 202 218 234 250 266 282 298 124 140 156 172 188 204 220 236 2252

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C-H-0	C %	H º/0	0 %	M. G.	C -H-0	C º/o	H º/o	0 %	M.G.
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6 7 8 9 8-18-1 2 3 4 5 6	46,2 42,9 40,0 37,5 73,8 65,7 59,3 53,9 49,5 45,7	7,7 7,1 6,7 6,2 13,8 12,3 11,1 10,1 9,3 8,6	46,1 50,0 53,3 56,2 12,3 21,9 29,6 36,0 41,2 45,7	208 224 240 256 130 146 162 178 194 210	10 11 12 13 14 9-10-1 2 3 4	39,1 37,0 35,0 35,0 33,3 31,7 80,6 72,0 65,1 59,3 54,5	2,9 2,7 2,6 2,4 2,3 7,4 6,7 6,0 5,5 5,0	58,0 60,3 62,3 64,2 65,9 11,9 21,3 28,9 35,2 40,4	276 292 308 324 340 134 150 166 182 198
7 8 9 8-20-3 9-2-1 2 3 4 5 6	42,5 39,7 37,2 58,5 85,7 76,0 68,3 62,0 56,8 52,4	7,9 7,4 7,0 12,2 1,6 1,4 1,2 1,1 1,0 1,0	49,6 52,9 55,8 29,3 12,7 22,5 30,4 36,8 42,1 46,6	226 242 258 164 126 142 158 174 190 206	6 7 8 9 10 11 12 13 14 9—12—1	50,5 46,9 43,9 41,2 38,8 36,7 34,8 33,1 31,6 79,4	4,7 4,3 4,0 3,8 3,6 3,4 3,2 3,0 2,9 8,8	44,8 48,7 52,0 55,0 57,5 59,8 61,9 63,8 65,5 11,8	214 230 246 262 278 294 310 326 342 136
7 8 9 10 11 9-4-1 2 3 4 5 6	48,6 45,4 42,5 40,0 37,8 84,4 75,0 67,5 61,3 56,3	0,9 0,8 0,7 0,7 3,1 2,8 2,5 2,3 2,0 1,9	50,4 53,8 56,7 59,3 61,5 12,5 22,2 30,0 36,4 41,7 46,1	222 238 254 270 286 128 144 160 176 192 208	2 3 4 5 6 7 8 9 10 11 12	71,1 64,3 58,7 54,0 50,0 46,5 43,5 40,9 38,6 36,5 34,6	7,9 7,1 6,5 6,0 5,6 5,2 4,8 4,5 4,3 4,0 3,8	21,0 28,6 34,8 40,0 44,4 48,3 51,6 54,6 57,1 59,5 61,6	152 168 184 200 216 232 248 264 280 296 312
7 8 9 10 11 12 $9-6-1$ 2 3 4	51,9 48,2 45,0 42,2 39,7 37,5 35,5 83,1 74,0 66,7 60,7	1,8 1,7 1,5 1,5 1,4 1,3 4,6 4,1 3,7 3,3	50,0 53,3 56,2 58,8 61,1 63,2 12,3 21,9 29,6 36,0	203 224 240 256 272 288 304 130 146 162 178	9-14-1 2 3 4 5 6 7 8 9	32,9 78,2 70,1 63,5 58,0 53,5 49,5 46,1 43,2 40,6 38,3	3,6 10,1 9,1 8,2 7,5 6,9 6,4 6,0 5,6 5,2 4,9	63,4 11,6 20,8 28,2 35,4 39,6 44,0 47,9 51,2 54,1 56,7	328 138 154 170 186 202 218 234 250 266 282
5 6 7 8 9 10 11	55,7 51,4 47,8 44,6 41,9 39,4 37,2 35,3	3,1 2,9 2,6 2,5 2,3 2,2 2,0 1,9	41,2 45,7 49,6 52,9 55,8 58,4 60,7 62,8	194 210 226 242 258 274 290 306	9-16-1 2 3 4 5	36,2 34,4 77,1 69,2 62,8 57,4 52,9	4,7 4,4 11,4 10,2 9,3 8,5 7,8	59,1 61,1 11,4 20,5 27,9 34,0 39,2	298 314 140 156 172 188 204

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10-14-9 10 11 12 13 14 10-16-1 2 3 4 5 6	43,2 40,8 38,7 36,8 35,1 33.5 79,0 71,4 65,2 60,0 55,5 51,7	5,0 4,7 4,5 4,3 4,1 3,9 10,4 9,5 8,7 8,0 7,4 6,9	51,8 54,4 56,8 58,9 60,8 62,6 10,5 19,1 26,1 32,0 37,0 41,4	278 294 310 326 342 358 152 168 184 200 216 232	11-2-5 6 7 8 9 10 11 12 13 11-4-1 2 3	61,7 57,4 53,7 50,4 47,5 44,9 42,6 40,5 38,6 86,8 78,5 71,7	0,9 0,8 0,8 0,7 0,7 0,7 0,7 0,6 0,6 2,6 2,4 2,2	37,4 41,7 45,5 48,8 51,8 54,4 56,8 58,9 60,8 10,5 19,0 26,1	214 230 246 262 278 294 310 326 342 152 168
7 8 9 10 11 12 13 10-18-1 2 3 4 5 6 7 8 9 10 11 11 12 13	48,4 45,4 42,4 40,5 38,4 36,6 34,9 77,9 664,5 59,4 55,0 51,3 48,0 45,1 42,5 40,3 38,2 47,6,9 69,8 63,8	6,4 6,1 5,7 5,4 5,1 4,9 4,6 11,7 10,6 9,7 8,9 8,3 7,7 7,2 6,7 6,4 6,0 5,7 5,4 12,8 11,6 10,6	44,1 48,5 51,4 56,4 58,5 60,5 10,4 18,8 31,7 36,7 41,0 44,8 48,1 51,0 53,7 56,1 58,2 10,8 18,6 54,1	248 264 280 296 312 328 344 170 186 202 218 234 250 266 282 298 314 330 156 172 188	4 5 6 7 8 9 10 11 12 13 14 11-6-1 2 3 4 5 6 7	66,0 61,1 56,9 53,2 50,0 47,1 44,6 42,3 40,2 38,4 36,7 77,6 65,3 60,5 56,4 52,8 49,6 46,8 44,3 42,0	2,0 1,8 1,7 1,6 1,5 1,4 1,3 1,3 1,3 1,1 1,1 1,1 3,9 3,5 2,7 2,5 2,4 2,2 2,1 2,0 1,9	32,0 37,0 41,4 45,1 48,5 51,4 54,1 56,4 58,5 60,5 62,2 10,4 18,8 25,8 31,7 41,0 44,8 48,2 51,1 53,7 56,1	184 200 216 232 248 264 280 296 312 328 344 360 154 170 186 202 218 234 250 266 282 298 314
4 5 6 7 8 9 10 10-22-1 2 3 4 5 6 6 7 8 9 10 10-22-1 2 3 4 10-24-4 14 10-26-13 11-2-1 2 3 4	58,8 54,5 50,8 47,6 44,8 42,2 40,0 38,0 76,0 68,9 63,2 58,2 54,0 47,2 44,8 42,0 39,7 57,7 32,6 33,9 88,0 79,5 72,5 66,7	9.8 9.1 8.5 7.9 7.4 7.0 6.7 6.7 13.9 12.6 11.6 10.7 10.0 9.2 8.6 8.1 7.7 7.3 11.5 6.5 7.4 1.3 1.3 1.15	31,4 36,4 40,7 44,5 47,8 50,7 53,3 55,7 10,1 18,4 25,2 31,1 36,0 40,3 44,1 47,4 50,3 53,0 860,9 58,7 10,7 19,3 26,4 32,3	204 220 236 252 268 284 300 316 158 174 190 206 222 238 254 270 286 302 208 368 354 150 166 182 198	12 13 14 15 11-8-1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 11-10-1 2 3 4 5	40,0 38,1 36,4 34,8 44,6 76,8 70,2 64,7 60,0 52,4 49,2 46,5 44,0 41,8 39,7 37,9 36,3 34,7 33,3 83,6 75,8 69,5 64,1 59,5	1,8 1,7 1,6 1,6 1,6 1,6 1,6 4,2 3,6 3,4 3,2 2,8 2,5 2,4 2,3 2,1 2,0 6,3 5,7 5,7 5,7 5,7 5,7 5,7 5,7 5,7 5,7 5,7	58,2 60,1 61,9 63,5 10,3 18,6 25,5 31,4 40,7 44,4 47,7 50,7 57,8 55,7 57,8 61,5 63,2 64,6 10,1 18,4 31,4 31,4 31,4 31,4 31,4 31,4 31,4 31	330 346 362 378 156 172 188 204 220 236 252 268 284 300 316 332 348 364 380 396 158 174 190 206 222

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C-H-0	C º/o	H º/0	0 %	M.G.	C—H—O	C º/o	H º/0	0 %	M. G.
$12-2-9 \\ 10 \\ 11 \\ 12 \\ 13 \\ 14 \\ 12-4-1 \\ 2 \\ 3 \\ 4 \\ 5$	49,6 47,0 44,7 42,6 40,7 38,9 87,8 80,0 73,4 67,9 63,2	0,7 0,6 0,6 0,6 0,6 0,5 2,4 2,2 2,0 1,9 1,7	49,6 52,3 54,6 56,8 58,7 60,5 9,7 17,8 24,5 30,2 35,1	290 306 322 338 354 370 164 180 196 212 228	12-10-6 7 8 9 10 11 12 13 14 15 16	57,6 54,1 51,1 48,3 45,8 43,6 41,6 39,8 38,1 36,5 35,1	4,0 3,7 3,5 3,3 3,2 3,0 2,9 2,7 2,6 2,5 2,4	38,4 42,1 45,4 48,3 50,9 53,3 55,5 57,4 59,2 60,9 62,4	250 266 282 298 314 330 346 362 378 394 410
5 6 7 8 9 10 11 12 13 14 15 12-6-1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 12 - 8 - 1 2 3 4 4 5 6 7 7 8 9 10 11 12 13 14 15 16 16 17 18 18 18 18 18 18 18 18 18 18 18 18 18	63,2 59,0 55,4 49,3 46,8 44,4 42,3 37,1 86,7 79,1 72,7 67,3 62,6 58,8 55,0 44,4 44,2 44,1 40,4 38,5 36,9 35,5 85,7 78,0 66,7 78,1 54,5 55,4 46,4 44,1 40,4 42,1 40,4 43,5 36,9 36,5 85,7 78,0 66,7 78,1 54,1 54,5 51,4 48,6	1,6 1,4 1,4 1,3 1,2 1,1 1,1 1,0 3,6 3,3 2,8 2,6 2,4 2,3 1,7 1,6 1,5 1,5 4,7 4,0 3,7 4,0 3,7 3,4 3,2 3,9	35,1 39,4 43,1 46,4 49,3 51,9 54,3 56,5 60,2 61,9 9,6 17,6 24,3 29,9 34,8 39,0 42,7 46,1 56,2 58,1 63,0 9,5 17,4 24,0 29,6 34,5 34,5 34,5 34,5 34,5 34,5 34,5 34,5	228 244 260 276 292 308 324 340 356 372 388 166 182 214 230 246 262 278 294 310 326 342 258 374 390 406 168 184 200 216 232 248 264 280 296	16 17 18 12-12-1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 12-14-1 2 3 4 5 6 7 7 8 9	35,1 33,8 32,6 83,7 76,6 65,5 61,0 57,1 53,7 48,0 45,4 41,4 39,5 36,4 31,3 82,7 75,8 69,8 60,5 56,3 50,5 50,5 43,4 41,4 41,4 41,4 41,4 41,4 41,4 41,4	2,4 2,2 6,4 6,9 6,9 5,4 1,8 4,4 4,2 0,8 6,3 3,1 0,9 8,7 6,8 6,3 9,5 1,8 4,4 4,4 4,0 8,6 4,4 4,4 4,0 8,6 4,4 4,4 4,4 4,4 4,4 4,4 4,4 4,4 4,4 4	62,4 63,9 65,2 9,3 17,0 23,5 29,1 33,9 38,1,8 45,1 48,0 50,6 55,2 57,1 59,0 60,6 62,1 63,5 64,9 66,1 9,2 16,3 23,8 33,6 37,8 44,7 47,7 50,3 55,8 56,8 57,6	410 426 442 172 188 204 220 236 252 268 284 300 316 332 348 364 380 396 412 428 444 460 174 190 206 222 238 254 270 286 302 318 334 354 354 354 366 382
10 11 12 13 14 15 16 17 12—10—1 2 3 4	46,1 43,9 41,9 40,0 38,3 36,7 35,3 34,0 84,7 77,4 71,3 66,1 61,5	2,7 2,6 2,4 2,3 2,2 2,1 2,0 1,9 1,9 5,9 4,6 4,3	51,3 53,6 55,8 57,8 59,6 61,2 62,8 64,1 9,4 17,2 23,8 29,3 34,2	312 328 344 360 376 392 408 424 170 186 202 218 234	15 16 17 18 12—16—1 2 3 4 5 6 7 8 9	36,2 34,8 33,5 32,3 81,8 75,0 69,2 64,3 60,0 56,3 52,9 50,0 47,4	3,5 3,4 3,2 3,1 9,1 8,3 7,7 7,1 6,7 6,2 5,9 5,6 5,2	60,3 61,8 63,3 64,6 9,1 16,7 23,1 28,6 33,3 37,5 41,2 44,4 47,4	398 414 430 446 176 192 208 224 240 256 272 288 304

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C—H-0	C º/o	H %	O º/o	M. G	C—H—O	C º/0	H º/0	0 %	M.G.
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15-14-3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 12 13 14 15 16 17 18 19 20 21 11 12 13 14 15 16 17 18 19 20 21 11 12 13 14 15 16 17 18 19 20 21 11 12 13 14 15 16 17 18 19 20 21 11 12 13 14 15 16 17 18 19 20 21 11 12 13 14 15 16 17 18 19 10 11 11 12 13 14 15 16 17 18 19 10 11 11 12 13 14 15 16 17 18 19 10 11 11 12 13 14 15 16 17 18 19 10 11 11 12 13 14 15 15 16 17 18 19 10 11 11 12 13 14 15 15 16 17 18 19 10 11 11 12 13 14 15 15 16 17 18 19 10 11 11 12 13 14 15 15 16 17 18 19 10 11 11 12 13 14 15 15 16 16 17 18 19 10 11 11 12 13 14 15 16 16 17 18 19 10 11 11 12 13 14 15 15 16 16 17 18 18 19 10 10 11 11 12 13 14 15 15 16 16 17 18 18 19 10 10 11 11 12 13 14 15 15 16 16 17 18 18 19 10 10 11 11 12 13 14 15 15 16 16 17 18 18 19 10 10 11 11 12 13 14 15 15 16 16 17 18 18 19 10 10 11 11 12 13 14 15 15 16 16 17 18 18 19 19 10 10 11 11 12 13 14 15 15 16 16 17 18 18 19 18 18 18 18 18 18 18 18 18 18 18 18 18	74,4 69,8 65,7 62,1 55,9 53,2 50,8 48,6 44,8 43,1 41,5 40,0 38,6 37,3 36,1 35,0 34,0 33,0 84,9 78,9 73,8 69,2 65,1 61,6 55,5 52,9 50,5 44,8 41,3 39,8 33,6 50,9 50,5 41,3 39,8 31,9 31,9 31,9 31,9 31,9 31,9 31,9 31,9	5,5 5,0 4,8 4,6 4,4 4,3	19,8 24,8 29,2 33,1 36,6 42,6 45,2 47,5 51,7 55,3 56,9 45,5 7,1 61,0 62,3 64,5 65,5 7,4 61,0 32,9 42,6 42,6 42,6 43,5 55,5 44,9 47,7 51,7 55,6 63,4 44,9 47,5 55,5 56,9 44,9 47,5 55,5 56,9 47,5 56,1 56,1 56,1 56,1 56,1 56,1 56,1 56	242 258 274 290 306 322 338 354 370 386 402 418 450 466 482 498 514 530 546 562 212 228 244 260 276 292 308 324 340 356 402 498 324 498 498 498 498 498 498 498 498 498 49	15-18-16 17 18 19 20 21 22 15-20-1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 15-22-1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 15-24-1 2 3 4 5 6 7 8 9 10 11 11 12 13 14 15 16 17 18 19 20 15-21	39,6 38,3 37,0 35,9 34,7 32,7 83,3 77,6 68,2 60,8 57,7 54,9 44,1 42,4 40,9 53,5 36,9 35,7 34,6 60,8 45,9 72,0 67,7 63,8 60,8 45,7 72,0 67,7 63,4 60,4 72,0 60,4 72,0 60,4 72,0 60,4 72,0 60,4 73,0 74,0 74,0 74,0 74,0 74,0 74,0 74,0 74	3,98 3,76 3,54 3,28 8,05 7,17 6,4 4,18 5,6 5,5 5,19 4,7 10,9 10,9 10,9 10,9 10,9 10,9 10,9 10,9	56,4 57,9 59,3 60,5 61,8 62,9 64,0 7,4 13,8 19,4 24,2 28,6 32,4 35,9 39,0 41,9 44,4 46,8 51,0 52,8 54,6 56,1 57,6 60,3 61,6 62,7 7,3 7,3 13,7 19,2 24,0 28,4 35,7 38,8 41,6 44,2 46,3 55,9 35,9 35,9 35,9 36,1 36,	454 470 486 502 518 534 550 216 232 248 264 280 296 312 328 344 360 376 424 440 456 472 488 504 520 536 218 234 248 250 266 282 298 314 300 316 317 318 318 319 319 319 319 319 319 319 319

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15-24-12 13 14 15 16 17 18 19 15-26-1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 15-28-1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 15-30-1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 15-30-1 15-30-1 15-30-1 16 17 15-30-1 16 16 17 15-30-1	45,4 43,7 42,1 40,5 39,1 37,8 36,6 35,4 81,1 75,6 56,6 56,6 56,6 53,9 41,8 40,4 439,0 63,4 41,8 40,4 37,6 62,5 56,6 51,4 40,4 37,6 62,5 56,6 51,4 40,4 37,6 62,5 56,6 56,6 51,4 40,4 37,6 62,5 56,6 56,6 51,4 40,4 43,5 66,7 62,9 62,9 62,9 63,9 64,9 65,7 66,7 66,7 66,6 66,7 66,6 66,7 66,6 66,7 66,6 66,7 66,6 66,7 66,6 66,7 66,6 66,7 66,6 66,7 66,6 66,7 66,6 66,7 66,6 66,7 66,7 66,6 66,7 66,6 66,7 66,6 66,7 66,6 66,7 66,6 66,7 66,7 66,6 66,7 66,6 66,7	6,1 5,8 5,4 5,2 5,0 4,9 10,2 9,6 10,2 9,1 6,5 6,3 12,5 11,7 10,9 10,3 10,3 10,4 10,5 10,5 10,7 10,7 10,9 10,7 10,9 10,7 10,9	48,5 50,5 52,3 54,1 55,6 57,2 58,5 59,8 7,2 13,4 18,9 23,7 28,0 31,8,9 35,2 35,3 41,1 43,7 46,1 25,1 53,8 55,4 56,9 58,3 11,3,7 23,5 55,4 45,8 48,0 50,0 38,1 40,5 45,8 48,0 50,0 51,8 53,6 31,4 34,8 45,8 48,0 50,0 51,8 53,6 55,2 18,6 31,4 34,8 45,8 48,0 50,0 51,8 53,6 55,2 18,6 31,4 34,8 45,8 48,0 50,0 51,8 53,6 55,2 56,7 7,1 13,6 23,3 27,6 31,4 34,8 37,9 43,9 45,6 47,8 49,7 51,6 53,3 54,9	396 412 428 444 460 476 492 508 222 238 254 270 286 302 318 334 350 366 382 398 414 430 446 462 478 494 224 240 256 368 384 400 416 432 448 464 480 226 242 258 274 290 306 322 338 354 370 386 402 418 434 450 466	15-32-1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 15-34-2 16-2-1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 16-4-1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 18 19 16 16 17 18 16 17 18 16 17 18 16 17 18 18 19 16 16 17 18 18 19 16 16 17 18 16 17 18 18 19 16 16 17 18 18 19 18 18 19 18 18 18 19 18 18 18 18 18 18 18 18 18 18 18 18 18	79,0 73,8 69,2 65,1 61,6 55,4 55,5 52,9 50,5 48,4 44,5 42,9 41,3 39,8 59,6 85,2 51,9 40,7 41,2 39,8 59,6 84,2 74,1 41,2 39,8 65,7 65,7 45,9 59,6 65,7 65,3 59,6 65,7 66,5 66,5 66,5 67,7 67,7 67,7 67	14,0 13,1 12,3 11,6 11,0 10,4 9,9 9,4 9,0 8,2 7,9 7,6 7,3 7,1 13,8 9,9 0,8 0,7 0,6 0,6 0,6 0,6 0,5 0,5 0,5 0,5 0,5 1,1 1,1 1,1 1,1 1,1 1,0 1,0 1,0 1,0 1,0	7,0 13,1 18,5 23,2 27,4 31,2 34,6 37,6 40,4 45,3 47,5 51,1 13,0 7,6 14,1 19,8 24,2 33,1 13,0 45,2 47,6 45,2 47,6 45,2 47,6 45,7 51,6 51,1 19,7 52,4 53,1 19,7 53,6 14,0 19,7 53,6 14,0 19,7 53,6 14,0 19,7 53,6 14,0 19,7 53,6 14,0 19,7 53,6 14,0 19,7 53,6 14,0 19,7 53,6 14,0 19,7 53,6 14,0 19,7 53,6 14,0 19,7 53,6 14,0 19,7 53,6 14,0 19,7 53,6 14,0 19,7 53,6 14,0 19,7 53,6 14,0 19,7 51,0 51,0 51,0 51,0 51,0 51,0 51,0 51,0	228 244 260 276 292 308 324 340 356 372 388 404 420 420 426 246 210 226 242 258 274 290 306 322 338 354 370 386 402 418 430 450 466 482 212 228 244 260 276 292 308 324 340 356 372 388 404 420 436 452 468 452 468 452 468 450 214 230 246 2678 294

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16-6-7 8 9 10 11 12 13 14 15 16 17 18 19 20 16-8-1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 16-10-1 2 3 4 5 6 7 18 19 20 21 16-10-1 2 2 3 4 5 6 7 18 19 20 21 16-10-1 2 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 16-10-1 22 33 44 55 66 77 88 9 10 11 12 13 14 15 16 17 18 19 20 21 21 21 21 21 21 21 21 21 21 21 21 21	62,0 58,9 56,1 53,6 51,3 49,2 47,3 45,5 43,8 42,2 40,9 39,5 38,3 37,1 88,9 82,7 77,7,7 68,6 64,8 61,5 58,6 55,8 51,1 49,0 47,0 45,6 42,1 40,7 39,1 36,9 35,8 88,1 82,0 76,8 72,2 68,1 64,4 61,1 55,5 53,0 50,8 72,2 68,1 64,9 43,4 41,9 43,4 41,9 43,4 41,9 43,4 41,9 43,4 41,9 43,6 43,7 43,8 43,8 43,9 83,7 76,8 76,8 76,8 72,2 68,1 64,9 43,4 41,9 43,6 43,6 43,7 43,6 43,7 43,6 43,7 43,6 43,7 43,6 43,7 43,7 43,7 43,7 43,8 43,8 43,9 43,9 43,9 43,9 43,9 43,9 43,9 43,9 43,1 55,5 53,0 50,8 50,8 50,8 50,8 60,8 76,9 40,9	2,7 2,6 2,5 2,4 2,3 2,6 2,2 2,1 2,0 1,9 1,8 1,8 1,8	62,4 63,5 7,2	310 326 342 358 374 390 406 422 438 454 470 486 502 518 216 232 248 264 280 296 312 328 344 360 376 392 408 424 440 456 472 488 504 520 536 218 232 248 504 450 376 392 408 502 538 534 406 406 406 407 408 502 518 216 232 248 264 280 296 312 328 344 360 376 392 408 504 504 504 504 504 504 504 504	5 6 7 8 9 10 11 12 13	76,2 71,6 67,6 64,0 60,7 57,8 55,2 52,7 50,5 46,6 44,8 43,7 40,3 39,0 37,8 63,6 63,5 86,5 77,5 63,6 60,4 44,6 44,1 41,6 43,1 41,6 43,1 41,6 43,1 41,6 43,1 41,6 43,1 41,6 43,1 41,6 43,1 41,6 43,1 41,6 43,1 41,6 43,1 41,6 43,1 41,6 43,1 41,6 43,1 41,6 43,1 41,6 43,1 43,1 43,1 43,1 44,6 43,1 41,6 43,1 41,6 43,1 41,6 43,1 43,1 43,1 43,1 43,1 43,1 43,1 43,1 44,6 43,1 44,6 43,1 44,6 43,1 41,6 43,1 41,6 43,1	4,5 4,3 4,2 4,0 3,8	19,0 23,9 28,2 32,0 35,4 38,6 41,4 44,0 46,3 48,5 50,5 42,4 54,1 55,7 57,2 58,5 59,8 61,1 62,2 63,3 64,3 7,2 13,4 18,9 23,7 28,0 31,8 35,2 38,3 41,1 48,2 50,2 52,1 55,4 56,9 58,3 66,1 66,1 66,1 66,1 66,1 66,1 66,1 66	252 268 284 300 316 332 348 364 380 396 412 428 444 460 476 492 508 524 540 556 572 222 238 254 270 286 302 318 334 430 446 476 492 556 572 222 238 270 286 302 318 350 366 382 398 414 430 446 476 492 556 572 222 238 414 430 446 447 448 449 450 476 492 556 572 222 238 254 440 440 440 440 450 476 492 556 366 382 398 414 430 446 447 450 450 556 572 224 240 256 272 286 336 350 366 367

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C-H-0	C º/0	H %	0 %	M.G.	C—H—O	C %	H º/0	O º/0	M.G.
16—16—15 16 17 18 19 20 21 22 23 24 25 16—18—1 2 3 4 5 6 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 34 16—20—1 11 12 13 14 15 16 17 18 19 20 21 21 22 23 16—22—1	42,8 41,4 40,0 38,7 37,5 36,4 35,3 34,3 33,3 32,4 685,0 79,3 74,4 70,1 66,2 62,7 59,6 56,8 54,2 51,9 44,7 44,2 42,7 41,2 39,8 38,6 37,3 36,2 33,2 34,2 35,2 35,2 35,2 35,2 56,3 56,3 35,2 35,4 49,7 47,7 44,0 42,5 43,7 47,7 44,0 42,5 43,7 44,0 42,5 43,7 44,0 42,5 43,7 44,0 42,5 43,0 43,0 43,0 43,0 44,0 44,0 44,0 44,0	3,4 3,3 3,1 3,9 2,8 8,7 7,4 4,5 5,5 5,5 5,5 5,5 5,5 5,5 4,7 4,5 4,1 4,0 9,7 6,5 2,9 6,5 6,5 6,5 6,5 6,5 6,5 6,5 6,5 6,5 6,5	53,6 555,2 56,7 58,1 59,4 60,6 61,8 62,9 63,9 64,9 87,1 31,4 27,6 43,4 45,6 47,7 49,8 51,6 53,9 61,5 54,9 61,5 62,6 63,7 64,6 7,0 61,5 62,6 63,7 64,6 7,1 13,1 27,6 43,7 64,6 7,8 51,6 63,7 64,6 7,8 51,6 63,7 64,6 7,1 64,6 7,8 51,6 64,7 64,6 7,8 51,6 64,7 64,7 64,7 64,7 64,7 64,7 64,7 64	448 448 448 448 480 496 512 528 544 560 576 592 608 226 242 258 274 290 306 322 338 354 370 386 402 418 434 450 466 482 498 514 562 578 594 292 308 309 309 309 309 309 309 309 309	16-22-2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 16-24-1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 16-26-1 2 3 4 5 6 7 8 9 10 11 11 12 13 14 15 16 17 18 19 20 10 11 11 12 13 14 15 16 17 18 19 19 10 11 11 12 13 14 15 16 17 18 19 19 10 11 11 12 13 14 15 16 17 18 19 19 10 11 11 12 13 14 15 16 17 18 19 19 10 11 11 12 13 14 15 16 17	78,1 73,3 69,1 65,3 61,9 58,9 56,1 53,6 49,2 47,3 45,5 43,8 42,3 40,9 33,5 33,7,1 36,0 34,9 33,9 82,8 55,5 55,8 55,8 55,8 55,8 55,8 55,8	8,9 8,9 7,5 7,1 6,7 6,4 5,6 6,1 5,6 4,7 6,4 4,2 4,0 3,9 10,3 9,1 6,7 6,4 4,2 4,0 9,1 6,7 6,4 4,2 4,1 4,0 9,7 6,7 6,4 4,2 4,1 4,0 8,1 7,5 5,6 6,6 6,7 6,7 6,7 6,7 6,7 6,7 6	52,4 54,0	246 262 278 294 310 326 342 358 374 486 502 486 502 518 550 566 232 248 264 280 296 312 328 374 440 456 472 486 502 248 264 280 296 312 328 406 422 434 440 456 472 486 472 486 472 486 472 486 472 486 472 486 472 486 472 486 472 486 472 486 472 486 472 486 472 486 472 486 472 486 472 486 472 486 472 488 474 488 552 236 236 237 488 478 478 488 478 488 478 488

C-	_H_O	C %	H °/ ₀	O º/o	M.G.	C-H-0	C %	H º/0	O º/o	M.G.
16 –	-26—18 19 20	38,0 36,8 35,7	5,1 5,0 4,8	56,9 58,2 59,5	506 522 538	16-34-3 4 5	70,1 66,2 62,7	12,4 11,7 11,1	17,5 22,1 26,1	274 290 306
16-	-28-1 2 3	81,4 76,2 71,6	11,8 11,1 10,4	6,8 12,7 17,9	236 252 268	6 7 8	59,6 56,8 54,2	10,6 10,0 9,6	29,8 33,1 36,2	322 338 354
	4 5 6	67,6 64,0 60,8	9,8 9,3 8,8	22,5 26,7 30,4	284 300 316	9 10 11	51,9 49,7 47,7	9,2 8,8 8,4	38,9 41,4 43,8	370 386 402
	7 8 9	57,8 55,1 52,7	8,4 8,0 7,7	33,7 36,8 39,6	332 348 364	12 13 14	45,9 44,2 42,7	8,1 7,8 7,6	45,9 47,9 49,7	418 434 450
	10 11 12	50,5 48,5 46,6	7,4 7,1 6,8	42,1 44,4 46,6	380 396 412	15 16 17—2—1	41,2 39,8 91,9	7,3 7,0 0,9	51,5 53,1 7,2	466 482 222
	13 14 15	44,9 43,6 41,7	6,5 $6,4$ $6,1$	48,6 50,9 52,2	428 444 460	2 3 4	85,7 80,3 75,5	0,8 - 0,8 - 0,7	13,4 18,9 23.7	238 254 270
	16 17 18	40,3 39,0 37,8	5,9 5,7 5,5	53,8 55,3 56,7	476 492 508	5 6 7	71,3 67,6 64,2	$0,7 \\ 0,6 \\ 0,6$	28,0 31,8 35,2	286 302 318
16-	$ \begin{array}{c c} & 19 \\ -30 - 1 \\ & 2 \\ & 3 \end{array} $	36,6 80,7 75,6	5,3 12,6 8,3	58,0 6,7 8,3	524 238 254	8 9 10	61,1 58,3 55,7	$0,6 \\ 0,6 \\ 0,5$	38,3 41,1 43,7	334 350 366
	4 5 6	71,1 67,1 63,6 60,4	11,1 10,5 9,9	17,8 22,4 26,5	270 286 302	11 12 13	53,4 51,3 49,3	0,5 0,5 0,5	46,1 48,2 50,2	382 398 414
	7 8 9	57,5 54,8 52,4	9,4 9,0 8,6 8,2	30,2 33,5 36,6 39,3	318 334 350 366	14 15 16 17	47,4 45,7 44,2 42,7	0,5 0,4 0,4	52,1 53,8 55,4	430° 446 462
,	10 11 12	50,3 48,2 46,4	7,8 7,5 7,2	41,9 44,2 46,4	382 398 414	18 19 17—4—1	41,3 40,0 91,1	$0,4 \\ 0,4 \\ 0,4 \\ 1,8$	56,9 58,3 59,6 7,1	478 494 510 224
	13 14 15	44,6 43,0 41,6	7,0 6,7 6,5	48,4 50,2 51,9	430 446 462	2 3 4	85,0 79,7 75,0	1,7 1,6 1,5	13,3 18,7 23,5	240 256 272
	16 17 18	40,2 38,9 37,6	6,3 6,0 5,9	53,5 55,1 56,5	478 494 510	5 6 7	70,8 67,1 63,8	1,4 1,3 1,2	27,8 31,6 35,0	288 304 320
16-	-32—1 2 3	80,3 75,0 70,6	13,3 12,5 11,7	6,7 12,5 17,7	240 256 272	8 9 10	60,7 58,0 55,4	1,2 1,1 1,1	38,1 40,9 43,5	336 352 368
•	4 5 6	66,7 63,2 60,0	11,1 10,5 10,0	22,2 26,3 30,0	288 304 320	11 12 13	53,1 51,1 49,0	1,0 1,0 0,9	45,8 48,0 50,0	384 400 416
	7 8 9 10	57,1 54,5 52,2 50,0	9,5 9,1 8,7 8,3	33,3 36,4 39,1 41,7	336 352 368	14 15 16	47,2 45,5 44,0	0,9 0,9 0,8	51,8 53,6 45,2 56,7	432 448 464
	11 12 13	48,0 46,2 44,4	8,0 7,7 7,4	41,7 44,0 46,1 48,2	384 400 416 432	17 18 19 20	42,5 41,1 39,8	0,8 0,8 0,8	58,1 59,4	480 496 512
	14 15 16	42,9 41,4 40,0	7,1 6,9 6,7	50,0 51,7 53,3	448 464 480	17-6-1	38,6 90,3 84,3 79,1	0,8 2,6 2,5 2,3	60,6 7,1 13,2 18,6	528 226 242 258
16-	17 -34-1 2	38,7 79,3 74,4	6,5 14,0 13,2	54,8 6,6 12,4	496 242 2 58	4 5 6	74,5 70,4 66,7	2,3 2,2 2,0 1,9	23,3 27,6 31,4	274 290 306

C-H-0	C %	H º/o	O %	M.G.	C—H—O	C º/o	H º/0	0 %	M.G.
17-6-7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 17-8-1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 17-10-1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 17-10-1 22 33 44 55 66 77 88 9 10 11 12 13 14 15 16 17 18 19 20 21 22 22 22 22 22 22 22 22 22 22 22 22	63,3 60,3 57,6 50,7 48,8 47,0 43,8 41,0 39,7 38,5 64,8 66,2 63,0 60,0 57,5 54,8 46,5 66,2 66,0 60,0 57,4 88,5 66,2 66,0 60,0 57,4 88,5 66,2 66,0 60,0 57,4 88,5 66,2 66,0 60,0 57,4 88,5 66,2 66,0 60,0 57,4 88,5 66,2 66,0	1,8 1,8 1,7 1,6 1,5 1,4 1,4 1,3 1,2 1,1 1,1 1,1 1,3 1,2 2,7 2,5 2,3 2,7 2,5 2,5 2,7 1,6 1,5 1,5 1,4 4,3 1,3 2,7 1,7 1,6 1,5 1,5 1,5 1,7 1,7 1,7 1,7 1,7 1,7 1,7 1,7 1,7 1,7	34,8 37,9 40,7 43,6 47,7 49,8 51,6 53,3 56,4 57,8 13,1 18,5 23,2 27,4 31,2 31,2 34,5 60,5 50,1 40,5 40,5 40,5 40,5 51,6 61,5 51,6 61,5	322 338 354 370 386 402 418 434 450 546 428 244 260 276 292 308 324 340 356 372 388 404 420 436 452 468 452 468 452 468 452 468 452 468 452 468 452 468 453 564 564 564 564 564 564 564 564	17-10-23 17-12-1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 17-14-1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 17-14-1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 17-14-1 2 3 4 5 6 7 8 9 10 10 11 12 13 14 15 16 17 18 19 20 21 22 23 34 45 5 6 7 8 9 9	35,1 88,0 82,2 77,3 72,9 68,9 65,4 62,2 59,3 56,7 54,3 52,0 50,0 48,1 44,7 43,2 41,8 39,2 33,1 37,0 35,9 34,0 87,2 81,6 76,7 72,3 68,4 65,0 61,8 59,0 56,0 61,8 51,8 40,3 51,8 40,3 51,8 40,3 51,8 40,3 51,8 40,3 51,8 40,3 51,8 51,8 51,8 51,8 51,8 51,8 51,8 51,8	1,7 5,18 4,5 4,0 3,6 3,6 3,5 3,2 2,7 2,6 5,2 4,7 4,2 2,3 3,1 2,8 7,6 5,2 4,7 4,2 4,0 3,7 5,2 4,7 4,2 4,0 3,7 5,2 4,0 4,0 5,2 4,0 5,2 4,0 5,2 4,0 5,2 4,0 6,0 6,0 6,0 6,0 6,0 6,0 6,0 6,0 6,0 6	63,2 6,9 12,9 18,2 22,8 37,2 40,0 34,2 37,2 40,5 44,9 47,1 49,1 50,6 62,0 63,0 64,0 64,0 64,0 64,0 64,0 64,0 64,0 64	582 232 248 264 2896 312 328 344 360 376 392 408 424 440 456 472 488 504 520 536 552 568 584 250 266 282 298 314 330 346 362 378 394 410 426 445 472 488 504 504 505 506 506 506 506 506 506 507 507 508 508 508 508 508 508 508 508 508 508

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10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 20—16—1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 19 19 19 19 19 19 19 19 19 19 19 19	58,0 55,8 52,0 50,2 48,6 47,1 45,6 44,3 41,8 40,7 36,9 38,6 37,6 36,7 35,8 35,0 34,2 83,3 78,9 75,0 66,7 66,7 57,0 67,1 68,1 67,1 68,1 67,1	3,4 3,2 3,1 3,0 2,9 2,8 2,7 2,6 2,5 2,4 2,2 2,2 2,1 2,0 2,9 5,5 5,2 4,3 4,2 4,0 3,8 4,2 4,0 3,7 4,2 4,0 3,7 4,0 4,0 4,0 4,0 4,0 4,0 4,0 4,0 4,0 4,0	38,6 40,9 43,1 45,0 46,9 48,6 50,2 51,7 56,9 58,1 59,5 60,2 61,1 63,0 63,8 5,9 11,1 15,8 20,0 23,8 27,3 30,4 33,3 36,0 38,5 40,7 42,8 44,8 46,7 45,0 55,7 55,7 55,7 55,7 56,9 58,1 58,1 58,1 58,1 58,1 58,1 58,1 58,1	414 430 446 462 478 494 510 526 542 558 574 590 606 622 638 654 670 686 702 272 288 304 320 336 336 336 384 400 416 416 417 418 418 418 418 418 418 418 418	12 13 14 15 16 17 18 19 20 21 22 23 24 25 5 26 27 28 29 30 20-20-1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	53,3 51,5 49,8 48,2 46,7 45,3 43,9 42,7 41,5 40,4 39,3 35,6 34,8 34,0 33,2 35,6 34,8 34,0 32,5 67,4 64,5 61,8 59,4 40,7 40,4 40,4 40,4 40,4 40,4 40,6	4,0 3,8 3,7 3,5 3,5 3,3 3,2 3,1 3,9 2,9 2,8 2,5 2,5 2,5 4,9 4,8 4,4 4,1 4,0 3,9 3,6 3,6	42,7 44,6 46,5 48,2 49,8 51,3 52,7 54,1 55,4 56,5 57,7 58,8 60,8 61,7 62,6 63,5 64,3 65,0 5,8 10,9 15,6 19,7 23,5 27,0 30,1 35,6 40,4 40,4 40,4 40,4 40,4 40,4 40,5 40,4 40,5 40,4 40,5 40,4 40,5 40,4 40,5 40,4 40,5 4	450 466 482 498 514 530 546 562 578 594 610 626 642 658 674 690 706 292 308 324 340 356 372 388 404 420 436 452 468 484 500 516 516 516 516 516 516 516 516 516 516

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14 115 16 17 18 19 20 21 22 23 24 25 26 27 28 29 30 20-24-1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16	49,4 47,8 44,9 43,6 42,4 40,1 39,1 38,1 37,1 36,2 35,4 33,8 33,1 32,3 85,7 76,9 73,2 69,8 66,7 63,8 66,7 63,8 55,6 66,5 52,6 54,5 55,6 66,6 54,5 55,0 949,2 47,6 46,2	4,0 4,4 4,1 4,0 3,8 3,6 3,5 3,6 3,7 3,6 3,7 3,6 3,7 3,7 6,4 5,6 4,8 4,6	46,1 47,8 49,4 50,9 52,4 53,7 55,0 56,2 57,3 58,4 59,4 60,4 61,4 62,2 63,1 63,9 64,7 5,7 10,8 115,4 119,5 23,2 26,6 29,8 35,3 37,7 40,0 42,1 44,0 445,9 47,6 49,2	486 502 518 534 550 566 582 598 614 630 646 662 678 694 710 726 742 280 296 312 328 344 360 376 392 408 424 440 456 472 488 504 504 504 504 505 506 507 507 508 508 509 509 509 509 509 509 509 509	14 15 16 17 18 19 20 21 22 23 24 25 26 27 28 20—28—1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	49,0 47,4 46,0 44,6 43,3 42,1 41,0 39,9 36,9 36,9 36,0 35,2 34,5 80,0 76,0 72,3 69,0 65,9 66,9 65,9 65,9 65,9 44,4 48,8 47,2 48,8 47,2 44,4 44,4 43,2	5,3 5,1 5,1 5,1 5,1 6,1 6,1 7,1 8,1 8,1 8,1 8,1 8,1 8,1 8,1 8,1 8,1 8	45,7 47,4 49,0 50,6 52,0 53,3 54,6 55,8 67,0 58,0 59,1 60,1 61,0 62,7 5,6 10,7 15,2 19,3 23,0 26,4 29,5 32,3 35,0 37,4 41,7 55,5 47,2 48,9 50,4 51,8	490 506 522 538 554 570 586 602 618 634 650 666 682 698 714 284 300 316 332 348 364 380 396 412 428 444 460 476 492 556

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21-22-1	86,9	7.6	5,5	290	6 7	66,7 64,0	7,9 7,6	25,4 28,4	378 394
2 3	82,4	7,2 6,8	10,4	306	. 9	59,1	7,0	33,8	426
4	74,6	6,5	14,9	322 338	21 - 32 - 1	49,8 84,0	5,9 10,7	44,3	506
5	71.2	6,2	22,6	354	2	79,8	10,1	5,3	300
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8	62,7	5,5	31,8	386	4 5	72,4 69,2	9,2 8,8	18,4 $22,0$	348
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10 11	58,1	5,0 4,9	36,9 39,1	434 450	7	63,6	8,1	28,3	396
12	54,1	4,7	41,2	466	8 12	61,2 52,9	7,8 6,7	31,0 41,3	412 476
13	52,3	4,5	43,2	482	21-34-1	83,5	11,2	5,3	302
21-24-1	50,6	8,2	45,0 5,5	498 292	2 3	79,2	10,7	10,1	318
2	81,7	7,8	10,4	308	4	75,4 72,0	10,2 9,7	14,4 18,3	334 350
3	77,8	7,4	14,8	324	5	68,9	9,3	21,8	366
4 5	74,1	7,1	18,8 22,5	340 356	6 7	66,0 63,3	8,9 8,5	25,1 28,1	382 398
. 6	67,8	6,4	25,8	372	21-36-1	82,9	11,8	5,3	30-1
7	65,0	6,2	28,8	388	2	78,8	11,2	10,0	320 -
9	62,4	5,9 5,7	31,7 34,3	404 420	3 4	75,0 71,6	10,7 10,2	14,3 18,2	336 352
10	57,8	5,5	36,7	436	5	68,5	9,8	21,7	368
11	55,8	5,3	38,9	452	6	65,6	9,4	25,0 30,8	384
$\begin{array}{c} 12 \\ 21-26-1 \end{array}$	53,8	5,1	41,0	468 294	8 21—38—1	60,6 82,4	8,6 $12,4$	5,2	416 306
2	81,3	8,4	10,3	310	2	78,3	11,8	9,9	322
3 4	77,3	8,0	14,7	326	3 4	74,6 71,2	11,2 10,7	14,2 18,1	338 354
5	73,7	7,6 7,3	18,7 22,3	342 358	5	68,1	10,7	21,6	370
6	67,4	6,9	25.7	374	6	65,3	9,8	24,9	386
7 8	64,6	6,7	28,7 31,5	390 406	21-40-1	81,8 77,8	13,0 12,3	5,2 $9,9$	308 324
9	59,7	6,4 $6,2$	34,1	422	3	74,1	11,8	14,1	340
10	57,5	5,9	36,5	438	4	70,8	11,2	18,0	356 372
11 12	55,5	5,7 5,5	38,8 40,9	454 470	5 6	67,7 65,0	10,8 10,3	21,5 24,7	388
21-28-1	85,1	9,5	5,4	296	21-42-1	81,3	13,5	5,2	310
2	80,8	9,0	10,2	312	2 3	77,3 73,7	12,9 12,3	9,8 14,0	326 342
3 4	76,8	8,5	14,6 18,6	328 344	4	70,4	11,7	17,9	358
5	70,0	7,8	22,2	360	5	67,4	11,2	21,4	374
. 6	67,0	7,4	25,5	376	$\begin{array}{c c} & 6 \\ 21-44-1 \end{array}$	64,6 80,8	10,8 14,1	24,6 5,1	390 312
7 8	64,3	7,1 6,8	28,6 31,4	392 408	21-41-1	76,8	13,4	9,8	328
. 9	59,4	6,6	34,0	424	3	73,3	12,8	13,9 19,4	344 330
10	57,3	6,3	36,4	440 450	$22-2-4 \\ 22-10-1$	80,0 91,0	$0,6 \\ 3,4$	5,5	290
11 12	55,3 53, 2	6,1 5,9	38,6 40,9	472	2	86,3	3,3	10,4	306
15	48.5	5,4	46,1	520	3	82,0	3,1 2,9	14,9 18,9	322 338
20	42,0	4,7	53,3	600	4 5	78,1 74,6	2,8	22,6	354
23 21—30—1	38,9	4,3 10,1	56,8	298	6	71,3	2.7	25,9	370
2	80,2	9,6	10,2	314	13	54,8 90,4	2,0 4,1	43,2 5,5	482 292
. 3	76,4	9,1	14,5	330	22-12-1	90,4	7,1	0,0	

	_								
C-H-O	C º/o	H %	0 %	M. G.	C-H-0	C º/o	H %	O º/o	M.G.
22-12-2 3 4 5 6 22-14-1 2 3 4 5 6 7 7 8 9	85,7 81,5 77,6 74,2 70,9 89,8 85,2 81,0 77,2 73,8 70,6 67,7 65,0 62,6 60,3	3,9 3,7 3,5 3,4 3,2 4,8 4,5 4,3 4,1 3,9 3,7 3,4 3,3 3,2	10,4 14,8 18,8 22,4 25,8 5,4 10,3 14,7 18,7 22,3 25,7 28,7 31,5 34,1 36,5	308 324 340 356 372 294 310 326 342 358 374 390 406 422 438	C-H-O 22-24-4 5 6 7 8 9 10 22-26-1 2 3 4 5 6 7 8	75,0 71,7 68,8 66,0 63,5 61,1 58,9 86,3 82,0 78,1 74,6 71,3 68,4 65,7 63,2	6,8 6,5 6,2 6,0 5,8 5,6 5,3 8,5 8,1 7,7 7,3 7,0 6,7 6,5 6,2	0 % 18,2 21,7 25,0 28,0 30,7 33,3 35,7 5,2 9,9 14,2 18,1 21,6 24,9 27,8 30,6	352 368 384 400 416 432 448 306 322 338 354 370 386 402 418
11 12 13 15 22-16-1 2 3 4 5 6 7 7 8	58,1 56,2 54,3 51,0 89,2 84,6 80,5 76,8 73,3 70,2 67,3 64,7 60,0	3,1 3,0 2,9 2,7 5,4 5,1 4,9 4,6 4,4 4,2 4,1 3,9 3,6	38,8 40,8 42,8 46,3 5,4 10,3 14,6 18,6 22,2 25,5 28,6 31,4 36,4	454 470 486 518 296 312 328 344 360 376 392 408	9 10 11 12 13 25 22—28—1 2 3 4 5	60,8 58,7 56,6 54,8 53,0 38,3 85,7 81,5 77,6 74,2 71,0 68,0	6,0 5,8 5,6 5,4 5,2 3,7 9,1 8,6 8,2 7,5 7,2	33,2 35,5 37,8 39,8 41,8 58,0 5,2 9,9 14,1 18,0 21,5 24,7	434 450 466 482 498 690 308 324 340 356 372 388
22-18-1 2 3 4 5 6 7 8 22-20-1 2 3	88,6 84,1 80,0 76,3 72,9 69,8 67,0 64,4 88,0 83,6 79,5 75,8	6,0 5,7 5,4 5,2 5,0 4,8 4,5 4,4 6,7 6,3 6,0 5,7	5,4 10,2 14,5 18,5 22,1 25,4 28,4 31,2 5,3 10,1 14,5 18,4	440 298 314 330 346 362 378 394 410 300 316 332 348	7 8 9 10 12 15 22—30—1 2 3 4 5 6 7	65,3 62,8 60,6 58,4 54,5 49,6 85,2 81,0 77,2 73,7 70,6 67,7 65,0	6,9 6,7 6,4 6,2 5,8 5,3 9,7 9,2 8,8 8,0 7,7 7,4	27,77 30,5 33,0 35,4 69,7 45,1 5,1 9,8 14,0 17,9 21,4 24,6 27,6	404 420 436 452 484 532 310 326 342 358 374 390 406
6 7 8 9 10 22-22-1 2 3 4 5 6 7	72,5 69,5 66,7 64,1 61,7 59,5 87,4 83,0 79,0 75,4 72,1 69,1 66,3 63,8	$5,3 \cdot $	22,0 25,3 28,3 31,1 33,6 36,0 5,3 10,1 14,4 18,3 21,9 25,1 28,1 30,9	364 380 396 412 428 444 302 318 334 350 366 382 398 414	$egin{array}{c} 8 \\ 9 \\ 10 \\ 15 \\ 22-32-1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 8 \\ 12 \\ 22-34-1 \\ \end{array}$	62,6 60,3 58,1 49,4 84,6 80,4 76,7 73,3 70,2 67,3 64,7 62,3 54,1 84,1	7,1 6,8 6,6 5,6 10,2 9,8 9,3 8,9 8,5 8,1 7,8 7,5 6,5 10,8	30,3 32,9 35,2 44,9 5,1 9,8 14,0 17,8 21,3 24,5 27,5 30,2 39,3	422 438 454 534 312 328 344 360 376 392 408 424 440
$\begin{array}{c} & 9 \\ 10 \\ 22 - 24 - 1 \\ 2 \\ 3 \end{array}$	61,4 59,2 86,8 82,5 78,6	5,1	33,5 35,9 5,2 10,0 14,3	430 446 304 320 336	2 3 4 5 6	80,0 76,3 72,9 69,8 67,0	10,8 10,3 9,8 9,4 9,0 8,6	5,1 9,7 13,9 17,7 21,2 24,4	314 330 346 362 378 394

C—H—O	C º/o	H º/o	0°/0	M.G.	С—Н—О	C º/o	H °/ ₀	0 º/0	M.G.
22-34-7 8 9 10 11 12 22-36-1 2 3 4 5 6	64,4 62,0 59,7 57,6 55,6 53,9 83,6 79,5 72,5 69,5 66,7	8,3 8,0 7,7 7,4 7,2 6,9 11,4 10,8 10,3 9,9 9,5 9,1	27,3 30,0 32,6 34,9 37,1 39,2 5,0 9,6 13,8 17,6 21,0 24,2	410 426 442 458 474 490 316 332 348 364 380 396	23-12-4 7 23-14-1 2 3 4 5 6 23-16-1 2 3 4	78,4 69,0 90,2 85,7 81,7 78,0 74,6 71,5 89,6 85,2 81,2 77,5	3,4 3,0 4,6 4,3 4,1 3,9 3,8 3,8 5,2 4,9 4,7 4,5	18,2 28,0 5,2 9,9 14,2 18,1 21,6 24,9 5,2 9,9 14,1 18,0	352 400 306 322 338 354 370 386 308 324 340 356
7 8 9 10 11 12 222—38—1 2 3 4 5 6 7	64,1 61,7 59,5 57,4 55,5 53,7 83,0 79,0 75,4 72,1 69,1 66,3 63,7	8,7 8,4 8,1 7,8 7,6 7,3 11,9 10,4 10,9 9,9 9,5 9,2	27,2 29,9 32,3 34,8 36,9 39,0 5,0 9,6 13,7 17,5 20,9 24,1 37,1	412 428 444 460 476. 492 318 334 350 366 382 398 414	5 6 7 8 9 10 23—18—1 2 3 4 5 6 10	74,2 71,1 68,3 65,7 63,3 61,1 89,0 84,7 77,1 73,8 70,8 60,8	4,3 4,1 3,9 3,8 3,7 3,5 5,8 5,5 5,3 5,0 4,8 4,6 4,0	21,5 24,7 27,7 30,5 33,0 35,4 5,2 9,8 14,0 17,9 21,4 24,6 35,2	372 388 404 420 436 452 310 326 342 358 374 390 454
8 9 10 22-40-1 2 3 4 5 6	61,4 59,2 57,2 82,5 78,5 75,0 71,7 68,7 66,0 63,5	8,8 8,5 8,2 12,5 11,9 11,4 10,9 10,4 10,0 9.6	29,8 32,3 34,6 5,0 9,5 13,6 17,4 20,8 24,0 26,9	430 446 462 320 336 352 368 384 400 416	23-20-1 2 3 4 5 6 8 10 11 23-22-1	88,5 84,2 80,2 76,7 73,4 70,4 65,1 60,5 58,5 87,9	6,4 6,1 5,8 5,5 5,3 5,1 4,7 4,4 4,2 7,0	5,1 9,7 14,0 17,8 21,3 24,5 30,2 35,1 37,3 5,1	312 328 344 360 376 392 424 456 472 314
8 22-42-1 2 3 4 5 6 7 8	61,1 82,0 78,1 74,6 71,3 68,4 65,7 63,2 60,8 35,0	9,2 13,0 12,4 11,9 11,3 10,9 10,4 10,0 9,7 5,6	29,6 5,0 9,5 13,5 17,3 20,7 23,9 26,8 29,5 59,4	432 322 338 354 370 386 402 418 434 754	2 3 4 5 6 7 8 9 10 23—24—1	83,6 79,8 76,2 73,0 70,1 67,3 64,8 62,4 60,3 87,3	6,7 6,3 6,1 5,8 5,6 5,4 5,2 5,0 4,8 7,6	9,7 13,9 17,7 21,2 24,3 27,3 30,0 32,6 34,9 5,1	330 346 362 378 394 410 426 442 458 316
28 22-44-1 2 3 4 5 6 7 8 9	81,5 77,6 74,1 70,9 68,0 65,3 62,8 60,6 58,4	13,6 12,9 12,4 11,8 11,3 10,9 10,5 10,1 9,7 14,1	33,4 4,9 9,4 13,5 17,2 20,6 23,8 26,7 29,3 31,8 4,9	324 340 356 372 388 404 420 436 452 326	2 3 4 5 6 7 8 9 10 23-26-1	83,1 79,3 75,8 72,6 69,7 67,0 64,5 62,2 61,0 86,8	7,2 6,9 6,6 6,3 6,1 5,8 5,6 5,4 5,2 8,2	9,6 13,8 17,6 21,1 24,2 27,2 29,9 32,4 34,8 5,0	332 348 364 380 396 412 428 444 460 318
22-46-1 2 3 4 5	81,0 77,2 73,8 70,6 67,7	13,4 12,8 12,3 11,8	9,3 13,4 17,1 20,5	342 358 374 390	2 3 4 5	85,6 78,9 75,4 72,3	7,8 7,4 7,1 6,8	9,6 13,7 17,5 20,9	334 350 366 382

C-H-0	C º/o	H 0/0	0 %	M.G.	C—H—O	C º/o	H º/0	O º/0	M.G.
23-26-6 7 8 9 10 11 12 23-28-1 2 3 4 5 6 8 23-30-1 2 3 4 5 6 7 23-32-1 2 3 4 5 6 7 23-34-1 2 3 4 5 6 7 23-34-1 2 3 4 5 6 7 23-34-1 2 3 4 5 6 7 23-34-1 2 3 4 5 6 7 23-34-1 2 3 4 5 6 7 23-34-1 2 3 4 5 6 7 23-34-1 2 3 4 5 6 7 8 23-36-1 2 3 4 5 6 7 8 23-36-1 2 3 4 5 6 7 8 8 23-36-1 2 3 4 5 6 7 8 8 23-36-1 2 3 4 5 6 7 8 8 23-36-1 2 3 4 5 6 7 8 8 23-36-1 2 3 4 5 6 7 8 8 8 23-36-1 2 3 4 5 6 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	69,3	6,5 6,3 6,0 5,8 5,6 5,4 5,2 8,8 8,3 7,6 7,3 7,0 6,5 9,8 8,5 8,1 7,8 7,2 6,0 9,9 9,4 9,0 8,6 8,2 7,9 7,6 10,4 10,0 9,5 9,1 11,0 10,5 11,0 10,1	24,1 27,0 29,8 32,3 34,6 36,8 38,9 5,0 9,5 13,6 17,4 20,8 24,0 9,5 13,5 17,3 20,7 23,8 38,6 4,9 9,4 13,5 17,1 20,6 23,8 26,7 4,9 9,4 13,4 17,1 20,5 23,8 26,7 4,9 9,3 13,4 13,4 17,1 20,5 23,8 26,7 4,9 9,3 13,4 13,5 17,1 20,6 23,8 26,7 4,9 9,3 13,4 13,5 17,1 20,6 23,8 26,7 4,9 9,3 13,6 13,7 4,9 9,3 13,6 13,7 4,9 9,3 13,6 13,7 13,0 13,0 13,0 13,0 14,0 15,0 16,0 16,0 16,0 16,0 16,0 16,0 16,0 16	398 414 430 446 462 478 494 320 336 352 368 384 400 432 322 418 498 324 340 326 372 388 404 420 326 342 358 374 390 406 454 328 344 360 376 378 394 410 472 330 346 362 378 394 410 4666 332 348 364 380 346	$ \begin{vmatrix} 23-42-2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 23-44-1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 23-48-1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 23-48-1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 24-10-8 \\ 9 \\ 10 \\ 24-12-1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 7 \\ 22 \\ 24-16-1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 7 \\ 22 \\ 24-16-1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 24-12-1 \\ 1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 24-18-1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 24-18-1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 24-18-1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 24-18-1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 24-18-1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 24-18-1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 24-18-1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 6 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 24-18-1 \\ 2 \\ 3 \\ 4 \\ 5 \\ 5 \\ 6 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 2 \\ 4 \\ 5 \\ 5 \\ 6 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 2 \\ 4 \\ 5 \\ 5 \\ 6 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 2 \\ 4 \\ 5 \\ 5 \\ 6 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 2 \\ 5 \\ 5 \\ 6 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 5 \\ 5 \\ 6 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 5 \\ 5 \\ 6 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 5 \\ 5 \\ 6 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 5 \\ 5 \\ 6 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 5 \\ 5 \\ 6 \\ 6 \\ 7 \\ 8 \\ 9 \\ 10 \\ 5 \\ 5 \\ 6 \\ 6 \\ 7 \\ 8 \\ 8 \\ 9 \\ 10 \\ 5 \\ 5 \\ 6 \\ 6 \\ 7 \\ 8 \\ 8 \\ 9 \\ 5 \\ 5 \\ 6 \\ 6 \\ 7 \\ 8 \\ 8 \\ 9 \\ 5 \\ 5 \\ 6 \\ 6 \\ 7 \\ 8 \\ 8 \\ 9 \\ 5 \\ 5 \\ 6 \\ 6 \\ 7 \\ 8 \\ 8 \\ 9 \\ 5 \\ 5 \\ 6 \\ 6 \\ 7 \\ 8 \\ 8 \\ 9 \\ 5 \\ 5 \\ 6 \\ 6 \\ 7 \\ 8 \\ 8 \\ 9 \\ 5 \\ 8 \\ 8 \\ 9 \\ 8 \\ 8 \\ 8 \\ 8 \\ 8 \\ 8 \\ 8$	78,9 75,4 72,3 69,3 69,7 82,1 78,4 75,0 71,9 69,0 66,3 53,9 81,7 78,0 71,5 68,7 66,0 81,2 77,5 74,2 71,1 68,3 73,4 67,6 65,2 62,9 91,1 86,7 78,1 90,6 86,2 82,3 78,7 79,1 90,6 86,2 82,3 78,7 75,4 44,0 90,0 85,7 81,8 78,3 75,0 72,0 69,2 66,7 64,3 62,1 60,0 65,2 66,7 64,3 62,1 60,0 85,7 81,8 78,3 75,0 72,0 69,2 85,4 78,3 75,0 72,0 69,2 88,4 85,2 81,4 87,8 74,6	H % 12,0 11,5 11,0 10,1 13,1 12,5 12,0 11,5 11,0 10,6 8,6 13,6 13,0 12,4 11,9 11,4 11,0 14,1 13,5 12,9 12,4 11,9 2,0 2,3 2,2 2,2 3,8 3,6 3,4 4,2 4,0 3,8 3,7 3,6 3,4 4,2 4,0 3,8 3,7 3,6 3,4 3,3 3,1 5,6 5,3 5,1 4,7 4,5 4,3 4,2 4,0 3,8 3,7 3,6 3,4 3,3 3,1 5,6 5,3 5,1 4,7 4,5 4,3 4,2 4,0 3,8 3,7 3,6 5,3 5,1 5,6 5,3 5,1 4,7 4,8 4,7	9,1 13,1 16,7 20,1 23,2 4,8 9,1 13,0 16,6 20,0 23,1 37,5 4,7 9,0 16,6 19,9 23,0 4,7 9,0 12,9 16,5 19,8 24,5 30,1 32,6 34,9 5,1 9,6 13,7 17,5 24,8 24,5 30,1 32,6 34,9 5,1 9,6 13,7 17,5 20,9 13,6 13,7 17,5 20,9 13,6 13,7 17,5 20,9 13,6 13,7 17,5 20,9 24,1 27,0 53,8 5,0 9,5 13,6 13,6 13,7 17,5 20,9 24,1 27,0 53,8 5,0 9,5 13,6 17,4 20,8 24,0 22,0 24,1 27,0 53,8 5,0 9,5 13,6 17,4 20,8 24,0 22,0 23,1 36,7 17,5 36,7 17,5 36,7 17,4 20,8 24,0 29,6 32,1 36,7 17,4 20,8 24,0 29,6 32,1 36,7 17,4 20,8 24,0 29,6 32,1 36,7 17,4 20,8 24,0 29,6 32,1 36,7 17,4 20,8 24,0 29,6 32,1 34,5 36,7 36,7 36,7 37,7 37,6 57,0 9,5 13,6 17,4 20,8 24,0 29,6 32,1 34,5 36,7 36,7 36,7 36,7 36,7 36,7 36,7 36,7 36,7 37,7 37,7 38,7 36,7 37,7	M. G. 350 366 382 398 414 336 352 368 384 400 416 512 338 354 370 386 402 418 340 356 372 388 404 392 426 442 458 316 332 348 364 318 334 350 366 382 348 364 350 366 382 348 404 406 512 328 388 414 654 320 368 384 400 416 432 448 460 496 512 322 3388 354 350 366 382 368 384 400 416 432 448 460 496 512 322 3388 354 350 366 382 368 384 400 416 432 448 460 496 512 322 3388 354 350 366 382 368 384 370 386
23-42-1	82,6	12,6	4,8	334	6 7	71,6 68,9	4,5	23,9 26,8	402 418

C-H-O	C 0/0	H '0/0	O º/o	M. G.	C-H-0	C %	H º/o	O º/o	M. G.
24-18-8	66,4	4,1	29,5	434	24-30-2	82,3	8,6	9,1	350
9 10	64,0 61,8	4,0	32,0 34,3	450 466	3 4	78,7 75,4	8,2 7,8	13,1 16,8	366
$\begin{array}{c} 11 \\ 12 \end{array}$	59,8 57,8	3,7 3,6	36,5 38,6	482 498	5 6	72,4 69,5	7,5 7,2	20,1 $23,2$	398 414
24 -20-1	88,9 84,7	6,2 5,9	4,9 9,4	324 340	7 8	67,0 64,6	7,0 6,7	26,0 28,7	430 446
3	80,9 77,4	5,6	13,5 17,2	356 372	12 15	56,4 51,6	5,9 5,4	37,6 43,0	510 558
4 5	74,2	5,4 5,1	20,6	388	17	48,8	5,1	46,0	590
6 7	71,3 68,6	4,9 4,7	23,8 26,7	404 420	24321	85,7 81,8	9,5	4,8 9,1	336 352
8 9	66,1 63,7	$\frac{4,6}{4,4}$	29,3 31,9	436 452	3 4	78,3 75,0	8,7 8,3	13,0 16,7	368
10 11	61,5 59,5	4,3 4,1	34,2 36,4	468 484	5 6	72,0 69,2	8,0	20,0 23,1	400 416
12	57,6	4,0	38,4	500	12 16	56,3	6,2 5,6	37,5 44,4	512 576
13 14	55,8 54,1	3,9 3,7	40,3 42,1	516	24-34-1	85,2	10,1	4,7	338
24-22-1	52,6 88,3	3,6 6,8	43,8 4,9	548 326	2 3	81,4	9,6 $9,2$	9,0	354 370
2 3	84,2 80,4	6,4	9,4	342	5	74,6	8,8 8,5	16,6 19,9	386 402
· 4.	77,0 73,8	5,9 5,6	17,1 20,5	374 390	6 7	68,9 66,4	8,1 7,8	23,0 25,8	418
6	70,9	5,4	23,6	406	8 17	64,0	7,5 5,7	28,4 45,8	450 594
7 8	68,3 65,7	5,2 5,0	26,5 29,2	422 438	23	41,8	4,9	53,3	690
9	63,4	4,8 4,7	31,7 34,0	454 470	24-36-1	84,7	10,6	9,0	356
11 12	59,3 57,4	4,5	36,2	486	3 4	77,4 74,2	9,7 9,3	12,9	372 388
24-24-1	87,8 83,7	7,3	4,9 9,3	328 344	5 6	71,3	8,9	19,8 22,8	404
3	80,0	6,7	13,3	360	7 8	66,0	8,3	25,7 28,3	436 452
4 5	76,6	6,4	17,0 20,4	376 392	. 12	55,8	7,0	37,2 44,1	516 580
· 6	70,6	5,9 5,2	23,5	408	24—38—1	49,7	11,1	4,7	342
24-26-1	87,3 83,2	7,9 7,5	4,8	330 346	3	80,5	10,6	8,9	358
3	79,6	7.2	13,2	362 378	4 5	73,8	9,7	16,4	390 406
4 5	76,2 73,1	6,9	16,9 20,3	394	6 7	68,3 65,7	9,0	22,7 25,6	422
6 8	70,2	6,3	23,4 28,9	410 442	8	63,4	8,4	28,2 48,3	454 630
10 12	60,8	5,5	33,7	474 506	19 21	45,7 43,5	6,0	50,8	662
13 24-28-1	55,2	5,0	39,8 4,8	522	24-40-1	83,7	11,6	4,6	360
2	86,8	8,0	9,2	348 364	3 4	76,6	10,6	12,8 16,3	376 392
3 4	79,1 75,8	7,7 7,4 7,1	13,2	380	5	70,6	9,8	19,6 22,6	408
5 6	72,7	7,1	20,2 23,3	396	9	61,0	8,5	30,5 32,8	472 488
7 8	67,3	6,5 6,3	26,2 28,8	428	10 12	59,0	1 : 7,7	36,9 49,4	520 648
$\frac{12}{24-30-1}$	56,7	5,5	37,8 4,8	50S 334	$\begin{vmatrix} 20 \\ 24-42-1 \end{vmatrix}$	83,2	6,2	4,6	346
24-00-1	00,4	1 0,0	1 7	1	1 .				

C—H—O	C º/o	H º/0	O %	M.G.	C-H-0	C %	H %	0 %	M.G.
24-42-2 3 4 5 6 8 21 $24-44-1$ 2 3 4 $24-46-1$ 2 3 4 5 6 19 $24-48-1$ 2 3 4 5 6 $24-50-1$ 2 $25-14-5$ $25-16-6$ 9 14 $25-18-1$ 2 3 5 5	79,6 76,2 73,1 70,2 67,6 64,9 43,6 82,7 79,1 75,8 72,7 82,3 78,7 75,4 69,6 67,0 45,1 81,8 75,0 72,0 69,2 66,7 81,4 77,8 76,1 72,8 65,2 55,6 89,8 85,7 82,0 75,4	5,4 5,1 4,9 4,5	8,8 12,7 16,2 19,5 22,5 50,9 4,6 8,8 12,6 16,1 4,6 8,7 12,6 16,1 19,3 22,3 47,6 4,5 8,7 12,5 16,0 19,2 22,2 4,5 8,6 20,3 23,3 31,3 4,8 9,1 13,1 20,1	362 378 394 410 426 458 666 348 364 380 396 350 366 382 398 414 430 638 352 368 344 400 416 432 354 370 394 412 460 540 334 350 394 395 395 395 395 395 395 395 395	$ \begin{vmatrix} 25-24-5 & 6 & 7 & 8 & 11 & 12 & 13 & 15 & 15 & 15 & 15 & 15 & 15 & 15$	74,3 71,4 68,8 66,4 60,0 58,1 56,4 87,7 83,8 80,2 76,9 73,9 71,1 63,8 61,7 54,5 87,2 83,3 76,5 73,5 70,8 65,8 65,5 56,0 52,8 86,7 78,9 78,9 79,4 76,1 57,5 51,2 86,2 86,2 86,2 86,2 86,2 86,2 86,2 86	5,9 5,5 5,3 4,8 4,6 4,6 7,2 6,9 6,6 6,2 5,5 4,7 7,4 7,4 7,4 7,1 6,6 6,1 5,5 5,2 4,9 7,6 7,7 8,7 8,7 8,7 8,7 8,7 8,7 8,7 8,7 8,7	19,8 22,9 25,7 28,3 35,2 37,2 39,1 4,7 8,9 12,8 16,4 19,7 22,7 30,6 32,9 40,7 4,6 8,9 12,8 16,3 19,6 22,6 28,1 34,9 38,8 42,2 4,6 8,8 12,7 16,2 36,8 43,7 4,6 8,8	404 420 436 452 500 516 538 374 390 406 422 470 486 550 346 376 392 408 424 456 504 536 568 348 362 378 394 522 588 348 364
7 8 25-20-1 2 3 4 5 6 7	69,8 67,3 89,3 85,2 81,5 78,1 75,0 72,1 69,4		26,0 28,7 4,8 9,1 13,0 16,6 20,0 23,1 25,9	430 446 336 352 368 384 400 416 432	$egin{array}{c} 3 \\ 4 \\ 10 \\ 14 \\ 25 - 34 - 1 \\ 2 \\ 3 \\ 4 \\ 14 \\ \end{array}$	78,9 75,7 61,0 54,0 85,7 82,0 78,5 75,4 53,8	8,4 8,1 6,5 5,7 9,7 9,3 8,9 8,5 6,1	12,6 16,2 32,5 40,3 4,6 8,7 13,6 16,1 40,1	380 396 492 556 350 366 382 398 558
9 12 25-22-1 2 3 4 5 6 7 8 10 14 25-24-1 2 3	64,6 58,6 88,8 84,8 81,1 77,7 74,6 71,8 69,1 66,7 62,2 54,9 88,2 84,3 80,6	3,9 6,5 6,2 5,9 5,7 5,5 5,3 5,1 4,9 4,6 4,0 7,0 6,7	4,7 9,0 13,0 16,6 19,9 22,9 25,8 28,4 33,2 41,0 4,7 9,0	464 512 338 354 370 386 402 418 434 450 4482 546 340 356 372	25-36-1 2 3 4 5 8 9 10 25-38-1 2 3 4 5	85,2 81,5 78,1 75,0 72,1 64,6 62,5 60,5 84,7 81,1 77,7 74,6 71,8 69,1	10,2 9,8 9,4 9,0 8,6 7,8 7,5 7,3 10,7 10,3 9,8 9,4 9,1 8,8	4,5 8,7 12,5 16,0 19,2 27,6 30,0 32,2 4,5 8,6 12,4 15,9 19,1 22,1	352 368 384 400 416 464 480 496 354 370 386 402 418 434
4	77,3	6,2		388	7	66,7 53,4			450 562

C-H-O	C º/o	H °/0	0 %	M.G.	С—Н—О	C º/o	H °/ ₀	0 %	M.G.
25-40-1	84,3	11,2	4,5	356	26-20-4	78,8	5,1	16,1	396
2	80,6	10,7	8,6	372	5	75,7	4,8	19,4	412
3 4	77,3 74,3	10,3 9,9	12,4 15,8	388 404	6	72,9	4,6	22,5	428
5	71,4	9.5	19,1	420	7 8	70,3 67,8	4,5 4,3	2 5,2 27,8	444
6	68,8	9,2	22,0	436	9	65,6	4,2	30,2	476
7	66,4	8,8	24,8	452	12	59,5	3,8	36,6	524
8 10	64,1 60,0	8,5 8,0	27,3 32,0	468	14 26-22-1	56,1 89,1	3,6	40,3	556
25 - 42 -1	83,8	11,7	4,5	358	20-22-1	85,2	6,3 6,0	4,6 8,7	350 366
2	80,2	11,2	8,6	374	3	81,7	5,7	12,6	382
3 4	76,9.	10,8 10,3	12,3	390	4	78,4	5,5	16,1	398
. 5	73,9 71,1	9,9	15,8 19,0	406 422	5 6	75,4	5,3 5,1	19,3 22,3	414 430
6	68,5	9,6	21,9	438	7	70,0	4.9	25,1	446
25 -44 -1	83,3	12,2	4,4	360	8	67,6	4,7	27,7	462
2 3	79,8 76,5	11,7 11,2	8,5 12,2	376 392	9 10	65,3	4,6	30,1	478
4	73,5	10,8	15,7	408	11	63,1 61,2	4,5 4,3	32,4 34,5	494 510
8	63,6	9,3	27,1	472	13	57,6	4,0	38,4	542
25-46-1	82,9	12,7	4,4	362	26-24-1	88,6	6,8	4,5	352
2 3	79,3 76,1	12,2 11,7	8,5 12,2	378 394	3	84,7 81,2	6,5 6,2	8,7 12,5	368 384
4	73,2	11,2	15,6	410	4	78,0	6,0	16,0	400
12	55,8	8,5	35,7	538	5	75,0	5,8	19,2	416
25-48-1	82,4	13,2	4,4	364	6	72,2	5,5	22,2	432
. 2	78,9 75,7	12,6 12,1	8,4 12,1	380 396	. 8 10	67,2	5,2 4,8	27,6 32,2	464 496
4	72,8	11,7	15,5	412	11	60,9	4,7	34,4	512
25-50-1	82,0	13,6	4,4	366	12	59,1	4,5	36,4	528
2 3	78,5	13,1 12,6	8,4	382	13 16	57,3 52,7	4,4	38,2 43,2	544 592
4	75,4 72,5	12.0	15,4	414	26-26-1	88,1	7,4	4,5	354
$25 - 52 - \overline{1}$	81,5	14,1	4,3	368	2	84,3	7,0	8,6	370
2	78,1	13,5	8,3	384	3 4	80,8	6,7	12,4 15,9	386 402
26-14-15 26-16-1	55,1 90,7	2,5 4,6	42,4	566	5	74,6	6,4	19,1	418
20-10-1	86,7	4,4	8,9	360	6	71,9	6,0	22,1	434
. 3	83,0	4,2	12,8	376	8	67,0	5,6	27,4	466 562
6 7	73,6	3,8	22,6 25,4	414 440	14 26-28-1	55,5 87,6	4,6 7,9	49,9 4,5	356
9	70,9 66,1	$\frac{3,6}{3,4}$	30,5	472	20 20 2	83,8	7,5	8,6	372
11	61,9	3,2	34,9	504	3	80,4	7,2	12,4	388
26-18-1	90,2	5,2	4,6	346	4 6	· 77,2 71,5	6,9	15,8 22,0	436
. 2 3	86, 2 . 82,5	5,0 4,8	8,8 12,7	362	14	55,3	4,9	39,7	564
4	79,1	4,6	16,2	394	· 16	52,3	4,7	42,9	596
5	76,0	4,4	19,5	410	26-30-1	87,1	8,4	4,5 8,6	358 374
6	73,3	4,2	32,5	426 442	3	83,4	7,7	12,3	390
7 8	70,6 68,1	4,1 3,9	25,3 $27,9$	458	4	76,8	7,4	15,8	406
9	65,8	3,8	30,4	474	7	68,7	6,6	24,7 27,2	454 470
10	63,7	3,7	32,6	490	8 9	66,4	$6,4 \\ 6,2$	29,6	486
11 12	61,7 59,8	3,5 3,4	34,8	506	12	58,4	5,6	36,0	534
14	56,3	3,2	40,5	554	13	56,7	5,4	37,8	550 582
26-20-1	89,7	3,2 5,7	4,6	348	15 · 26—32—1	53,6	5,1 8,9	41,2	360
2	85,7	5,5	8,8	364 380	26-32-1	83,0	8,5	8,5	376
, 3	82,1	5,3	12,6	300		1	1		1

		1	1		1				
C-H-0	C º/o	H 0/0	O º/ó	M.G.	C—H—Ó	C 0/0	H 0/0	0 %	M.G.
26-32-3	79,6	8,2	12,2	392	26-50-1	82,5	13,2	4,2	378
4	76,5	7,8	15,7	408	2	79,2	12,7	8,1	394
8	66,1	6,8	27,1	472	3	76,1	12,2	11,7	410
. 9	63,9	$\begin{array}{c c} 6,6 \\ 6,2 \end{array}$	29,5 33,8	488 520	4 7	73,2	11,7	15,0	426
14	54,9	5,6	39,4	568	26-52-1	65,8	10,5	23,6	474 380
.16	52,0	5,3	42,7	600	2	78,8	13,1	8,1	396
26-34-1	86,2	9,4		362	3	75,7	12.6	11,7	412
2 3	82,5 79,2	9,0	$\begin{array}{c c} 8,5 \\ 12,2 \end{array}$	378	20 54 1	72,9	12,2	14,9	428
4	76,1	8,3	15,6	410	$\begin{vmatrix} 26-54-1 \\ 2 \end{vmatrix}$	81,7	14,1 13.6	4,2 8,0	382 398
5	73,2	8,0	18,8	426	3	75,4	13,0	11,6	414
10	61,6	6,7	31,6	506	27-12-3	84.4	3,1	12,5	384
14	54,7	5,9	39,3	570	27-14-5	77,5	3,3	19,1	418
17	51,8	5,6 5,5	$42,5 \\ 34,0$	602 618	27-16-6	74,3 69,2	3,7	12,0	436
26-36-1	85,7	9,9	4,4	364	27-18-1	90,5	3,4	27,4 4,5	468 358
2	82,1	9,5	8,4	380	N 2 2	86,6	4,8	8,6	374
3	78,8	9,1	12,1	396	3	83,1	4,6	12,3	390
4 18	75,7 49,1	8,7 5,6	15,5 45,3	412 636	5	79,8	4,4	15,8	406
26-38-1	85,2	10,4	4,4	366	6	76,8 74,0	4,3 4,1	18,9 21,9	422 438
2	81,7	9,9	8,4	382	27-20-1	90.0	5,5	44	360
3.	78,4	9,5	12,1	398	2	86,2	5,3	8,5	376
4 5	75,4 72,6	9,2 8,8	15,4	414	3	82,7	5,1	12.2	392
6	70,0	8,5	18,6 21,5	430 446	$\begin{array}{c c} & 4 \\ 27-22-1 \end{array}$	79,4 89,5	4,9	15,7 4,4	408 362
7	67,5		24,2	462	2	85,7	6,1 5,8	8,5	378
26-40-1	84,8	10,9	4,3	368	3	82,2	5,6	$1\overset{\circ}{2,2}$	394
3	81,3	10,4	8,3	384	8	68,4	4,6	27,0	474
4	75,0	10,0	$12,0 \\ 15,4$	400 416	13 14	58,5 56,9	4,0	37,5	554
$\bar{7}$	67,2	8,6	24,1	464	17	52,4	3,8 3,6	39,3 44,0	570 620
26-42-1	84,3	11.3	4,3	370	27-24-1	89,0	6,6	4,4	364
2 3	80,8	10,9	8,3	386	2	85,3	6,3	8,4	380
4	77,6	$10,4 \\ 10,0$	11,9 15,3	402 418	3	81,8	6,0	12,1	396
5	71,9	9,7	18,4	434	4 5	78,6 75,7	5,8 5,6	15,5 18,7	412 428
7	67,0	9,0	24,0	466	6	72,9	5,0 $5,4$	21,6	444
10	60,7	8,2	31,1	514	. 7	70,4	5,2	24,4	460
26-44-1	83,8	11,8 11,3	4,3 8,2	372	8	68,1	5,0	26,9	476
3	77,2	10,9	11,9	388 404	9	65,8 63,8	4,9	29,2	492 508
4	74,3	10,5	15,2	420	27-26-1	88,5	7,1	4,4	366.
5	71,5	10,1	8,3	436	3	81,4	6,5	12,1	398
6 10	69,0	9,7	$\frac{21,2}{31,0}$	452	4	78,2	6,3	15,5	414
15	52,3	7,4	40,3	516 596	6 7	72,6 70,1	5,8	21,5	446
26-46-1		12,3	4.3	374	8	67.8	5,6	24,3 26,8	462 478
2	80,0	11.8	8,2 11,8	390	9	65,6	5,4 5,3	29,1	494
. 3	76,8	11,3	11,8	406	10	63,5	5,1	31.4	510
4 5	73,9 71,2	10,9	15,2 18,3	422 438	11	61,6	4,9	33,5	526
9	62.2	9.1	28,7	502	$egin{array}{c} 12 \ 15 \end{array}$	59,8 54,9	4,8	35,4 40,7	54 2 590
26-48-1	83.0	12.8	4.2	376	27-28-4	77,9	6,7	15,4	416
2	79,6	12,2	8,2	392	5	74,0	: 6,5	18,5	432
3 4	76,5 73,6	11,7 11,3	11,7	$\begin{array}{c c} 408 & 1 \\ 424 & 1 \end{array}$	8	67,5	5,8	26,7	480
15	52,0	8,0	40,0	600	9	65,3 63,3	5,6	29,0	496 512
	/	7.	7.7		. 20	00,0	0,*	01,2	014

C-H-O	C 0/0	H %	0 %	M.G.	C—H—O	C 0/0	H %	O º/o	M.G.
27-28-11	61,4	5,3	33,3	528	28-18-6	74,7	4,0	21,3 $24,0$ $26,6$	450
16	53,3	4,6	42,1	608	7	72,1	3,8		466
27-30-9	65,1	6,0	28,9	498	8	69,7	3,7		482
13	57,6	5,3	37,0	562	$egin{array}{c} 9 \\ 13 \\ 28-20-1 \end{array}$	67,5	3,6	28,9	498
14	56,1	5,2	38,7	578		59,8	3,2	37,0	562
17	51,7	4,8	43,5	626		90,3	5,4	-4,3	372
27-32-2	83,5	8,2	8,2	388	2	86,8	5,1	8,2	388
16	52,9	5,2	41,8	610	3	83,2	4,9	11,9	404
27-34-11	60,7	6,3	33,0	534	4	80,0	4,8	15,2	420
27-36-10	62,3	6,9	30,8	520	5	77,1	4,6	18,3	436
27-38-5	73,3	8,6	18,1	442	6	74,3	4,4	21,2	452
7	68,4	8,0	23,6	474	7	71,7	4,3	23,9	468
10	62,0	7,3	30,7	522	10	65,1	3,9	31,0	516
13	56,9	6,6	36,5	570	11	63,2	3,7	33,1	532
27—40—1	85,3	10,5	4,2	380	13	59,6	3,5	36,9	564
2	81,8	10,1	8,1	396	28-22-1	90,8	5,9	4,3	374
5	73,0	9,0	18,0	444	2	86,1	5,6	38,2	390
8	65,9	8,1	26,0	492	3	82,7	5,4	11,8	406
$ \begin{array}{r} 10 \\ 27 - 42 - 2 \\ 3 \end{array} $	61,8	7,6	30,5	524	4	79,6	5,2	15,2	422
	81,4	10,5	8,0	398	5	76,7	5,0	18,3	438
	78,2	10,1	11,6	414	6	74,0	4,8	21,1	454
5	72,6	9,4	17,9	446	7	71,5	4,7	23,8	470
7	67,8	8,8	23,4	478	8	69,1	4,5	26,3	486
10	61,6	8,0	30,4	526	9	66,9	4,4	28,7	502
$\begin{array}{c} 12 \\ 27-44-1 \\ 2 \end{array}$	58,0	7,5	35,4	558	11	62,9	4,1	33,0	534
	84,4	11,4	4,2	384	13	59,4	3,9	36,7	566
	81,0	11,0	8,0	400	14	57,7	3,8	38,5	582
3	77,9	10,6	11,5	416	28—24—1	89,4	6,4	4,2	376
4	75,0	10,2	14,8	432	2	85,7	6,1	8,2	392
15	53,3	7,2	39,5	608	8	68,8	4,9	26,2	488
27-46-1	83,9	11,9	4,1	386	9	66,7	4,7	28,6	504 · 552 568
2	80,6	11,4	8,0	402	12	60,9	4,3	34,8	
3	77,5	11,0	11,5	418	13	59,2	4,2	36,6	
5	72,0	10,2	17,8	450	28-26-1	50,6	3,6	45,8	664
14	54,5	7,7	37,7	594		88,9	6,9	4,2	378
27—48—1	83,5	12,4	4,1	388		85,3	6,6	8,1	394
27—50—1 2	80,2 83,1 79,8	11,9 12,8 12,3	7,9 4,1 7,9	404 390 406	3 4 5	82,0 78,9 76,0	6,3 6,1 5,9	11,7 15,0 18,1	410 426 442
27-52-1 2 $27-54-1$	82,6 79,4 82,2	13,3 12,7 13,7	4,1 7,8 4,1	392 408 394	$\begin{array}{c c} 7 \\ 12 \\ 28-28-1 \end{array}$	70,9 60,7 88,4	5,5 4,7 7,3	23,6 34,6 4,2	474 554 380
2	79,0	13.2	7,8	410	2	84,8	7,1	8,1	396
3	76,0	12,7	11,3	426	6	73,1	6,1	20,8	460
27561	81,8	14,1	4,0	396	13	58,7	4,9	36,4	572
28-10-15 28-14-5	78,6 57,3 78.2	13,6 1,7 3,2	7,8 40,9 18,6	412 586 430	28—30—2 4	57,1 84,4 78,1	4,8 7,6 7,0	38,1 8,0 14,9	588 398 430
8	75,3	3,1	21,5	446	5	75,3	6,7	17,9	446
7	72,7	3,0	24,3	462	7	70,3	6,3	23,4	478
28—16—1	91,3	4,3	4.3	368	9	65,9	5,9	28,2	510
3 6 7	84,0 75,0 72,4	4,0 3,6 3,4	12,0 21,4 24,1	400 448 464	28-32-8 10	55,4 67,8 63,6	4,9 6,4 6,1	39,6 25,8 30,3	606 496 528
28-18-1 3	70,0 90,8 83,6	3,3 4,9 4,5	26,7 4,3 11,9	480 370 402	28—34—1 5 17	87,1 72,1 52,3	8,8 7,3 5,3	4,1 20,6 42,4	386 450 642
4 . 5	80,4 77,4	4,3 4,1	15,3	418 434	28-36-4	77,1 69,4	8,2 7,4	14,7 23,1	436

C-H-0	C º/o	H %	O º/o	M.G.	C—H-O	C %	H %	· O º/o	M.G.
28-36-17	52,2	5,6	42,2	644	29-44-3	79,1	10,0	10,9	440
28-38-4	76,7	8,7	14,6	438	8	66,9	8,5	24,6	520
19	49,6	5,6	44,8	678	10	63,0	8,0	29,0	552
28-40-1	85,7	10,2	4,1	392	11	61.3	7,7	31,0	568
2	82,4	9,8	7,8	408	16	53,7	6,8		648
4	76,4	9,1	14,5	440	29-46-2	81,7	10,8	7,5	426
7 28-42-2	68,9 81,9	8,2 10,3	22,9 7,8	488 410	4 5	76,0	10,0	14,0	458
4	76,0	9,5	14,5	442	7	73,4 68,8	9,7 9,1	16,9 22,1	474 506
8	66.4	8,3	25,3	506	29-48-4	75,7	10,4	13,9	460
24	44,1	5,5	50,4	762	27	42,0	5,8	52,2	828
28-44-2	81,6	10,7	7,7	412	29-50-2	80,9	11,6	7.4	430
4	75,6	10,0	14,4	444	5	72,7	1.0,5	16,7	478
7	68,3	8,9	22,8	492	29-52-20	- 48,3	7,2	44,5	720
28 - 46 - 1	84,4	11,6	4,0	398	29-56-4	74,4	11,9	13,7	468
10	81, 2 62,0	11,1 8,5	7,7 29,5	414 542	29-58-1	82,5 79,4	13,7	3,8	422
28-48-1	84,0	12,0	4,0	400	2 4	74,0	13,2 12,3	7,3 13,6	438 470
20 10 2	80.7	11,5	7,7	416	29-60-1	82,1	14,1	3,8	424
3	77,8	11,1	11,1	432	2	79,1	13,6	7,3	440
4.	75.0	10,7	14,3	448	30-18-4	81,4	4,1	14,5	442
28-50-1	83,6	12,4	4,0	402	8	71,1	3,6	25,3	506
2	80,4	12,0	7,6	418	18	54,0	2,7	43,2	666
$\begin{array}{c} 13 \\ 28-52-1 \end{array}$	56,6	8,4	35,0	594	30-20-3	84,1	4,7	11,2	428
20-02-1	83, 2 80,0	12,9 12,4	$\frac{3,9}{7,6}$	404 420	6	75,6 73.2	4,2	20,2 $22,7$	476
28-54-1	82,8	13,3	3,9	406	8	70,9	4,1 3,9	25,2	492 508
2	79,6	12,8	7,6	422	30-22-1	90.5	5,5	4,0	398
3	76,7	12,3	11,0	438	2	87.0	5,3	7,7	414
28 - 56 - 1	82,4	13,7	3,9	408	4	80,7	4,9	14,3	446
2	79,2	13,2	7,5	424	6	75,3	4,6	20,1	478
4	73,7	12,3	14,0	456	15	57,9	3,5	38,6	622
28 - 58 - 1	8 2,0 79,6	14,1 13,7	3,9 7,6	410 426	19	52,5	3,2 5,7	44,3	686
29-18-6	75,3	3,9	20,8	462	30-24-2	86,5 83,3	5,6	7,7 11,1	416 432
29-20-4	70,6	4,6	14,8	432	· · · · · ·) 4	80,3	5,3	14,3	448
8	70,2	4,0	2 5,8	496	6	75,0	5,0	20,0	480
18	53,0	3,0	43,9	656	8	70,3	4.7	25,0	512
29—24—1	89,7	6,2	4,1	388	9	68,1	4,5	27,3	528
2	86,1	5,9	7,9	404	30-26-1	89,5	6,5	4,0	402
4 6	79,8 74,4	5,5 5,1	14,7 20,5	436 468	2 3	86,1	6,2 6,0	7,6	418
8	69,6	4,8	25,6	500	4	82,9 80.0	5,8	$11,1 \\ 14,2$	434 450
29-26-2	85,7	6,4	7,9	406	5	77,2	5,6	17,2	$\frac{450}{466}$
6	74,1	5,5	20,4	470	. 6	74,7	5,4	19,9	482
9;	67,2	5,0	27,8	518	7	72,3	5,2	22,5	498
12	61,5	: 4,6	33,9	566	1 8	70,0	5,1	24,9	514
29—28—6	73,7	5,9	20,3	472	9	67,9	4,9	27,2	530
29-30-4	58,0	4,7	37,3	600	30—28—1	64,0	4,6	31,3	562
6	78,7 73,4	6,8 6,3	14,5 20,3	442 474	30—28—1 2	89,1 85,7	6,9	4,0	404
10	64,7	5,6	29,7	538	4	79,6	6,6 6, 2	7,6 14,2	$\begin{array}{c} +420 \\ -452 \end{array}$
11	62,8	5,4	31,8	554	5	76,9	6,0	17,1	468
29-32-16	54,7	5,0	40,3	636	6	74,4	5,8	19,8	484
29-34-9	66,2	6,4	27,4	526	14	58,8	4,6	36,6	612
12	60,6	5,9	33,4	574	30-30-1	88,7	7,4	3,9	406
29-36-8	59,0	5,8	35,2	590	2	85,3	7,1	7,6	.422
29-42-2	68,0 8 2,4	7,0 9,9	25,0	512	30 22 4	76,6	6,4	17,0	470
20 22 2	04,4	9,9	7,6	422	30-32-4	78,9	7,0	14,0	456

C—H—O	C º/o	H º/o	0 %	M.G.	C—H—O	Ġ %	H º/0	0 %	M.G.
30-34-4	78,6	7,4	14,0	458	31-38-9	67,1	6,8	26,0	554
10 12	65,0 $61,4$	6,1	28,9	554	10	65,3	6,6	28,1	570
. 13	59,8	5,8 5,6	32,8 $34,5$	586 602	31-40-8 31-42-9	68,9 66,7	7,4	23,7	540
15	56,8	5,3	37,9	634	31-44-6	72,7	7,5 8,6	25,8 18,7	558 512
30-36-10	64,7 37,6	6,5	28,8	556	31-48-4	76,9	9,9	13,2	484
30-38-2	83,7	8,8	58,6	956	8 12	67,9	8,7 7,8	23,4 31,4	548
3	80,7	8,5	10,8	446	31-50-7	69,7	9,4	20,9	612
4 6	77,9 72,9	8, 2 7,7	13,9 19,4	462	10 31—52—17	63,9	8,6	27,5	582
8	68,4	7,2	24,3	526	31-62-1	53,4 82,7	7,5 13.8	39,1 3,5	696 450
10 30-44-1	64,5	6,8	28,7	558	2	79,8	13,3	6,9	466
14	85,7 57,3	10,5	3,8 35,7	420 628	3 4	77,2 74,7	12,9 12,4	9,9 12,9	482 498
30-46-1.	85,3	10,9	3,8	422	31-64-1	82,3	14,1	3,5	452
2 3	82,2 79,3	10,5 10,1	7,3 10,6	438 454	32-14-5	79,5	13,7	6,8	468
4	76,6	9,8	13,6	470	32-14-5	80,3 77,1	2,9 3,6	16,7 19,3	478 498
12	60,2	7,7	32,1	598	32-18-13	62,9	2,9	34,1	610
$\begin{array}{c} 14 \\ 21 \end{array}$	57,2 48,5	7,3 6.2	35,5 45,3	630	32-20-13 14	62,7 $61,1$	3,2 3,2	34,0 35,7	612 628
30-48-1	84,9	11,3	3,8	424	32-22-2	87,7	5,0	7,3	438
3	81,8 78,9	10,9 $10,5$	7,3	440	3	84,6	4,8	10,6	454
4	76,3	10,3	10,5 13,5	472	4 5	81,7 79,0	4,7 4,5	13,6 16,4	470 486
8	67,1	8,9	23,9	536	10	67,8	3,9	28,3	566
. 12 13	60,0 $58,4$	8,0	32,0 33,8	600	32241 2	90,5 87,4	5,7 5,4	3,8 7,2	424 440
14	56,9	7,6	35,4	632	3	84,2	5,3	10,5	456
38 30-50-1	35,4 84,5	4,7 11,7	59,8 3,8	1016 426	4 8	81,4 71,6	5,1 4,5	13,5 23,9	472 536
2	81,5	11,3	7,2	442	10	67,6	4,2	28,2	568
30-52-2	81,1	11,7	7,2	444	16	57,8	3,6	38,6	664
8 10	66,7 $62,9$	9,6 9,1	23,7 28,0	540 572	32-26-1	90,1 86,9	6,1 5,9	3,8 7,2	426 442
14	56,6	8,2	35,2	636	3	83,8	5,7	10,5	458
30-58-3	77,3 70,0	12,4 11,3	10,3 18,7	466 514	4 5	81,0 78,4	5,5 5,3	13,5 16.3	474 490
30-60-1	82,6	13,7	3,7	436	18	75,9	5,1	19,0	506
. 2	79,6	13,2	7,1	452	8	73,5 71,4	5,0 4,8	21,5 23,8	522 538
$egin{array}{c} 3 \ 4 \end{array}$	$76,9 \\ 74,4$	12,8 12,4	10,3 13,2	468	32-28-1	89,7	6,5	3,7	428
30-62-1	82 ,2	14,1	3,6	438	2	86,5	6,3	7,2 16,3	444 492
31—20—6	79,3 76,2	13,6 4,1	7,0 19,7	454 488	5	78,0 71,1	5,7 5,2	23,7	540
31-22-1	90,7	5,4	3,9	410	12	63,6	4,6	31,8	604
2	87,4	5,1	7,5	426	32 - 30 - 4 12	80,3 63,4	6,3 4,9	13,4 31,7	478 606
31—24—4	78,5	$\frac{4,6}{5,2}$	16,9 13,9	474 460	32 + 32 - 8	70,6	5,9	23,5	544
31-28-4	80,2	6,0	13,8	464	12	63,2 57,1	5,2 4,8	31,6 38,1	608 672
31—30—2	70,5 85,7	5,3 6,9	24,2 7,4	528 434	$\begin{array}{c} 16 \\ 32 - 34 - 1 \end{array}$	88,5	7.8	3.7	434
9	68,1	5,5	26,4	546	2	85,3	7,6 5,7 4,7	7,1 30,3	450 600
14 31 - 32—16	59,4	4,8 4,8	35,8 38,8	626	13 19	64,0 53,2	4,7	42,1	722
31-32-16	$56,3 \\ 62,2$	5,7	32,1	598	32-36-8	70,1	6,5	33,4	548
15	57,6	5,2	37,2	646	32-38 - 8 13	69,8 61,0	6,9	23,3 33,0	550 630
31364	78,8	7,6	13,6	472	10	32,0	,,,	7-	

C-H-0	C º/₀"	H º/o	· O %	M.G.	C-H-O	C %	H.0/0	·O º/o	M.C.
32-38-15	58,0	5,7	36,2	662	34-22-3	85,4	4,6	10.0	478
32-40-2	84.2	8,8	7,0	456	4	82,6	4,4	13,0	494
9	67,6	7.0	25,4	568	5	80,0	4,3	15,7	510
32-42-10	65,5	7,2	27,3	586	6	77,6	4,2	18,2	526
$31 \\ 32-44-32$	41.6	4,5 4,7	53,8 54,4	922	34-24-1	91,1 88,0	5,3 5,1	3,6 6.9	448
32-46-23	48,1	5,8	46,1	798	34-26-2	87,6	5,1 $5,6$	6,8	466
31	41,5	5,0	53,5	926	3	84,6	5,4	10,4	482
32-48-6	72,7	9,1	18,2	528	4	81,9	5,2	12,9	498
16	55,8	7,0	37,2	688	8	74,7	4,8	20,5	546
32—50—3	40,7	5,1 10,4	54,2	944	34-28-4	60,5 81,6	3,8	35,6 $12,8$	674
4	77,1	10,4	12,9	498	5	79,1	5,6 5,4	15,5	516
33	39,9	5,2	54,9	962	6	76,7	5,2	18,1	532
32-52-2	82,1	11,1	6,8	468	8	72,3	4,9	22,7	564
4	76,8	10,4	12,8	500	9	70,3	4,8	•24,8	580
5 17	74,4 54,2	10,1 7,3	15,5 38,4	516 708	10 16	68,4	4,7	26,8	596 692
32-54-1	84,6	11,9	3,5	454	22	59,0	4,0 3,5	37,0 44,7	788
4	76,5	10.8	12,7	502	34-30-4	81,3	6,0	12,7	502
11	62,5	8,8	28,7	614	8	72,1	5.3	22,6	566
18	52,9	7,4	39,7	726	17	57,5	4,2	38,3	710
32—62—3 5	77,7 73,0	12,5 11.8	$\begin{array}{c} 9,7 \\ 15,2 \end{array}$	494	34-32-6	76,1	6,0	17,9	536
7	68,8	11,0	20,1	526 558	7	73,9 68,0	5,8 5,3	20,3 26,7	600
9	65,1	10,5	24,4	590	12	64,5	5,0	30,4	632
16	54,7	8,8	36,5	702	14	61,4	4.8	33.7	664
32-64-1	82,8	13,8	3,4	464	34-34-4	80,6	6.7	12,7	506
2	80,3	13,3	6,7	480	6	75,8	6,3	17,8	538
$\begin{array}{c c} 3 & 3 \\ 32-66-1 & \end{array}$	77,4 82,4	12,9 14,2	9,7 $3,4$	$\frac{496}{466}$	34-36-4 34-38-2	80,3 85,4	7,1	12,6 6,7	508 478
2	79,7	13,7	6,6	482	4	80,0	7,4	12,6	510
33-22-4	83,6	4,6	11,8	474	.9	69,2	$6,\overline{4}$	24,4	590
7	76,7	4,3	19,0	516	15	59,5	5,5	35,0	686
33-24-1	91,2	5,6	3,2	434	34-40-8	70,8	6,9	22,2	576
8	83, 2 73,9	$\begin{array}{c} 5,1 \\ 5,2 \end{array}$	11,7 20,9	476 536	$18 \\ 34 - 42 - 5$	55,4 77,0	5,4 7,9	39,1	- 73 6 - 53 0
33-30-5	79,8	6,0	14,1	496	20	53,0	5,4	$15,1 \\ 41,6$	770
9	69,5	5,2	25,3	-570	34-46-6	74,2	8,4	17,4	550
33-32-4	81,8	6,6	11,6	484	9	68,2	7,7	24,1 .	598
22 24 12	60,7	4,9	34,4	652	: 11	64,8	7,3	27,9	630
33-34-13	64,7 52,8	5,6 4,5	29,7 42,7	612 750	$\begin{array}{c} 23 \\ 34-48-2 \end{array}$	49,6 83,6	5,6 $9,8$	$\frac{44,8}{6,5}$	822 488
33-36-9	68,8	6.2	25,0	576	9	68,0	8,0	24,0	600
12	63,5	5,8	30,7	624	34-50-8	69,6	8,5	21,8	586
33-46-2	83,6	9,7	6,7	474	16	57,1	7,0	35,9	714
33-48-2	83,2	10,1	6,7	476	34-52-1	85,7	10,9	3,4	476
33-62-1	73,3 83,5	8,9 13,1	17,8 3,4	540 474	2 9	82,9 - 67,5	10,6 8,6	6,5 2 3,8	$\begin{array}{c} 492 \\ 604 \end{array}$
33-66-1	82,9	13.8	3,3	478	34-54-9	67,3	8,9	23,8	606
2	80,2	13,8 13,3	6,5	494	11	63,9	8,5	27,6	638
3	77,6	12,9	9,4	510	14	59,5	7,9. 11,3	32,6	686
22 . 60 1	75,3	12,5	12,2	526	34-56-2	82,2	11,3	6,4	496
3368-1	82,5 79,8	14,2 13,7	3,3 6,5	$\frac{480}{496}$	11 16	63,8	8,7	27,5	640 720
3	77,3	13,3.	9,4	512	21	56,7 51,0	7,8	$\begin{array}{c c} 35,5 \\ 42,0 \end{array}$	$\frac{720}{800}$
34-20-4	82,9	4.0	13,0	492	3460-17	55,1	8,1	36,8	740
7	75,6	3,7	20,7	540	18	54,0	7,9	38,1	756
10	69,4	3,4	27,2	588	34-62-9	66,4	10,1	23,5	614

C—H—O	C %	H %	0 %	M. G.	С—Н—О	C %	H º/o	0 %	M.G.
34-62-11	63,2	9,6	27,2	646	36-38-4	80,9	7,1	12,0	521
34-66-4	75,8	12,2	11,9	538	19	55,8	4,9	39,3	774
34-68-1	82,9 80,3	13,8	3,2	492	20	54,7	4,8	40,5	790
34-70-1	82,6	13,4 14,2	6,3 3,2	508	36-40-16	59,3	5,5	35,2	728
2	80,0	13,7	6,3	510	$36-42-6 \ 36-48-14$	75,8 61,4	7,4	16,8	570
35-20-8	73,9	3,5	22,5	568	36 -50 -25	49,0	6,8 5,6	31,8 45,4	704 882
35-22-8	73,7	3,9	22,4	570	36-52-2	83,7	10,1	6,2	516
35-24-1	71,7 91,3	3,7	24,6	586	16	58,4	7,0	34,6	740
4	82,6	5,2 4,7	3,5 $12,6$	460 508	36-54-2	83,4 74,2	10,4	6,2	518.
: 9	71,4	4,1	24.5	588	20	53,6	9,3 6,7	16,5 39,6	582 806
35-28-2	87,5	5,8	6,7	480	36566	74,0	9,6	16,4	584
4	82,0	5,5	12,5	512	18	55,7	7,2	37,1	776
35—30—17	67,3 58,2	4,5 4.1	28,2 37,7	$624 \\ 722$	19	54,5	7,1	38,4	792
35-32-11	66,9	5,1	28.0	628	36-58-2	82,8 80,3	11,1 10,8	6,1 8,9	522 · 538
35-34-11	66,7	5,4	27,9	630	15	59.2	7.9	32,9	730
13	63,4	5,1	31,4	662	29	45,3	6,1	48,6	954
17	57,9	4,7	37,4	726	36-60-2	82,4	11,4	6,2	524
35-52-2	83,3 73,9	10,3	6,3 16,9	504 568	3 5	80,0 75,5	11,1 10,5	8,9 14.0	540 572
35-56-2	82,7	11.0	6,3	508	30	44,4	6,2	49,4	972
3	80,2	10,7	9,1	524	31	43,7	6,1	50,2	988
4	77,8	10,4	11,8	540	36-62-4	77,4	11,1	11,5	558
35—58—11	60,0	8,0	32,0	700	7	71,3	10,2	18,5	606
14	64,2 59,9	8,9 8,2	26,9 31,9	654 702	31 36—64—8	43,6 69,2	6,3 10.2	50,1 $20,5$	970 624
32	42,4	5,9	51,7	990	3666-5	74,7	11,4	13,8	578
35-68-4	76,1	12,3	11,6	552	31	43,5	6,6	49,9	994
5	73,9	12,0	14,1	568	36-68-5	74,5	11,7	13,8	580
35-70-1	80,3	13,8 13,4	3,2	506 522	7 36-70-4	70,6 76,3	11,1 $12,4$	18,3 11,3	612 566
35-72-1	80,5 82,7	14,2	6,1 3,1	508	50-70-4	74.2	12,0	13,7	582
2	80,2	13,7	6,1	524	7	70,4	11,4	18,2	614
36-16-4	84,4	3,1	12,5	512	36-72-1	83,1	13,8	3,1	520
36-22-7	76,3	3,9	19,8	566	2	76,0 82,7	$12,7 \\ 14,2$	11,3 3,1	536 522
8 9	$74,2 \\ 72,2$	3,8 3,7	22,0 $24,1$	582 598	36-74-1	80,3	13,7	5,9	538
36-24-7	76,1	4.2	19,7	568	37—26—8	74,2	4,3	21,4	598
36-26-6	78,0	4,7	17,3	554	37-34-10	69,6	5,3	25,1	638
8	73,7	4,4	21,8	586	27 26 1	67,9 89,5	$\frac{5,2}{7,3}$	26,9 3,2	654 496
16 36 —28 —3	60,5 85,0	3,6 5,5	35,9 9,4	714 508	37 - 36 - 1 $37 - 40 - 17$	58,7	5,3	36,0	756
30-28-3	77,7	5,0	17,3	556	3750-25	49,7	5,6	44,7	. 894
36-30-3	84,7	5,9	9,4	510	37-52-4	79,3	9,3	11,4	560
8	73,2	5,1	21,7	590	37-54-2	83,8	10,2 7,1	6,0 3 6,5	530 788
13	64,5	4,5	31,0 35,6	670 718	37 - 56 - 18 $37 - 66 - 2$	56,3 81,9	12,2	5,9	542
36-32-6	60,2 $77,1$	4,2 5,7	17,1	560	4	77,3	11,5	11,1	574
10	69,2	5,1	25,6	624	18	55,5	8,5	36,0	800
14	62,8	4,6	32,6	688	37-74-1	83,1	13,9	3,0 5,8	534 550
36-34-8	72,7	5,7	21,5	594	27 78 1	80,7 82,8	13,5 14,2	3,0	536
15	61,2	4,8	34,0	706 738	$\begin{array}{c c} 37-76-1 \\ \hline 2 \end{array}$	80,4	13,8	5,8	552
17 20	58,5 55,0	4,6 4,3	36,9 $40,7$	786	38-24-11	69,5	3,6	26,8	656
36-36-6	76,6	6,4	17,0	564	38-26-7	76,8	4,4	18,8	594
15	61,0	5,1	33,9	708	9	72,8	4,1	23,0 24,9	$\frac{626}{642}$
21	53,7	4,4	41,8	804	10	71,0	4,0	22,0	

С—Н—О	C %	H %	O º/o	M.G.	C-H-0	C %	H %	O º/o.	M.G.
38-26-15	63 ,2	3,6	33,2	722	40-52-4	80,5	8,7	10,7	596
17	60,5	3,4	36,1	754	40-54-27	49,7	5,6	44,7	966
38-30-6	78,3	5,2	16,5	582	40—56 —5	77,9	9,1	13,0	616
9	72,4	4,7	22,9	630	40-58-3	81,9	9,9	8,2 12,9	586
38-32-3	85,1	6,0 4.7	8,9 28,2	536 680	5 9	77,7 70,4	9,4 8,5	21,1	618 682
$ \begin{array}{c c} & 12 \\ & 38 - 34 - 11 \end{array} $	$67,1 \\ 68,5$	5,1	26,4	666	40-60-2	83.9	10,5	5,6	572
12	66,9	5,0	28,1	682	4	79,5	9,9	10,6	604
38-36-6	77,5	6,1	16,3	.588	6	75,5	9,4	15,1	636
38-40-17	59,4	5,2	35,4	768	40-62-2	83,6	10,8	5,6	574
38-42-4	81,1	7,5	11,4	562	3	81,4	10,5	8,1	590
38-44-4 38-62-3	80,8 80,6	7,8 11.0	11,4 8,4	564 566	4 5	79,2	10,2 10,0	10,6 $12,8$	606
11	65,7	8,9	25,4	694	6	77,2 75,2	9,7	15.1	638
38-64-3	80,3	11,3	-8,4	568	7	73,4	9,5	17,1	654
18	56,4	7,9	35,6	808	40-64-4	79,0	10,5	10,5	608
38-66-4	77,8 -	11,3	10,9	586	5	76,9	10,3	12,8	624
. 17	57,4	8,3	34,2	794	18	57,7	7,7	34,6	832
38-72-7	71,3	11,2	17,5	.640	40-66-7	58,7	8,1 8,3	33,2 33,2	658 820
38-74-4 38-76-1	76,8 83, 2	12,4	10,8 2,9	594 548	40-68-17 40-70-1	58,5 84,8	12,4	2,8	566
2	80,8	13,5	5,7	564	4	78,2	11,4	10.4	614
38-78-1	82,9	14,2	2,9	550	18	5.7,3	8,3	34,4	838
2	80,6	13,8	5,6	566	28	48,1	7,0	44,9	998
39-26-2	89,0	4,9	- 6,1	526	40-74-8	70,4	10,8	18,8	682
39-30-24	.53,1	3,4	43,5	882	40-80-1	83,3	13,9	2,8	576
39-34-11	69,0	5,0	26,0	678 730	$\frac{2}{40-82-1}$	81,1 83,0	13,5 14.2	5,4 5,4	592 578
39 - 38 - 14 $39 - 56 - 16$	64,1 60,0	5,2	30,7	780	2	80,8	13,8	5,4	594
39-64-2	82,9	11,3	5,7	564	41-32-4	83,7	5,4	10.9	588
39-72-5	75,5	11.6	12,9	620	11	70,3	4,6	25,1	700
7	71,8	11,0	17,2	652	41343	85,7	5,9	8,4	574
39-74-6	73,4	11,6	15,0	.638	11	70,1	4,8	25,1	702
39-76-4	67,2	12,2	10,6	608	15	64,2	4,4 6,6	31,3 8,3	766 578
39—78—1	75,2 83,3	11,9 13,9	12,9 2,8	562	41 - 38 - 3 $41 - 68 - 2$	85,1 83,1	11,5	5,4	592
2	81,0	13,5	5,5	578	4	78,8	10,9	10,3	624
39-80-1	83,0	14,2	2,8	564	37	42,7	5,9	51,4	1152
2	80,7	13,8	5,5	580	41-74-2	82,3	12,4	5,3	598
40-22-7	78,2	3,6	18,2	614	41-78-6	73,9	11,7	14,4	666
40-24-8	75,9	3,8	20,2	632	$41-82-1 \\ 2$	83,4	13,9 13,5	2,7 5,3	590 606
40-26-7	77,7	4,2 4,1	18,1 20,2	618	41-84-1	81,2	14,2	2,7	592
40-28-6	79,5	4,6	15,9	604	2	80,9	13,8	5.3	608
40-30-14	65,4	4,1	30,5	734	42-22-12	70,2	3,1	26,7	718
17	61,4	3,8	34,8	782	42-30-13	67,9	4,0	28,0	742
40-32-7	76,9	5,1	18,0	624	42-32-6	79,8	5,0	15,2	632
14	65,2	4,3	30,4	736	42-34-10	72,2	4,9	22,9 30,8	698
40-34-15	63,7	4,5	31,8	754	15 16	64,8	4,4 4,3	32,2	794
40-36-12	67,8 62,2	5,1	27,1 33,1	708	17	63,5 62,2	4,3	33,6	810
21	56,3	4,2	39,4	852	42-36-10	72,0	-5.1	22,9	700
40-38-16	62,0	4,9	33,1	774	13	67,4	4,8	27,8	748
17	60,8	4.8	34,4	790	16	63,3	4,5	32.2	796
18	59,6	4,7	35,7	806	42-38-13	67,2	5,1	27,7	750
19	58,4	4,6	37,0	822	16	63,2	4,7	32,1 12,8	798 624
40-40-2	86,9	7,2 5,9	5,8 23,5	552 680	$oxed{42-40-5} 42-44-22$	80,8 56,0	6,4 $4,9$	39,1	900
40-50-14	63,7	6,6	29,7	754	42-46-23	54,9	5,0	40,1	918
	1 .,,	1. 0,0	-0,	1	1	1.	1 -,	1	!

C-H-O	C º/o	H °/ ₀	O º/0	M.G.	C-H-0	C º/o	H º/0	O º/o	M.G.
42-48-16	62,4	5,9	31,7	808	1 45 00 0	000			-
27	51,2	4,9	43,9	984	45-28-2	90,0	4,7	5,3	600
42-50-22	55,6	5,5	38,9		45-32-2	89,4	5,3	5,3	604
42-56-15	63,0	7,0	30,0	906	45661	86,8	10,6	2,6	622
42-64-10	69,2	8,8	22,0	800	7	75,2	9,2	15,6	718
42-66-12	66,1	8,6		728	45-72-3	81,8	10,9	7,3	660
42-68-4	79,2		25,2	762	15	63,4	8,4	28,2	852
12	66,0	10,7	10,1	636	45-74-4	- 79,6	10,9	9,4	678
42-70-2		8,9	25,1	764	45-80-28	50,6	7,5	41,9	1068
42-74-2	83,1	11,6	5,3	606	45-86-6	74,8	11,9	13,3	722
42-76-7	82,6	12,1	5,2	610	45—90—1	83,6	13,9	2,5	646
8	72,8	11,0	16,2	692	2	81,6	13,6	4,8	662
42-78-6		10,7	18,1	808	45-92-1	83,3	14,2	2,5	648
7	74,3	11,5	14,2	678	2	81,3	13,9	4.8	664
	72,6	11,2	16,1	694	46-6-5	86,5	0,9	12,5	638
42-80-7	72,4	11,5	16,1	696	46-32-15	67,0	3,9	29,1	824
42-84-1	83,4	13,9	2,6	604	16	65,7	3,8	30,5	840
49 90 1	81,3	13,5	5,2	620	46-38-4	79,5	11,2	9,2	654
42-86-1	83,1	14,2	2,6	606	13	65,9	9,3	24,8	798
2	81,0	13,8	5,1	622	46-42-6	75,6	11,2	13,2	690
43-26-10	73,5	3,7	22,8	702	46-46-7	77,7	6,5	15,8	710
43-38-10	72,3	5,3	22,4	714	46-48-15	65,7	5,7	28,6	840
43-46-10	71,5	6,4	22,1	722	46-58-15	64,9	6,8	28,2	850
43-50-16	62,8	6,1	31,1	822	46-66-24	55,1	6,6	38,3	1002
43-76-4	78,7	11,6	9,6	656	46-68-10	70,8	8,7	20,5	780
13	64,5	9,5	26,0	800	46-72-12	67,7	8,8	23,5	816
43-84-5	75,9	12,3	11,8	680	46-76-1	85,7	11,8	2,5	644
43-86-1	83,5	13,9	2,6	618	46-80-2	83,1	12.1	4,8	664
2	81,4	13,6	5,0	634	7	74,2	10,8	15,0	744
43-88-1	83,2	14,2	2,6	620	46-84-25	53,3	8.1	38,6	1036
2	81,1	13,8	5,0	636	46-92-1	83.6	13,9	2,4	660
44 - 28 - 9	75,4	4,0	20,6	700	2	81,7	13.6	4,7	676
44-30-9	75,2	4,3	20,5	-702	46-94-1	83,4	14,2	2,4	662
15	66,1	3,8	30,1	798	47-30-11	73,2	3,9	22,9	770
44 - 34 - 8	76,5	4,9	18,5	690	47 36-12	71,2	4,5	24,2	792
9	74,8	4,8	20,4	706	47-42-16	65,4	4,9	29,7	862
11	71,5	4,6	23,8	738	47-68-8	74,2	8,9	16,8	760
44-38-3	86,0	6,2	7,8	614	47-78-1	85,7	11,9	2,4	658
15	65,5	4,7	29,8	806	2	83,7	11,6	4,7	674
44-40-15	65,3	4,9	29,7	808	47-88-5	77.0	12,0	10,9	732
44-42-1	90,1	7,2	2,7	586	47-94-1	83,7	13,9	2,4	674
44-54-4	81,7	8,4	9,9	646	2	81,8	13,6	4,6.	690
44-58-18	60,4	6,6	33,0	874	4796-1	83,4	14,2	2,4	676
44-60-19	59,2	6,7	34,1	892	2	81,5	13,9	4,6	692
44-62-4	80,7	9,5	9,8	654	48-18-1	94,4	2,6	2,6	610
44-64-4	80,4	9,8	9,8	656	48-28-11	73,8	3.6	22,6	780
5	78,6	9,5	11,9	672	48-30-10	75.2	3,9	20,9	766
13	66.0	8,0	26,0	800	48-36-12	71,6	4,5	23,9	804
44-68-5	78,1	10,1	11,8	676	48-38-12	71,4	4,7	23,8	806
14	64.4	8,3	27,3	820	19	62,7	4,1	33,1	918
16	62,0	8,0	30,0	852	48-42-18	63,6	4,6	31,8	906
44-70-4	79,8	10,6	9,6	662	48-54-5	81,1	7,6	11,3	710
28	50,5	6,7	42,8	1046	48-60-18	62,3	6,5	31,2	924
44-76-2	83,0	11,9	5,0	636	48-64-10	72,0	8,0	20,0	800
44-78-2	82,8	12,2	5,0	638	12	69,2	7,7	23,1	832
44-82-3	80,2	12,5	7,3	658	48-66-3	83,5	9,6	6,9	690
44-88-1	83,6	13,9	2,5	632	29	52,1	5,9	41,9	1106
. 2	81,5	13,6	4,9	648	48-68-25	55,2	6,5	38,3	1044
44-90-1	83,3	14,2	2,5	634	48-70-17	62,8	7,6	29,6	918
2	81,2	13,8	4,9	650	48-72-5	79,1	9,9	11,0	728
4	01,2	119,0	7,0	9,70	10-14-0	10,1	0,0	11,0	. 20

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C—H—O	C º/o	H º/₀	O %	M.G.	C—H—O	C º/o	H °/0	0 %	M.G.
48-72-12	68,6	8,6	22,8	840	53-106-1	83,9	14,0	0.1	750
48-74-37	46,4	5,9	47,7	1242	20-100-1	82,2	13,7	2,1 4,1	758 774
48-78-3	82,0	11,1	6,8	702	53-108-1	83,7	14.2	2,1	760
9	72,2	9,8	18,0	798	2	82,0	13,9	4,1	776
48-80-19	60,0	8,3	31,7	960	54-38-5	84,6	5,0	10,4	766
48-82-41	43,8	6,2	49,9	1314	54-44-22	62,1	4,2	33,7	1044
48-90-8	72,5	11,3	16,1	794	24	60,2	4,1	35,7	1076
48-94-2	82,0	13,4	4,6	702	54-46-17	67,1	4,8	28,1	966
48-96-1	83,7	14,0	2,3	688	54-48-18	65,8	4,9	29,2	984
$\frac{2}{48-98-1}$	81,8	13,6 14,2	$\frac{4,5}{26.5}$	704 690	54-50-21	62,7	4,8	32,5	1034
2	81,6	13,9	20,3 $20,1$	706	54—84—24 54—86—1	58,1	7,5	34,4	1116
49-34-14	69,5	4.0	4,6	846	7	$86,4 \\ 76,6$	11,5 10,2	2,1 13,2	750 846
49-48-10	73,9	6,0	20,1	796	54-90-4	80,8	11,2	8,0	802
49-68-2	85,5	9,9	4.6	688	6	77,7	10,8	11,5	834
49-98-1	83,8	13,9	2,3	702	54-96-27	55,1	8,2	36,7	1176
2	81,9	13,6	4,5	718	54 - 98 - 2	83,3	12,6	4,1	778
49-100-1	83,5	14,2	13,3	704	54-108-1	83,9	14,0	2,1	772
2	81,7	13,9	4,4	720	2	82,2	13,7	4,1	788
50-26-6	83,1	3,6	13,3	722	54-110-1	83,7	14,2	2,1	774
50-28-7 50-36-14	81,1 69,8	3,8	15,1	740	2	82,0	13,9	4,1	790
50-36-14	84,5	4,2 6,5	2 6,0 9,0	860	55-110-1	84,0	14,0	2,0	786
25	57,4	4,4	38,2	1046	55-112-1	82,3 83,8	13,7 14,2	$\frac{4,0}{2,0}$	802 788
50-50-6	80,4	6,7	12,9	746	2	82,1	13,9	4,0	804
11	72,6	6,0	21,3	826	56-34-17	68,7	3,5	27,8	978
50-68-4	82,0	9,3	8,7	732	56-48-24	60,9	4,3	34,8	1104
50-70-8	75,2	8,8	16,0	798	36	51,8	3,7	44,4	1296
17	63,7	7,4	28,9	942	56-50-35	52,4	3,9	43,7	1282
50-74-28	53,5	6,6	39,9	1122	56-52-36	51,7	4,0	44,3	1300
50-82-7	75,6	10,3	14,1	794	56-56-37	50,9	4,2	44,9	1320
9 50843	72,6 82,0	9,9	17,4	826 732	40	49,1	4,1	46,8	1368
50-100-1	90,1	11,5 7,5	6,5 2,4	716	$oxed{56-58-38} \ 56-76-29$	50,2	4,3	45,4	1338
2	88,0	7,3	4.7	732	56-80-8	55,4 76,4	6,3 9,1	38,3 14,5	121 2 880
50-102-1	89,8	7.8	2,4	718	56-84-23	59,8	7,5	32,7	1124
2	87,7	7,6	4.7	734	56-88-8	75,6	10,0	14,4	888
51-82-3	82,5	11,0	6,5	742	56-96-1	85,7	12,2	2,0	784
51-98-6	75,9	12,2	11,9	804	56-112-1	84,0	14,0	2,0	800
51-102-1	83,8	14,0	2,2	730	2	82,4	13,7	3,9	816
2	82,0	13,7	4,3	746	56-114-1	83,8	14,2	2,0	802
51—104—1	83,6	14,2	2,2	732	2	82,2	13,9	3,9	818
52-40-24	81,8 59,5	13,9	4,3 36,6	748	$57 - 34 - 14 \ 57 - 72 - 33$	72,6	3,6	2 3,8	942
52-42-1	91,5	$\begin{array}{c c} 3,8 \\ 6,2 \end{array}$	2,3	1048 682	57-72-33	53,3 77,9	5,6 11,2	41,1 10,9	1284 878
52-46-23	60,1	4,4	35,5	1038	57-104-6	77,3	11,7	10,9	884
52-60-26	56,7	5,4	37,8	1100	57-108-6	77,0	12,1	10,8	888
52-70-8	75,9	8,5	15,6	822	57-110-6	76,8	12,4	10,8	890
52-82-23	58,1	7,6	34,3	1074	57-114-1	84,0	14,0	2,0	814
52-84-2	84,3	11,3	4,3	740	2	82,4	13,7	3,9	830
52-104-1	83,9	14,0	2,1	744	57—116—1	83,8	14,2	2.0	816
59 100 1	82,1	13,7	4,2	760	70 40 99	82,2	13,9	3,8	832
52-106-1	83,7	14,2	2,1	746	58-46-23	62,7	4,1	33,2	1110
53-48-11	81,9 74,0	13,9 5,6	4,2	$\frac{762}{860}$	58—54—14 58—58—13	71,5 72,3	5,5	23,0	974
53-50-19	64,2	5,0	20,4 30,7	990	58-86-31	72,5 54,5	$\begin{array}{c c} 6,0 \\ 6,7 \end{array}$	21,6 38,8	$\frac{962}{1278}$
53-76-8	75,7	9,0	15,2	840	58-88-5	80,6	10,2	9.2	864
53-84-19	62,1	8,2	20,7	1024	581161	84,0	14,0	9,2 1,9	828
53—104—5	77,5	12,7	9,8	820	2	82,5	13,7	3,8	844

C—H—O	C º/o	H º/o	0 º/0	M.G.	С—Н—О	C°/0	H º/ ₀	O º/0	M.G.
58-118-1	83,9	14,2	1,9	830	70-56-4	87,5	5,8	67	960
2	82,2	13,9	3,8	846	70-140-2	83,0	13,8	6,7 3,2	1012
59—118—1	84,1	14,0	1.9	842	71-112-59	44,6	5,9		1908
2	82,5	13,8	1,9 3,7	858	72-62-31	60,8	4,3	49,4 34,9	1422
59-120-1	83,9	14,2	1,9	844	72-66-33	59.3	4,5	36,2	1458
2	82,3	14,0	3,7	860	72—90—41	53,7	5,6	40,7	1610
60-54-27	59,7	4,5	35,8	1206	72-112-40	53,5	6,9	39,6	1616
60-96-9	75,0	10,0	15,0	960	72-114-36	55,6	7,3	37,1	1554
22	61,6	8,2	30,1	1168	72—120—6	80,0	11,1	8,9	1080
60-98-1	86,3	11,8	1.9	834	72-126-63	43,2	6,3	50,5	1998
60-104-52	43,5	6,3	50,2	1656	73-100-32	58,9	6,7	34,4	1488
60-120-1	84,1	14,0	1.9	856	75-54-15	75,4	4,5	20.1	1194
2	82,6	13,7	3,7	872	75-56-21	68.7	4,3	27,0	1292
60-122-1	83,9	14,2	1,9	858	75—102—9	78,5	8,9	13,6	1146
2	82,4	14,0	3,6	874	75—108—30	60,5	7,3	32,2	1488
61-50-18	68,4	4,7	26,9	1070	78-148-9	76,2	12,1	11,7	1228
61-96-36	52,1	6,8	41,0	1404	78—152—6	79,0	12,8	8,1	1184
62-44-16	71,3	4,2	24,5	1044	80-46-9	83,5	4,0	12,5	1150
62 - 94 - 4	82,5	10,4	7,1	902	. 10	82,3	3,9	13,7	1166
63-72-27	60,0	5,7	34,3	12 60	80-54-2	91,8	5,1	3,1	1046
63-122-6	79,6	12,8	7,6	974	80—104—8	80,5	8,7	10,7	1192
63-124-5	78,8	12,9	8,3	960	80-120-5	82,8	10,3	6,9	1160
64-128-2	82,8	13,8	3,4	928	80-124-29	62,0	8,0	30,0	1548
65-42-17	71,3	3,8	24,9	1094	82-100-46	54,1	5,5	40,4	1820
65-48-22	66,1	4,0	29,8	1180	84-64-32	63,6	4,0	32,3	1584
65-84-8	78,6	8,5	12,9	992	86-46-25	69,8	3,1	27,1	1478
66-4-11	81,5	0,4	18,1	972	89—142—74	44,6	6,0	49,4	2394
66-40-15	73,9	3,7	22,4	1072	92—182—6	79,9	13,2	6,9	1382
66-132-2	82,9	13,8	3,3	956	93—182—6	80,1	13,0	6,9	1394
67-60-23	65,3	4,9	29,8	1232	96—102—51	55,7	4,9	39,4	2070
67—68—9	79,1	6,7	14,2	1016	96—162—81	50,3	7,1	42,6	2290
68-52-20	68,7	4,4	26,9	1188	105-96-33	66,9	5,1	28,0	1884
68-118-35	64,6	7,9	37,5	1494	114-216-11	77,7	12,3	10,0	1760
68-126-4	81,1	12,5	6,4	1006	156-160-52	65,4	5,6	29,0	2864
69-128-6	78,7	12,2	9,1	1052	216-360-180	45,1	6,1	48,8	5896
		1		1			1		

C-H-N	C º/0	H º/o	N º/0	M.G.	C—H—N	C %	H %	N º/o	M.G.
1-1-1	44,4 21,8	3,7 1,8	51,9 76,4	27 55	2-5-3 5	33,8 24,2	7,0 5,0	59,1 70,7	71 99
$egin{array}{c} 5 \\ 7 \\ 1-2-2 \\ 4 \end{array}$	14,5 10,8 28,5 17,1	1,2 9,0 4,8	84,3 88,2 66,7 80,0	83 111 42 70	$egin{array}{cccccccccccccccccccccccccccccccccccc$	24,2 18,9 41,4 27,9	3,9 10,3 7,0	77,2 48,3 65,1	127 58 86
6 8 1—3—1	$ \begin{array}{c c} 12,2 \\ 9,6 \\ 41,4 \end{array} $	2,9 2,0 1,6 10,3 5,2	85,7 88,8 48,3	98 126 29	8 2-7-1 3	21,1 16,9 53,3 32,9	5,2 4,2 15,6 9,6	73,7 78,8 31,1 57,5	114 142 45 73
$egin{array}{c} 3 \\ 5 \\ 7 \\ 1-4-2 \end{array}$	$\begin{array}{c} 21,1 \\ 14,1 \\ 10,6 \\ 27,3 \end{array}$	5,2 3,5 2,7 9,1	73,7 82,3 86,7 63,6	57 85 113 44	$egin{array}{c} 5 \\ 7 \\ 2-8-2 \\ 4 \end{array}$	23,8 18,6 40,0	6,9 5,4 13,3 9,1	69,3 76,0 46,7	101 129 60
6 8	16,7 12,0 9,4 38,7	5,5 4,0 3,1	77,8 84,0 87,5	72 100 128	6 8 3—1—1	27,3 20,7 16,7 70,6	6,9 5,5 2,0	63,6 72,4 77,8 27,4	88 116 144 51
1-5-1 3 5 7	20,3 $13,8$	16,1 8,5 5,7	45,2 · 71,2 · 80,4	31 59 87	3 5 7	45,5 $33,6$ $26,7$	1,3 0,9 0,7	53,2 65,4 72,6	79 107 135
1-6-2 4 6	10,4 26,1 16,2 11,8	4,3 13,0 8,1 5,9	85,2 60,9 75,7 82,3	-115. 46 74 102	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	54,5 38,3 29,5 24,0	3,0 2,1 1,6	42,4 59,6 68,8 74,7	66 94 122 150
2-1-1 3	9,2 $61,5$ $35,8$	4,6 2,6 1,5	86,2 35,9 62,7	130 39 67	3—3—1 3 5	67,9 44,4 33,0	1,3 5,7 3,7 2,8	26,4 $51,9$ $64,2$	53 81 109
$\begin{array}{c} 5 \\ 7 \\ 2-2-2 \\ 4 \end{array}$	25,3 19,5 44,4 29,3	1,0 0,8 3,7 2,4	73,7 79,6 51,9 68,3	95 123 54	3—4—2 4	26,3 52,9 37,5	2,8 2,2 5,9 4,2	71,5 41,2 58,3	137 68 96
6 8 10	21,8 17,4 14,5	1,8	76,4 81,1 84,3	82 110 138 166	$egin{array}{cccccccccccccccccccccccccccccccccccc$	29,0 23,7 65,5 43,4	3,2 2,6 9,1 6.0	67,7 73,7 2 5,4 50,6	124 152 55 83
2—3—1 3 5	58,5 34,8 24,7	1,2 7,3 4,3 3,1	34,2 60,8 72,2	41 69 97	5 7 3—6—2	32,4 25,9 51,4	4,5 3,6 8,6	63,1 70,5 40,0	111 139 70
2-4-2 4 6	19,2 42,8 28,6 21,4	2,4 7,1 4,8 3,6	78,4 50,0 66,8 75,0	125 56 84 112	4 6 8 3—7—1	36,7 28,5 23,4 63,2	6,1 4,8 3,9 12,3	57,1 66,7 72,7	98 126 154 57
$\begin{vmatrix} 8 \\ 10 \\ 2-5-1 \end{vmatrix}$	17,1 14,3 55,8	$\begin{array}{c} 3,0 \\ 2,9 \\ 2,4 \\ 11,6 \end{array}$	80,0 83,3 32,6	140 168 43	3—7—1 3 5 7	42,3 31,9 25,5	12,5 8,2 6,2 5,0	24,5 49,4 61,9 69,5	85 113 141

C-H-N	C º/o	H º/o	N º/0	M.G.	C-H-N	C º/0	H º/o	N º/o	M.G.
						70	11 /0	TA -/0	M.G.
3—8—2 4	50,0 36,0	11,1 8,0	38,9 56,0	72 100	4—12—6	33,3 21,1	8,3 5,2	58,3 73,7	144 172
6 8	28,1 23,1	6,2 5,1	65,6 71,8	128 156	4-13-1	64,0 46,6	17,3 12,6	18,7 40,8	75 103
3-9-1	61,0	15,2	23,7	59	5	36,7	9,9	53,4	131
5	41,4 31,3	10,3 7,8	48,3 60,9	87 115	5-1-1	30,2 80,0	8,2 1,3	61,6 18,7	159 75
$\frac{7}{3-10-2}$	25,2 $48,6$	6,3 13,5	68,5 37,8	143 74	3 5	58,2 45,8	1,0 0,8	40,8 53,4	103 131
4 6	35,3 27,7	9,8 7,7	54,9 64,6	102 130	7	37,7	0,6	61,6	159
8	22,8	6,3	70,9	158	5—2—2 4	66,7 50,8	2,2 1,7	31,1 47,5	90 118
4-11	76,2 52,7	1,6 1,1	22,2 46,2	63 91	6 8	41,1 34,5	1,4 1,1	57,5 64,3	146 174
5 7	40,3 32,6	0,8	58,8 66,7	119 147	5-3-1	77,9	3,9 2,9	18,2	77
4-2-2	61,5	$0,7 \\ 2,6$	35,9	78	5	57,1 45,1	2,3	40,0 52,6	133
4 6	45,3 35,8	1,9 1,5	52,8 62,7	106 134	5-4-2	37,3 65,2	1,8 4,3	60,9	161 92
8 4-3-1	29,6 73,9	1,2 4,6	69,2 21,5	162 65	4 6	50,0 40,5	3,3 2,7	46,7 56,7	120 148
3	51,6	3,2	45,2	93	8	34,1	2,3	63,6	176
5 7	39,7 32,2	2,5 $2,0$	57,8 65,8	121 149	551 3	76,0 56,1	6,3	17,7 39,2	79 107
$\begin{array}{c} 4-4-2 \\ 4 \end{array}$	60,0 44,4	5,0 3,7	35,0 51,9	80 108	5 7	44,4 36,8	3,7 3,1	51,9 60,1	135 163
6	35,3	2.9	61,8	136	5-6-2	63,8	6,4	29,8	94
8 4-5-1	29,3 71,7	2,4 7,4	68,3	164 67	4. 6	49,2	4,9	45,9 56,0	150
. 3 5	50,5 39,0	5,2 4,1	44,2 56,9	95 123	5—7 — 1	33,7 74,1	3,4 8,6	62,9	178 81
7	31,8	3,3	64,9	151	3	55,0	6,4	38,5	109 137
4—6—2 4	58,5 43,6	7,3 5,4	34,2 50,9	82 110	5 7	43,8 36,4	5,1	59,4	165
. 6 8	34,8 28,9	4,3 3,6	60,8	138 166	5—8—2° 4	62,5 48,4	8,3 6,4	29,2 45,2	96
4-7-1	69,6	10,1	20,3	69	6 8	39,5 33,3	5,2 4,4	55,3 62,2	152 180
3 5	49,5 38,4	7,2 5,6	43,3 56,0	97 125	5-9-1	72,3	10,8	16,9	83
7 4- 8-2	31,4 57,1	4,6 9,5	64,0	153 84	3 5	54,0 43,2	8,1 6,5	37,8	111 139
4	42,8	7.1	50,0	112 140	5-10-2	35,9 61,2	5,4 $10,2$	68,7	167 98
6 8	34,3 28,6	5,7 4,8	60,0	168	4	47,6	7,9	44,4 54,5	· 126 154
20 4—9 - 1	14,3 67,6	2,4 12,7	83,3	336	6 8	39,0	5,5	61,5	182
3	48,5	9,1	42,4 55,1	99	5—11—1	70.6	12,9 9,7	16,4 37,2	85 113
5 7	37,8 31,0	7,1 5,8	63.2	155	5	42,6 35,5	7,8	49,6 58,0	141 169
4102 4	55,8 42,1	11,6 8,8	32,6 49,1	86 114	5-12-2	60,0	12,0	28,0	100
6 8	33,8 28,2	7,0	59,1 65,9	142 170	$\frac{4}{6}$	46,9 38,5	9,4	43,7 53,8	128 156
4-11-1	65,7	5,9 15,1	19,2	73	5—13—1	32,6 68,9	6,5	60,9	184
3 5	47,5 37,2	10,9	41,6 54,3	101 129	3	52,2	11,3	36,5	115 143
7 4 —12—2	30,5	7,0 13,6	62,4	157 88	5 7	42,0	9,1	48,9 57,3	171
4-12-2	54,6	10,3	48,3	116	5-14-2	58,8	13,7	27,5	102
		,							

C-H-N	C °/ ₀	H º/o	N °/ ₀	M. G.	C-H-N	C º/o	H º/o	N º/0	M. G.
5-14-4	46,1	10,8	43,1	130	6-16-4	50,0	11,1	38,9	144
6 8	38,0	8,8	53,2 60,2	158 186	6 8	41,9 36,0	9,3	48,8 56,0	172 200
6-3-1	80,9	3,4	15,7	89	6—17—1	69,9	16,5	13,6	103
3 5	61,5	2,6 2,1	35,9 48,3	117 145	3 5	55,0	12,8 10,7	32,1	131 159
7 9	41,6	1,7	56,6	173 201	7	28,5	9,1 15,2	52,4	187
6-4-2	69,2	1,5 3,8	62,7 26,9	104	6182	61,0	12,3	23,7	118 146
4 6	54,5 45,0	3,0 2,5	42,4 $52,5$	132 160	6 8	41,4 35,6	10,3	48,3 55,4	174 202
8	38,3	2,1	59,6	188	7-4-2	72,4	3,4	24,1	116
6-5-1 3	79,1	5,5 4,2	15,4 35,3	91	$\frac{4}{6}$	58,3 48,8	2,8 2,3	38,9 48,8	$\begin{array}{ c c }\hline 144\\172\\\end{array}$
5	49,0	3.4	47,6	147	8	42,0	2,0	56,0	200
6—6—2	41,1 67,9	2,9 5,7	56,0 26,4	175 106	7-5-1	81,6	4,8	13,6 32,1	103 131
4	53,7	4,5	41,8	134	5	52,8	3.1	44,0	159
6 8	44,4 37,9	3,7 3,1	51,9 59,0	162 190	7—6—2	44,9 71,2	2,7 5,1	52,4 23,7	187 118
10 6-7-1	33,0	2,8 7,5	64,2	218	4	57,5	4,1	38,4	146
3	77,4 59,5	5,8 4,7	$15,0 \\ 34,7$	93 121	6 8	48,3	3,4	48,3 55,4	$\begin{array}{ c c }\hline 174 \\ 202 \\ \end{array}$
5 7	48,3	4,7 3,9	$47,0 \\ 45,4$	149 177	7-7-1	80,0	6,7	13,3	105
6-8-2	66,7	7,4	25,9	108	3 5	63,1 52,2	5,3 4,3	31,6 43,5	133 161
4 6	52,9	5,9 4,9	41,2 51,2	136 164	7 7—8—2	44,4 70,0	3,7 6,7	51,9	189 120
8	37,5	4.2	58,3	192	4	56,7	5,4	23,3 37,8	148
6—9—1 3	75,8 58,5	9,5 7,3	14,7 34,2	95 1 2 3	6 8	47,7 41,2	4,5 3,9	47,7 54,9	176 204
. 5	47,7	6,0	46,3	151	7—9—1	78,5	8,4	13,1	107
7 11	40,2 30,6	5,0 3,8	54,8 65,5	179 235	3 5	62,2 51,5	6,7 5,5	31,1 42,9	135 163
6-10-2	65,5	9.1	25,4	110	7	44,0	4,7	51,3	191
4 6	52,2 43,4	7,2 6,0	40,6 50,6	138 166	7—10—2 4	68,8 56,0	8,2 6,7	23,0 37,3	122 150
8	37,1	5,2	57,7	194	6	47,2	5,6	47.2	178
6-11-1	$\begin{bmatrix} 74,2\\ 57,6 \end{bmatrix}$	11,3 8,8	14,4 33,6	$\begin{array}{c} 97 \\ 125 \end{array}$	8 7—11—1	40,8 77,1	4,8 10,1	54,4 12,8	206 109
5 7	47,1 39,8	7,2 6,1	45,7 54,1	153 181	3	61,3	8,0	30,7	137
6-12-2	64,3	10,7	25,0	112	5 7	72,7 43,5	6,7 5,7	42,4 50,8	$\begin{array}{c} 165 \\ 193 \end{array}$
4 6	51,4 42,8	8,6 7,1	40,0 50,0	140 168	7—12—2	67,7	9,7	22,6	124
8	36,7	6,1	57,1	196	6	55,3 46,7	7,9 6,6	36,8 46,7	152 180
6—13—1 3	72,7 56,7	$\begin{array}{c c} 13,1 \\ 10,2 \end{array}$	14,1 33,1	99 1 2 7	7—13 - 1	40,4	5,8	53,8	208
5	46,4	8,4	45,2	155	3	75,7 60,4	11,7 9,4	12,6 30,2	111 139
6—14—2	39,3 63,2	7,1 12,3	53,5 24,5	183 114	5 7	50,3 43,1	7,8 6,7	41,9 50,2	167 195
4	50,7	9,8	39.4	142	7-14-2	66,7	11,1	22,2	126
6 8	42,3 36,4	8,2 7,1	49,4 56,5	170 198	4 6	54,5 46,1	9,1 7,7	36,4 46,1	154 182
6-15-1	71,3	14,8	13,9	101	8	40,0	6,7	53,3	210
3 5	55,8 45,9	11,6 9,5	32,6 44,6	$\begin{array}{c c} 129 \\ 157 \end{array}$	7—15—1	74,3 59,6	13,3 10,6	12,4 29,8	113 141
6—16—2	38,9 62,1	8,1	53,0	185	5	49,7	8,9	41,4	16 9
0-10-2	02,1	13,8	24,1	116	7	42,6	7,6	49,7	197

C-H-N	C º/o	H °/0	N °/0	M.G.	C—H—N	C º/o	H °/ ₀	N º/o	M.G.
7-16-2	65,5	12,5	21,9	128	8-15-7	45.0	H 0	100	200
4	53,8	10.3	35,9	156	8-16-2	45,9 68,6	7,2	46,9 20,0	209
6	45,6	8,7	45,6	184	4	57,1	9,5	33,3	140 168
8 7—17—1	39,6 73,0	7,5	52,8	212	6	49,0	8,2	42,8	196
3	58,7	11,9	12,2 29,4	115 143	8—17—1	42,8	7,1	50,0	224
5	49,1	9,9	40,9	171	3	75,6 61,9	13,4 11,0	11,0 27,1	127 155
7	42,2	8,5	49,2	199	5	52,5	9,3	38,2	183
7—18—2 4	64,6	13,8	21,5	130	7	45,5	8,0	45,5	211
6	53,2 45,1	11,4 9,7	35,4 45,1	158 186	8182 4	67,6 56,4	12,7 10,6	19,7	142
8	39,2	8,4	52,3	214	6	48,5	9,1	32,9 42,4	170 198
8-4-2	75,0	3.1	21,9	12 8	. 8	42,5	8,0	49,5	226
4 6	61,5 52,2	2,6 2,2	35,9	156 184	8—19—1	74,4	14,7	10,9	129
. 8	45,3	1,9	45,6 52, 8	212	3 5	61,2 51,9	12,1	26,7 37,8	157 185
8-5-1	83,5	4,3	12,2	115	7	45,0	8,9	46,0	213
3	67,1	3,5	29,4	143	8-20-2	66,7	13,9	19,4	144
5 7	56,1 48,2	2, 9 2, 5	$\begin{vmatrix} 40,9\\49,2 \end{vmatrix}$	171 199	6	55,8	11,6	32,6	172
8-6-2	73,9	4,6	21,5	130	8	48,0 42,1	10,0	42,0 49,1	200 228
4	60,8	3,8	35,4	158	8-21-1	73,3	16,0	10,7	131
6	51,6	3,2	45,2	186	3	60,4	13,2	26,4	159
8 8—7—1	44,9 82,0	2, 8 6,0	52,3 12,0	214	5 7	51,3 44,6	11,2 9,8	37,4 45,6	187 215
3	66,2	4,8	29,0	145	9-3-1	86,4	2.4	11,2	125
5	55,5	4,0	40,5	173	3	70,6	2,4 2,0	27,4	153
7	47,7	3,5	48,7	201	5	79,7	1,6	38,7	181
8-8-2 4	72,7	6,1 5,0	21,2 35,0	132 160	7 · 13	51,7 45,6	1,4 1,3	46,9 53,1	209 237
6	51,1	4,2	44,7	188	9-4-2	77,1	2.9	20,0	140
8	44,4	4,2 3,7 7,6	51,9	216	. 4	64.3	2,4 2,0	33,3	168
8-9-1	80,6	7,6	11,8	119	6	55,1	2,0	42,8	196 224
3 5	65,3 54,9	6,1 5,1	28,6 40,0	147 175	8 9—5—1	48,2 85,0	1,8	50,0	127
7	47,3	4,4	48,3	203	3	69,7	3,2 2,7	27,1	155
8-10-2	71,7	4,4 7,4 6,2	20,9	134	5	59,0	2,7	38,2	183
4 6	59,3	6,2	34,5 44,2	162 190	9-6-2	51 ,2 76,0	2,4 4,2	46,4 19,7	211 142
8	50,5 44,0	5,2 4,6	51,4	2 18	4	63,5	3,5	32,9	170
8-11-1	79,3	9.1	11,6	121	6	54,5	3,0	42,4	198
3	64,4	7,4 $6,2$	28,2	149	8	47,8	2,6	49,6 10,8	226 129
5 7	54,2 46,8	$\begin{array}{c c} 6,2 \\ 5,4 \end{array}$	39,6 47,8	177 205	9-7-1	83,7 68,8	5,4 4,4	26,7	157
8-12-2	70,6	8,8	20,6	136	5	58,4	3,8	37,8	185
4	58,5	7.3	34,2	164	7	50,7	3,3	46,0	213
6	50,0	6,2	43,8	192	9-8-2	75,0 62,8	5,6 4,6	$\frac{19,4}{32,6}$	144 172
8 8—13—1	43,6 78,0	5,4 $10,6$	50,9 11,4	220 123	6	54,0	4,0	42,0	200
3	63,6	8,6	27,8	151	8	47,4	3,5	49,1	228
5	53,6	7,2	39,1	179	9-9-1	82,4	6,9 5,7	10,7	131
7	46,4	- 6,3	47,3	207	3 5	67,9 57,8	5,7	$26,4 \\ 37,4$	159 187
8-14-2	69,6 57,8	10,1	20,3 33,7	138 166	9 7	50,2	4,8 4,2 6,8 5,7	45,6	215
6	49,5	7,2	43,3	194	9-10-2	74,0	6,8	19,2	146
8	43,2	6,3	50,4	222	4	62,1	5,7	32,2 41,6	174 202
8-15-1	76,8	12,0	11,2	$125 \\ 153$	8	53,5 47,0	4,9 4,3	48,7	230
3 5	62,7 53,0	9,8 8,3	27,4 38,7	181	9-11-1	81,2	8,3	10,5	133
9	00,0	,,,,	7,						

C-H-N	C º/o	H 0/0	N º/o	M.G.	C-H-N	C º/o	H º/o	N º/0	M.G.
9-11-3	67,1	6,8	26,1	161	10-8-2	76,9	5,1	17,9	156
5	57,1	5,8	37,0	189	4	65,2	4,3	30,4	184
7	49,8	5,1	45,1	219	6 .	56,6	3,8	39,6	212
9-12-2	73,0	8,1	18,9	148	8	50,0	3,3	46,7	240
4 6	61,4 52,9	6,8 5,9	31,8 41,2	176	10-9-1	83,9	6,3	9,8	143
8	46,5	5,9	48,3	204 232	3 5	70,2 60,3	5,3	24,5	171
9—13—1	80,0	9,6	10,4	135	7	52,9	4,5 4,0	35,2 43,1	$\frac{199}{227}$
3	66,2	8,0	25,8	163	10-10-2	76,0	6,3	17,7	158
5	56,6	6.8	36,6	191	4	64,5	5,4	30,1	186
7	49,3		44,7	219	6	56,1	4,7	39,2	214
9-14-2	72,0	9,3	18,7	150	8	49,6	4,1	46,3	24 2
4 6	60,7 52,4	7,8 6,8	31,5 40,8	178	$10-11-1 \\ 3$	82,8	7,6	9,6	145
8	46,1	6,0	47,9	206 234	5	69,4 59,7	6,3 5,5	24,3	173
9-15-1	78,8	10,9	10,2	137	. 7	52,4	4,8	34,8 42,8	201 229
3.	65,5	9,1	25,4	165	10-12-2	75,0	7,5	17,5	160
5	56,0	7,7	36,3	193	1. 4.	63,8	6,4	29,8	- 188
7	48,9	6,8	44,3	221	6	55,5	5,5	38,9	2 16
9-16-2	71,1	10,5	18,4	152	8	49,2	4,9	45,9	244
6	60,0 51,9	8,9 7,7	31,1 40,4	180 208	10-13-1	81,6	8,8	9,5	147
8	45,8	6,8	47,4	236 ×	3 5	68,6 59,1	$\begin{array}{c c} 7,4 \\ 6,4 \end{array}$	34,0 34,5	175 203
9-17-1	77,7	12,2	10,1	139	7	52,0	5,6	42,4	203 231
3 .	64,7	10,2	25,1	167	10-14-2	74.1	8,6	17,3	- 162
5	55,4	8,7	35,9	195	* 4	63,2	7,3	29,5	190
7	48,4	7,6	43,9	223	6	55,0	6.4	38,5	2 18
9-18-2	70,1 59,3	11,7 9,9 8,6	18,2	154	8	48,8	5,7	45,5	246
6	51.4	9,9	30,8 40,0	182 210	10-15-1	80,5 67,8	10,1 8,5	9,4 23,7	149
8	45,4	7,6	47,0	238	5	58,5	7,3	34,2	$\frac{177}{205}$
9-19-1	76,6	13,5	9,9	141	7	51,5	6,4	42,1	2 33
3	63,9	11.2	24,8	169	10-16-2	73,1	9,7	17,1	164
5	54,8	9,6	35,5	. 197	4	62,5	8,3	29.2	192
9-20-2	48,0	8,4	43,5	225	6	54,5	7,3	38,2	22 0
4	69, 2 " 58,7	12,8 10,9	17,9 30,4	156 184	10-17-1	48,4 79,5	$\begin{array}{c c} 6,4\\11,2\end{array}$	45,2	248
6	50,9	9,4	39,6	212	3	67,0	9,5	9,3 23,5	151 179
8	45,0	8,3	46,7	240	5	58,0	8,2	33,8	207
9-21-1	75,5	14,7	9,8	143	7	51,1	7.2	41,7	235
3	63,2	12,3	24,5	171	10-18-2	72,3	10,8	16,9	166
5 7	54,3 47,6	10,5	35,2	199	4	61,9	9,3	28,8	194
9-22-2	68,4	9,2	43,2 17,7	227 158	6 8	54,0 48,0	8,1 7,2	37,8	222
4	58,1	11,8	30,1	186	10-19-1	78,4	12,4	44,8 9,1	250 153
6	50,5	103	39,2	214	3	66,3	10,5	23,2	181
8.	44,6	9.1	46,3	242	5	57,4	9.1	33,5	209
10-5-1	86,3	3,6	10,1	139	7	50.6	8,0	41,3	2 37
3	71,9	3,0	25,1	167		71,4	11,9	16,7	168
7	86,3 71,9 61,5 53,8	2,6 2,2	35,9 44,0	195	4	61,2	10,2	28,6	196
10-6-2	77,9	3,9	18,2	223 154	6 8	53,6 47,6	8,9 7,9	37,5 44,4	$\begin{array}{c} 224 \\ 252 \end{array}$
4	65,9	3,3 1	30,8	182	10-21-1	77,4	13,5	9,0	155
6	57,1	2,9	40,0	210	3	65,6	11,5	22,9	183
8	50,4	2,5	47,0	2 38	5	56,9	9,9	33,2	211
10-7-1	85,1	5,0	9,9	141	7	50,2	8,8	41.0	239
3 5	71,0	4,1	24,8	169	10-22-2	70,6	12,9	16,4	170
7	60,9 53 ,3	3,5	35,5 43,6	197 225	4	60,6	11,1	28,3	198
,	00,0.	0,1	33,0	220	0.	53,1	9,7	37,2	226

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C-H-N	C 0/0	H º/o	N º/o	M.G.	C-H-N	C º/o	H º/0	N º/o	M.G.
10-22-8	47,2	8,7	44,1	254	11-16-4	647	7.0	05.4	204
10-23-1	76,4	14,6	8,9	157	B	64,7 56,9	7,8 6,9	27,4 36,2	204 232
3	64,9	12,4	22,7	185	š	50,8	6,1	43,1	260
5	56,3	10,8	32,9	213	11-17-1	81.0	10,4	8,6	163
$7 \\ 10-24-2$	49,8	9,5 13,9	40,7	241	3	69,1	8,9	22,0	191
10-24-2	69,8 60,0	13,9 $12,0$	16,3 28,0	172 200	5	60,3	7,8	31,9	219
6	52,6	10,5	36,8	22 8	7 11—18—2	53,4 74,2	6,9	39,7	247
8	46,9	9,4	43,7	256	4	64,1	10,1 8,7	15,7 $27,2$	178 206
10-25-1	75,5	15,7	8,8	159	ê	56,4	7,7	35,9	234
3	64,2	13,4	22,4	187	8-	50.4	6,9	42.7	262
5	55,8	11,6	32,6	215	11-19-1	80,0	11,5	8,5	165
7	49,4	10,3	40,3	243	3	68.4	9,8	21,7	193
10-26-2	68,9 59,4	14,9 12,9	16,1 $27,7$	174 202	5 7	59,7	8,6	31,7	221
6	52,2	11,3	36,5	230	11-20-2	53,0 73,3	7,6 11,1	39,3 15,6	249 180
8	46.5	10.1	43,4	258	4	63,5	9,6	26,9	208
11-5-3	73,7	2,8	23,5	179	6	55,9	8,5	35,6	236
11-6-2	79,5	2,8 3,6	16,9	166	8	50,0	7,6	42,4	264
4	68,0	3,1	28,9	194	11-21-1	79,0	12,6	8,4	167
6	59,4	2,7	37,8	222	3	67,7	10,7	21,5	195
8 11-7-1	52,8 86,3	2,4	44,8	250 153	5 7	59,2	9,4	31,4	223
3	72,9	4,6 3,9	$9,1 \\ 23,2$	181	11-22-2	52,6 72,5	8,4 12,1	39,0 15,4	251 182
5	63,2	3,3	33,5	209	4	62,8	10,5	26,7	210
7	55,7	2,9	41,3	237	ê	55,5	9,2	35,3	238
11-8-2	78.5	4,8	16,7	168	8	49,6	8,3	42,1	266
4	67,3	4,1	28,6	196	11-23-1	78,1	13,6	8,3	169
6	58,9	3,6	37,5	224	3	67,0	11,7	21,3	197
8	52,4	3,2	44,4	252	5 7	58,6	10,2	31,1	225 253
11-9-1	85,2 72,1	5,8 4,9	9,0 22 ,9	155 183	11-24-2	52,2 71,7	9,1 13,0	38,7 15,2	184
5	62,6	4,2	33,2	211	4	62,3	11,3	26,4	212
7	55,2	3,8	41,0	239	6	55.0	10,0	45,0	240
11-10-2	77,6	5,9	16,5	170	8	49,3	8,9	41,8	268
4	66,7	5,0	28,3	198	11-25-1	77,2	24,6	8,2	171 199
6	58,4	4,4	37,2	226	3	66,3 58,1	12,6 11,0	21,1 30,8	199 227
8	52,0	3,9	44,1	254 157	5 7	51,8	9,8	38,4	255
11-11-1	84,1 71,3	7,0 5,9	8,9 22 ,7	185	11-26-2	70,9	14,0	15,0	186
5	62,0	5,1	32,9	213	4	61,7	12,1	26,2	21.4
. 7	54,8	4,5	40,7	241	6	54,5	10,7	34,7	242
11-12-2	76,7	7,0	16,3	172	8	48,9	9,6	41,5	270 178
4	66,0	6,0	28,0	200	12-6-2	80,9	3,4 2,9	15,7 27,2	206
6	57,9	5,3	36,8	228 256	4 6	61,5	2,6	35,9	234
8 11—13—1	51,6 83,0	4,7 8,2	43,7 8,8	159	8	55,0	2,3	42,7	262
3	70,6	6,9	22,5	187	12-7-1	87,3	4,2	8,5	165
5	61,4	6,0	32,6	215	3	74.6	3,6	21,8	193
7	54,3	5,3	40,3	243	5	65,1	3,2	31,7	221
11-14-2	75,8	8,0	16,1	174	7	57,5	2,8	39,3 15,6	249 180
4	65,3	6,9	27,7	202	12-8-2	80,0 69,2	4,4 3,8	26,9	208
6	57,4	6,1	36,5	230	8	61,0	3,4	35,6	236
8	51,2	5,4	43,4	258 161	B	54,5	3,0	42,4	264
11-15-1	82,0 69,8	9,3	22,2	189	12-9-1	86,2	5,4	8,4	167
5	60,8	6,9	32,3	217	3	73,9	4,6	21,5	195
7	53,9	6,1	40,0	245	5	64,6	4,0	31,4 39,0	223 251
11-16-2	75,0	9,1	15,9	176	7	57,4	3,6	33,0	2.71
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C—H—N	C º/0	H º/0	N º/0	M.G.	C—H—N	C º/o	H °/ ₀	N º/0	M.G.
12-9-9	51,6	3,2	45,2	279	12-24-6	57,1	9,5	33,3	252
$12-10-2 \\ 4$	79,1 68,6	5,5 4,7	15,4 $26,7$	182 210	8 12251	51,4	8,6	40,0	280
6	60,5	4.2	35,3	238	3	78,7 68,2	13,7 11,8	7,6	183 211
8	54,1	3,7	42.1	266	5	60,2	10,5	29,3	239
12—11—1 3	85,2 73,1	6,5 5,6	8,3 21,3	169 197	$\begin{array}{c c} & 7 \\ 12-26-2 \end{array}$	53,9 72,7	9,4 13,1	36,7 14,1	267 198
5	64,0	4,9	31.1	225	4	63,7	11,5	24,8	226
12-12-2	56,9 78,3	4,3 6,5	38,7 15,2	253	6	56,7	10,2	33,1	254
4	67.9	5,7	26,4	184 212	8 12 —27 —1	51,1 77,8	9,2 14,6	39,7	282 185
6	60,0	5,0	35.0	240	3	67,6	12,7	19,7	2 13
8 12—13—1	53,7 84,2	4,5 7,6	41,8 8,2	268 171	5 7	59,7 53,5	11,2 10,0	29,0 36,4	241 269
3	72,4	6,5	21.1	199	12-28-2	72,0	14,0	14,0	200
5 7	63,4 56,5	5,7	30,8	227	4	63,2	12,3	24,5	228
12-14-2	77,4	5,1 7,5	38,4 15,0	255 186	6 8	56,2 50,7	10,9 9,8	32,8 39,4	256 284
4	67,3	6,5	26,2	214	12-29-1	77,0	15,5	7,5	187
6 8	59,5 53,3	6,5 5,8 5,2	34,7 41,4	242 270	3 5	67,0 59,2	13,5 11,9	19,5 28,8	215 243
12-15-1	83,2	8,7 7,4	8,1	173	7	53,1	10,7	36,2	271
3 5	71,7 62,9	7,4	20,9	201	12-30-2	71,3	14.8	13,9	202
7	56,0	$\begin{array}{c c} 6,5 \\ 5,8 \end{array}$	30,6 38,1	229 257	4 6	62,6 $55,8$	13,0 11,6	24,3 32,6	230 258
12-16-2	76,6	8,5	14,9	188	8	50,3	10,5	39,2	2 86
4 6	66,7 59,0	7,4 6,6	25,9 34,4	216 244	$\begin{array}{c} 12 - 31 - 1 \\ 3 \end{array}$	76,2 66,3	16,4 14,3	7,4	189
8	52,9	5,9	41.2	272	5	58,8	12,6	$ \begin{array}{c c} 19,4 \\ 28,6 \end{array} $	$217 \\ 245$
12-17-1	82,3 70,9	9,7	8,0	175	7	52.7	11.3	35,9	273
5	62,3	8,4 7.4	20,7 30,3	203 231	13-7-1	88,1 76,1	4,0 3,4	7,9 20,5	$\frac{177}{205}$
7	55,6	7,4 6,6	37,8	259	5	67,0	3,0	30,0	2 33
12—18—2	75,8 66,1	9,5	$\frac{14,7}{25,7}$	190 218	7 13-8-2	59,8	2,7	37,5	261
6	58,5	8, 2 7,3	34,2	246	13-6-2	81 , 3 70,9	$\frac{4,1}{3,6}$	14,6 25,4	$\frac{192}{220}$
8 12—19—1	52,5	6,6	40,9	274	6	62,9	3,2	33,9	2 48
3	81,4 70,2	10,7 9,3	7,9 20,5	$\frac{177}{205}$	8 13 — 9—1	56,5 87,1	2,9 5,0	40,6 7,8	$\frac{276}{179}$
5	61,8	8,2	30,0	2 33	3	75,3	4,3	20,3	207
12-20-2	55,2 75,0	7,3 10,4	37,5 14,6	261 192	5 7	66,4	3,8	29,8	2 35
4	65,5	9,1	25,4	220	13-10-2	59,3 80,4	3,4 5,2	37,3 14,4	$\frac{263}{194}$
6 8	58,1 52,2	8,1	33,8	2 48	4	70,3	$_{4,5}$	25,2	222
12-21-1	80,4	7,2 11,7	40,6 7,8	276 179	6 8	62,4 56,1	4,0 3,6	33,6 40,3	250 278
3	69,6	10,1	20,3	207	13—11—1	86,2	6,1	7,7	181
5 7	61,2 54,7	8,9 8,0	29,8 37,3	235 263	3	74,6	5,3	20,1	209
12-22-2	74,2	11,3	14,4	194	5 7	65,8 58,9	4,6 4,1	29,5 37,0	237 265
4	64,9	9,9	25,2	222	13-12-2	79,6	6,1	14,3	196
6 8	57,6 51,8	8,8	33,6 40,3	250 278	4	69,6	5,4	25,0	224
12-23-1	79,6	12,7	7,7	181	6 8	61,9	4,8 4,3	33,3 40,0	252 280
3 5	68,9	11,0	20,1	209	13—13—1	85,2	7,1	7,6	183
7	60,8 54,3	9,7 8,7	29,5 37,0	$\frac{237}{265}$	3 5	73,9 65,3	6,2	19,9 29,3	211
12-24-2	73,4	12,2	14,3	196	7	58,4	5,4 4,9	36,7	$\frac{239}{267}$
4.	64,3	10,7	25,0	224	13—14—2	78,8	7,2	14,1	198

C—H—N	C %/0	H 0/0	N °/0	M.G.	C—H—N	C °/ ₀	H 0/0	N º/0	M.G.
13-14-4	69,0 61,4	6,2	24,8	226	13-29-1	78,4	14,6	-7,0	199
8	55,3	5,5	33,1 39,7	254 282	3 5	68,7 61,2	12,8 11,4	18,5 27,4	227 255
13—15—1	84,3 73,3	8,1 7,0	7,6	185 213	7 13—30—2	55,1 72,9	10,3 14,0	34,6 13,1	283 214
5 7	64,7 58,0	6,2 5,6	29,0 36,4	241 269	4. 6	64,5 57,8	12,4 11,1	23,1 31,1	242 270
$13-16-2 \\ 4$	78,0 68,4	8,0	14,0 24,6	200 228	8 13—31—1	52,4 77,6	10,0 15,4	37,6	298 201
6 8	60,9 54,9	6,2 5,6	32,8 39,4	256 284	3 5	68,1	13,5 12,1	18,3	229 257
13-17-1	83,4 72,6	9,1 7,9	7,5 19,5	187 215	7 13-32-2	54,7 72,2	10,9 14,8	34,4	285 216
5 7	64,2 57,6	7,0 6,3	28,8 36,1	243 271	4 6	63,9 57,3	13,1 11,8	23,0 30,9	244 272
13-18-2	77,2 67,8	8,9 7,8	13,9 24,3	202 230	8	52.0	10,7	37,3 13,7	300 204
6	60,5	7.0	32,5	258	4 6	82,3 72,4 64,6	3,4	24,1 32,3	232 260
13-19-1	54,5 82,5	6,3	39,2	286 189	8	58,3	2,8	38,9	288 191
3 5	71,9 63,7	8,7	19,3 28,6	217 245	14-9-1	88,0	4,7	7,3	219
7 13—20—2	57,1 76.5	7,0 9,8	35,9 13,7	273 204	5 7	68,0	3,6	28,3 35,6	247 275
4 6	67,2	8,6	24,1 32,3	232 260	14-10-2	81,6 71,8	4,8	13,6 23,9	206 234
8 13-21-1	54,2	6,9	38,9	288 191	6 8	64,1 57,9	3,8	32,1 38,6	2 62 2 90
3 5	71,2 63,2	9,6	19,2 28,3	219 247	14-11-1	87,0 76,0	5,7	7,2	193 221
7 13—22—2	56,7 75,7	7,6	35,6 13,6	275 206	5 7	67,5	4,4	28,1 35,4	249 277
4	66,7	9,4	23,9	234	14-12-2	80,8 71,2	5,8 5,1	13,4 23,7	208 236
6 8	59,4 53,8	8,4	32,1 38,6	262 290	6	63,6	4,5	31,8	264 292
13-23-1	80,8 70,6	$\begin{vmatrix} 11,9\\10,4 \end{vmatrix}$	7,2	193 221	14-13-1	86,1	6,7	7,2	195 223
5 7	62,6	9,2	28,1 35,4	249 277	3 5	75,3 66,9	5,2	27,9	251 279
13-24-2 4	75,0	11,5	13,5 23,7	2 08 2 36	14-14-2	60,2 80,0	4,6	13,3	210 238
6 8	59,1 53,4	9,1	31,8	264 292	6	70,6	5,9	23,5	266
13-25-1	80,0	12,8 11,2	7,2 18,8	195 223	8 14—15—1	57,1 85,3	4,8	38,1	294 197
5	62,1	10,0	27,9 35,1	251 279	3 5	74,6	6,7 5,9	18,7 27,7	225
13-26-2	74,3	12,4 10,9	13,3 23,5	210 238	14-16-2	59,8	5,3 7,5 6,7	34,9 13,2	281
4	65,5 58,6	9,8	31,6	266 294	4 6	70,0 62,7	6,7	23,3 31,3	240 268
13—27—1	53,1 79,2	8,8 13,7	38,1	197	8 14-17-1	56,7 84,4	5,4	37,8	296 199
3 5	69,3 61,6	12,0 10,7	18,7 27,7	225 253	3 5	74,0 65,9	7,5 6,7	18,5 27,4	227 255
$7 \\ 13-28-2$	55,5 73,6	9,6	34,9 13,2	281 212	7	59,4	6,0	34,6 13,1	283 214
4 6	65,0 58,2	11,7	23,3 31,3	240 268	14-18-2	69,4	7,4	23,1	242 270
8	52,7	9,5	37,8	2 96	6	02,2	1 0,1	32,1	

C-H-N	C %	H °/ ₀	N º/0	M. G.	C-H-N	C º/o	H º/o	N º/o.	M. G.
14-18-8 14-19-1 3	56,4 83,6 73,4	6,0 9,4 8,3	37,6 7,0 18,3	298 201 229	$\begin{array}{ c c c c c }\hline 14-33-5 & 7 \\ 15-8-2 & \end{array}$	62,0 56,2 83,3	12,2 11,0 3,7	25,8 32,7 13,0	271 299 216
5 7 14—20—2	65,4 58,9 77,8	7,3 6,7	27,2 34,4	257 285	8	73,8	3,3 2,9	22,9 30,9	244 272
4	68,8	9,2 8,2 7,3	13,0 23,0 30,9	216. 244 272	15-9-1 3	60,0 88,7 77,9	2,7 4,4 3,9	37,3 6,9 18.2	300 203 231
$14-21-1 \\ 3$	56,0 82,8 72,7	6,7 10,3 9,1	$ \begin{array}{c} 37,3 \\ 6,9 \\ 18,2 \end{array} $	300 203 231	5 7	69,5	3,5 3,1	27,0 34,1	259 2 87
5 7	64,9 58,5	8,1 7,3	27,0 $34,2$	2 59 2 87	15-10-2	82,6 73,2 65,7	$egin{array}{c} 4,6 \\ 4,1 \\ 3,6 \\ \end{array}$	12,8 22,7 30,7	218 246 274
14-22-2 4 6	77,1 68,3 61,3	10,1 8,9 8,0	12,8 22,7 30,7	218 246 274	15—11—1 3	59,6 87,8 77,3	3,3 5,4 4,7	37,1 6,8 18,0	302 205 233
8 14-23-1 3	55,6 82,0 72,1	7,3	37,1 6,8	302 205	5 7	69,0	4,2 3,8	26,8 33,9	261 289
5 7	64,4 58,1	9,9 8,8 8,0	18,0 26,8 33,9	233 261 289	15—12—2 4 6	81,8 72,6 65,2	5,4 4,8 4,3	12,7 22,6 30,4	220 248 276
14—24—2 4 6	76,4 67,7 60,9	10,9 9,7 8,7	12,7 22,6 30,4	220 248 276	15—13—1 3	59,2 87,0 76,6	3,9 6,3	36,8 6,6	304 207
8 14-25-1 3	55,3 81,2	7,9 12,1	36,8 6.7	304 207	5 7	68,4 61,8	5,5 4,9 4,5	17,9 26,6 33,7	235 263 291
5 7	71,5 63,9 57,7	10,6 9,5 8,6	17,9 26,6 33,7	235 263 291	$egin{array}{cccccccccccccccccccccccccccccccccccc$	81,1 72,0 64,7	6,3 5,6 5,0	12,6 22,4 30,2	222 250 278
14-26-2 4 6	75,7 67, 2 60,4	11,7 10,4 9,4	12,6 22,4 30,2	222 250 278	8 15—15—1	58,8 86,1	$\frac{4,6}{7,2}$	36,6 6,7	306 209
8 14-27-1	54,9	8,5	36,6	306 2 09	3 5 7	76,0 67,9 61,4	6,3 5,7 5,1	17,7 26,4 33,4	237 265 293
3 5 7	70,9 63,4 57,3	11,4 10,2 9,2	17,7 26,4 33,5	237 265 293	15—16—2 4 6	80,4 71,4 64,3	7,1 6,3 5,7	12,5 22,2 30,0	224 252 280
14-28-2 4 6	75,0 66,7 60,0	12,5 11,1 10,0	$12,5 \\ 22,2$	$\frac{224}{252}$	8 15—17—1	58,4 85,3	5,2 8,1	36,4	308 211
8" 14-29-1	54,5 79,6	9,1	30,0 36,4 6,6	280 308 211	3 5 7	75,3 67,4 61,0	7,1 6,4 5,8	17,6 26,2 33,2	239 267 295
3 5 7	70,3 62,9 56,9	12,1 10,9 9,8	17,6 26,2 33,2	239 267 295	15—18—2 4 6	79,6 70,9 63,8	8,0 7,1 6,4	12,4 22,0 29,8	226 254 282
14-30-2	74,3 66,1	13,3	12,4 22,1	226 254	8 15—19—1	58,1 84,5	5,8 8,9	36,1	310 2 13
8 14 -31-1	59,6 54,2 78,9	10,6 9,7 14,4	29,8 36,1 6,6	282 310 213	3 5 7	74,7 66,9 60,6	7,9 7,1 6,4	17,4 26,0 33,0	241 269 297
3 5 7	69,7 62,4 56,6	12,9 11,5 10,4	17,4 26,0 33,0	241 269 297	15-20-2 4 6	78,9 70,3 63,4	8,8	12,3	228 256
14-32-2 4 6	73,7 65,5	14,0 12,5	12,3 21,9	228 256	8 15—21—1	57,7 83,7	7,0 6,4 9,8	29,6 35,9 6,5	284 312 215
8 14-33-1	59,1 53,8 78,1	11,3 10,3 15,3	29,6 35,9 6,5	284 312 215	3 5 7	74,1 66,4 60,2	8,6 7,7 7,0	17,3 25,8 32,8	243 271 299
3	69,1	13,6	17,3	243	15-22-2	78,3	9,6	12,1	2 30

-									
C—H—N	C %	H °/ ₀	N º/o	M.G.	C-H-N	C º/o	H º/0	N º/o	M.G.
15-22-4	69,8	8,5	21,7	258	16-11-1	88,5	5,1	6,4	217
6	62,9	7,7	29,4	286	3	78,4	4,5	17,1	245
8 15-23-1	57,3 82,9	7,0	35,7 6,4	314	5	70,3	4,0	25,6	273
3	73,5	9,4	17,1	217 245	7 16—12—2	63,8 82,8	3,6 5,2	32,6 12,0	301 232
5	65,9	8,4	25,6	273	4	73,9	4,6	21,5	260
7	59,8	7,6	32,6	301	6	66,6	4,2	29,2	288
15-24-2	77,6 69,2	10,3	12,1 21,5	232	8	60,8	3,8	35,4	316
6	62,5	8,3	29,2	288	3	87,7 77,7	5,9 5,3	6,4	219 247
8	57,0	7,6	35,4	316	5	69,8	4,7	25,4	275
15-25-1	82,2	11,4	6,4	219	7	63,4	4,3	32,3	303
3 5	72,9 65,5	10,1 9,1	17,0 25,4	247 275	16—14—2	82,0	6,0	12,0	234 262
7	59,4	8,3	32,3	303	6	73,3 66,2	5,3 4,8	21,4 29,0	290
15-26-2	76,9	11,1	12,0	234	8	60,4	4,4	35,2	318
4	68,7	9,9	21,4	262	10	55,5	4,0	40,5	346
6	62,1 56,6	8,9 8,2	29,0	290 318	16—15—1 3	86,9 77,1	6,8	6,3	221 249
15-27-1	81,4	12,2	6,3	221	5	69,3	5,4	25,3	277
3	72.3	10,8	16,9	249	7	62,9	4,9	32,1	305
5 7	65,0 59,0	9,7	25,3	277	16-16-2	81,3	6,8	11,9	236
15-28-2	76,3	8,8	32,1 11,8	305 236	4 6	72,7 65,7	6,1 5,5	21,2 28,8	264 292
4	68,2	10,6	21,2	264	s s	60,0	5,0	35,0	320
6	61,6	9,6	28,8	292	16-17-1	86,1	7,6	6,3	223
8 15—29—1	56,2 80,7	8,7 13,0	35,0	320 223	3 5	76,5	6,8	16,7 25,1	251 279
3	71,7	11,6	6,3 16,7	251	7	68,8 62,5	5,5	31,9	307
5	64,5	10,4	25,1	279	16-18-2	80,6	7,6	11,8	238
7	58,6	9,4	31,9	307	4	72,2	6,8	21,0	266
15-30-2 4	75,6 67,7	12,6 11,3	11,8 21,0	238 266	6 8	65,3 59,6	6,1 5,6	28,6 34,8	294 322
6	61,2	10,2	28,6	294	16-19-1	85,3	8.4	6,2	225
8	55,9	9,3	34,8	322	3	75,9	7,5	16,6	253
15-31-1	80,0	13,8	6,2	225	5 7	68,3	6,8	24,9 31,7	281 309
3 5	71,2 $64,0$	12,2 11,0	16,6 24,9	253 281	16-20-2	62,1 80,0	8,3	11,7	240
7	58,2	10.0	31,7	309	4	71,7	7,4	20,9	268
15-32-2	75,0	13,3	11,7	240	6	64,9	6,7	28,4	296
4	67,2 60,8	11,9 10,8	20,9 28,4	268 296	8 16—21—1	59,3 84,6	6,2 9,2	34,5 6,2	324 227
6 8	55,6	9,9	34,5	324	3	75,3	8,2	16,5	255
15-33-1	79,3	14,5	6,2	227	5	67.8	7,4	24,7	283
3	70,6	12,9	16,4	255	7	61,7	6,7 9,1	31,5 11,6	311 242
5 7	63,6	11,7 10,6	24,7 31,5	283 311	16-22-2	79,3	8.1	20,7	270
15-34-2	57,9 74,4	14,0	11,6	242	6	64,4	7,4	28,2	298
4	66,7	12,6	20,7	270	8	58,9	6,7	34,3	326
6	60,4	11,4	28,2	298	16-23-1	83,8	10,0	6,1 16,3	229 257
8 16-9-1	55,2 89,3	$10,4 \\ 4,2$	34,4 6,5	326 215	5 5	74,7 67,4	8,9 8,1 7,3	24,5	285
3	79,0	3,7	17,3	243	7	61,4	7,3	31,3	313
5	70,8	3,3	25,8	271	16-24-2	78,7	9,8	11,5 20,6	244 272
7	64,2	3,0	32,8	299 230	$\frac{4}{6}$	70,6	8,8 8,0	28,0	300
16—10—2 4	83,5 74,4	4,3 3,9	12,2 21,7	258	8	58,5	7,3	34,2	328
6	67,1	3,5	29,4	286	16-25-1	83,1	10,8	6,1	231
8	61,1	3,2	35,7	314	3	74,1	9,6	16,2	259

C-H-N	C º/o	H °/ ₀	N º/o	M.G.	C—H—N	C º/o	H º/o	N º/o	M.G.
16-25-5	66,9	8,7	24,4	287	17-13-3	78,8	5,0	16,2	2 59
7 16 – 26–2	61,0	7,9	31,1 11,4	315 246	5 7	71,1	4,5	24,4	287
10-20-2	70,1	9,5	20,4	274	17-14-2	64,8	4,1 5,7	31,1 11,4	315 246
6	63.6	8.6	27,8	302	4	74,4	5,1	20,5	274
10 07 1	58,2	7,9	33,9	330	' 6	67,6	4.6	27,8	302
$16-27-1 \\ 3$	82,4	11,6 10,3	6,0 16,1	233 261	8 17-15-1	61,8 87,6	4,2 6,4	33,9	330 233
5	66,4	9,3	24,2	289	. 3	78,1	5.7	16,1	261
7 16—28—2	60,6	8,5 11,3	30,9	317	5	70,6	5.2	24,2	289
10-20-2	69,6	10,1	11,3 20,3	248 276	$7 \\ 17-16-2$	64,4 82,2	4,7 6,4	30,9 11,3	317 24 8
6	63,2	9,2	27,6	304	4	73,9	5,8	20,3	276
16 90 1	57,8	8,4	33,7	332	6	67,1	5,3	27,6	304
16-29-1 3	81,7	12,3 11,0	6,0 16,0	235 2 63	8 17—17—1	61,4 86,8	4,8 7,2	33,7 6,0	332 2 35
5	66,0	10,0	24,0	291	3	77,6	6,5	15,9	26 3
7 16-30-2	60 ,2 76,8	9,1 $12,0$	30,7	319 2 50	5	70,1	5,8	24,0	291
10-30-2	69,1	10,8	11,2 $20,1$	278	$\begin{array}{c} 7\\17-18-2\end{array}$	64,0 81,6	5,3 7,2	30,7 11,2	319 250
6	62,7	98	27,4	306	4	73,4	6,5	20,1	278
8 16—31—1	57,5	9,0	33,5	334	6	66,7	5.9	27,4 33,5	306
3	81,0 72,5	11,7	5,9 15,8	237 265	8 17—19—1	61,1 86,1	5,4 8,0	55,5 5,9	334 237
5	65,5	10,6	23,9	2 93	3	77,0	7.2	15.8	265
7 16—32—2	59,8 76,2	9,6 12,7	30,5 11,1	321 252	5 7	69,6	6,5	23,9	293
4	68.6	11,4	20,0	280	17-20-2	63, 5 80,9	5,9 7,9	30,5 11,1	321 252
6	62.3	10,4	27,3	308	4 : 4	- 72,9	7,1	20,0	2 80
8 16—33—1	57,1 80,3	9,5 13,8	33,3 5,9	3 36 2 39	6 8	$\begin{array}{c} 66,2\\ 60,7\end{array}$	6,5	27,3 33,3	308
3	71,9	12,3	15,7	267	17-21-1	85,3	5,9 8,8	5,8	336 2 39
5	65,1	11,2	23,7	295	3	76,4	7,9	15,7	267
7 16-34-2	59,4 75,6	10,2 $13,4$	30,3	3 2 3 2 54	5 7	69, 2 63, 2	7,1	23,7 30,3	295 323
4	68.1	12,1	19,8	282-	17-22-2	80,3	6,5 8,7	11,0	254
6	61,9	11,0	27,1	310	4	72,3	7,8	19,9	2 82
8 16351	56,8 79,6	10,1 14,5	33,1	338 241	6 8	65,8 60,3	7,1	27,1	310 338
3,	71,4	13,0	5,8 15,6	269	17-23-1	84,6	6,5 9,5	33,1 5,8	241
5	64.6	11,8	23,6	297	3	75.8	8.5	15.6	2 69
7 17—9—1	59,1 89,9	10,8	30,1 6,2	$\begin{array}{c c} 325 \\ 227 \end{array}$	5 7	68,7 62,8	7,7 7,1	23,6 30,1	297 325
3	80,0	3.5	16,5	255	17-24-2	79,7	9,4	10.9	256
5	72,1	3,2 2,9 4,1	24,7	283	4	71,8	8,4	19,7	284
7 17-10-2	65,6 84,3	2,9	31,5 11,6	$\frac{311}{242}$	8	65,4 60,0	7,7 7,0	26,9 32,9	312 340
4	75,6	3,7	20,7	270	17-25-1	83,9	10,3	5.8	24 3
6	68,4	3.4	28,2	298	3	75,3	9,2	15.5	271
8 17—11—1	62,6 89,1	3,1 4,8	34,3 6,1	326 229	5 7	68,2 62,4	8,3 7,6	23,4 30,0	2 99 3 2 7
3	79,4	4,3	16,3	257	17-26-2	79,1	10,1	10.8	25 8
5	71,6	3,8	24,6	285	· · · 4	. 71,3	9,1	19,6	286
7	65 ,2 83 , 6	3,5 4,9	31,3 11,5	$\begin{array}{c c} 313 \\ 244 \end{array}$	6 8	65,0 59,6	8,3	26,7 32,7	$\frac{314}{342}$
4	75,0	4,4	20,6	272	17-27-1	83,3	11,0	5,7	245
6	68.0	4,0	28,0	300	3	74,7	9,9	15,4	2 73
8 17—13 —1	62,2 88,3	3,7 5,6	$\begin{array}{c c} 24,1 \\ 6,1 \end{array}$	$\frac{328}{231}$	5 7	67,8 62,0	9,0	23,2 29,8	301 3 2 9
	00,0	0,0	0,1	201	,	02,0	0,2	20,0	020

C—H—N	C º/0	H º/0	N º/o	M. G.	C—H—N	C º/0	H 0/0	N º/0	M. G.
17—28—2	78,5	10,8 9,7	10,8	260	18-11-7	66,4	3,4	30,2	325
4	70,8	9,7	19,4	288	18-12-2	84,4	4,7	10,9	256
6 8	64,6 59,3	8,8	26,6	316	4	76,0	4,2	19,7	284
17-29-1	82,6	11,7	32,6 5,7	344 247	6 8	69,2	3,8	26,9	312
3	74,2	10,5	15,3	275	18-13-1	63,5 88,9	3,5 5,3	32,9 5,8	340 243
5	67,3	9,6	23,1	303	3	79,7	4,8	15,5	271
7 17—30—2	61,6	8,7	29,6	331	5	$1 \cdot 72.2$	4,3	23,4	299
4	77,9	11,4	10,7 $19,3$	262 290	7	66,1	4,0	29,9	327
6	64,1	9,4	26,4	318	18—14—2 4	83,7 75,5	5,4	10,8	258
8	58,9	8,7	32,4	346	6	68,8	4,9 4,4	19,6 26,7	286 314
17-31-1	81,9	12,4	5,6	249	8	63,2	4,1	32,7	342
3 5	73,6	$11,2 \\ 10,2$	15,2	277	18151	88,2	6,1	5,7	245
7	66,9 61,3	9,3	22,9 29,4	305 333	3	79,1	5,5	15,4	273
17-32-2	77,3	12,1	10,6	264	5 7	71,8 65,7	5,0 4 ,5	23,2 29,8	301 329
4	69,9	10,9	19,2	292	18-16-2	83,1	6,1	10,8	260
6	63,7	10,0	26,2	320	4	75,0	5,6	19,4	288
8 17—33—1	58,6	9,2	32,2	348	6	68,3	5,1	26,6	316
3	81,3 73,1	13,1 11,8	5,6	251	8	62,8	4,6	32,6	344
5	66,4	10,7	15,1 22,8	279 307	18—17—1 3	87,5 78,5	$6,9 \\ 6,2$	5,6 15,3	247 275
7	60,9	9,8	29,2	335	5	71,3	5,6	23,1	303
17-34-2	76,7	12,8	10,5	266	7	65,2	5,1	29,6	331
4	69,4	11,6	19,0	294	18-18-2	82,4	6.9	10,7	262
6 8	63,3 58,3	10,6	26,1	322	4	74,5	6,2	19,3	290
17-35-1	80,6	9,7 13,8	32,0 5,5	350 253	6 8	67,9 62,4	5,7 5,2	26,4 32,4	318 346
3	72,6	12.4	14,9	281	18-19-1	86,7	7,6	5,6	249
5	66,0	11,3	22,6	309	3	78,0	6,9	15,1	277
7	60,5	10,4	29,1	337	5	70,8	6,2	22,9	305
17-36-2	76,1 68,9	13,4 12,2	10,4 18,9	268 296	7 18 – 20–2	64,9 81,8	5,7 7,6	29,4 10,6	$\frac{333}{264}$
6	63,0	11,1	25,9	324	10-20-2	74,0	6,8	19,2	204
8	58,0	10,2	31,8	352	6	67,5	6.2	26,2	320
17-37-1	80,0	14,5	5,5	255	8	62,1	5,7	32,2	348
3 5	72,1	13,1	14,8	283	18-21-1	86,0	8,4	5,6	$\frac{251}{279}$
7	65,6 60,2	11,9 10,9	22,5 28,9	311 339	3 5	77,4 70,3	7,5 6,8	$\begin{array}{c c} 15,0 \\ 22,9 \end{array}$	307
17-38-2	75,5	14,1	10,4	270	7	64,5	6,3	29,2	335
4	68,4	12.7	18,8	298	18-22-2	81,2	8.3	10,5	266
6	62,6	11,6	25,8	326	4	73,5	7,5	19,0	$\frac{294}{322}$
8 18—8—2	57,6	10,7	31,6	354 252	6 8	67,1	6,8	$\begin{array}{c c} 26,1 \\ 32,0 \end{array}$	350
4	85,7 77,1	3,2 2,9	11,1 20,0	280	18-23-1	85,4	9,1	5,5	253
6	70,1	2,6	27,3	308	3	76,9	8,2	14,9	281
8	64,3	2.4	33,3	336	5	69,9	7,4	22,6	309
18-9-1	90,4	3,8	5,8	239	7	64,1	6,8	29,1 10,4	337 2 68
3 5	80,9	3,4	15,7	267 295	18-24-2	80,6 73,0	9,0	18,9	296
5 7	73,2 66,9	3,0 2,8	23,7 30,3	323	6	66,7	7,4	25,9	324
18-10-2	85,0	3,9	11,0	254	8	61,3	6,8	31,8	352
4	76,6	3,5	19,8	282	18-25-1	84,7	9,8	5,5	255
6	69,7	3,2	27,1	310	3 5	76,3 69,4	8,8	14,8 22,5	283 311
8 18—11—1	63,9 89,6	2,9	33,1 5,7	338 241	7	63,7	7,4	28,9	339
3	80,3	4,0	15,6	269	18-26-2	80,0	9,6	10,4	270
5	72,7	3,7	23,6	297	4	72,4	8,7	18,8	2 98
1		, ,		-			,		

C-H-N										
8 61.0 7,3 31.6 354 5 66.1 12,5 21,4 327 3 75.8 9,5 14.7 285 7 60.8 11.6 27.6 38.7 8 9.5 14.7 28.5 18.2 2.7 7.6 3.3 7.9 28.7 341 4 8.8 11.4 17.8 34.2 18.2 2.7 4.0 10.3 272 8 6.8 11.4 17.8 34.5 34.2 3.2 8 6.6 9.8 5.2 2.6 3.8 3.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 7.7 8.1 3.7 3.7 3.7 3.0 1.8 4.4 1.1 4.0 2.7 9.0 1.2 2.7 3.0 1.3 3.0 3.7 3.7 3.0 3.3 4.7 3.6 3.4 2.8 3.4 3.6 3.4 3.4 3.4 3.4 3.4 3	C-H-N	C º/o	H º/o .	N 0/0-	M.G.	C-H-N	C º/o	H °/0	N º/o	M.G.
S	18-26-6	66,2	8,0	25,8	326		72,2	13,7		
3 75,8 9,5 14,7 285 18-42-2 75,5 14,7 9,8 286 5 60,0 8,6 22,4 313 7 63,3 7,9 25,7 341 6 63,2 12,3 24,5 342 18-28-2 70,4 10,3 10,3 272 8 85,4 11,3 30,3 370 6 65,0 8,5 25,6 32,8 3 71,7 14,3 13,9 301 18-29-1 83,4 11,2 5,4 250 7 60,5 12,0 27,5 357 5 66,6 9,2 22,2 315 4 68,4 13,9 17,7 316 7 7 83,0 8,4 22,6 343 6 62,8 12,8 24,4 344 18-30-2 78,8 10,9 10,2 274 8 58,1 11,8 30,1 372 4 71,5 9,9 18,6 30,2 18-45-1 78,5 16,4 51, 275 66,5 9,1 25,4 330 8 60,3 8,4 31,3 388 5 65,2 13,6 24,1 331 18-31-1 82,7 11,0 5,4 281 37,7 60,2 12,5 27,3 350 3 18-31-1 82,7 11,0 5,4 281 37,7 60,2 12,5 27,3 350 3 18-32-2 78,3 11,6 10,1 276 8 6 62,4 13,3 24,3 346 18-32-2 78,3 11,6 10,1 276 8 8 60,0 8,9 31,1 360 4 77,0 4,0 18,9 366 18-32-2 78,3 11,6 10,1 276 5 8 60,0 8,9 31,1 360 4 77,0 4,0 18,9 366 18-33-3 8,1 12,6 5,3 26,3 32,1 19-12-2 85,1 4,5 4,5 4,5 28,3 18-34-2 77,7 12,2 10,1 278 5 60,0 27,1 13,3 27,3 28,3 36 6 64,4 3,4 3,5 5 67,7 10,3 21,9 319 19-13-1 89,4 5,1 5,2 53,3 26,3 6 64,7 10,2 25,1 334 19-12-2 85,1 4,5 0,4 26,8 36,0 3,3 32,9 31,3 36 6 4,6		61,0	7,3	31,6			66,1	12,5		
5 66,0 8,6 22,4 313 4 68,8 13,4 17,8 314 7 63,3 7,9 28,7 341 6 63,2 12,3 24,5 342 18-28-2 79,4 10,3 10,3 272 8 58,4 11,3 30,3 370 6 65,9 8,5 25,6 328 3 71,7 14,3 13,9 301 18-29-1 83,4 11,2 5,4 250 3 71,7 14,3 13,9 301 18-29-1 83,4 11,2 5,4 250 5 65,6 13,1 21,3 329 18-29-1 83,4 11,2 5,4 250 18-44-2 75,0 15,3 9,7 288 50,7 7,8 31,5 356 5 65,6 13,1 21,3 329 18-39-2 78,8 0,9 22,2 315 6 62,8 12,8 24,4 344 18-30-2 78,8 10,9 10,2 274 8 58,1 11,8 30,1 372 4 71,5 9,9 18,6 302 18-45-1 78,5 16,4 5,1 275 6 65,5 9,1 25,4 313 358 5 65,2 13,6 21,3 303 8 60,3 8,4 31,3 358 5 65,2 13,6 21,3 303 8 60,3 8,4 31,3 358 5 65,2 13,6 21,3 31 18-31-1 82,7 11,9 5,4 261 3 74,7 10,7 14,5 250 18-46-2 74,5 15,9 9,0 20,4 344 444 71,1 10,5 14,5 317 4 67,9 14,5 17,6 318 18-32-2 78,3 11,6 10,1 276 8 57,8 12,3 29,9 374 4 71,1 10,5 14,4 304 19-11-1 90,1 4,5 17,6 318 18-32-2 78,3 11,6 10,1 276 8 57,8 12,3 29,9 374 4 71,1 10,5 14,4 291 8 64,8 3,4 31,8 352 18-34-2 77,7 11,2 13,3 14,4 291 8 64,8 3,4 31,8 352 18-34-2 77,7 12,2 10,1 278 5 5,3 6 60,0 8,9 31,1 360 6 70,4 3,7 25,9 324 345 6 64,7 10,2 25,1 349 19-12-2 85,1 4,5 10,4 268 8 60,0 8,9 31,1 360 6 7,7 6,0 2,3 9,5 25,2 347 3 80,6 4,6 14,8 283 18-34-2 77,7 12,2 10,1 278 5 5,3 6 69,9 4,3 25,8 39,5 18-34-2 77,7 12,2 10,1 278 5 5,3 80,6 4,6 14,8 283 18-34-2 77,7 12,2 10,1 278 5 66,6 69,9 4,3 25,8 326 6 64,7 10,2 25,1 349 19-13-1 89,4 5,1 5,5 255 316 66,5 10,0 25,1 349 344 345 345 345 34		75.8	10,5	5,4 14.7			75.5	11,0	9.8	
The color of the			8,6	22,4	313	4	68.8	13,4	17,8	
4 72.0 9.3 18.7 300 18-43—1 79.1 15.7 5.1 273 6 6 65.9 8.5 25.6 328 8 60,7 7.8 31,5 356 18—29—1 83,4 11,2 5.4 250 3 75,2 10,1 14,6 287 5 68,6 9.2 22,2 315 7 60,5 12,0 27,5 357 18—30—2 78,8 10,9 10,2 274 4 71,5 9.9 18,6 302 4 71,5 9.9 18,6 302 6 65,5 9.1 25,4 330 8 60,3 8,4 31,3 358 8 60,3 8,4 31,3 358 8 60,3 8,4 31,3 358 18—31—1 82,7 11,9 5,4 261 3 74,7 10,7 14,5 289 5 68,1 9,8 22,1 317 7 62,6 9,0 28,4 345 6 62,8 13,3 24,3 366 18—32—2 78,3 11,6 10,1 276 8 60,1 9,8 22,1 317 6 8 60,1 9,8 22,1 317 7 62,6 9,0 8,9 31,1 360 18—33—1 82,1 12,6 5,3 263 8 60,0 8,9 31,1 360 18—33—1 82,1 12,6 5,3 263 8 60,0 8,9 31,1 360 18—33—1 82,1 12,6 5,3 263 8 60,0 8,9 31,1 360 18—33—1 82,1 12,6 5,3 263 8 60,0 8,9 31,1 360 18—33—1 82,1 12,6 5,3 263 8 60,0 8,9 31,1 360 18—33—1 82,1 12,6 5,3 263 8 60,0 8,9 31,1 360 18—33—1 82,1 12,6 5,3 263 8 60,0 8,9 31,1 360 18—33—1 82,1 12,6 5,3 263 8 60,0 8,9 31,1 360 18—33—1 82,1 12,6 5,3 263 8 60,0 8,9 31,1 360 18—33—1 82,1 12,6 5,3 263 8 60,0 8,9 31,1 360 18—34—2 77,7 12,2 10,1 278 18—34—2 77,7 12,2 10,1 278 18—34—2 77,7 12,2 10,1 278 18—34—2 77,7 12,2 10,1 278 18—35—7 62,3 9,5 28,2 347 18—34—2 77,7 12,2 10,1 278 18—35—1 81,5 13,2 5,5 265 18—36—2 77,1 12,9 10,0 28,1 349 18—38—2 76,6 11,2 25,1 31,3 44 19—11—1 80,4 4,5 2,1 10,4 206 18—38—39,9 30,8 364 4 70,1 11,7 18,3 306 6 64,7 10,2 25,1 334 19—14—2 84,4 4,0 31,6 364 18—35—1 81,5 13,2 5,3 265 6 66,9 11,4 21,7 323 18—38—2 76,6 13,5 9,9 282 4 76,5 4,7 18,8 293 18—38—2 76,6 13,5 9,9 282 4 76,5 4,7 18,8 293 18—38—2 76,6 13,5 9,9 282 4 76,5 4,7 18,8 293 18—38—2 76,6 13,5 9,9 282 5 66,6 11,4 21,7 323 18—38—2 76,6 13,5 9,9 282 18—38—2 76,6 13,5 9,9 282 18—39—1 80,3 14,5 5,2 269 6 63,5 11,8 24,7 310 18—30—1 80,6 6,6 5,4 259 7 61,6 10,5 27,9 312 7 61,6 10,5 27,9 312 7 61,6 10,5 27,9 312 7 61,6 10,5 27,9 312 7 61,6 10,5 27,9 312 7 61,6 10,5 27,9 312 7 61,6 10,5 27,9 312 7 61,6 10,5 27,9 312 7 61,6 10,5 27,9 312 7 61,6 10,5 27,9 312 7 61,6 11,5 22,6 33 3 78,9 45,9 28,6 34,3 31,5 38 3 78,9 6,6 14,5 22,2 315 4 69,7 10,0 22,1 317 6 62,5 10,0 10,0 28,1 349 19—10,			7,9	28,7	341		63,2	12,3		
6 65,9 8,5 25,6 328 3 71,7 14,3 13,9 301 18-29-1 83,4 11,2 5,4 250 7 60,5 12,0 27,5 357 5 68,6 9,2 22,2 315 6 83,0 8,4 28,6 343 6 62,8 12,8 24,4 34,1 18-30-2 78,8 10,9 10,2 274 6 85,5 9,1 25,4 330 8 62,5 11,8 30,1 372 8 60,3 8,4 31,3 358 5 65,2 13,6 21,1 331 18-31-1 82,7 11,9 5,4 261 3 7 60,2 12,5 27,3 350 5 68,1 9,8 22,1 317 7 62,6 9,0 23,4 345 6 65,1 9,8 22,1 317 7 62,6 9,0 23,4 345 6 65,1 9,8 22,1 317 6 65,1 10,5 18,4 304 18-32-2 78,3 11,6 10,1 276 4 71,1 10,5 18,4 304 18-33-1 82,1 12,6 5,3 332 18-34-2 77,7 10,3 21,9 319 18-34-2 77,7 10,3 21,9 319 18-34-2 77,7 12,2 10,1 278 6 64,7 10,2 25,1 334 6 64,7 10,2 25,1 334 6 64,7 10,2 25,1 334 6 64,7 10,2 25,1 334 6 64,7 10,9 21,8 321 7 62,6 9,4 30,9 36,2 347 8 59,7 9,4 30,9 36,2 347 8 59,7 9,4 30,9 36,2 347 8 59,3 10,9 10,2 28,1 345 6 64,7 10,2 25,1 334 18-35-1 81,5 13,2 5,3 265 6 66,9 11,4 21,7 12,9 10,0 28,0 36 18-35-1 81,5 13,2 5,3 382 18-36-2 77,1 12,9 10,0 28,0 36 18-37-1 80,9 13,8 5,2 267 8 59,3 9,9 30,8 364 18-37-1 80,9 13,8 5,2 267 8 59,3 9,9 30,8 364 18-37-1 80,9 13,8 5,2 267 8 59,3 10,9 12,2 48,8 321 7 61,6 10,5 27,9 351 18-38-2 76,6 11,1 23,1 14,1 297 8 59,3 10,9 13,8 5,2 267 8 60,5 11,8 30,1 14,5 12,5 32,5 32,5 33,5 32,5 32,5 33,5 32,5 34,5 34,5 34,5 34,5 34,5 34,5 34,5 34		79,4	10,3	10,3			79.1	11,3	50,5	
18-29-1		65.9	8.5	25,6			71,7	14,3	13,9	
3 75,2 10,1 14,6 287 18—44—2 75,0 15,3 9,7 288 5 68,6 9,2 22,2 315 6 62,8 12,8 24,4 344 18—30—2 78,8 10,9 10,2 274 4 6,6 6,8 12,8 24,4 344 4 71,5 9,9 18,6 302 18—45—1 78,5 16,4 5,1 372 6 65,5 9,1 25,4 330 3 71,3 14,8 13,9 303 18—31—1 82,7 11,9 5,4 261 7 60,2 12,5 27,3 359 5 68,1 9,8 22,1 317 6 62,6 9,0 28,4 345 6 62,4 13,3 24,3 346 18—32—2 78,3 11,6 10,1 276 8 57,8 12,3 29,3 374 4 71,1 <td></td> <td>60,7</td> <td>7,8</td> <td>31,5</td> <td>356</td> <td></td> <td>65,6</td> <td>13,1</td> <td>21,3</td> <td></td>		60,7	7,8	31,5	356		65,6	13,1	21,3	
5 68,6 9,2 22,2 315 4 68,4 13,9 17,7 316 7 83,0 8,4 28,6 343 6 62,8 12,8 24,4 344 4 71,5 9,9 18,6 302 18-45-1 78,5 16,4 5,1 275 6 65,5 9,1 25,4 300 371,3 14,8 13,9 303 8 60,3 8,4 31,3 358 5 65,2 13,6 21,1 331 18-31-1 82,7 11,9 5,4 261 7 60,2 12,5 27,3 359 5 68,1 9,8 22,1 317 4 67,4 11,5 16,6 18,0 16,1 27,5 27,3 359 4 71,1 10,5 18,4 304 19-11-1 90,1 4,3 5,5 253 352 253 332 19-12-2 85,1 4,5 <td></td> <td>83,4</td> <td></td> <td>5,4</td> <td>259</td> <td></td> <td>75.0</td> <td></td> <td>27,5</td> <td></td>		83,4		5,4	259		75.0		27,5	
Toleran		68.6	9,2	22,2		4	68.4	13.9	17,7	
4 71,5 9,9 18,6 302 18-45-1 78,5 16,4 5,1 275 6 65,5 9,1 25,4 330 8 60,3 8,4 31,3 358 5 65,2 13,6 21,1 331 18-31-1 82,7 11,9 5,4 261 7 60,2 12,5 27,3 359 3 74,7 10,7 14,5 289 18-46-2 74,5 15,9 9,6 290 5 68,1 9,8 22,1 31,7 4 67,9 14,5 17,6 318 7 62,6 9,0 28,4 345 6 62,4 13,3 24,3 346 18-32-2 78,3 11,6 10,1 276 8 57,8 12,3 29,9 374 4 71,1 10,5 18,4 304 19-11-1 90,1 4,3 5,5 253 6 65,1 9,6 25,3 332 19-12-2 85,1 4,5 10,4 268 18-33-1 82,1 12,6 5,3 263 6 70,4 3,7 25,9 324 3 74,2 11,3 14,4 291 8 64,8 3,4 31,8 352 5 67,7 10,3 21,9 319 19-13-1 89,4 5,1 5,5 255 7 62,3 9,5 28,2 347 8 7 7 62,3 9,5 28,2 347 8 8 59,7 9,4 30,9 362 18-34-2 77,7 12,2 10,1 278 5 73,3 4,2 22,5 311 4 70,6 11,1 18,3 306 7 67,3 3,8 28,9 339 6 64,7 10,2 25,1 334 19-14-2 84,4 5,2 10,4 270 8 59,7 9,4 30,9 362 18-35-1 81,5 13,2 5,3 265 6 69,9 4,3 25,8 36 3 73,7 11,9 14,3 293 8 64,4 4,0 31,6 354 5 67,3 10,9 21,8 321 19-15-1 88,7 5,8 5,4 257 7 61,9 10,0 28,1 349 18-36-2 77,1 12,9 10,0 280 5 72,8 4,8 22,4 313 4 70,1 11,7 18,2 308 7 66,9 4,4 28,7 341 6 64,3 10,7 25,0 336 19-16-2 88,8 5,9 10,3 272 8 57 66,9 11,4 21,7 323 19-15-1 88,7 5,8 5,4 257 7 61,9 10,0 28,1 349 6 64,3 10,7 25,0 366 19-16-2 88,8 5,9 10,3 272 8 57 66,9 11,4 21,7 323 19-17-1 88,0 6,6 5,4 259 7 61,6 10,5 27,9 351 8 -38-2 77,1 12,9 14,3 293 8 64,4 4,0 31,6 354 5 66,3 11,2 24,8 338 19-18-2 83,2 6,6 10,2 274 8 69,7 12,3 18,0 310 7 66,5 4,9 25,6 328 3 73,7 11,9 14,3 293 8 64,4 4,0 31,6 354 5 66,3 10,7 25,0 366 19-16-2 83,8 5,9 10,3 272 8 6 63,9 11,4 21,7 323 19-17-1 88,0 6,6 5,4 259 7 61,6 10,5 27,9 351 8 -38-2 76,6 13,5 9,9 282 5 76,6 13,5 9,9 282 5 76,6 13,5 9,9 282 5 76,6 13,5 9,9 282 5 76,6 13,5 9,9 282 5 76,6 6,1,5 5,2 26,1 31,7 4,2 29,5 8 60,0 1,5 3,3 358 6 63,9 11,2 24,8 338 19-18-2 83,2 6,6 10,2 274 8 69,7 12,3 18,0 310 7 66,5 4,9 25,6 328 3 72,7 13,1 14,1 29,7 8 8 64,7 5,5 66,5 12,0 21,5 325 18-39-1 80,3 14,5 5,2 269 6 6 69,1 5,4 25,9 31,3 35,4 36,4 4 69,2 12,8 13,4 300 18-37-1 80,3 14,5 5,2 269 6 6 69,1 5,5 5,8 24,3 35,5 26,6 6 10,1 276 8 57,4 57,5 66,6 12,0 21,5 325 19-19-19-18-18-18,		83.0	8,4	28,6	343		62,8	12,8	24,4	
6 65,5 9,1 25,4 330 3 71,3 14,8 13,9 303 18—31—1 82,7 11,9 5,4 261 7 60,2 12,5 27,3 359 3 74,7 10,7 14,5 289 18—46—2 74,5 15,9 9,6 20,0 5 68,1 9.8 22,1 317 4 67,9 14,5 17,6 318 7 62,6 9.0 28,4 345 6 62,4 13,3 24,3 346 18—32—2 78,3 11,6 10,1 276 8 57,8 12,3 29,9 374 4 71,1 10,5 18,4 304 19—11—1 90,1 4,3 5,5 253 6 65,1 9,6 25,3 332 19—12—2 85,1 4,5 10,4 208 8 60,0 8,9 31,1 360 4 77,0 40 18,9 </td <td></td> <td>78,8</td> <td>10,9</td> <td>10,2</td> <td></td> <td></td> <td>58,1 78,5</td> <td>11,8</td> <td></td> <td></td>		78,8	10,9	10,2			58,1 78,5	11,8		
18-31-1		65.5	9,5	25,4	330		71,3	14,8	13,9	
3 744,7 10,7 14,5 289 18—46—2 74,5 15,9 9,6 29,0 5 68,1 9,8 22,1 317 4 67,9 14,5 17,6 318 18—32—2 78,3 11,6 10,1 276 8 57,8 12,3 29,9 374 4 71,1 10,5 18,4 304 19—11—1 90,1 4,3 5,5 253 6 65,1 9,6 25,3 332 19—12—2 86,1 4,5 10,4 208 8 60,0 8,9 31,1 360 4 77,0 4,0 18,9 396 18—33—1 82,1 12,6 5,3 263 6 70,4 3,7 25,9 324 5 67,7 10,3 21,9 319 19—13—1 89,4 5,1 5,5 255 7 62,3 9,5 28,2 347 3 80,6 4,6 14,8 283 18—34—2 77,7 12,2 10,1 278		60,3	8,4	31,3	358		65,2	13.6	21,1	
5 68,1 9,8 22,1 317 4 67,9 14,5 17,6 318 7 62,6 9,0 28,4 345 6 62,4 13,3 24,3 346 18—32—2 78,3 11,6 10,1 276 8 57,8 12,3 29,9 374 4 71,1 10,5 18,4 304 19—11—1 90,1 4,3 5,5 253 6 65,1 9,6 25,3 332 19—12—2 85,1 4,5 10,4 268 8 60,0 8,9 31,1 360 4 77,0 4,0 18,9 396 18—33—1 82,1 12,6 53 263 6 70,4 3,7 25,9 324 3 74,2 11,3 14,4 291 8 64,8 3,4 31,8 352 555 7 62,3 39,5 32,2 347 34,2 22,5 311		82,7	11,9				60,2	12,5	27,3	
7 62,6 9,0 28,4 345 6 62,4 13,3 24,3 346 18—32—2 78,3 11,6 10,1 276 4 71,1 10,5 18,4 304 6 65,1 9,6 25,3 332 19—11—1 90,1 4,3 5,5 253 6 65,1 9,6 25,3 332 19—12—2 85,1 4,5 10,4 268 8 60,0 8,9 31,1 360 4 77,0 4,0 18,9 366 18—33—1 82,1 12,6 5,3 263 6 70,4 3,7 25,9 324 3 74,2 11,3 14,4 291 8 64,8 3,4 31,8 352 5 67,7 10,3 21,9 319 19—13—1 89,4 5,1 5,5 255 7 62,3 9,5 28,2 347 3 80,6 4,6 14,8 283 18—34—2 77,7 12,2 10,1 278 5 73,3 4,2 22,5 311 4 70,6 11,1 18,3 306 7 67,3 3,8 28,9 339 6 64,7 10,2 25,1 334 19—14—2 84,4 5,2 10,4 270 8 59,7 9,4 30,9 362 4 76,5 4,7 18,8 298 18—35—1 81,5 13,2 5,3 265 6 69,9 4,3 25,8 326 5 67,3 10,9 21,8 321 18—36—2 77,1 12,9 10,0 28,1 349 6 64,3 10,7 25,0 336 19—15—1 88,7 5,8 5,4 25,7 7 61,9 10,0 28,1 349 6 64,3 10,7 25,0 336 19—16—2 83,8 5,9 10,3 272 8 59,9 9,9 30,8 364 4 76,5 4,7 18,8 298 18—37—1 80,9 13,8 5,2 267 8 5 9,3 9,9 30,8 364 4 70,1 11,7 18,2 308 7 66,9 4,4 22,4 313 6 64,3 10,7 25,0 336 19—16—2 83,8 5,9 10,3 272 8 5 66,6 9 11,4 21,7 323 7 61,6 10,5 27,9 351 8 64,0 4,5 31,5 366 19—16—2 83,8 5,9 10,3 272 8 5 66,5 12,0 21,5 32,5 14,2 29,5 8 64,0 4,5 31,5 366 18—39—1 80,3 14,5 5,2 269 7 61,6 10,5 27,9 351 8 66,5 12,0 21,5 32,5 14,2 29,5 8 64,0 4,5 31,5 366 18—39—1 80,3 14,5 5,2 269 6 69,1 5,4 25,4 330 3 72,7 13,1 14,1 29,7 8 63,7 5,0 31,3 358 5 66,5 12,0 21,5 32,5 19—17—1 87,4 5,9 14,6 287 7 61,2 11,0 27,8 353 3 78,9 6,6 14,5 29,6 32 18—40—2 76,6 14,1 9,9 284 5 71,9 6,0 22,1 31,7 4,6 69,2 12,8 17,9 312 7 66,1 5,5 28,4 345 6 63,5 11,8 24,7 340 19—20—2 82,6 7,2 10,1 276 8 58,7 10,9 30,4 368		68.1	9.8	22.1			67.9	14.5	17,6	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		62,6	9,0	28,4	345	6	62,4	13,3	24,3	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		78,3	11,6				57,8	12,3	29,9	
8 60,0 8,9 31,1 360 4 77,0 4,0 18,9 396 18-33-1 82,1 12,6 5,3 263 6 70,4 3,7 25,9 324 37,4 211,3 14,4 291 8 64,8 3,4 31,8 352 5 67,7 10,3 21,9 319 19-13-1 89,4 5,1 5,5 255 7 62,3 9,5 28,2 347 3 80,6 4,6 14,8 283 18-34-2 77,7 12,2 10,1 278 5 73,3 4,2 22,5 311 4 70,6 11,1 18,3 306 7 67,3 3,8 28,9 339 6 64,7 10,2 25,1 334 19-14-2 84,4 5,2 10,4 270 8 59,7 9,4 30,9 362 4 76,5 4,7 18,8 298 18-35-1 81,5 13,2 5,3 265 6 69,9 4,3 25,8 326 5 67,3 10,9 21,8 321 19-15-1 88,7 5,8 5,4 257 7 61,9 10,0 28,1 349 3 80,0 5,3 14,7 285 18-36-2 77,1 12,9 10,0 280 5 72,8 4,8 22,4 313 4 70,1 11,7 18,2 308 7 66,9 4,4 28,7 341 6 64,3 10,7 25,0 336 19-16-2 83,8 5,9 10,3 272 8 59,3 9,9 30,8 364 4 76,0 5,3 18,7 300 18-37-1 80,9 13,8 5,2 267 6 69,5 4,9 25,6 328 3 73,2 12,5 14,2 295 8 64,0 4,5 31,5 356 5 66,9 11,4 21,7 323 19-17-1 88,0 6,6 5,4 257 18-38-2 76,6 13,5 9,9 282 5 72,4 5,4 22,2 315 4 69,7 12,3 18,0 310 7 66,5 4,9 28,6 343 6 63,9 11,2 24,8 338 19-18-2 83,2 6,6 10,2 274 8 69,7 12,3 18,0 310 7 66,5 4,9 28,6 343 6 63,9 11,2 24,8 338 19-18-2 83,2 6,6 10,2 274 8 59,0 10,4 30,6 366 44 75,5 60,0 18,5 302 18-39-1 80,3 14,5 5,2 269 6 69,1 5,4 25,4 330 18-39-1 80,3 14,5 5,2 269 6 69,1 5,4 25,4 330 18-39-1 80,3 14,5 5,2 269 6 69,1 5,4 25,4 330 18-39-1 80,3 14,5 5,2 269 6 69,1 5,4 25,4 330 18-39-1 80,3 14,5 5,2 269 6 69,1 5,4 25,4 330 18-39-1 80,3 14,5 5,2 269 6 69,1 5,4 25,4 330 18-39-1 80,3 14,5 5,2 269 6 69,1 5,4 25,4			9.6				85.1	4,5	10.4	
3 74,2 11,3 14,4 291 8 64,8 3,4 31,8 352 7 62,3 9,5 28,2 347 3 80,6 4,6 14,8 283 18—34—2 77,7 12,2 10,1 278 5 73,3 4,2 22,5 311 4 70,6 11,1 18,3 306 7 67,3 3,8 28,9 339 6 64,7 10,2 25,1 334 19—14—2 84,4 5,2 10,4 270 8 59,7 9,4 30,9 362 4 76,5 4,7 18,8 298 18—35—1 81,5 13,2 5,3 265 6 69,9 4,3 25,8 326 3 73,7 11,9 14,3 293 8 64,4 4,0 31,6 354 5 67,3 10,0 28,1 349 3 80,0 5,3 14,7 285 18—36—2 77,1 12,9 10,0 280 5		60,0	8,9	31.1	360	4	77,0	4,0	18,9	396
5 67,7 10,3 21,9 319 19—13—1 89,4 5,1 5,5 255 18—34—2 77,7 12,2 10,1 278 5 73,3 4,2 22,5 311 4 70,6 11,1 18,3 306 7 67,3 3,8 28,9 339 6 64,7 10,2 25,1 334 19—14—2 84,4 5,2 10,4 270 8 59,7 9,4 30,9 362 4 76,5 4,7 18,8 298 18—35—1 81,5 13,2 5,3 265 6 69,9 4,3 25,8 326 5 67,3 10,9 21,8 321 19—15—1 88,7 5,8 5,4 257 7 61,9 10,0 28,1 349 3 80,0 5,3 14,7 285 18—36—2 77,1 12,9 10,0 280 5 72,8 4,8 22,4 314 6 64,3 10,7 25,0 336 <			12,6	5,3			70,4	3,7	25,9	324
7 62,3 9,5 28,2 347 3 80,6 4,6 14,8 283 18-34-2 77,7 12,2 10,1 278 5 73,3 4,2 22,5 311 4 70,6 11,1 18,3 306 7 67,3 3,8 28,9 389 6 64,7 10,2 25,1 334 19-14-2 84,4 5,2 10,4 270 8 59,7 9,4 30,9 362 4 76,5 4,7 18,8 298 18-35-1 81,5 13,2 5,3 265 6 69,9 4,3 25,8 326 5 67,3 10,9 21,8 321 19-15-1 88,7 5,8 5,4 257 7 61,9 10,0 28,1 349 3 80,0 5,3 14,7 285 18-36-2 77,1 12,9 10,0 280 5 72,8 4,8 22,4 313 4 70,1 11,7 18,2 308 7 </td <td></td> <td></td> <td>10.3</td> <td>21.9</td> <td>319</td> <td></td> <td>89.4</td> <td>5.1</td> <td>5,5</td> <td></td>			10.3	21.9	319		89.4	5.1	5,5	
4 70,6 11,1 18,3 306 7 67,3 3,8 28,9 339 8 59,7 10,2 25,1 334 19-14-2 84,4 5,2 10,4 270 8 59,7 9,4 30,9 362 4 76,5 4,7 18,8 298 18-35-1 81,5 13,2 5,3 265 6 69,9 4,3 25,8 326 3 73,7 11,9 14,3 293 8 64,4 4,0 31,6 354 5 67,3 10,9 21,8 321 19-15-1 88,7 5,8 5,4 257 7 61,9 10,0 28,1 34 380,0 5,3 14,7 285 18-36-2 77,1 12,9 10,0 280 5 72,8 4,8 22,4 313 4 70,1 11,7 18,2 308 7 66,9 4,4 28,7 341 6 64,3 10,7 25,0 336 19-16-2 83		62,3	9.5	28,2	347	3	80.6	4,6	14.8	283
6 64,7 10,2 25,1 334 19—14—2 84,4 5,2 10,4 270 8 59,7 9,4 30,9 362 4 76,5 4,7 18,8 298 18—35—1 81,5 13,2 5,3 265 6 69,9 4,3 25,8 326 5 67,3 10,9 21,8 321 19—15—1 88,7 5,8 5,4 257 7 61,9 10,0 28,1 349 3 80,0 5,3 14,7 285 18—36—2 77,1 12,9 10,0 280 5 72,8 4,8 22,4 313 4 70,1 11,7 18,2 308 7 66,9 4,4 28,7 341 6 64,3 10,7 25,0 336 19—16—2 83,8 5,9 10,3 272 8 59,3 9,9 30,8 364 4 76,0 5,3		77,7	12,2	10,1	278		73,3	4,2	22,5	
8 59,7 9,4 30,9 362 4 76,5 4,7 18,8 298 3 73,7 11,9 14,3 293 8 64,4 4,0 31,6 354 5 67,3 10,9 21,8 321 19-15-1 88,7 5,8 5,4 257 7 61,9 10,0 28,1 349 3 80,0 5,3 14,7 285 18-36-2 77,1 12,9 10,0 280 5 72,8 4,8 22,4 313 4 70,1 11,7 18,2 308 7 66,9 4,4 28,7 341 6 64,3 10,7 25,0 336 19-16-2 83,8 5,9 10,3 272 8 59,3 9,9 30,8 364 4 76,0 5,3 18,7 300 18-37-1 80,9 13,8 5,2 267 6 69,5 4,9 25,6 328 3 73,2 12,5 14,2 295 8		64.7	10.2				84.4	5.2		
3 73,7 11,9 14,3 293 8 64,4 4,0 31,6 354 5 67,3 10,9 21,8 321 19-15-1 88,7 5,8 5,4 257 7 61,9 10,0 28,1 349 3 80,0 5,3 14,7 285 18-36-2 77,1 12,9 10,0 280 5 72,8 4,8 22,4 313 4 70,1 11,7 18,2 308 766,9 4,4 28,7 341 6 64,3 10,7 25,0 336 19-16-2 83,8 5,9 10,3 272 8 59,3 9,9 30,8 364 4 76,0 5,3 18,7 300 18-37-1 80,9 13,8 5,2 267 669,5 4,9 25,6 328 3 73,2 12,5 14,2 295 864,0 4,5 31,5 356 5 66,9 11,4 21,7 323 19-17-1 188,0 6,6	8	59,7	9,4	30,9	362	1 4	76,5	4.7	18,8	298
5 67,3 10,9 21,8 321 19-15-1 88,7 5,8 5,4 257 18-36-2 76,9 10,0 28,1 349 3 80,0 5,3 14,7 285 18-36-2 77,1 12,9 10,0 280 5 72,8 4,8 22,4 313 4 70,1 11,7 18,2 308 5 72,8 4,8 22,4 313 4 70,1 11,7 18,2 308 7 66,9 4,4 28,7 341 6 64,3 10,7 25,0 336 19-16-2 83,8 5,9 10,3 272 8 59,3 9,9 30,8 364 4 76,0 5,3 18,7 300 18-37-1 80,9 13,8 5,2 267 6 69,5 4,9 25,6 328 3 73,2 12,5 14,2 295 8 64,0 4,5		81,5	13,2	5,3	265		69,9	4,3	25,8	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		67,3	10.9	21.8	321	19—15—1	88.7	5.8	5.4	
4 70,1 11,7 18,2 308 7 66,9 4,4 28,7 341 6 64,3 10,7 25,0 336 19-16-2 83,8 5,9 10,3 272 8 59,3 9,9 30,8 364 4 76,0 5,3 18,7 300 18-37-1 80,9 13,8 5,2 267 6 69,5 4,9 25,6 328 3 73,2 12,5 14,2 295 8 64,0 4,5 31,5 356 5 66,9 11,4 21,7 323 19-17-1 88,0 6,6 5,4 259 18-38-2 76,6 13,5 9,9 282 5 72,4 5,4 22,2 315 4 69,7 12,3 18,0 310 7 766,5 4,9 28,6 343 6 63,9 11,2 24,8 338 19-18-2 83,2 6,6 10,2 274 8 59,0 10,4 30,6 366 4<	-	61.9	10,0	28,1	349	3	80.0	5,3	14,7	285
6 64,3 10,7 25,0 336 19-16-2 83,8 5,9 10,3 272 18-37-1 80,9 13,8 5,2 267 6 69,5 4,9 25,6 328 3 73,2 12,5 14,2 295 8 64,0 4,5 31,5 356 5 66,9 11,4 21,7 323 19-17-1 88,0 6,6 5,4 259 7 61,6 10,5 27,9 351 3 79,4 5,9 14,6 287 18-38-2 76,6 13,5 9,9 282 5 72,4 5,4 22,2 315 4 69,7 12,3 18,0 310 7 66,5 4,9 28,6 343 6 63,9 11,2 24,8 338 19-18-2 83,2 6,6 10,2 274 8 59,0 10,4 30,6 366 4 75,5 6,0		77,1	12,9			5	72,8	4,8	22,4	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		64.3	10,7	25,0	336		83.8	5,9	10,3	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		59,3	9,9	30,8	364	2 1 1 1 1 4	76,0	5,3	18,7	300
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		73.2	13,8	5,2			69,5			
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	5 °	66,9	11,4	21,7	323		88.0	6.6		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		61.6	10,5	27,9	351	3	79,4	5,9	14,6	287
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		OO M		18.0	282	5	72,4			
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		63,9	11,2	24,8	338	19-18-2	83.2	6.6	10.2	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		09,0	10,4	30,6	366	4	75.5	6,0	18,5	302
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		72.7	14,5	5,2			69,1		25,4	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	5	66,5	12,0	21,5			87.4	7.3	5.3	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		61,2	11,0	27,8	353	3	78,9	6,6	14,5	289
6 63,5 11,8 24,7 340 19—20—2 82,6 7,2 10,1 276 8 58,7 10,9 30,4 368 4 75,0 6,6 18,4 304			14,1	9,9			71,9	6,0		
8 58,7 10,9 30,4 368 4 75,0 6,6 18,4 304		63,5	11.8	24.7		19-20-2	82.6	7.2		276
10-41-1 79,7 15,1 5,2 271 6 68,7 6,0 25,3 332		58,7	10,9	30,4	368	4	75,0	6,6	18,4	304
	10-41-1	19,7	15,1	5,2	271	6	68,7	6,0	25,3	332

			,						
C—H—N	C º/o	H º/o	N º/o	M.G.	C-H-N	C %	H º/0	N º/0	M.G.
10-20-8	63,3	5,5	31,1	360	19-35-5	68,5	10,5	210	1 220
19-21-1	86,7	8,0	5,3	263	7	63,1	9,7	21,0 $27,1$	333
3	78.3	7,2	14,4	291	19-36-2	78,1	12,3	9,6	292
5 7	71,5 65,7	6,6	21,9	319	4	71,2	11,2	17,5	320
19-22-2	82,0	6,1	28,2	347 278	6	65,5	10,3	24,1	348
4	74,5	7,2	18,3	306	19-37-1	60,6	9,6	29,8	376
6	68,3	6,6	25,1	334	3	81,7	13,3 12,0	5,0	279
8	63,0	6,1	30,9	362	5	68,1	11,0	13,7 20,9	307
19—23—1	86,0	8,7	5,3	265	7	62,8	10.2	27.0	365
3 5	77,8	7,8	14,3	293	19-38-2	77,6	12,9	9,5	294
7	65,3	7,2	21,8 28,1	321	4	70,8	11,8	17,4	322
19-24-2	81,4	8,6	10,0	280	8	65,1	10,8	24,0	350
4	74,0	7,8	18,2	308	19-39-1	60,3	10,1	29,6 5,0	378 281
6	67,8	7,1	25,0	336	3	73,8	12,6	13,6	309
8	62,6	6,6	30,8	364	5	67,6	11,6	20,8	337
19-25-1	85,4	9,3	5,3	267	7	62,5	10,7	26,8	365
3 5	77,3	8,5	$14,2 \\ 21.7$	295	19-40-2	77,0	13,5	9,4	296
7	65,0	7,1	27,9	323 351	4	70,4	12,3	17,3	324
19-26-2	80.8	9,2	9,9	282	6 8	64,8	11,4 10,5	23,8 29,5	352 380
4	73,5	8,4	18.1	310	19-41-1	80,6	14.5	4,9	283
6	67.4	7,7	24,8	338	3	73.3	13,2	13,5	311
8	62,3	7,1	30,6	366	5	67,3	12,1	20,6	339
19-27-1	84,7	10,0	5,2	269	7	62,1	11,2	26,7	367
3 5	76,8	9,1 8,3	14,1 $21,5$	297 325	19-42-2	76,5	14.1	9,4	298
7	64,6	7,6	$\frac{21,3}{27,7}$	353	$\begin{array}{c c} 4 \\ 6 \end{array}$	69,9 64.4	12,9 11.9	17,2 23,7	$\frac{326}{354}$
19-28-2	80,3	9,8	9,8	284	8	59,7	11,0	29,3	382
4	73,1	9,0	17,9	312	20-12-2	85,7	4,3	10,0	280
6	67,1	8,2	24,7	340	4	77,9	3,9	18,2	308
8	61,9	7,6	30,4	368	6	71,4	3,6	25,0	336
$19-29-1 \\ 3$	$\begin{bmatrix} 84,1 \\ 76,2 \end{bmatrix}$	10,7	5,2 14,0	271 299	8	65,9	3,3	30,8	364
5 5	69,7	9,7 8,9	21,4	327	20-13-1	89,8 81,4	4,9	$\frac{5,2}{14,2}$	267 2 95
7	64,2	8,2	27,6	355	5	74,3	4,0	21,7	323
19-30-2	79,7	10,5	9,8	286	7	68,4	3,7	27,9	351
4	72,6	9,6	17,8	314	20—14—2	85,1	5,0	9,9	282
6	66,7	8,8	24,5	342.	4	77,4	4,5	18,1	310
8 19—31—1	61,6 83,5	8,1	30,2	370 273	6 8	71,0 65,6	4,1 3,8	24,8 30,6	338 366
3	75,7	11,4	5,1 $14,0$	301	20-15-1	89,2	5,6	5,2	2 69
5	69,3	9,4	21,3	329	3	80,8	5,0	14,1	297
. 7	63,9	8,7	27,4	357	5	73,9	4,6	21,5	325
19-32-2	79,2	11,1	9,7	288	7	68,0	4.2	27,8	353
4	72,1	10,1	17,7	316	20-16-2	84,5	5,6	9,9	284 312
6 8	66,3 61,3	9,3	24,4 30,1	344 372	4	76,9 70,6	5,1 4,7	24,7	340
19-33-1	82,9	$\begin{array}{c c} 8,6 \\ 12,0 \end{array}$	5,1	275	8	65,2	4,3	30,4	368
3	75,2	10,9	13,8	303	20-17-1	88,6	6,3	5,1	271
5	68,9	10,0	21,1	331	3	80,3	5,7	14,0	299
7	63,5	9,2	27,3	359	5	73,4	5,2	21,4	327
19-34-2	78,6	11,7	9,7	290	7	67,6 83,9	4,8 6,3	27,6 9,8	355 2 86
4	71,7	10,7	17,6	318 346	$20-18-2 \ 4$	76,4	5,7	17,8	314
6 8	65,9 61,0	9,8 9,1	24,3 29,9	374	6	70,2	5,3	24,5	342
19-35-1	82,3	12,6	5,0	277	8	64,8	4,9	30,3	370
3	74,7	11,5	13,8	305	20—19—1	87,9	6,9	5,1	273
	1	- 1			,				

C-H-N	C º/o	H °/0	N º/o	M.G.	C-H-N	C º/o	H °/ ₀	N °/ ₀	M.G.
20-19-3	79,7	6,3	13,9	301	20-34-2	79,5	11,2	9,3	302
5	72,9	5.8	21,3	329	$\frac{4}{6}$	72,7 67,0	10,3	17,0 23,5	330
20-20-2	67, 2 83,3	5,3 6,9	27,4 9,7	357 288	8	62,2	9,5 8,8	29,0	358 386
4	76,0	6,3	17,7	316	20-35-1	83,0	12,1	4,8	289
6 8	69,7 64,5	5,8 5,4	24,4 30,1	344 372	3 5	75,7 69,6	11,0 $10,1$	13,2 20,3	317 345
20-21-1	87,2	7,6	5,1	275	7	64,3	9,4	26,2	373
3	79,2	6,9	13,9	303	20-36-2	78,9	11,8	9,2	304
5 7	72,5 66,8	6,3 5,8	21,1 27,3	331 359	4 6	72,3 66,7	10,8 10,0	16,9 23,3	332
20-22-2	82,8	7,6	9,6	290	8	61,9	9,3	28,8	388
4	75,5	6.9	17,6	318	20-37-1	82,5	12,7	4,8	291
6 8	69,4 64,2	6,3 5,9	24,3 29,9	346	3 5	75,2 $69,2$	11,6 10,6	$13,1 \\ 20,2$	319 347
20-23-1	86,6	8,3	5,0	277	7	64,0	9,9	26,1	375
3	78,7	7,5	13,8	305	20-38-2	78,4	12,4	9,1	306
5 7	72,0 66,5	6,9 6,4	21,0	333 361	4	71,9 66,3	11,4 10,5	16,7 23,2	334 362
20-24-2	82,2	8,2	9,6	292	8	61,5	9,7	28,7	390
4	75,0	7,5	17,5	320	20-39-1	81,9 74,8	13,3 12,1	4,8 13,1	293 321
6 8	69,0 63,8	6,9	24,1 29.8	348 376	3 5	68,8	11,2	20.0	349
20-25-1	86,0	9,0	5,0	279	7	63,7	10,3	26,0	377
3	78,1	8,1	13,7	307	20-40-2	77,9	13,0	9,1	308
5 7	71,7	7,4 6,9	20,9 27,0	335 363	4 6	71,4 65,9	11,9 11,0	16,7 23,1	336
20-26-2	81,6	8,8	9,5	294	8	61,2	10,2	28,6	392
4	74,5	8,1	17,4	322	20-41-1	81,4 74,3	13,9 12,7	4,7	295 323
6	68,6 63,5	7,4 6,9	34,0 29,6	350 3.78	5	68,4	11,7	19,9	351
20-27-1	85,4	9,6	5,0	281	7	63,3	10,8	25,8	379
3	77,7	8,7	13,6	309	20-42-2	77,4 71,0	13,5 12,4	9,0 $16,6$	310 338
5 7	71,2 65,8	8,0	20,8	337 365	$\frac{4}{6}$	65,6	11,5	22,9	366
20-28-2	81,1	9,4	9,4	296	. 8	60,9	10,6	28,4	394
4	74,1	8,6	17,3	324	20-43-1	80,8	14,5 $13,2$	4,7 12,9	297 325
6 8	68,2	7,9	23,9 29,5	352	5	68,0	12,2	19,8	353
20-29-1	84,8	10,2	4,9	283	7	63,0	11,3	25,7	.381
3 5	77,2	9,3	13,5 20,6	311	20-44-2	76,9 70,6	$14,1 \\ 12,9$	9,0 $16,4$	312
7	65,4	7,9	26,7	367	6	65,2	12,0	22,8	368
20-30-2	80,5	10,1	9,4	298	8	60,6	11,1	28,3	396
4 6	73,6	9,2	17,2 23,7	326 354	21-10-2	86,9 79,3	3,4	9,7 $17,6$	290 318
. 8	62.8	7,9	29,3	382	6	72,8	2,9	24,3	346
20-31-1	84,2	10,9	4,9	285	8	67,4	2,7	29,9	374
3 5	76,7 70,4	9,9	13,4 20,5	313 341	21-11-1	91,0 82,6	4,0 3,6	5,0 13,8	277 305
7	65,0	8,4	26,6	369	5	75,7	3,3	21,0	333
20-32-2	80,0	10,7	9,3	300	7	69,8	3.0	27,1	361 292
4 6	73,1 67,4	9,7	17,1 23,6	328 356	21-12-2	86,3	4,1 3,7	9,5	320
8	62,5	8,3	29,2	384	6	72,4	3.4	24,1	348
20-33-1	83,6	11,5	4,9	287	8	67,0	3,2 4,7	29,8 5,0	376 279
3 5	76,2	10,5	13,3 20,4	315	21-13-1	90,3	4.2	13,7	307
7	64,7	8,9	26,4	371	5	75,2	3,9	20,9	335
				1 1					

C-H-N	C %	H %	N º/o	M.G.	C-H-N	C º/e	H º/0	N º/0	M.G.
21-13-7 21-14-2	69,4	3,6	27,0	363	21-28-4	75,0	8,3	16,7	336
4	85,7	4,8 4,3	9,5 17,4	294 322	6	69,2	7,7	23,1	364
6	72,0	4,0	24,0	350	21-29-1	64,3 85,4	7,1	28,6 4,7	392 295
21—15—1	66,6	3,7 5,3	29,6 5,0	378 281	3	78.0	9,0	13,0	32 3
3	81,6	4,8	13,6	309	5 7	71,8 66,5	8,3 7,6	19,9 2 5,8	351 379
. 5	74,8 69,1	4,4 4,1	20,8 26,8	337	21-30-2	81,3	9,7	9,0	310
21-16-2	85,1	5,4	9,5	$\frac{365}{296}$	6	74,6 68,8	8,9	16,5 23,0	338
$\frac{4}{6}$	77,8	4,9	17,3	324	8	64.0	7,6	28,4	366 394
8	66,3	4,5 4,2	23,8 29,5	352 380	21-31-1	84,8 77,5	10,4 9,5	4,7	297
21-17-1	89,1	6,0	4,9	283	5	71,4	8,8	12,9 19,8	325 353
5	81,0 74,3	5,4 5,0	$\frac{13,5}{20,6}$	311 339	$\begin{array}{c} 7 \\ 21-32-2 \end{array}$	66,1 80,8	8,1	25,7	381
7	68,7	4,6	26,7	367	4	74,1	10,3 9,4	8,9 16,5	312 340
21—18—2 4	84,6	6,0 5,5	9,4 17,2	298 326	6 8	68,5	8,7	22,8	368
6	71,2	5.1	23,7	354	21-33-1	63,6 84,3	8,1 11,0	28,3 4,7	396 299
8 21—19—1	66,0 88,4	4,7 6,7	29,3 4,9	382 285	3	77,1	10,1	12,8	327
3	80,5	6,1	13,4	313	5 7	71,0 65,8	9,3 8,6	19,7 25,6	355 383
5 7	73,9	5,6	20,5	341	21-34-2	80,3	10,8	8,9	314
21-20-2	68,3 84,0	5,1 6,7	26,6 9,3	369 300	6	73,7 68,1	9,9 9, 2	$\begin{array}{c c} 16,4 \\ 22,7 \end{array}$	342 370
4	76,8	6.1	17,1	328	. 8	63,3	8,5	28,1	398
6 8	70,8 65,6	5,6 5,2	23,6 29,2	356 384	21-35-1	83,7 76,6	11,6 10,6	4,6 12,8	301 329
21-21-1	87,8	7,3	4,9	287	5	69,6	9,8	19,6	357
3 5	80,0 73,4	6,7	13,3 20,4	315 343	21—36-2	65,4 79,8	9,1 11,4	25,5 8,8	385 316
7	67,9	5,7	26,4	371	4	73,2	10,5	16,3	344
21-22-2	63,1 83,4	5,3	31,6 9,3	399 302	6 8	67,7	9,7	22,6	372
4	76,4	7,3 6,6	17,0	330	21-37-1	63,0 83,2	9,0	28,0	. 4 00 303
6	70,4	6.1	23,4	358	3	76,1	11,2	12,7	331
21-23-1	65,3 87,2	5,7 8,0	28,9	386 289	5 7	70,2 65,1	10,3 9,6	19,5 25,3	359 387
3	79,5	7,3	13,2	317	21-38-2	79,2	12,0	8,8	318
5 7	73,1 67,6	6,6	20,3 26,2	345 373	4 6	72,8 67,4	11,0	16,2 22,4	346 374
21-24-2	82,9	7.9	9,2	304	8	62,7	9,4	27,9	402
4 6	75,9 70,0	7,2 6,7	16,9 23,3	332 360	21-39-1	82,6 75,7	12,8	4,6 12,6	305 333
8	64,9	6,2	28,9	388	5	69,8	10.8	19,4	361
2 1—25—1	86,6	8,6	4,8 13,2	291 319	21-40-2	64,8 78,7	10,0 12,5	25,2 8,7	389 3 2 0
5	78,9 72,6	7,8	20,2	347	4	72,4	11,5	16,1	348
7	67,2	6,7	26,1	375	6	67,0	10,6	$\begin{array}{c c} 22,3 \\ 27,7 \end{array}$	376 404
21-26-2	82,4 75,4	8,5 7,8	9,1	306	21-41-1	63,4 82,1	9,9	4,6	307
6	69,6	7,2	23,2	362	3	75,2	12,2	12,5	335 363
21-27-1	64,6 86,0	$\begin{array}{c c} 6,7 \\ 9,2 \\ \end{array}$	28,7	390 293	5 7	69,4 64,5	11,3 10,5	19,3 25,0	391
3	78,5	8.4	13,1	321	21-42-2	78,3	13,0	8,7	322
5 7	72,2 66,8	7,7 7,2	20,1 26,0	349 3 7 7	4 6	72,0 66,7	12,0 11,1	16,0 22,2	350 378
21-28-2	81,8	9,1	9,1	308	.8	62,1	10,3	27,6	406
		1	1		1		148	*	

C-H-N	C %	H.%	N º/0	M.G.	C-H-N	C %.	H º/o	N º/o	M.G.
21-43-1	81,6	13,9	4,5	309	22-20-8	66,7	5,0	28,3	396
3 5	74,8	12,8 11,8	12,4 19,2	337	22-21-1	88,3	7,0 6,4	4,7 12,8	299 327
7 21 –44 –2	64,1 77,8	10,9 13,6	24,9 8,6	393 324	5 7	74,4	5,9	19,7	355
4	71.6	12,5	15,9	352	22-22-2	68,9	5,5	25,6 8,9	383 314
6 8	66,3	11,6	$22,1 \\ 27,4$	380 408	4 6	77,2 71,3	6,4 5,9	16,4	342 370
21-45-1	81,0	14.5	4,5	311	8	66.3	5.5	22,7 28,1	398
3 5	74,3 68,7	13,3 12,2	12,4 19,1	339 367	22-23-1	87,7	7,6	4,6 12,8	301 329
7	63,8	11,2	24,8	395	5	80,2 73,9	6,4	19,6	357
21—46— 2 4	77,3	14,1 13,0	8,6 15,8	326 354	7 22—24—2	68,6 83,6	5,9 7,6	25,4 8,8	385 316
6	66,0	12.0	22,0	382	4	76,7	7,0	16,3	344
8 22—10—2	61,5 87,4	11,2 3,3	27,3 9,3	410 302	6 8	71,0	6,4	22,6 28,0	372 400
4 6	80,0	3,0 2,8	17,0	330	22-25-1	87,1	8,2	4,6	303
8	68.4	2,6 3,8	23,5 29,0	358 386	3 5	79,7	7,6	12,7 19,5	331 359
22—11—1	91, 3 83,3	3,8 3,5	4,8 13,2	289 317	$egin{array}{c} 7 \ 22-26-2 \end{array}$	68,2	1 6.5	25,3 8,8	387 318
5	76,5	3.2	20,3	345	4	76,3	8,2 7,5	16,2	346
$\begin{array}{c} 7 \\ 22-12-2 \end{array}$	70,8 86,8	2,9 3,9	26,3 9,2	373 304	6 8	70,6	6,9 6,5	22,5 27,8	374 402
4 6	79,5	3,6	16,9	332	22-27-1	86,5	8,8	4.6	305
8	73,3 68,0	3,3 3,1	23,3 28,9	360 388	3 5	79,3 73,1	8,1 7,5	12,6 19,4	333 361
22—13—1 3	90,7 82,7	4,5 4,1	4,8 13,2	291 319	$\begin{array}{c} 7 \\ 22-28-2 \end{array}$	67,8 82,5	6,9	25,2	389
5	76,1	3,7	20,2	347	4	75,8	8,7 8,0	8,7 16,1	320 348
$\begin{array}{c} 7 \\ 22-14-2 \end{array}$	70,4 86,3	3,5 4,6	26,1 9,1	375 306	6 8	70,2	7,4 6,9	22 ,3 27,7	376 404
4 6	79,0 72,9	4.2	16,8	334	22-29-1	85.9	9,4	4,6	307
8	67,7	3,9 3,6	23,2 28,7	362 390	3 5	78,8 72,7	8,7 8,0	12,5 19,3	335 363
22-15-1	$90,1 \\ 82,2$	5,1	4,8 13,1	293 321	7 22-30-2	67,5 82,0	7,4	25,1	391
5	75,6	4,7 4,3	20,0	349	4	75.4	9,3 8,6	8,7 16,0	322 350
22-16-2	70,0 85,7	4,0 5.2	26,0 9,1	377 308	6 8	69,8 65,0	7,9 7,4	22,2 27,6	378 406
4 6	78,5 72,5	5,2 4,8 4,4	16,7 23,1	236 364	22-31-1	85,4	10.0	4,5	309
8	67.3	4,1	28,6	392	3 5	78,3 72,3	9,2 8,5	12,5 19,2	337 · 365
$22-17-1 \\ 3$	89,5 81,7	5,8 5,3	4,7 13,0	295 323	$\begin{array}{c} 7 \\ 22 - 32 - 2 \end{array}$	67,2 81,5	7,9 9,9	24,9 8,6	393 324
5 7	75,2	4,8	19.9	351	4	75,0	9,1	15,9	352
22-18-2	69,6 85, 2	4,5 5,8	25,8 9,0	379° 310	6 8	69,5 64,7	8,4	22,1 27,4	380 408
4 6	78,1 72,1	5,3 4,9	16,6 22,9	338	22-33-1	84,9	10,6	4,5	311
8	66,9	4,6	28,4	366 394	3 5	77,9 71,9	9,7 9,0	12,4 19,1	339 367
$\begin{bmatrix} 22-19-1 \\ 3 \end{bmatrix}$	88,9 81,2	6,4 5,9	4,7 12,9	297 325	7 22—34—2	66,8 81,0	8,3 10,4	24,8 8,6	395 326
5 7	74,8 69,3	5,4	19,8	353	4	74,6	9,6	15.8	354
22-20-2	84,6	5,0	25,7 9,0	381 31 2	8	69,1	8,9 8,3	22,0 27,3	382 410
4 6	77,6 71,7	5,9 5,4	16,5 22,8	340 368	22—35—1 3	84,3	11,2	4,5	313
	, , ,	,,	22,0	300	3	77,4	10,3	12,3	341

		1		,					
C—H—N	C %	H °/ ₀	N º/o	M.G.	C-H-N	C º/o	H º/0	N º/0	M.G.
22-35-5 7	71,5	9,5	19,0	369	23—13—3	83,4	3,9	12,7	331
22-36-2	66,5 80,5	8,8 11,0	24,7 8,5	397 328	5 7	76,9 71,3	3,6	19,5	359
4	74,2	10,1	15,7	356	23-14-2	86,8	3,4 4,4	25,3 8,8	387
6 8	68,7 $64,1$	9,4	21,9	384	4	79,8	4,0	16,2	346
22-37-1	83,8	11,7	27,2	412 315	6 8	73,8 68,6	3,7 3,5	22,5 27,9	374 402
3	76,9	10,8	12,2	343	23-15-1	90,4	4,9	4,6	305
5 7	71,1 66,2	10,0	18,9 24,5	371 399	3	82,9	4,5	12,6	333
22-38-2	80,0	11,5	8.5	330	5 7	76,5 70,9	4,1 3,9	19,4 25,2	361 389
4	73,8	10,6	15,6	358	23-16-2	86,2	5,0	8,7	320
6 8	68,4 63,7	9,8	$\begin{array}{ c c c c }\hline 21,7\\ 27,0\\ \end{array}$	386 414	4 6	79,3 73,4	4,6	16,1	348
22-39-1	83,3	12,3	4,4	317	8	68,3	4,3 4,0	22,3 27,7	376 404
3	76,5	11,3	12,2	345	23-17-1	89,9	5,5	4,6	307
5 7	70,8 65,8	10,4 $24,4$	18,8	373 401	3 5	82,4 76,0	5,1 4,7	12,5 19,3	335 363
22-40-2	79,5	12,0	8,4	332	7	70,6	4,3	25,1	391
4	73,3	11,1	15,6	360	23-18-2	85,7	5,6	8,7	322
6 8	68,0 63,5	10,3	21,6 26,9	388 416	4 6	78,8 73,0	5,1 4,8	16,0 22,2	350 378
22-41-1	82,7	12,8	4.4	319	8	68,0	4,4	27,6	406
3	76,1	11,8	12,1	347	23—19—1	89,3	6,1	4.5	309
5 7	70,4 65,5	10,9 10,2	18,7 24,3	375 403	3 5	81,9 75,6	5,6 5, 2	12,5 19,2	337 365
22-42-2	79,0	12,6	8,4	334	7	70,2	4,8	24,9	393
4	72,9	11,6	15,5	362	23-20-2	85,2	6,2	8,6	324
6 8	67,7 63,1	10,7	21,5 26,8	390 418	6	78,4 72,6	5,7 5,3	15,9 $22,1$	352
22-43-1	82,2	13,4	4,4	321	8	67,6	4,9	27,4	408
3	75,6	12,3	12,0	349	23-21-1	88,7	6,8	4,5 12,4	311
5 7	70,0 $65,2$	11,4 10,6	18,6 24,2	377 405	3 5	81,4 75,2	6,2 5,7	19,1	367
22-44-2	78,6	13,1	8,3 .	3 36	7	69,9	5,3	24,8	395
4	72,5	12,1	15,4	364	23-22-2 4	84,7 78,0	6,7 6,2	8,6 15,8	326 354
6 8	67,3 $62,8$	11,2 10,5	21,4 $26,7$	392 420	6	72,2	5,7	22,0	382
22-45-1	81,7	13,9	4.3	32 3	8	67,3	5,4	27,3	410
3	75,2	12,8	12,0	351 379	23-23-1	88,2 80,9	7,3 6,7	$\begin{array}{c c} 4,5 \\ 12,3 \end{array}$	313 341
5 7	69,6 64,9	11,9 11,0	18,5 24,1	407	5	74,8	6,2	19,0	369
22-46-2	78,1	13,6	8,3	338	7	69,5	5,8	24,7 4,5	397 314
4 6	72,1 67,0	12,6 11,7	15,3 21,3	366 394	23-24-2	87,9 80,7	7,6 7,0	12,3	342
8	62,5	10,9	26,5	422	6	74,6	6,5	18,9	370
22-47-1	81,2	14,5	4,3	325	8	69,4 87,6	6,0 7,9	24,6 4,4	398 315
3 5	74,8 69,3	13,3 12.3	11,9 18,4	353 381	23-25-1 3	80,4	7,3	12,2	343
7	64,6	11,5	23,9	409	5	74,4	6.7	18,9	371
22-48-2	77,6	14,1	8,2	340	23—26—2	69,2 83,6	6,3 7,8	24 ,5 8,5	399 330
4. 6	71,7 66,7	13,0 $12,1$	15,2 21,2	368 396	23-20-2	77,1	7,3 6,7	15,6	358
8	62,3	11,3	26,4	424	6	71.5	6,7	21,8	386 414
23-12-2	87,3	3,8	8,9	316	8 23-27-1	66,7 87,1	6,3 8,5	27,0 4,4	317
6	80,2 74,2	· 3,5 3,2	16,2 22,6	344	3	80,0	7.8	12,2	345
8	69,0	3,0	28,0	400	5 7	74,0	7,2 6,7	18,8 24,4	373 401
23-13-1	91,1	4,3	4,6	303	,	68,8	O _I (# 19 X	1

C-H-N	C º/o	H °/ ₀	N °/0	M.G.	C-H-N	C º/o	H º/o	N °/0	M.G.
23-28-2 4 6	83,1 76,7 71,1	8,4 7,8 7,2	8,4 15,5 21,7	332 360 388	$ \begin{array}{ c c c c c c c c c c c c c c c c c c c$	64,2 82,9 76,4	9,8 12,9 11,9	26,0 4,2 11,6	430 333 361
8 23-29-1 3 5	66,3 86,5 79,5 73,6	6,7 9,1 8,3	26,9. 4,4 12,1	416 319 347	5 7 23—44—2	70,9 66,2 79,3	11,0 10,3 12,6	18,0 23,5 8,1	389 417 348
23-30-2 4	68,5 82,6 76,2	7,7 7,2 9,0 8,3	18,7 24,3 8,4 15,5	375 403 334 362	$egin{pmatrix} 4 & 6 & 8 \ 23-45-1 & \end{array}$	73,4 68,3 63,9 82,4	11,7 10,9 10,2 13,4	14,9 20,8 25,9 4,2	376 404 432 335
23-31-1 3	70,8 66,0 86,0 79,1	7,7 7,2 9,7 8,9	21,5 26,8 4,3 12,0	390 418 321 349	3 5 7 23-46-2	76,0 70,6 65,9 78,8	12,4 11,5 10,7 13,1	11,6 17,9 23,4 8,0	363 391 419 350
5 7 23—32—2 4	73,2 68,1 82,1 75,8	8,2 7,6 9,5 8,8	18,6 24,2 8,3 15,4	377 405 336 364	$\begin{array}{c} 4 \\ 6 \\ 8 \\ 23-47-1 \end{array}$	73,0 68,0 63,6 81,9	12,2 11,3 10,6 14,0	14,8 20,7 25,8 4,1	378 406 434 337
6 8 23-33-1 3	70,4 65,7 85,4 78,7	8,2 7,6 10,2 9,4	21,4 26,7 4,3 11,9	392 420 323 351	3 5 7 23–48–2	75,6 70,2 65,5	12,9 12,0 11,2 13,6	11,5 17,8 23,3	365 393 421
5 7 23-34-2 4	72,8 67,8 81,7 75,4	8,7 8,1 10,0	18,5 24,1 8,3	379 407 338 366	4 6 8	78,4 72,6 67,6 63,3	12,6 11,8 11,0	8,0 $14,7$ $20,6$ $25,7$	352 380 408 436
6 * 8 2335-1	70,0 65,4 84,9	9,3 8,6 8,1 10,8	15,3 21,3 26,5 4,3	394 422 3 2 5	23-49-1 3 5 7	81,4 75,2 69,9 65,2	14,4 13,3 12,4 11,6	4,1 11,4 17,7 23,2	339 367 395 423
$\begin{array}{c} 3 \\ 5 \\ 7 \\ 23-36-2 \end{array}$	78,2 72,4 67,5 81,2	9,9 9,2 8,6 10,6	11,9 18,4 23,9 8,2	353 381 409 340	23-50-2 4 6 8	78,0 72,2 67,3 63,0	$\begin{array}{c c} 14,1 \\ 13,1 \\ 12,2 \\ 11,4 \end{array}$	7,9 14,7 20,5 25,6	354 382 410 438
4 6 8 23-37-1	75,0 69,7 65,1 84,4	9,8 9,1 8,5 11,3	15,2 21,2 26,4 4,3	368 396 424 327	24-10-2 4 6 8	88,3 81,3 75,4 70,2	3,1 2,8 2,6	8,6 15,8 22,0	326 354 382
3 5 7 23—38—2	77,7 72,1 67,1	$ \begin{array}{c c} 10,4 \\ 9,6 \\ 9,0 \end{array} $	11,8 18,3 23,8	355 383 411	24-11-1 3 5	92,0 84,5 78,0	2,4 3,5 3,2 3,0	27,3 4,5 12,3 19,0	410 313 341 369
4 6 8	80,7 74,6 69,4 64,8	11,1 10,3 9,5 8,9	8,2 15,1 21,1 26,3	342 370 398 426	24—12—2 4 6	70,1 87,8 80,9 75,0	2,7 3,6 3,4 3,1	27,2 8,6 15,7 21,9	411 328 356 384
23—39—1 3 5 7	83,9 77,3 71,7 66,8	11,9 10,9 10,1 9,4	4,2 11,8 18,2 23,7	329 357 385 413	8 24-13-1 3 5	69,9 91,4 83,9	2,9 4,1 3,8	27,2 4,4 12,2	412 315 343
23-40-2 4 6 8	80,2 74,2 69,0 64,5	$\begin{bmatrix} 11,6 \\ 10,8 \\ 10,0 \end{bmatrix}$	8,1 15,0 21,0	344 372 400	$\begin{bmatrix} 24 - 14 - 2 \\ 4 \end{bmatrix}$	77,6 72,2 87,3 80,5	3,5 3,3 4,2 3,9	18,9 24,5 8,5 15,6	371 399 330 358
23-41-1	83,4 76,9 71,3	9,3 12,4 11,4 10,6	26,2 4,2 11,7 18,1	428 331 359 387	6 8 24—15—1 3	74,6 69,5 90,9 83,5	3,6 3,4 4,7 4,3	21,8 27,0 4,4 12,2	386 414 317 345
23-42-2 4 6	64,3 79,8 73,8 68,6	9,6 12,1 11,2 10,4	26,1 8,1 15,0 20,9	429 346 374 402	5 7 24—16—2 4	77,2 71,8 86,7 80,0	4,0 3,7 4,8 4,4	18,8 24,4 8,4 15,6	373 401 332 360
		, , , , , , , , , , , , , , , , , , ,		1	1	- 1	1	1	

C—H—N	C º/o	H °/ ₀	N º/9	M.G.	C-H-N	C º/o	H º/0	N º/0	M.G.
24-16-6	74,2	4,1	21,6	388	24-31-1	86,5	9,3	4,2	333
$\begin{array}{c} 8 \\ 24-17-1 \end{array}$	69 ,2 90,3	3,8	26,9	416	. 3	79,8	8,6	11,6	361
3	83,0	5,3 4,9	$\frac{4,4}{12,1}$	319 347	5 7	74,0 69,0	8,0 7,4	18,0	389
5	76,8	4,5	18,7	375	24-32-2	82,8	9,2	23,5 8,0	417 348
24-18-2	71,4 86,2	4,2	24,3	403	4	76,6	8.5	14,9	376
4	79,5	5,4 5,0	8,4 15,5	334	6 8	71,3 66,7	7,9 7,4	20,8 25,9	404 432
6	73,9	4,6	21,5	390	24-33-1	86.0	9,8	4,2	335
24-19-1	68,9 89,7	4,3	26,8	418	3	79,3	9,1	11.6	363
3	82,5	5,9 5,4	$\frac{4,4}{12,0}$	321 349	5 7	73,7 68,8	8,4 7,8	17,9 23,4	391 419
5	76,4	5.0	18,6	377	24-34-2	82,3	9,7	8,0	350
$\frac{7}{24-20-2}$	71,1 85,7	4,7 5,9	24,2	405	4	76,2	9,0	14,8	378
4	79,1	5,5	8,3 15,4	336 364	6 8	70,9 66,3	8,4 7,8	20,7 25,8	406 434
6	73,5	5.1	21,4	392	24-35-1	85.4	10,4	4,2	337
8 24-21-1	68,6 89,2	4,7 6,5	26,7	420	3 5	78,9	9,6	11,5	365
3	82,0	6,0	4,3 12,0	323 351	7	73,3 68,4	8,9 8,3	17,8 23,3	393 421
5	76,0	5.5	18,5	379	24-36-2	81.8	10,2	7,9	352
$\begin{array}{c} 7 \\ 24-22-2 \end{array}$	70,7 85, 2	5,2 6,5	24,1 8,3	407	4 6	75,8	9,5	14,7	380
4	78,7	6,0	15,3	338	8	70,6 66,1	8,8 8,2	20,6 25,7	408 436
6	73,1	5.6	21,3	394	24-37-1	85,0	10,9	4,1	339
8 24—23—1	68,2	5,2 7,1	26,5	422	3 5	78,5 72,9	10,1	11,4 17,7	367 395
3	88,6 81,6	6,5	4,3 11,9	325 353	7	68.1	9,4 8,7	23,2	423
5	75,6	6,0	18,4	381	24-38-2	81.4	10,7	7,9	354
7 24—24—2	70;4	5,6	24,0	409	4 6	75,4	9,9 9,3	$14,7 \\ 20,5$	382 410
24-24-2	84,7 78,3	7,1 6,5	8,2 15,2	340 368	8	70,2 65,7	8,7	25,6	438
6	72,7	6.1	21.2	396	24-39-1	84,5	11,4	4,1	341
24-25-1	67,9	5,7	26,4	424 327	3 5	78,0 72,6	10,6 9,8	11,4 17,6	369
3	88,1 81,1	7,6	4,3	355	7	67,8	9,2	23,0	425
5	75,2	6,5	18,3	383	24-40-2	80,9	11,2	7,9	356
$\begin{array}{c} 7 \\ 24-26-2 \end{array}$	70,1 84,2	6,1 7,6	23,8 8,2	411 342	4 6	75,0 69,9	10,4	14,6 20,4	384
4	77,8	7,0	15,1	370	8	65.5	9,1	25,4	440
. 6	72,4	6,5	21,1	398	24-41-1	83,9	12,0	4,1	343
8 24-27-1	67,6 87,6	6,1 8,2	26,3 4,2	426 329	3 5	77,6 72,2	11,0 10,3	11,3 17,5	371 399
3	80,6	7,6	11,8	357	7	67,4	9,6	22,9	427
5	74,8	7.0	18,2	385	24-42-2	80,4	11,7	7,8	358 386
7 9	69,7 65,3	6,5 6,1	23,7 28,6	413	4 6	74,6 69,6	10,9	14,5 20,3	414
24-28-2	83,7	8,1	8,1.	344	8	65.1	9,5	25,3	442
4	77,4	7,5	15,0	372	24-43-1	83,5	12,5 11,5	4,0 11,2	345 373
6 8	72,0 67,3	7,0 6,5	21,0 $26,2$	400	5	77,2 71,8	10,7	17,5	401
24-29-1	87,0	8,8	4,2	331	7	67,1	10,0	22,8	429
3	80,2	8,1	11,7	359	24-44-2	80,0 74,2	22,2 11,3	7,8 14,4	360 388
5 7	74,4 69,4	7,5 7,0	18,1 23,6	387 415	6	69,2 64,9	10,6	20,2	416
24-30-2	83,2	: 8,7	8,1	346	8	64,9	9,9	25,2	244
4	77,0	8,0	15,0	374	24-45-1 3	83,0 76,8	13,0 12,0	$^{4,0}_{11,2}$	347 375
8	71,7 67,0	7,4	20,9 26,0	402 430	5	71,4	11,2	17,4	403
8	01,0	1,0	20,0	1					ł

C—H—N	C º/o	H º/0	N º/o	M.G.	C—H—N	C º/o	H °/ ₀	N º/o	M.G.
24-45-7	66,8	10,4	22,7	431	25-17-5	77,5	4,4	18,1	387
24-46-2	79,6	12,7	7,7	362	7	72,3	4,1	23,6	415
4	73,8	11,8	14,4	390	25-18-2	86,7	5,2	8,1	346
6 8	68,9	11,0	20,1 $25,1$	418	6	80,2	4,8	15,0	374
24-47-1	82,5	13,5	4,0	349	8	74,6	4,5 4,2	20,9 26,1	402 430
3	76,4	12,5	11,1	377	25-19-1	90,1	5,7	4,2	333
5	71,1	11,6	17,3	405	3	83,1	5,3	11,6	361
$\begin{array}{c} 7 \\ 24-48-2 \end{array}$	66,5	10,9	2 2,6 7,7	433 364	5 7	77,1	4,9	18,0	389
4	73,4	12,2	14,3	392	25-20-2	86,2	4,6 5,7	23,5	417 348
6	68,6	11,4	20,0	420	4	79,8	5,3	14,9	376
8 24-49-1	64,3	10,7	25,0	448	. 6	74,2	4,9	20,8	404
3	82,1 76,0	13,9 12,9	4,0 11,1	351 379	8 25-21-1	69,4 89,6	4,6	25,9	432
5	70.8	12,0	17,2	407	3	82,6	6,2 5,8	4,2 11,6	335 363
7	66.2	11,3	22,5	435	5	76,7	5,4	17,9	391
24-50-2	78,7	13,7	7,6	366	7	71,6	5,0	23,4	419
6	73,1 68,2	12,7 11.8	14,2 19,9	394 422	$oxed{25-22-2}{4}$	85,7	6,3	8,0	350
8	64,0	11,1	24,9	450	6	73,9	5,8 5,4	14,8 20,7	378 406
24-51-1	81,6	14.4	4,0	353	. 8	69,1	5,1	25,8	434
3 5	75,6 70,4	13,4 12,5	11,0	381	25—23—1	89,0	6,8	4,1	337
7	65,9	11.7	22,4	409 437	3 5	82,2 76,3	6,3 5,8	11,5	365 393
24-52-2	78,2	14,1	7,6	368	7	71,2	5,5	17,8 23,3	421
4	772,7	13,1	14,1	396	25—24—2	85,2	6,8	8,0	352
6 8	67,9	12,3 11,5	19,8 24,8	$\frac{424}{452}$	$\frac{4}{6}$	79,0	6,3	14,7	380
25-10-2	88,8	2,9	8,3	338	8	73,5 68,8	5,9 5,5	20,6 25,7	408 436
4	82,0	2,7	15,3	366	25-25-1	88,5	7,4	4,1	339
6 8	76,1 71,1	2,6 2,4	21,3	394	3	81,7	6,8	11,4	367
25-11-1	92,3	3,4	26,5 4,3	$\frac{422}{325}$	5 7	76,0 70,9	6,3 5,9	17,7	395
3	85,0	3,1	11,9	353	25-26-2	84,7	7,3	23,2 7,9	423 354
5	78,7	2,9	18,4	381.	. 4	78,5	6,8	14,7	382
7 25-12-2	73,3 88,2	2,7 3,5	24,0	409	6	73,2	6,3	20,5	410
4	81,5	3,3	8,2 15,2	340 368	25-27-1	68,5 88,0	5,9 7,9	. 25,6	438
6	75,7	3,0	21,3	396	3	81,3	7,3	$\begin{array}{c c} 4,1 \\ 11,4 \end{array}$	341 369
25—13—1	70,7	2,8	26,4	424	5	75,6	6,8	17,6	397
25—13—1 3	91,7 84,5	4,0 3,7	4,3 11,8	327 355	7	70,6	6,3	23,1	425
5	78,3	3,4	18,3	383	25—28—2 4	84,3 78,1	7,8 7,3	7,8	356 384
7	73,0	3,2	23,8	411	6	72,8	6,8	20,4	412
25—14—2	87,7	4,1	8,2	342	8	68,2	6,4	25,4	440
6	81,1 75,4	3,8	15,1 21,1	370 398	$25-29-1 \\ 3$	87,4	8,4	4,1	343
8	70,4	3,3	26.3	426	5 5	80,8 75,2	7,8 7,3	11,3 17,5	371 399
25—15—1	91,2	4,6	4,2 11,8	32 9	7	70,3	6,8	22,9	427
3 5	84,0	4,2	11,8	357	25-30-2	83,8	8,3	7,8	358
7	77,9 72,6	3,9	18,2 23,7	385 413	4 6	77,7 72,4	7,8	14.5	386
25-16-2	87,2	4,6	8,1	344	8	67,9	7 ,2 6,8	20,3 25,3	$\frac{414}{442}$
4	80,6	4,3	15,1	372	25-31-1	87,0	9,0	4,0	345
6 8	75,0 70,1	4,0	21,0	400	3	80,4	8,3	11,3	373
25-17-1	90,6	5,1	26,2 4,2	428 331	5 7	74,8	7,7	17,5 22,8	401
3	83,6	4,7	11,7	359	25-32-2	83,3	7,2 8,9	7,8	429 360
	1	1		- 1		/	-,	-,	

C—H—N	C 0/0	H °/ ₀	N º/o	M.G.	C-H-N	C°/0	H º/o	N º/o	M.G.
25-32-4	77,3	8,2	14,4	388	25-47-1	83,1	13,0	3,9	361
6 8	72,1	7,7	20,2	416	3	77,1	12,1	10,8	389
25-33-1	67,6 86,5	7,2 9,5	25,2 $4,0$	444 347	5 7	71,9 67,4	11,3 10,6	16,8	417
3	80,0	8,8	11,2	375	25-48-2	79,8	12,8	22,0 7,4	376
5	74,4	8,2	17.4	403	4	74.2	11.9	13,9	404
7 25—34—2	69,6 82,9	7,6 9,4	22,7 7,7	431 362	6	69,4	11,1	19,5	432
4	76,9	8,7	14,4	390	8 25-49-1	65,2 82,6	10,4 13,5	24 ,3 3,9	460 363
6	71,8	8,1	20,1	418	3	76,7	12,5	10,7	391
8 8 9 7	67,3	7,6	25,1	446	5	71,6	11,7	16,7	419
25-35-1 3	86,0	10,0	4,0	349 377	7 25-50-2	67,1 79,3	11,0 13,2	21,9	378
5	74,1	8,6	17,3	405	4	73,9	12,3	13,8	406
7	69,3	8,1	22,6	433	6	69,1	11,5	19,4	434
25—36—2 4	82,4 76,5	9,9 9,2	7,7	364 392	8 25—51—1	64,9	10,8	24,2	462
6	71,4	8,6	20,0	420	3	76,3	14,0 13,0	3,8	365
8	67,0	8,0	25,0	448	5	71,2	12,1	16,6	421
25-37-1	85,5	10,5	4,0	351	7	66,8	11,3	21,8	449
3 5.	79,1 73,7	9,8 9,1	$11,1 \\ 17,2$	379 407	25—52—2 4	79,0 73,5	13,7 12,7	7,3 13,7	380 408
7	69,0	8,5	22.5	435	6	68,8	11.9	19,3	436
25-38-2	82,0	10,4	7,6	366	. 8	64,6	11,2	24,1	464
4	76,1	9,6	14,2	394 422	25—53—1 3	81,7	14,4 13,4	3,8	367 395
6 · 8	71,1	9,0 8,2	19,9 25,0	450	5	75,9 70,9	12,4 $12,5$	10,6 16,5	423
25-39-1	85.0	11,0	4,0	353	7	66,5	11,7	21,7	451
3	78,7	10,2	11.0	381	25-54-2	78,5	14,1	7,3	382
5 7	73,3	9,6	17,1 22,4	409	4 6	73,2 68,5	13,2 12,3	13,6 19,2	410 438
25-40-2	68,6 81,5	10,9	7,6	368	8	64,4	11,6	24,0	466
. 4	75,7	10,1	14.1	396	26-12-2	88,6	3,4	8,0	352
6	70,7	9,4	19,8	424	4 6	82,1	3,2 2,9	14,7 20,6	380° 408
8 25-41-1	66,4	8,8 11,6	24,8 3,9	452 355	8	76,5 71,6	2,9	25,7	436
3	78,3	10,7	11,0	383	26-13-1	92,0	3,8	4,1	3 39
5	73,0	10,0	17,0	411	3	85,0	3,5	11,4	367
7	68,3	9,3	22,3	439 370	5 7	79,0 73,7	3,3	17,7 23,2	395 423
25—42—2 4	81,1 75,4	11,3 10,6	7,6	398	26-14-2	88,1	4,0	7,9	354
6	70,4	9,9	19,7	426	4	81,7	3,7	14,6	382
8	66,1	9,2	24,7	454	6 8	76,1 71,2	3,4	20,5 2 5,6	410 438
25-43-1 3	84,0 77,9	12,0 11,2	3,9 10,9	357 385	26-15-1	91,5	4,4	4,1	341
5	72,3	10,8	16,9	415	3	84,5	4,1	11,4	369
7	68,0	9,7	22,2	441	. 5	78,6	3,8 3,5	17,6 23,1	397 425
25-44-2 4	80,6	11,8	7,5	372	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	73,4 87,6	4,5	7.9	356
6	75,0 70,1	11,0 10,3	14,0 19,6	428	4	81,3	4,1	14,6	384
8	65,8	9,6	24,6	456	6	75,7	3,9	20,4	412
25-45-1	83,6	12,5	3,9	359	8 26—17—1	70,9 90,9	3,6 4,9	25,4 4,1	440 343
3 5	77,5 72,3	11,6 10,8	10,9 $16,9$	387 415	3	84,1	4,6	11,3	371
7	67,7	10,3	22,1	443	5	78,2	4,3	17,5	399
25-46-2	80,2	12,3	7,5	374	7	73,1	4,0 5,0	22,9 7,8	427 358
4	74,6	11,4	13,9	402	26—18—2 4	87,1 80,8	4.7	14,5	386
6 8	69,8	10,7	19,5 24,4	458	ē	75,3	4,3	20,3	414
	1 00,0		-,-	1					

C—H—N	C º/o	H º/o	N º/0	M. G.	C-H-N	C º/o	H º/o	N º/o	M. G
26-18-8	70,6	4,1	25,3	442	26-33-5	75,2	7,9	16,9	415
26191 3	90,5	5,5	$\frac{4,0}{11,2}$	345 373	$\begin{array}{c} \cdot & 7 \\ 26-34-2 \end{array}$	70,5 83,4	7,4 9,1	22,1 7,5	443 274
5	77,8	5,1 4,7	17,5	401	4	77,6	8,4	13,9	374 402
7	72,7	4,4	22,8	429	6	72,6	7,9	19,5	430
26-20-2 4	86,7 80,4	5,5 5,2	7,8	360	8 26-35-1	68,1 86,4	7,4 9,7	24,5 3,9	458 361
6	75,0	4,8	20,2	416	3	80,2	9,0	10,8	389
8	70,3	4,5	25,2	444	5	74,8	8,4	16,8	417
26-21-1	89,9 83,2	6,1 5,6	$\frac{4,0}{11,2}$	347 375	$oxed{7} 26-36-2$	70,1 83,0	7,9 9,6	22,0	445 376
5	77,4	5,2	17,4	403	. 4	77,2	8,9	13.9	404
7 26-22 -2	72,4	4,9 6,1	22,7	431 362	6 8	72 ,2 67,8	8,3 7,8	19,4 24,3	432 460
4	80,0	5,6	14,3	390	26-37-1	86,0	10,2	3,8	363
6	74,6	5,3	20,1	418	3	79,8	9,4	10,7	391
8 26—23—1	70,0 89,4	4,9 6,6	25,1 4,0	446 349	5 7	74,4 69,8	8,8 8,3	16,7 21,9	419 447
3	82,8	6.1	11,1	377	26-38-2	82,5	10,1	7,4	378
5	77,0	5,7	17,3	405	4	76,8	9,4	13,8	406
7 26-24-2	72,1 85,7	5,3 6,6	22,6	433 364	6 8	71,9 67,5	8,7 8,3	19,3 24,2	434 462
4	79,6	6,1	14,3	392	26-39-1	85,5	10,7	3,8	365
6 8	74,3 69,6	5,7 5,4	20,0 25,0	420 448	3	79,4	9,9 9,3	10,7	393 421
26-25-1	88,9	7,1	4,0	351	5 7	74,1 69,5	8,7	16,6 21,8	449
3	82,3	6,6	11,1	379	26-40-2	82,1	10,5	7,4	380
5 7	76,7 71,7	6,1 5,7	17,2 22,5	407 435	4 6	76,5 71,6	9,8 9,2	13,7 19,2	408 436
26-26-2	85,2	7,1	7,6	366	8	67,2	8,6	24,1	464
4	79,2	6,6 6,2	14,2	394	26-41-1	85,0	11,2	3,8	367
6 8	73,9 69,3	5,8	19,9 24 ,9	422 450	3 5	79,0 73,7	10,4 9,7	10,6 $16,5$	395 423
.26-27-1	88,4	7,6	4,0	353	7	69,2	9,1	21,7	451
3 5	81,9	7,1 6,6	11,0 17,1	381 409	$egin{array}{c} 26-42-2 \ 4 \end{array}$	81,7 76,1	11,0	7,3	382 410
7	71,4	6,2	22,4	437	6	71,2	10,2 $9,6$	13,6 19,2	438
26-28-2	84,8	7,6	7,6	368	8	67,0	9,0	24,0	466
6	78,8 73,6	7,1 6,6	14,1 19,8	396 424	26-43-1 3	84,5 78,6	11,6 10,8	3,8 10,6	369 397
8	69,0	6,2	24,8	452	5	73,4	10,3	16,5	425
26-29-1	87,9	8,2	3,9	355	7	68,9	9,5	21,6	453
5	81,5 75,9	7,6 7,1	10,9 17,0	383 411	$26-44-2 \ 4$	81,2 75,7	11,4 10,7	7,3 13,6	384 412
7	71,1	6,6	22,3	439	6	70,9	10,0	19,1	440
26-30-2	84,3 78,4	8,1 7,5	7,6 14,1	370 398	$\begin{array}{c} 8 \\ 26-45-1 \end{array}$	66,7	9,4	23,9	468
8	73,3	7.0	19.7	426	$26-45-1 \\ 3$	84,1 78,2	12,1 11,3	3,8 10,5	371 399
8	68,7	6,6 8,7	24,7	454	5	73,1	10,5	16,4	427
26-31-1	87,4 81,0	8,7	3,9 10,9	357 385	7 26—46—2	68,6	9,9	21,5	455
5	75,5	7,5	17,0	413	4	80,8 75,3	11,9 11,1	7,2 13,5	$\frac{386}{414}$
26-32-2	70,8	7,0	22.2	441	в	70.6	10,4	19,0	442
4	83,9 78,0	8,6 8,0	7,4 $14,0$	372 400	$\begin{array}{c c} & 8 \\ 26-47-1 \end{array}$	66,4 83,6	9,8 12,6	23,8 3,7	470 373
6	72,9	7,5	19,6	428	3	77,8	11,7	10,5	401
8 26—33—1	68,4 86,9	7,0 9,2	24,6	456	5	72,7	11,0	16,3	429
3	80,6	8,5	3,9 10,9	359 387	$\begin{array}{c c} & 7 \\ 26-48-2 \end{array}$	68,3 80,4	10,3 12,4	$\begin{array}{c c} 21,4\\ 7,2 \end{array}$	457 388
		′				30,1	± 10, 1	1,2	000

C-H-N	C º/o	H º/o	N º/c	M.G.	C—H—N	C º/o	H º/o	N º/0	M.G.
26-48-4	75,0	11,5	13,5	416	27-20-2	87,1	5,4	7,5	372
6 8	70,3 66,1	10,8 10,2	18,9 23,7	444	4 6	81,0	5,0	14,0	400
26-49-1	83,2	13,1	3,7	375	8	75,7 71,1	4,7 4,4	19,6 24,5	428 456
3	77,4	12,2	10,4	403	27—21—1	90,3	5,8	3,9	359
5 7	72,4 68,0	11,4 10,7	$ \begin{array}{c c} 16,2 \\ 21,3 \end{array} $	431	3	83,7	5,4	10,8	387
26-50-2	80,0	12,8	7,2	459 390	5 7	78,1 73,2	5,0 4,7	16,9 22,1	415 443
4	74,6	12,0	13.4	418	27-22-2	86,6	5,9	7,5	374
. 6	70,0	11,2	18,8	446	4	80.6	5,5	13,9	402
26—51—1	65,8 82,8	10,6 13,5	23,6	474 377	6 8	75,4	5,1	19,5	430
3	77,0	12,6	10,4	405	27-23-1	70,7 89,7	4,8 6,4	24,4 3,9	458 361
5	72.0	11,8	16,2	433	3	83,3	5.9	10,8	389
7	67,7	11,1	21,2	461	5	77,7	5.5	16,8	417
26-52-2	82,5 74,3	13,7 12,4	3,7 13,3	378 420	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	72,8 86,2	5,2 6,4	22,0 7,4	445 376
6	69,6	11.6	18,8	448	4	80,2	5,9	13,8	404
8	58.6	9,8	31.6	532	6	75,0	5,6	19,4	432
26-53-1	82,3	14,0 13,0	3,7	379	8 27-25-1	70,4	5,2	24,3	460
3 5	76,6 71,7	12,2	10,3	407	27-25-1	89,3 82,9	6,9 6,4	3,8 10,7	363 391
7	67,4	11,4	21.2	463	5	77.4	5,9	16,7	419
26-54-2	79,2	13,7	7,1	394	7	72,5	5,6	21,9	447
4 6	73,9 69,3	12,8 12,0	13,3 18,7	422	27-26-2	85,7 79,8	6,9	7,4 13,8	378 406
8	65,3	11,3	23,4	450 478	6	74,6	6,4	19,4	434
26-55-1	81,9	14,4	3,7	381	. 8	70.1	5,6	24,2	462
3	76,3	13,4	10.3	409	27-27-1	88,8	7,4	3,8	365
5 7	71,4 67,1	12,6 11,8	16,0 21,1	437 465	3 5	82,4 77,0	6,9 6,4	10,7 16,6	393 421
27-13-1	92,3	3,7	4,0	351	7	72.1	6,0	21.8	449
	85,5	3,4	11,1	379	27-28-2	85,3	7,3	7,3	380
5	79,6	3,2 3,0	17,2	407	4 6	79,4	6,9	13,7 19,3	408 436
7 2 7—14—2	74,5 88,5	3,8	22,5	435 366	8	74,3 69,8	6,4	24,1	464
4	82,2	3,6	14,2	394	27-29-1	88,3	7,9	3,8	367
6	76,8	3,3	19,9	422	3	82,0	7,3	10,6	395 423
8	72,0	3,1 4,2	24,9	450	5 7	76,6 71,8	6,9 6,4	16,5 21,7	451
27—15—1 3	91,8 85,0	3,9	4,0	353 381	27-30-2	84,8	7,9	7,3	382
5	79,2	3,7	17,1	409	4	79,0	7,3	13,7	410
7	74,1	3,4	22,4	437	6	74,0	6,8	19,2 24,0	438 466
27—16—2	88,0	4,3	7,6 14,1	3 68	8 27—31—1	69,5 87,8	6,4 8,4	3,8	369
4 6	81,8 76,4	3,8	19,8	424	3	81,6	7.8	10,6	397
8	71,7	3,5	24,8	452	5	76,2	7.3	16,5	425 453
27-17-1	91,3	4,8	3,9	355	7	71,5 84,4	6,8 8,3	21,6 7,3	384
3	84,6	4,4	11,0	383 411	27—32—2 4	78,6	7,8	13,6	412
5 7	78,8 73,8	4,1 3,9	17,0 22,3	439	6	73,6	7,3	19,1	440
27—18—2	87,6	4,8	7,6	370	8	69,2	6,8	23,9	468 371
4	81,4	4,5	14,1	398	27-33-1	87,3 81,2	8,9 8,3	3,8	399
6	76,0 71,4	4,2	19,7 24,7	426 454	5	75.9	7,7	16,4	427
8 27—19—1	90,8	5,3	3,9	357	7	71,2	7,2	21,5	455
3	84,1	4,9	10,9	385	27-34-2	83,9	8,8	7,3 13,5	386
5	78,4	4,6	16,9	413	4	78,2 73,3	8,2	19,0	442
7	73,5	4,3	22,2	771		1	1	1	1

C-H-N	C º/0	H 0/0	N º/o	M.G.	C-H-N	C º/o	H º/ ₀	N º/o	M.G.
27-34-8	68,9	7,2 9,4	23,8	470	27-49-5	73,2	11,0	15,8	443
27—35—1 3	86,9	8,7	3,7 10,5	373 401	7 27—50—2	68,7 80,6	10,5 12,4	20,8 7,0	471 402
5 7	75,5 70,9	8,2	16,3 21,4	429 457	4 6	75,4 70,7	11,6 10,9	13,0 18,3	430 458
27-36-2	83,5	9,3	7,2	388	8	66,6	10,3	2 3,0	486
4	77,9	8,6 8,1	13,4 18,9	416 444	27—51—1 3	83,3 77,7	13,1 12,2	3,6 10,1	389 417
8 27 —37—1	68,7 86, 4	7,6 9,9	23,7 3,7	472 375	5 7	72,8 68,5	11,5 10,8	15,7 20,7	445 473
3	80,4	9,2	10,4	403	27-52-2	80,2	12,9	6,9	404
5 7	75, 2 70,6	8,6 8,1	16,2 21,3	431 459	4 6	75,0 70,4	12,0 11,3	13,0 18,3	432 460
27—38—2 4	83,1 77,5	9,7 9,1	7,2 13,4	390 418	8 27—53—1	66,4 82,9	10,6	22,9	488
6	72,6	8,5	18,8	446	3	77,3	13,5 $12,6$	3,6 10,0	391 419
8 27—39—1	68, 4 86,0	8,0 10,3	23,6 3,7	474 377	5 7	72,5 $68,2$	11,8 11,2	15,7 20,6	447 475
3 5	80,0 74,8	9,6	10,4	405	27-54-2	79,8	13,3	6,9	406
7	70,3	8,4	$16,2 \\ 21,2$	433 461	6	74,6 70,1	12,4 11,7	12,9 18,2	434 462
27-40-2	82,7 77,1	10,2 9,5	7,1 13,3	392 420	27-55-1	66,1 82,4	11,0 14,0	22,8 3,6	490 393
6	72,3	8,9	18,8	448	3	76,9	13,1	10,0	421
8 27—41—1	68,1 85,5	8,4 10,8	23,5 3,7	476 379	5 7	72,1 67,9	12,2 $11,5$	15,6 20,5	449 477
3 5	79,6 74,5	$10,1 \\ 9,4$	10,2 $16,1$	407 435	27-56-2	79,4 74,3	13,7 12,8	6,9 12,8	408 436
7	70,0	8,8	21.2	4 63	6	69,8	12,1	18,1	464
27-42-2	82,2 76,8	10,7 9,9	7,1 13,3	394 422	8 28—14—2	65,9 88,9	11,4 3,7	$\frac{22,7}{7,4}$	492 378
6 8	72,0 67,8	9,3 8,8	18,7 2 3,4	450 478	4 6	82,8 77,4	3,4 3,2	13,8 19,4	406 434
27-43-1	85,0	11,3	3,7	381	8	72,7	3,0	24,2	462
3 5	79,2 74,1	10,5 9,8	10,3 $16,0$	409 437	$\begin{bmatrix} 28-15-1 \\ 3 \end{bmatrix}$	92,1 85,5	4,1 3,8	3,8 10,7	365 393
7 27-44-2	69,7 81,8	9 ,2 11,1	$21,1 \\ 7,1$	465 396	5 7	79,8	3,6	16,6	421
4	76,4	10,4	13,2	424	28-16-2	74,8 88,4	3,3 4,2	21,8 7,4	449 380
6 8	71,7 67,5	9,7 9,2	18,6 23,3	452 480	4 6	82,3 77,1	3,9	13,7 19,2	408 436
27-45-1	84,6	11,7	3,7	383	8	72,4	3,4	24,1	464
3 5	78,8 73,8	$10,9 \\ 10,2$	10,2 15,9	411 439	28—17—1 3	91,6 85,0	4,6 4,3	3,8 10,6	367 395
27—46—2	69,4 81,4	9,6 11,6	$\begin{array}{c c} 21,0 \\ 7,0 \end{array}$	46 7 398	5 7	79,4 74,5	4,0 3,8	16,5 21,7	$\frac{423}{451}$
4	76,0	10,8	13,1	426	28-18-2	88,0	4,7	7,3	382
6 8	71,4 67,2	10,1 9,5	18,5 23,2	454 482	6	81,9 76,7	$\begin{array}{c c} 4,4 \\ 4,1 \end{array}$	13,6 19,2	410 438
27—47—1	84,1 78,4	12,2 11,4	3,6 10,2	385 413	8 28—19—1	72,1 91,0	3,9 5,1	24,0 3,8	$\frac{466}{369}$
5	73,5	10,6	15,9	441	3	84,6	4,8	10,6	397
27—48—2	69,1 81,0	10,0 12,0	20,9 7,0	469 400	5 7	79,1 74,2	$\frac{4,4}{4,2}$	$\begin{array}{c c} 16,5 \\ 21,6 \end{array}$	$\begin{array}{c} 425 \\ 453 \end{array}$
4. 6	75,7 71,1	11,2 10,5	13,1 18,4	428 456	28-20-2	87,5 81,6	5,2 4,8	7,3 13,6	384 412
8	66,9	9,9	23,1	484	6	76,4	4,5	19,1	440
27-49-1	83,7 78,1	12,7 11,8	3,6 10,1	387 415	8 28-21-1	71,8 90,6	4,3 5,6	23,9 3,8	468 371
,			, 1		1	-,-	1	7- 1	

C-H-N	C º/0	H °/ ₀	N º/o	M.G.	C—H—N	C º/o	H º/₀	N º/o	M. G.
28-21-3	84,2	5,3	10,5	399	28-36-2	84,0	9,0	7,0	400
5	78,7	4,9	16,4	427	4	78,5	8.4	13,1	428
28-22-2	73,0 87,0	4,6 5,7	21,5 7,2	455 386	6 8	73,7 69,4	7,9 7,4	18,4	456 484
4	81,1	5,3	13,5	414	28-37-1	86,9	9,5	23,1 3,6	387
6	76.0	5,0	19,0	442	3	81,0	8,9	10,1	415
8	71,5	4,7	23,8	470	5	75,9	8.3	15,8	443
28-23-1	90,1 83,8	6, 2 5,7	3,7	373 401	7 28-38-2	71,3 83,6	7,8	20,8	471
5	78,3	5,4	10,5	429	4	78,2	9,4	7,0	402
7	73.5	5,0	21,4	457	. 6	73,4	8,3	18,3	458
28-24-2	86,6	6,2	7,2	388	8	69,1	7,8	23,0	486
4 6	80,8 75,7	5,8	13,4	416 444	28-39-1	86,3	10,0	3,6	389
8	71,2	5,4 5,1	18,9	472	5	75,5	8,8	15,7	445
28-25-1	89,6	6,7	3,7	375	7	71,0	8,2	20,7	473
3	83,4	6,2	10,4	403	28-40-2	83,2	9,9	6,9	404
5	78,0	5,8	16,2	4 31 4 59	4 6	77,8	9,2	13,0	432 460
7 28-26-2	73,2 86,1	5,4	21,4 7,2	390	8	68,8	8,2	23,0	488
4	80,4	6,2	13,4	418	28-41-1	86,0	10,5	3,5	391
6	75,3	5,8	18,8	446	3	80,2	9,8	10,0	419
8 97 1	70,9	5,5	23,6	474 377	5 7	75,1 70,7	9,2	15,7	447
28-27-1	83,0	7,2 6,7	10,3	405	28-42-2	82,8	10,3	6,9	406
5	77,6	6,2	16,2	433	4	77,4	9,7	12,9	434
7	72.9	5,9	21,2	. 461	6 8	72,7	9,1	18,2 22,8	462
28-28-2	85,7	7,1	7,1	392 420	28-43-1	68,6 85,5	10,9	3,5	393
6	75.0	6,2	18,8	448	3	79.9	10,2	9,9	421
8	70,6	5,9	23,5	476	5	74.8	9,6	15,6	449
28-29-1	88,6	7,6	3,7	379	28-44-2	70,4 82,3	9,0	20,5	477
3 5	82,6	7,1	10,3	407	4	77,1	10,1	12,8	436
7	72,6	6,3	21,1	463	6	72,4	9,5	18,1	464
28-30-2	85,3	.7,6	7,1	394	8	68,3	8,9	22,7	492 395
4	79,6	7,1	13,2	422 450	28-45-1	85,0 79,4	11,4	9,9	423
6 8	74,6 70,3	6,7	18,7	478	5	74,5	10,0	15,5	451
28-31-1	88,2	8,1	3,7	381	7	70,1	9,4	20,5	479
3	\$2,1	7,6	10,3	409	28-46-2	82,0	11,2	6,8	410
5 7	76,9	7,1	16,0 21,1	437 465	6	72,1	9,9	18,0	466
28-32-2	72,2	8.1	7,1	396	8	68,0	9,3	22,7	494
4	79,2	7,5	13,2	424	28-47-1	84,6	11,8	3,5	397 425
6	74,3	7,1	18,6	452	3 5	79,1	10,4	15,4	453
8	70,0	6,7	23,3	480 383	7	69,8	9,8	20,4	481
28—33—1 3	87,7	8,0	10,2	411	28-48-2	81,5	11,6	6,8	412
5	76,5	7,5	15,9	439	4	76,4	10,9	12,7	440 468
.7	72,2	7,1	20,6	467	6 8	71,8	9,7	2 2,6	496
28-34-2	84,4	8,5	7,0	398 426	28-49-1	84,2	12,3	3,5	399
4 6	78,9	8,0	18,5	454	3	78,7	11,5	9,8	427
8	69,7	7,0	23,2	482	5	73,8	10,8	15,4	455
28-35-1	87,3	9.1	3,6	385	28-50-2	69,6	12,1	6,7	414
3	81,3	8,5 7,9	10,2	413	4	76,0	11,3	12,7	442
5 7	76,2 71,6	7,5	20,9	469	6	71,5	10,6	17,9	470
	1, -	1		,		,			

C-H-N	C º/o	H °/0	N º/o	M.G.	C-H-N	C º/o	H °/ ₀	N º/o	M.G.
28-50-8	67,5	10,0	22,5	498	29 - 19 - 5	79,6	4,3	16,0	437
28-51-1	83,8 78,3	12,7 11,9	3,5 9,8	401	$\begin{array}{c} 7 \\ 29-20-2 \end{array}$	74,8 87,8	4,1 5,0	$ \begin{array}{c c} 21,1 \\ 7,1 \end{array} $	465 396
5	73,5	11,1	15,3	457	4	82,1	4,7	13,2	424
7	69,3	10,5	20,2	485	6	77,0	4,4	18,6	452
28 - 52 - 2 4	80,8 75,7	12,5 $11,7$	6,7 12,6	416 444	8 29-21 -1	72,5 90,9	4,2 5,5	23,3 3,6	480 383
6	71,2	11,0	17,8	472	3	84,7	5,1	10,2	411
8 28-53-1	67, 2 83.4	10,4 13,1	22,4 3,5	500 403	5 7	79,3 74.5	4,8 4,5	$\frac{15,9}{21,0}$	439 467
3	78,0	12,3	9,7	431	29-22-2	87,4	5,5	7,0	398
5 7	73,2	11,5	15,2	459	4.	81,7	5,2	13,1	426
28-54-2	68,9 80,4	10,9 12,9	$20,1 \\ 6,7$	487 418	8	76,7 72,2	4,8 4,6	18,5 23,2	454 482
4	75,3	12,1	12,5	446	29-23-1	90,4	6,0	3,6	385
6 8	70,9 66,9	11,4 10,7	17,7 22,3	474 502	3 5	84,2 78,9	5,6 $5,2$	10,2 15,9	413 441
28-55-1	82,9	13,6	3,5	405	7	74,2	4,9	20,9	469
3 5	77,6	12,7 $11,9$	9,7 $15,2$	433	$\begin{array}{c} 29-24-2 \\ 4 \end{array}$	87,0	6,0	7,0	400
7	72,9 68,7	11,2	20,0	461 489	6	81,3 76,3	5,6 5,3	13,1 18,4	428 456
28-56-2	80,0	13,3	6,7	420	8	71,9	5,0	23,1	484
4 6	75,0 70,6	12,5 11,8	12,5 17,6	448 476	29-25-1 3	89,9 83,9	6,5 6,0	3,6 $10,1$	387 415
8	66,7	11,1	22,2	504	5	78,6	5,6	15,8	443
28-57-1	82,6	14,0 13,1	3,4 9,7	407 435	29-26-2	73,9	5,3	20,8	471
5	77,2 $72,6$	12,3	15,1	463	4	86,5 80,9	6,5 6,0	7,0 13,0	402 430
7	68,4	11,6	20,0	491	6	76,0	5,7	18,3	458
28—58—2 4	79,6 7 4, 6	13,7 12,9	$\begin{array}{c} 6,6 \\ 12,4 \end{array}$	422 450	8 29271	71,6 89,4	5,3 6,9	$\frac{23,0}{3,6}$	$\frac{486}{389}$
6	70,3	12,1	17,6	478	3	83,4	6,5	10,1	417
8 28—59—1	66,4 82,2	11,5 14,4	22,1	506 409	5 7	78,2	6,1	15,7	445
3	76,9	13,5	$\frac{3,4}{9,6}$	409	29-28-2	73,6 - 86,1	5,7 6,9	20,7 6,9	473 404
5	72,2	12,7	15,0	465	4	80.6	6,5	12,9	432
7 28602	68 ,2 79 ,2	11,9 14,1	19,9 6,6	$\begin{array}{c c} 493 \\ 424 \end{array}$	8	75,7 71,3	6,1 5,7	18,2 22,9	460 488
4	74,3	13,3	12,4	452	29—29—1	89,0	7,4	3,6	391
6 8	70,0 $66,1$	12,5 11,8	17,5 22,1	480 508	3 5	83,0	6,9	10,0	419
29—15—1	92,3	4,0	3,7	377	7	77,8 73, 2	6,5 6,1	15,7 $20,6$	$\frac{447}{475}$
3	85,9	3,7	10,4	405	29-30-2	85,7	7,4	6,9	406
5 7	80,4 75,5	3,4 3,2	$16,2 \\ 21,2$	433 461	4 6	$\begin{array}{c c} 80,2 \\ 75,3 \end{array}$	6,9 6,5	12,9 18,2	$\begin{array}{c} 434 \\ 462 \end{array}$
29-16-2	88,8	4,1	7,1	392	8	71,0	6,1	22,8	490
4 6	82,9 77,7	$\frac{3,8}{3,6}$	13,3 18,7	420 448	29-31-1	88,5	7,9	3,5	393
8	73,1	3,4	23,5	476	. 5	82,6 77,5	7,4 6,9	9,9 15,6	$\frac{421}{449}$
29—17—1	91,8	4,5	23,5 3,7	379	7	72,9	6,5	20,5	477
3 5	85,5 80,0	4,1 3,9	10,3 16,1	$\begin{array}{c} 407 \\ 435 \end{array}$	29-32-2	85,3 79,8	7,8 7,3	6,9 12,8	408 436
7	75,2	3,7	21,1	463	6	75,0	6.9	18,1	464
29—18—2 4	88,3	4,6	7,1	394	8	70,7	6,5	22,8	492
6	82,4 77,3	4,3 4,0	13,3 18,7	$\frac{422}{450}$	29-33-1	88,1 82,3	8,4 7,8	3,5 9,9	395 4 2 3
8	72,8	3,8	23,4	478	5	77,2	7,3	15,5	451
29-19-1	91,3 85,1	5,0 4,6	3,7 10,3	381 409	$\begin{array}{c} 7 \\ 29-34-2 \end{array}$	72,6	6,9	20,5	479
-	00,1	310	10,5	409	20-04-2	84,9	8,3	6,8	410

C-H-N	C %	H %	N º/o	M	0 17 37				
O-11-IV	0 /0	11 /0	TN -\0	M.G.	C-H-N	C %	H ⁰ / ₀	N °/0	M.G.
29-34-4	79,4	7,8	12,8	438	29-49-1	84,7	11,9	3,4	411
6 8	74,7 70,4	7,3 6,9	18,0 22,7	466	3	79,3	11,1	9,6	439
29-35-1	87,7	8,8	3,5	494 397	5 7	74,5 70,3	10,5 9,9	15,0 19,8	467
3	81,9	8,2	9,9	425	29-50-2	81,7	11,7	6,6	495 426
5	76,8	7,7	15,4	453	4	76,7	11,0	12,3	454
7 · 29—36—2	72,3 84.5	7,3 8,7	20,4	481	6 8	72,2 68,2	10,4 9,8	17,4	482
4	79,1	8,2	12,7	440	29-51-1	84,2	12,3	$\begin{array}{c c} 22,0 \\ 3,4 \end{array}$	510
6	74,4	7,7	17,9	468	3	78,9	11,6	9,5	441
29—37—1	70,1 87,2	7,3 9,3	22,6	496 399	5 7	74,2 70,0	10,9	14,9	469 497
3	81,5	8,7	9,8	427	29-52-2	81,3	10,3 12,1	19,7	428
5	76,5	8,1	15,4	455	4	76,3	11,4	12,3	456
7 29—38—2	72,0 84,0	7,7 9,2	20,3	483 414	6 8	71,9	10,7	17,3	484
4	78,7	8,6	12,7	442	29-53-1	68,0 83,8	10,1	21,9	512 415
6	74,0	8,1	17,9	470	3	78,6	11,9	9,5	443
8 29-39-1	69,9 86,8	7,6	2 2,5	498	5 7	74,0	11,2	14,8	471 499
3	81,1	9,1	9,8	429	29-54-2	69,7	10,6 12,6	19,6	430
5	76,1	8,5	15,3	457	4	76,0	11,8	12,2	458
7	71,7	8,0	20,2	485	6	71,6	11,1	17,3	486
29-40-2	83,7 78,4	9,6	6,7	416	8 29—55—1	67,7 83,4	10,5	21,8	514
6	73,7	8,5	17,8	472	3	78,2	12,3	9,4	445
8	69,6	8,0	22,4	500	5 7	73,6	11,6	14,8	473 501
29-41-1	86,3 80,7	10,2	3,5	403 431	29-56-2	69,4	11,0	19,6	432
5	75,8	8,9	15,2	459	4	75,6	12,2	12,2	460
7	71,4	8,4	20,1	487	6 8	71,3 67,4	11,5 10,8	17,2 21,7	488 516
29-42-2	83,2 78,0	10,0	6,7	418	29-57-1	83,0	13,6	3,3	419
6	73,4	8,9	17,7	474	3	77,8	12,7	9,4	447
8	69,3	8,4	22,3	502	5 7	73,2 69,2	12,0	14,7	475 503
29—43—1 3	85,9 80,4	10,6	3,5	405	29-58-2	80,2	13,4	6,4	434
5	75,5	9,3	15,2	461	4	75,3	12,5	12,1	462
7	71,2	8,8	20,0	489	6 8	71,1 67,2	11,8	17,1 21,6	490 518
29-44-2	82,8	10,5	6,7	420 448	29-59-1	82.6	14,0	3,3	421
6	73,1	9,2	17,6	476	3	77,5	13,1	9,4	449
8	69,0	8,7	22,2	504	5 7	72,9	12,4	14,7 19,4	477 505
29—4 5 —1	85,5 80,0	11,1	3,4 9,7	407	29-60-2	79,8	13,8	6,4	436
5	75,2	9,7	15,1	463	4	75,0	12,9	12,1	464
7	70,9	9,1	20,0	491	6 8	70,6	12,2	17,1 21,5	492 520
29-46-2	82,4 77,3	10,9	6,6	422 450	29-61-1	82,3	14,4	3,3	423
6	72,8	9,6	17,6	478	3	77,1	13,5	9,3	451 479
8	68,8	9,1	22,1	506	5 7	72,7 68,6	12,7 12,0	14,6	507
29-47-1	85,1 79,6	11,5	3,4 9,6	409	29-62-2	79,4	14,1	6,4	438
5 5	74,8	10,3	15,0	465	4	74,7	13,3	12,0	466
7	70,6	9,5	19,9	493	8	70,4	12,5 11,9	17,0 21,4	522
29—48—2	82,1	11,3	6,6	424	30-16-2	89,1	4,0	6,9	404
4 6	77,0	10,0	17,5	480	4	83,3	3,7	13,0 18,2	432
8	68,5	9,4	22,0	508	6	78,3	3,5	10,2	1

C-H-N	C º/o	H °/ ₀	N º/o	M.G.	C—H—N	C º/o	H %	N %	M. G
30-16-8	73,8	3,3	22,9	488	30-31-5	78,1	6,7	15,2	461
30-17-1	92,1	4,3	3,6	391	7	73,6	6,3	20,0	489
3 5	85,9 80,5	4,0 3,8	$\begin{vmatrix} 10,0\\15,7 \end{vmatrix}$	419	30-32-2	85,7 80,4	7,6	6,7 $12,5$	420 448
7	75,8	3,6	20,6	475	6	75,6	6,7	17,6	476
30-18-2	88,7	4,4	6,9	406	8	71,4	6,3	22,2	504
4 6	82,9 77,9	4,1 3,9	12,9 18,2	434 462	30-33-1	88,4 82,7	$\begin{bmatrix} 8,1 \\ 7,6 \end{bmatrix}$	3,4	407 435
8	73,5	3,7	22,8	490	5	77,8	7.1	15,1	463
30-19-1	91,6	4,8	3,6	393	7	73,3	6,7	20,0	491
3 5	85,5 80,2	4,5 4,2	10,0 15,6	421 449	30-34-2	85,3 80,0	8,1	6,6 12,4	422 450
. 7	75,5	4,0	20,5	477.	6	75,3	7,1	17,6	478
30-20-2	88,2	4,9	6,9	408	8	71,1	6,7	22,1	506
4 6	82,6	4,6 4,3	12,8 18,1	436	30-35-1	88,0 82,4	8,6 8,0	3,4 9,6	409 437
8	73,2	4,1	22,7	492	5	77,4	7,5	15,0	465
30-21-1	91,1 85,1	5,3	3,5	395	7	73,0	7,1	19,9	493
3 5	79,8	5,0 4,7	9,9 $15,5$	423 451	30-36-2	84,9 79,6	8,5	6,6 12,4	$\begin{vmatrix} 424 \\ 452 \end{vmatrix}$
7	75,2	4,4	20,4	479	6	75,0	7,5	17,5	480
30-22-2	87,8 82,2	5,4 5,0	$\begin{array}{c c} 6,8 \\ 12,8 \end{array}$	410	8	70,9	7,1	22,0	508
4 6	77,3	4,7	18,0	466	$\frac{30-37-1}{3}$	87,6 82,0	9,0	$\begin{vmatrix} 3,4\\ 9,6 \end{vmatrix}$	411 439
8	72,8	4,4	22,7	494	5	77,1	7,9	15,0	467
30-23-1	90,7	5,8 5,4	3,5	397 425	7	72,7	7,5	19,8	495
5 5	79,4	5,1	9,9 $15,4$	453	30-38-2	84,5	8,9 8,4	6,6 12,3	426 454
7	74,8	4,8	20,4	481	6	74,7	7,9	17,4	482
30-24-2	87,4 81,8	5,8	6,8	412	8	70,6	7,4	22,0	510
6	76,9	5,4 5,1	17,9	468	30-39-1 3	87,2 81,7	9,4	3,4 9,5	413 441
8	72,6	4,8	22,6	496	5	76,7	8,3	14,9	469
$30-25-1 \\ 3$	90,2	6,3	3,5	399 427	7	72,4	7,8	19,7	497
5	79,1	5,8 5,5	9,8 15,4	455	30-40-2	84,1 78,9	9,3 8,8	6,5 12,3	428 456
7	74.5	5,2	20,3	483	6	74,4	8,3	17,3	484
30-26-2	87,0 81,4	6,3	6,6	414	8	70,3	7,2	21,9	512
6	76,6	5,9 5,5	12,7 17,9	470	30-41-1	86,7 81,3	9,9 9,2	3,4 9,5	415 443
8	72,3	5,2	22,5	498	. 5	76,4	8,8	14,8	471
30-27-1	89,8 83,9	6,7 6,3	3,5	401 429	7	72,1	8,2	19,6	499
5	78.8	5,9	9,8 15,3	457	30-42-2	83,7 78,6	9,8 9,2	6,5 12,2	43C 458
7	74,2	5,6	20,2	485	6	74,1	8,6	17,3	486
30-28-2	86,5 81,1	6,7	6,7 $12,6$	416 444	8 8	70,0	8,2	21,8	514
6	76.3	5 9	17.8	472	30-43-1	86,3 80,9	10,3 9,7	3,4 9,4	417 445
8	72,0	5,6	22,4	500	5	76,1	9,1	14,8	473
30—29—1	89,3 83,5	5,6 7,2 6,7	3,5	403	20 44 9	71,8	8,6	19,6	501
5	78.4	6,3	9,7 15,2	431 459	$\begin{vmatrix} 30-44-2\\4 \end{vmatrix}$	83,3 78,3	10,2 9,6	6,5 $12,1$	432 460
7	73,9	6.0	20,1	487	6	73,8	9,0	17,2	488
30-30-2	86,1 80,7	7,2 6,7	6,7	418 446	8 8	69,8	8,5	21,7	516
6	76,0	6,3	12,5 17,7	474	30-45-1	85,9 80,5	10,7	$ \begin{array}{c} 3,3 \\ 9,4 \end{array} $	419 447
8	71,7	6,0	22,3	502	5	75,8	9,5	14,7	475
30-31-1	88,9 83, 2	7,6 7,1	$\frac{3,5}{9,7}$	405 433	30 48 9	71,6	8,9	19,5	503
,	00,2	1,1	9,1	455	30-46-2	82,9	10,6	6,4	434

C-H-N	C °/ ₀	H °/0	N º/o	M. G.	C—H—N	C º/o	H º/o	N º/0	M. G.
30-46-4	77,9	10,0	12,1	462	30611	82,8	14,0	3,2	435
6	73,5	9,4	17,1	490	3	77.7	13,2	9,1	463
8	69,5	8,9	21,6	518	5	73,3	12,4	14,3	491
30-47-1	85,5 80,2	11,2	3,3	421	7	69,4	11,7	18,9	519
5	75,5	10,4 9,8	9,4 14,7	449	30-62-2	80,0 75,3	13,8 13,0	6,2	450
7	71,3	9,3	19,4	505	6	71,2	12,2	11,7 16,6	478 506
30 - 48 - 2	82,6	11,0	6,4	436	8	67,4	11,6	21.0	534
4	77,6	10,3	12,1	464	30-63-1	82,4	14,4	3,2	437
6 8	73,2 69,2	$9,7 \\ 9,2$	17,1	492 520	3 5	77,4	13,5	9,0	465
30-49-1	85,1	11,6	21,5 3,3	423	7	73,0 69,1	12,8 12,1	14,2 18,8	493 521
3	79,8	10,9	9,3	451	31-22-4	82,6	4,9	12,4	450
5	75,2	10,2	14,6	479	31-23-3	85,1	5,3	9,6	437
7	71,0	9,7	19,3	507	31-24-2	-87,7	5,7	6,6	424
30—50—2	82,2 77,3	11,4	6,4	438	31-25-3	84,7	5,7	9,6	439
. 6	72,9	10,7 10,1	12,0 17,0	466 494	4	86,4	5,7	5,9 12,3	472
š	69,0	9,6	21,4	522	31-27-3	84,4	6,1	9,5	441
30-51-1	84,7	12,0	3,3	425	7	74,8	5,4	19,7	497
3	79,5	11,2	9,3	453	31-29-3	84,0	6,5	9,5	443
5	74,8	10,6	14,6	481	31—30—2 31—34—2	86,5	7,0	6,5	430
$\begin{array}{c} 7 \\ 30-52-2 \end{array}$	70,7 81,8	10,0 11,8	19,2 6,4	509 440	31-37-3	85,7 82,5	8,2	6,4 9,3	434 451
4	76,9	11,1	12,0	468	31-41-3	81,8	9,0	9,2	455
<u></u>	72,6	10,5	16,9	496	31-43-3	81,4	9,4	9,2	457
8	68,7	9,9	21,4	524	31-61-1	83,2	13,6	3,1	447
30-53-1	84,3	12,4	3,3	427	32-20-4	83,5	4,3 4,7	12,2	460
3 5	79,1 74,5	11,6 11,0	9,2 $14,5$	455 483	32—21—3 32—22 — 4	85,9 83,1	4,8	9,4 12,1	462
7	70,4	10,4	19,2	511	32-23-5	80,5	4,8	14,7	477
30-54-2	81,4	12,2	6,3	442	32-24-6	78,1	4,9	17,0	492
. 4	76,6	11,5	11,9	470	32-25-3	85,1	5,5	9,3	451
6	72,3	10,8	16,9	498	$32-26-4 \ 32-27-5$	82,4 79,8	5,6 5,6	12,0 14,6	466 481
8 30—55—1	68,4 83,9	10,3 12,8	21,3 3,3	526 429	7	75,4	5,3	19,3	509
3	78,8	12,0	9,2	457	32-28-2	87,3	6,3	6,3	440
5	74,2	11,3	14,4	485	6	77.4	5,6	16,9	496
7	70,2	10,7	19,1	513	32-29-5	79,5	$6,0 \\ 7,2$	14,5 11,8	483 474
30-56-2	81,1	12,6	6,3	444	32—34—4 32—36—6	81,0 76,2	7,1	16,7	504
4 6	76,3 72,0	11,8 11,2	11,8 16,8	500	32-40-4	80,0	8,3	11,7	480
8	68,2	10,6	21,2	528	32-42-4	79,7	8,7	11,6	482
30-57-1	83,5	13,2	3,2	431	32-49-1	85,9	11,0	3,1	447
3	78,4	12,4	9,2	459	32-52-4	78,0 88,8	10,6 4,9	$\begin{array}{c c} 11,4\\ 6,3 \end{array}$	492 446
5	73,9	11,7	14,4	487 515	$33-22-2 \ 33-23-5$	81,0	4,7	14,3	489
30-58-2	69,9 80,7	11,1 13,0	19,0 6,3	446	33-24-2	88,4	5,4	6,2	448
4	76,0	12,2	11,8	474	6	78,5	4,8	16,7	504
6	71,7	11,6	16,7	502	33-28-4	82,5	5,8	11,7	480
8	67,9	10,9	21,1	530	33-29-5 33-30-6	80,0 77,6	5,8 5,9	$14,1 \\ 16,5$	495 510
30-59-1	83,2	13,6	3,2	433	33-30-6	73,6	5,6	20,8	538
3 5	78,1	12,8 12,1	9,1 14,3	461 489	33-33-3	84,1	7,0	8,9	471
5 7	73,6 69,6	11,4	19,0	517	33-35-3	83,7	7,4	8,9	473
30-60-2	80,4	13,4	6,2	448	33-39-3	83,0	8,2	8,8 3,0	477 461
4	75,6	12,6	11,8	476	$33-51-1 \\ 34-22-4$	85,8 83,9	$11,1 \\ 4,5$	11,5	486
6	71,4	11,9	16,7	504 532	34-24-2	88,7	5,2	6,1	460
8	67,7	11,3	21,0	334	0.1	,	14		

C-H-N	C 0/0	H %	N º/0	M. G.	C-H-N	C º/ ₀	H 0/0	N °/0	M. G.
`				100	00 51 1	00.0	100		105
34-24-4	83,6	4,9	11,5	488	36-51-1	86,9	10,3	2,8	497
34-26-2	88,3	5,6	6,1	462	37-27-5	82,1	5,0	12,9	541
4	83,3	5,3	11,4	490	37-29-3	86,2	5,6	8,2	515
6	78,8	5,0	16,2	518	37-30-2	88,4	6,0	5,6	502
34-28-2	87,9	6,0	6,0	464 492	37 - 38 - 2 $38 - 24 - 2$	87,1	7,4	5,5	510 508
4 6	82,9	5,7	11,4		38-26-4	89,7	4,7	5,5	
	78,5	5,4	16,1	520	38-30-8	84,8	4,8	10,4 18,7	538 598
34-32-2	87,2	6,8 6,4	6,0	468	38-33-3	76,2	5,0	70,1	531
4 6	82,2	0,4	11,3	496 524	38-41-3	85,9 84,6	6,2 7,6	7,9	539
_	77,8	0,1	16,0	470	38-52-4	80,8	0,0	7,8	564
	86,8	6,1 7,2 7,2	6,0		38-71-1	00,0	9,2	9,9	541
34-35-3	84,1	7,2	8,7	485 472	39-30-2	84,3	13,1	2,6 5,3	526
34 - 36 - 2 $34 - 40 - 4$	86,4	7,6	5,9 11,1	504	6	69,0	5,7 5.2	144	
34-40-4	80,9	1,9	11,1		39-34-4	80,4 83,9	6,1	14,4 10,0	582 558
34-43-5	80,6	7,9 8,3 8,3	11,1 13,4	506 521	39-35-11	71,2	5,1	23,4	657
34-52-2	78,3 83,6	10.6	15,4	488	40-44-6	79,0	_5,3 7,2	13,8	608
35-24-4	84,0	10,6	5,7 11,2		41-30-2	89,4	5,4	5 1	550
35-25-1	01.5	4,8 5,4	3,0	500 459	42-32-6	09,4	5,4 5,2	5,1 13,5	620
35-26-2	91,5 88,6	5,5	5,9	474	42-33-5	81,3 83,0	5,4	11,5	607
35-30-2	87,9	6,3	5,8	478	42-36-4	84,6	6,0	9,4	596
35-30-2	82,3	6,7	5,8	510	42-51-5	80,6	8,2	11,2	625
35-35-5	80,0	6.7	11,0 13,3	525	43-30-2	89,9	5,2	4,9	574
35-41-1	88,4	6,7	20,0	475	46-34-6	82,4	5,1	12,5	670
35-42-2	85,7	8,6	2,9 5,7	490	37-36-4	86,0	5,5	8,5	656
36-27-3	86,2	5,4	8,4	501	48-38-6	82,5	5,4	12,0	698
50-21-5	81,7	5,1	13,2	529	48-99-1	83,6	14,4	2,0	689
36-28-6	79,4	5,1	15,4	544	54-51-5	84,3	6,6	9,1	769
36-29-5	81,3	5,2 5,5	13,2	531	60-123-1	84,0	14,3	1,6	857
36-35-5	80,4	6,5	13,0	537	61-74-6	82,3	8,3	9,4	890
36-36-6	78,3	6,5	15,2	552	01-74-0	02,0	0,5	0,4	080
00-00-0	10,5	0,0	10,4	1 302				1	

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C-H-O-N	C º/o	H °/ ₀	O º/o	N°/0	M.G.	C-H-O-N	C º/o	H º/ ₀	0 %	N º/0	M.G
$2-3-6-5 \ 2-4-1-2 \ 4$	12,4 33,3 24,0	1,6 5,5 4,0	49,7 22,2 16,0	36,3 38,9 56,0	193 72 100	3-2-4-4 5-2 4	22,8 24,6 20,7	1,2 1,4 1,1	40,5 54,8 46,0	35,5 19,2 32,2	158 146 174
2-2	18,7 27,3 20,7	3,1 4,5 3,4	12,5 36,4 27,6	65,6 31,8 48,3	128 88 116	6-2 4 $3-3-1-1$	22,2 19,0 52,2	1,2 1,0 4,3	59,3 50,5 23,2	17,3 29,5 20,3	162 190 69
3-2 4 $4-2$	23,1 18,2 20,0	3,8	46,2 36,4 53,3	26,9 42,4 23,3	104 132 120	3 2—1 3	37,1 42,3 31,9	3,1 3,5 2,6	16,5 37,6 28,3	43,3 16,5 47,2	97 85 113
$5-2\\4$	16,2 17,7 14,6	3,3 2,7 2,9 2,4	43,2 58,8 48,8	37,8 20,6 34,1	148 136 164	3—1 3 4—1	35,6 27,9 30,8	3,0 2,3 2,5	47,5 37,2 54,7	13,9 32,6 12,0	101 129 117
6-2 4 $2-5-1-1$	15,8 13,3 40,7	2,6 2,2 8,5	63,2 53,3 27,1	18,4 31,1 23,7	152 180 59	3 5—1 3	24,8 27,1 22,4	2,1 2,2 1,8	44,1 60,1 49,7	29,0 10,5 26,1	145 133 161
3 5 7	27,6 20,9 16,8	5,7 4,3 3,5	18,4 13,9 11,2	48,3 60,9 68,5	87 115 143	6-1 3 $7-3$	24,2 20,3 18,6	2,0 1,7 1,5	64,4 54,2 58,0	9,4 23,7 21,8	149 177 193
2-1 3 3-1	32,0 23,3 26,3	6,7 4,8 5,5 4,2	42,7 31,1 52,7	18,6 40,8 15,4	75 103 91	3-4-1-2	42,9 32,1 36,0	4,8 3,6 4,0	19,0 14,3 32,0	33,3 50,0 28,0	84 112 100
3 5 41 3	20,2 16,3 22,5 17,8	3,4 4,6 3,7	40,3 32,7 59,8 47,4	35,3 47,6 13,1 31,1	119 147 107 135	$egin{array}{c} 4 \\ 3-2 \\ 4 \\ 4-2 \end{array}$	28,1 31,0 25,0 27,3	3,1 3,4 2,8 3,0	25,0 41,4 33,3 48,5	43,7 24,1 38,9 21,2	128 116 144 132
2-6-1-2 4 6	32,4 23,5 18,5	8,1 5,9 4,6	21,6 15,7 12,3	37,8 54,9 64,6	74 102 130	4 5-4 6-2	22,5 10,5 22,0	2,5 2,3 2,4	40,0 45,4 58,5	35,0 31,8 17,1	160 676 164
2—2 4 3—2	26,7 20,3 22,6	6,7 5,1 5,6	35,5 27,1 45,3	31,1 47,5 26,4	90 118 106	3-5-1-1 3	18,7 50,7 36,4	2,1 7,0 5,0	50,0 22,5 16,2	29,2 19,7 42,4	192 71 99
4 42 4	17,9 19,7 16,0	4,5 4,9 4,0	35,8 52,4 42,7	41,8 23,0 37,3	134 122 150	5 2—1 3	28,3 41,4 31,3	3,9 5,7 4,3	12,6 36,8 27,8	55,1 16,1 36,5	127 87 115
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$egin{array}{c} 7 \\ 2-1 \\ 3 \\ 2-8-1-2 \end{array}$	16,6 31,2 22,8	4,8 9,1 6,6	11,0 41,5 30,5	67,6 18,2 40,0	145 77 105	4—1 3 5—1	30,2 24,5 26,6	4,2 3,4 3,7	53,8 43,5 59,3	11,8 28,6 10,4	119 147 135
10 2-2 3-2	31,6 12,7 26,1 22,2	10,5 4,2 8,7 7,4	21,1 8,5 34,8 44,4	36,8 74,5 30,4 25,9	76 188 92 108	3 6-3 7-3 8-3	22,1 20,1 18,5 17,0	3,0 2,8 2,6	49,1 53,6 57,4	25,8 23,5 21,3	163 179 195 211
3-1-1-1 3 2-1	53,7 37,9 43,4	1,5 1,0 1,2	23,9 16,8 38,6	20,9 44,2 16,8	67 95 83	9-3 9-3 4	15,8 41,9 31,6	2,4 2,2 7,0 5,2	60,7 63,4 18,6 14,0	19,9 18,5 32,5 49,1	227 86 114
3 5 3—1	32,4 25,9 36,3	0,9 0,7 1,0	28,8 23,0 48,5	37,8 50,4 14,1	111 139 99	2—2 4 3—2	35,3 27,7 30,5	5,9 4,6 5,1	31,4 24,6 40,7	27,4 43,1 23,7	102 130 118
3-2-1-2	28,3 43,9 32,7	0,8 2,4 1,8	37,8 19,5 14,5	33,1 34,2 50,9	127 82 110	4 6 4—2	24,7 20,7 26,8	4,1 3,4 4,5	32,9 27,6 47,8	38,3 48,3 20,9	146 174 134
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4 4 4-2	$\begin{vmatrix} 51,0\\25,3\\27,7 \end{vmatrix}$	1,7 1,4 1,5	42,1 33,8 49,2	24,6 39,4 21,6	114 142 130	6-2 4 3-7-1-1	21,7 18,5 49,3	3,6 3,1 9,6	57,8 49,5 21,9	16,9 28,9 19,2	166 194 73

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3 44,9 0,9 14,9 39,3 107 5 31,0 3,2 20,6 45,2 155 2—1 50,5 1,0 33,7 14,7 95 3—1 41,7 4,3 41,7 12,2 115 3 39,0 0,8 26,0 34,1 123 3 33,5 3,5 33,6 29,4 143 3—1 43,2 0,9 43,2 12,6 111 5 28,1 2,9 28,1 40,9 171 3 34,5 0,7 34,5 30,2 139 4—1 36,6 3,8 48,8 10,7 131 4—1 37,8 0,8 50,4 11,0 127 3 30,2 3,1 40,2 26,4 159 3 31,0 0,6 41,3 27,1 155 5 25,7 2,7 34,2 37,4 187 5—3 28,1 0,6 46,8 24,5 171 5—1 32,6 3,4 54,4 9,5 147 6—3 25,7 0,5 51,3 22,5 187 3 27,4 2,8 45,7 24,0 175 7—3 23,6 0,5 55,2 20,7 203 5—5 23,6 2,5 39,4 34,5 203 4—2—1—2 51,1 2,1 17,0 29,8 94 6—3 25,1 2,6 50,3 22,0 191 2—2 43,6 1,8 29,1 25,5 110 5 21,9 2,3 43,8 32,0 219 4 34,8 1,4 23,2 40,6 138 7—3 23,2 2,4 54,1 20,3 207 6 28,9 1,2 19,3 50,6 166 8—5 19,1 2,0 51,0 27,9 251 3—2 33,1 1,6 38,1 2,2 126 4—6—1—2 49,0 6,1 16,3 28,6 98 4 31,2 1,3 31,2 36,3 154 4 48,2 1,2 37,6 32,9 170 4 28,2 1,2 37,6 32,9 170 2—2 42,1 5,2 28,1 24,6 114 5—2 30,4 1,2 50,6 17,7 158 4 33,8 4,2 22,5 39,4 142 4 25,8 1,1 43,0 30,1 186 6 28,2 3,5 18,8 49,4 170 6—4 23,7 1,0 47,5 27,7 202 3—2 36,9 4,6 36,9 21,6 130 4—3—1 59,3 3,7 19,7 17,3 81 4 30,4 3,8 30,4 35,4 158 3 52,7 3,3 17,6 26,4 109 4 4—2 32,9 4,1 43,8 19,2 146 5 31,4 1,9 20,9 45,8 153 5—2 29,6 3,7 49,4 17,3 162 3—1 42,5 2,6 42,5 12,4 113 4 25,3 3,1 42,1 29,5 190 3 3,1 42,5 2,6 42,5 12,4 113 4 25,3 3,1 42,1 29,5 190 3 3,1 42,5 2,6 42,5 12,4 113 4 25,5 3,1 42,1 29,5 190 3 3,1 42,5 2,6 42,5 12,4 113 4 25,5	3-7-1-3 35,6 2-1 40,4 3 30,8 3-1 34,3 3 27,1 4-1 29,7 3 24,2 5-1 26,3 3 21,8 3-8-1-2 40,9 4 31,0 2-2 34,6 4 27,3 6 22,5 3-2 30,0 4 21,9 3-9-1-1 48,0 3 35,0 2-1 39,5 3 30,2 3-1 33,6 3 26,7 3-10-1-2 40,0 4 30,5 3-11-2-1 38,7 3-12-1-2 69,1	6,9 1,7,8 6,0 2,6,7,8 5,4,7 5,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1,1	15,8 41,6 36,0 15,7 27,3 35,9 45,7 13,3 36,1 31,6 52,9 11,6 42,9 28,2 58,4 10,2 48,5 25,4 18,2 31,8 18,3 48,3 30,8 26,9 24,2 42,4 20,0 52,5 40,0 23,3 32,4 37,8 47,0 20,6 39,1 34,1 21,3 18,7 15,5 40,8 35,2 15,4 26,9 35,3 44,8 13,1 35,5 31,1 17,8 31,1 17,8 31,1 17,4 30,4	101 89 117 105 133 121 149 137 165 88 116 104 132 160 120 148 136 164 75 103 91 119 107 135 90 118 93 92	4-3-5-1 3 $4-4-1-2$ 4 $2-2$ 4 6 $3-2$ 4 $4-2$ 4 6 $5-2$ 4 $6-2$ 4 $6-2$ 4 $8-2$ 4 $9-2$ 4 $10-2$ $4-5-1-1$ 3 5 $2-1$	33,1 27,7 50,0 38,7 42,99 24,0 30,0 25,5 27,3 20,7 25,0 21,8 23,1 19,0 20,0 57,8 43,2 43,2 48,5	2,1 1,7 4,2 3,2 3,5 2,4 3,1 2,5 2,3 2,5 2,5 2,1 2,3 2,0 1,7 1,8 1,9 1,7 6,5 3,6 4,5 6,5 6,5	55,2 46,2 16,6 12,9 28,6 19,0 37,5 30,8 44,4 32,0 50,0 42,5 54,5 44,4 58,3 50,9 61,5 54,2 66,7 19,3 11,5 32,3	*9,6 24,3 29,2 45,2 25,0 40,0 21,9 35,9 19,4 32,6 42,0 17,5 29,8 15,9 27,4 214,6 25,5 13,5 23,7 12,5 22,2 11,6 16,9 37,8 50,4	145 173 96 124 112 140 168 128 156 144 172 200 160 188 176 204 232 192 220 208 236 224 252 240 83 111 139 99
3 34,0 2,1 34,0 29,8 141 6—2 27,0 3,4 53,9 15,7 178	4 30,5 38,7 3-12-1-2 69,1 4-1-1-1 60,8 3 44,9 2-1 50,5 3 39,0 3-1 43,2 3 34,5 4-1 37,8 3 31,0 5-3 28,1 6-3 25,7 7-3 23,6 4-2-1-2 51,1 2-2 43,6 4 34,8 6 28,9 3-2 38,1 4 31,2 4-2 33,8 4 28,2 5-2 30,4 4 25,8 6-4 23,7 4-3-1-1 59,3 3 52,7 2-1 49,5 3 38,4 5 31,4 3-1 42,5	8,5 11,8 13,0 1,2 0,9 1,0 0,8 0,6 0,6 0,6 0,5 1,1 1,8 1,4 1,2 1,1 1,0 1,1 1,1 1,1 1,1 1,2 1,2 1,1 1,2 1,2 1,3 1,4 1,2 1,2 1,2 1,2 1,2 1,2 1,2 1,2 1,2 1,2	13,5 47,5 34,4 15,1 17,4 30,4 17,4 30,3 17,7 14,9 39,3 33,7 14,7 26,0 34,1 43,2 12,6 50,4 11,0 41,3 27,1 46,8 24,5 51,3 22,5 55,2 20,7 17,0 29,8 29,1 25,5 23,2 40,6 19,3 50,6 17,7 17,0 29,8 29,1 25,5 23,2 40,6 19,3 50,6 17,7 17,0 30,1 44,7,5 27,7 19,7 17,3 17,6 26,4 33,0 14,4 25,6 33,6 14,4 25,6 33,0 14,4 25,6 33,0 14,4 25,6 33,0 14,4 25,6 33,0 14,4 25,6 33,0 14,4	118 93 92 79 107 95 123 111 139 127 155 171 187 203 94 110 138 166 126 154 142 170 158 186 202 81 109 97 125 110 110 110 110 110 110 110 11	$\begin{array}{c} 3\\ 5\\ 2-1\\ 3\\ 5\\ 3-1\\ 3\\ 5\\ 4-1\\ 3\\ 5\\ 5-1\\ 3\\ 5-5\\ 6-3\\ 5\\ 7-3\\ 8-5\\ 4-6-1-2\\ 4\\ 6\\ 2-2\\ 4\\ 6\\ 3-2\\ 4\\ 6\\ 4-2\\ 4\\ 5-2\\ \end{array}$	43,2 34,5 48,5 31,0 41,7 33,5 28,1 30,2 25,7 32,6 25,7 21,9 23,2 19,1 42,1 33,8 31,0 42,1 33,8 25,7 42,1 33,8 42,1 33,8 42,1 33,8 42,1 33,8 42,1	4,5,6,0,9,2,3,5,9,8,1,7,4,8,2,2,3,5,6,8,2,1,4,5,5,6,8,2,1,4,5,5,6,8,2,1,4,4,5,7,4,8,2,1,4,4,5,5,6,8,2,1,4,4,5,6,8,2,1,4,5,6,8,2,1,4,5,6,8,2,1,4,5,6,8,2,1,4,5,6,8,2,1,4,5,6,8,2,1,4,5,6,8,2,1,4,5,6,8,2,1,4,5,6,8,2,1,4,5,6,8,2,1,4,5,6,8,2,1,4,5,6,8,2,1,4,5,6,8,2,1,4,5,6,8,1,5,8,1,5,8,1,5,8,1,5,8,1,5,8,1,5,8,1,5,8,1,5,8,1,5,8,1,5,8,1,5,8,1,5,8,1,5,8,1,5,8,1,5,8,1,5,8,1,5,1,5	14,4 11,5 225,2 20,6 41,7 33,6 28,1 44,2 45,7 34,2 45,7 45,1 50,3 43,8 54,1 151,0 428,1 22,5 83,1 44,2 45,7 10,4 28,1 45,7 10,4 28,1 45,7 45,7 45,1 45,1 45,1 45,1 45,1 45,1 45,1 45,1	37,8 50,4 14,1 33,1 45,2 12,2 29,4 40,9 26,4 37,4 9,5 24,0 32,0 32,0 20,3 27,9 28,6 44,4 54,5 24,6 35,4 49,4 49,4 49,4 45,2 19,2 217,3	111 139- 99- 127 155- 115- 143- 171 131- 159- 187- 147- 175- 203- 191- 207- 251- 98- 126- 154- 114- 142- 170- 130- 158- 186- 146- 174- 162-

C-H-O-N	C º/o	H º/ ₀	0 %	N º/0	M.G.	C-H-O-N	C º/o	H °/ ₀	0%	N °/0	M.G.
C-H-O-N 4-6-7-4 8-2 4 9-2 4 10-2 4 11-2 12-4 4-7-1-1 3 5 2-1 3 3-1 3 5 4-1 3 5 5-1	21,6 22,9 20,2 21,2 18,9 19,8 17,8 18,6 15,9 42,5 34,1 47,5 37,2 41,0 33,1 27,7 36,1 29,8 25,4 32,2 27,1	H°/ ₀ 2,7 2,8 2,5 2,6 2,4 2,5 2,2 2,3 6,2 4,9 6,9 6,9 6,9 4,0 5,2 4,3 3,7 4,7 3,9	50,4 61,0 53,8 63,7 56,7 66,1 59,3 63,6 18,8 14,1 11,3 31,7 24,8 41,0 33,1 27,7 48,1 33,9 53,7	25,2 13,3 23,5 12,4 22,0 11,6 20,7 10,9 18,5 16,5 37,2 49,6 12,0 29,0 40,5 10,5 23,7 10,9 9,4	222 210 238 226 254 242 270 258 302 85 113 141 101 129 117 145 173 133 161 189 149	4-9-5-1 3 5 $6-1$ 3 5 $7-3$ 5 $8-3$ 5 $4-10-1-2$ 4 6 $2-2$ 4 8 $3-2$ 4 $4-2$ 4 $5-2$	31,8 26,8 23,2 28,7 24,6 21,5 22,7 20,1 21,1 18,8 47,1 36,9 30,4 40,7 32,9 23,8 35,8 29,6 32,0 27,0 28,9	5,9 5,0 4,3 5,4 4,6 4,0 4,3 3,8 3,5 9,8 7,3 6,8 5,4 6,2 6,7 6,2 6,7 6,0	53,0 44,7 38,6 57,5 449,2 43,1 54,1 56,4 50,2 15,7 12,3 35,8 29,6 42,7 36,0 48,2	9,3 23,5 33,8 8,4 21,5 31,4 19,9 29,3 18,5 27,5 27,4 43,1 53,2 23,7 38,4 55,4 20,9 34,6 18,6 18,6 18,6 18,6	151 179 207 167 195 223 211 239 227 265 102 130 158 118 146 202 134 162 150 178 166
$\begin{array}{c} 3 \\ 6-1 \\ 3 \\ 7-3 \\ 8-1 \\ 3 \\ 4-8-1-2 \\ 4 \\ 2-2 \\ 4 \\ 6 \\ 3-2 \\ 4 \\ 4-2 \\ 4 \\ 6 \\ 8 \\ 5-2 \\ 4 \\ 6-2 \end{array}$	27,1 29,1 24,9 23,0 24,4 21,3 48,0 37,5 41,4 33,3 27,9 36,4 27,3 23,5 20,7 29,3 25,0 26,7	3,9 4,2 3,3 3,5 3,5 4,0 6,2 6,5 4,5 5,4 4,5 3,4 4,5 3,4 4,1 4,1	45,2 58,2 49,7 53,6 65,0 16,0 12,5 27,6 22,2 18,6 36,4 30,0 43,2 36,4 31,4 48,8 41,7 53,3	23,7 8,5 21,8 20,1 7,1 18,7 28,0 43,7 24,1 38,9 48,9 21,2 35,0 18,9 31,8 41,2 48,3 17,0 29,2 15,6	177 165 193 209 197 225 100 128 116 144 172 132 160 148 176 204 232 164 192 180	$\begin{array}{c} 4\\ 6-2\\ 4\\ 4-11-1-1\\ 3\\ 5\\ 2-1\\ 3\\ 5\\ 3-1\\ 3\\ 4-11\\ 3\\ 4-11\\ 2-2\\ 4\\ 2-2\\ 4\\ 3-2\\ \end{array}$	24,7 26,3 22,9 54,0 41,0 33,1 45,7 36,1 29,8 39,7 32,2 29,1 26,5 24,4 46,2 36,4 40,0 32,4 35,3	5,1 5,5 4,7 12,3 9,4 7,6 10,5 8,3 6,8 9,1 7,4 8,0 6,6 6,1 5,6 11,5 9,1 10,0 8,1 8,8	41,2 52,7 45,7 18,0 13,7 11,0 30,5 24,0 19,9 39,7 32,2 46,7 38,8 44,2 48,7 15,4 126,7 21,6 35,3	28,9 15,4 26,7 15,7 35,9 48,3 13,3 31,6 43,5 11,5 28,2 21,3 26,9 42,4 23,2 21,3 26,9 42,4 23,8 20,6	194 182 210 89 117 145 105 133 161 121 149 137 165 181 197 104 132 120 148 136
4 7-2 4 6 8-2 4 6 4-9-1-1 3 2-1 3 5 7 3-1 3 5 4-1 3	23,1 24,5 21,4 19,0 22,6 20,0 17,9 55,2 41,7 46,6 36,7 30,2 25,7 40,3 32,6 27,4 35,6 29,4	3,8 4,1 3,6 3,2 3,8 3,0 10,3 7,8 7,7 6,9 5,7 4,8 7,5 6,1 5,1 6,6	46,2 57,1 50,0 44,4 60,4 53,3 57,7 18,4 13,9 31,1 24,4 20,1 17,1 40,3 32,6 27,4 47,4 39,3	26,9 14,3 15,0 33,3 13,2 23,3 31,3 16,1 13,6 32,0 44,0 52,4 11,8 28,6 40,0 10,4 25,8	208 196 224 252 212 240 268 87 115 103 131 159 187 119 147 175 135 163	$ \begin{array}{c} 4 \\ 4 \\ 4 \\ 4 \\ 4 \end{array} $ $ \begin{array}{c} 4 \\ 4 \\ 6 \\ 4 \\ 4 \\ -13 \\ -1 \\ 3 \\ 3 \\ 2 \\ -1 \\ 3 \\ 5 \\ -1 \\ -1 \\ 6 \\ 5 \\ 5 \\ -2 \\ -1 \\ 2 \\ 2 \\ 2 \\ 4 \\ 4 \\ 4 \\ 2 \\ 4 \\ 5 \\ -2 \\ \end{array} $	29,3 31,5 26,7 23,1 52,7 40,3 44,9 35,5 65,9 26,4 56,6 49,2 40,0 43,5 36,1 39,0 33,0 35,3	7,3 7,9 6,7 5,8 14,3 10,9 12,1 9,6 1,1 0,4 1,9 1,6 1,3 1,4 1,2 1,3 1,1	29,3 42,1 35,5 30,7 17,6 13,4 29,9 23,7 17,6 42,3 15,1 26,2 21,3 34,8 28,9 41,6 35,1 47,0	20,0 34,1 18,4 31,1 40,4 15,4 35,3 13,1 31,1 15,4 26,4 23,0 37,3 20,3 33,7 18,1 30,8 16,5	164 152 180 208 91 119 107 135 91 227 106 122 150 138 166 154 182

					1			1					
C-H-O-N	C º/o	H °/0	O º/o	N 0/0	M.G.	CH	0-	N	C º/0	H º/0	O º/o	N º/0	M.G.
$5-2-5-4 \\ 6-2$	30,3 32,3	1,0	40,4 51,6	28,3 15,0	198 186	5-	-62- 3-	-6 -2	33,0 42,2	3,3 4,2	17,6 33,8	46,1 19,7	182 142
5-3-1-1	64,5	3,2	17,2 13,2	15,0 34,7	93 1 21			4	35,3 30,3	3,5 3,0	28,2 24,2	32,9 42,4	170 198
$\begin{array}{c} 3 \\ 2-1 \end{array}$	49,6	2,5 2,7	29,3	12,8	109		4-	-2	38,0	3,8	40,5	17,7	158
3 3—1	43,8	2,2 2,4	$\begin{vmatrix} 23,4\\ 38,4 \end{vmatrix}$	30,6	137 125			4 6	32,2 28,0	3,2 2,8	34,4	30,1	186 214
3	39,2	1,9	31,4	27,5	153		5-	-2 4	34,5 29,7	3,4 3,0	46,0	16,1 27,7	174 202
$4-1 \\ 3$	42,6	2,1-1,8	45,4 37,9	9,9	141 169			6	26,1	2,6	34,8	36,5	230
5	30,5	1,5	32,5 51,0	35,5 8,9	197			-2 -4	27,0	2,7	57,7	12,6 17,0	222 330
$5-1 \\ 3$	32,4	1,9	43,2	22,7	185	5.	-7-1	1	61,9	7,2	16,5	14,4	97
5 6—1	28,2 34,7	1,4	37,6	32,8	213 173			3 5	48,0	5,6	12,8 10,4	33,6 45,8	125 153
3	29,9	1,5	47,7	20,9	201		2	— <u>1</u>	53,1 42,5	6,2	28,3 $22,7$	$\begin{vmatrix} 12,4\\29,8 \end{vmatrix}$	113
5 7—1	26,2 31,8		$\begin{vmatrix} 41,9\\59,2 \end{vmatrix}$	$\begin{vmatrix} 30,6 \\ 7,4 \end{vmatrix}$	229 189			5	35,5	4,1	18,9	41,4	169
3	27,6	1,4	51,6 45,7	19,4	217		3	3	46,5 38,2	5,4	37,2 30,6	10,9 $26,7$	129
5 5-4-1-2	24,5 55,6	3,7	14,8	25,9	108			5	32,4	3,8	25,9	37,8	185
$egin{array}{c} 4 \ 2 - 2 \end{array}$	44,1	2,9	11,8 25,8	$\begin{vmatrix} 41,2\\22,6 \end{vmatrix}$	136 124		4	3	41,4 34,7	4,8	44,1 37,0	24,3	145 173
4	39,5	2,6	21,1	36,8	152		-	5 1	29,9	3,5	31,8	34,8	201
$^{\cdot 3-2}$	$\begin{vmatrix} 42,8\\ 35,7 \end{vmatrix}$	$\begin{array}{c c} 2,9 \\ 2,4 \end{array}$	34,3 28,6				٤	3	31,8	3,7	42,3	22,2	189
6.	30,6	2,0	24,5	42,8	196		6	5 3—1	27,7 33,9	3,2	36,8	32, 2 7,9	217
4—2 4	38,5	3 2,2	$\begin{vmatrix} 41,0\\34,8 \end{vmatrix}$	30,4	184			3	29,3	3,4	46,8	20,5	205
6 5—2	28,3	3 1,9	$\begin{vmatrix} 30,2 \\ 46,5 \end{vmatrix}$				5	5 7—1	25,8 31,1	3,6	41,2		
5—2 4	30,0) 2,0	40,0	28,0	200	1		3	27,1		50,7		
6 6—2	26,3 31,9	$\begin{array}{c c} 3 & 1,7 \\ 7 & 2,1 \end{array}$	35,1 51,1				8	5 3—1	28,7	3,3	61,	2 6,7	209
4	27,8	8 1,8	44,4	25,9	1 216		1.5	3 5	25,3 $15,9$		54,0		
5-5-1-1	$\begin{vmatrix} 24,6\\63,2 \end{vmatrix}$	2 5,2	39,4	3 14,7	7 95	5	_81	L—2	53,6	7,1	14,3	3 25,0	112
3	48,8	3 4,1	13,0) 34,1	1 123			4 6	$\begin{vmatrix} 42,8\\35,7 \end{vmatrix}$	4,8	11,4		
5 2—1	54,0	$0 \mid 4,5$	28,8	12,6	3 111		2	2-2	46,9	6,2	25,0		
3 5	/	$\begin{array}{c c} 2 & 3,6 \\ 9 & 3,0 \end{array}$	$\begin{vmatrix} 23,0\\19,2 \end{vmatrix}$		$\begin{vmatrix} 139 \\ 167 \end{vmatrix}$			4 6	32,6	3 4,3	17,4	4 45,7	184
3-1	47.	2 3.9	37,8	3 11,0	$) \mid 127$		ę	3-2 4	010	5,5	$\begin{vmatrix} 33, \\ 27, \end{vmatrix}$		
3 	'	$ \begin{array}{c c} 7 & 3,2 \\ 8 & 2,7 \end{array} $	31,0	$2 \mid 38,3$	2 183			6	30,0	$) \mid 4,0$	24,	$0 \mid 42,0$	200
4-1	. 42,	0 3,5	44,	7 9,8	$3 \mid 143$		4	$^{1-2}$		4,2	34,	1 29,8	188
3 5	30,	1 2.5	$\frac{1}{32.2}$	2 35,	$2 \mid 199$,	6	27,8	$3 \mid 3,7$	2 29,		
5—1 3	. 37,	7 3,1	$\frac{50,3}{42,8}$	$\frac{3}{8} \frac{8}{22}$	3 159 4 187			$5-2 \\ 4$. 29,4	1 3,9	39,	2 27,	5 204
5	27,	9 2,3	37,	$2 \mid 32,$	$6 \mid 215$			6 3—2	25,9	$9 \mid 3,4$	L 34,		
6-J		3 2,8	54,	$3 \mid 20,$	7 203			4	27,3	$3 \mid 3,6$	i 43,	$6 \mid 25,4$	1 220
5	26,	0 2,1	41,	$6 \mid 30,$	$3 \mid 231$			6 7—2		$3 \mid 3,8$	53,	$8 \mid 13,$	$5 \mid 208$
5-6-1-2		5 4,3	11,	$6 \mid 40,$	$6 \mid 138$			4	25,4	$4 \mid 3,4$	1 47,	4 23,	$ \begin{array}{c c} 7 & 236 \\ 3 & 264 \end{array} $
2—2		1 3,6	3 + 9,	$ \begin{array}{c c} 6 & 50, \\ 4 & 22, \end{array} $:	8-2	1 23,4	4 3,1	1 62,	5 10,	$9 \mid 224$
4		0 3,9	$\frac{1}{20}$					4	21,	1 2,8	3 56,	3 19,	7 252

C-H-O-N	C º/o	H 0/0	0 %	N º/0	M.G.	C-H-O-N	C º/o	H %,	0.0/0	N º/o	M. G.
5-8-8-6	19,2	2,6	51,3	26,9	2 80	5-11-4-3	33,9	6,2	36,2	23,7	177
5-9-1-1	60,6	9,1	16,2	14,1	99	5	29,3	5,4	31,2	34,1	205
3 5	47,2 38,7	7,1 5,8	12,6 10,3	$33,1 \\ 45,2$	$\frac{127}{155}$		36,4 31,1	6,6 $5,7$	48,5	8,5 21,8	$165 \\ 193$
2-1	52,2	7,8	27,8	12,2	115		27.1	5,0	36,2	31,7	2 2 1
3	41,9	6,3	22,4	29,4	143	5-12-1-2	27,1 51,7	10,3 8,3	13,8	24,1	116
5 3—1	35,1 45,8	5 ,2 6,9	18,7 36,6	40,9	171 131	4 6	$\frac{41,7}{34,9}$	8,3 7,0	11,1	38,9	144
3	37,7	- 5,6	30,2	26,4	159	2-2	45,4	9,1	9,3	48,8 21,2	$\begin{array}{c} 172 \\ 132 \end{array}$
5	32,1	4,8	25,7	37,4	187	4	37,5	7,5	20,0	35,0	160
4—1 3	40,8	6,1 5,1	43,5 36,6	$9,5 \\ 24,0$	147 175	3-2	31,9	6,4	17,0	44,7	188
5	29,6	4,4	31,5	34,5	203	4	$40,5 \\ 34,1$	8,1 6,8	32,4 27,3	18,9° 31,8	$\frac{148}{176}$
5-1	36,8	5,5	49,1	8,6	163	6	29,4	5,9	23,5	41,2	204
3 5	31,4 27,4	4,7 4,1	41,9 36,5	22,0 32,0	191 219	$egin{array}{c c} 4-2 \ 4 \end{array}$	36,6 31,3	7,3	39,0	17,1	164
6-1	33,5	5,0	53,6	7,8	179	6	$\frac{51,5}{27,3}$	6,2 5,4	33,3 29,1	29,2 38,2	$\begin{array}{c} 192 \\ 220 \end{array}$
3	29,0	4,3	46,4	20,3	207	5-2	33.3	6,7	44,4	15,6	180
5 7—1	25,5 30,8	3,8 4,6	40,9 57,4	29,8 7,2	$\frac{235}{195}$	$5-13-1-1 \\ 3$	58,2 45,8	$\frac{12,6}{9,9}$	15,5 $12,2$	13,6	103
3	26,9	4,0	50,2	18,8	223	5	37,7	8,2	10,1	32,1 44,0	131 159
5	23,9	3,6	44,6	27,9	251	2-1	50,4	10,9	26,9	11,8	119
5-1 3	28,4 25,1	4,3 3,8	60,7 53,5	$\frac{6,6}{17,6}$	211 239	3	40,8 34,3	8,8 7,4	21,8 18,3	28,6	$\frac{147}{175}$
5	22,5	3,4	47,9	26,2	267		$\frac{34,3}{44,4}$	9,6	35,6	40,0 $ 10,4 $	135
5-10-1-2	52,6	8,8	14,0	24,6	114	3	36,8	8,0	29,4	25,8	163
4 6	42,2 35,3	7,0 5,9	11,3	39,4 49,4	142 170	5—14—1—2	31,4 50,8	6,8 $11,9$	25,1 13,6	36,6 23,7	191 118
2-2	46,2	7,7	24,6	21,5	130	4	41,1	9,6	10.9	38,4	146
4	38,0	6,3 5,4	20,3	35,4	158	6	34.5	8,0	9,2	48,3	174
3-2	41,1	6,8	17,2 32,9	45,1 19,2	186 146	2-2 4	44,8 37,0	10,4	23,9 19,8	20,9 34,6	$\begin{array}{c} 134 \\ 162 \end{array}$
4	34,5	5,7	27,6	32,2	174	6	31.6	7,4	16,8	44,2	190
$egin{array}{c} 6 \ 4-2 \end{array}$	29,7 37,0	4,9 6,2	23,7 39,5	41,6 17,3	$\begin{array}{c c} 202 \\ 162 \end{array}$	3-4	33,7	7,9	27,0	31,4	178
4	31,6	5,2	33,7	29,5	190	6-4	29,1 26,5	6,8 6,2	23,3 42,5	40,8 24,8	206 226
6	27,5	4,6	29,4	38,5	218	5-15-1-1	57,1	14,3	15,2	13,3	105
5—2 , 4	33,7 29,1		45,0 38,8	15,7 27,2	178 206		45,1 37,3	11,3	$\begin{array}{c c} 12,0 \\ 9,9 \end{array}$	31,6 43,5	$\begin{array}{c} 133 \\ 161 \end{array}$
6	25,6	4,3	34,2	35,9	234	2-1	49,6		26.4	11,6	121
$egin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{vmatrix} 30,9 \\ 27,0 \end{vmatrix}$		49,5	14,4	194	3 4	40,3	10,1	21,5	28,2	149
6	24,0		43,2 38,4	25,3 33,6	222 250	3—1 3	33,9 43,8	8,5	18,1 35,0	39,5 10,2	177 137
7-2	28,6	4,8	53,3	13,3	210	3 8	36,4	9,1	29,1	25,4	165
. 6	25,2 $22,5$		47,1 42,1	23,5 31,6	238 266	5 3	31,1	7.8	24,8	36,3	193
8-2	26.5	4.4	56,6	12,4	226		39,2 33,1		41,8 35,4	$\begin{array}{c c} 9,2\\23,2 \end{array}$	153 181
.4	23,6 21,3	3.9	50,4	22,1	254	5 2	28,7	7,2	30,6	33,5	209
5-11-1-1	59,4	3,5 10,9	45,4 15,8	29,8 13,9	282 101		35,5	8,9 +	47,3	8,3	169
3	46,5	8,5	12,4	32,6	129	- 3 3 - 5 2	30,5 $26,7$		$\frac{40,6}{35,5}$	21,3 31,1	197 225
$egin{array}{c} 5 \ 2-1 \end{array}$	38,2	7,0	10.2	44,6	157	5-17-5-7 2	23.7	5.9	31,6	38,7	255
3	51,3 41,4	9,4 7,6	27,3 $ $ $22,1$ $ $	$\frac{12,0}{28,9}$	117 145		18,0	15,2	25,6	11,2	125
5	34,7	6,3	18,5	40,5	173		39,6 55,0			$\frac{13,6}{32,1}$	103 131
3—1	45,1	8,3	36,1 +	10,5	133	5 4	15,3	0,6	10,1	44,0	159
5	37,3 31,7		29,8 $25,4$	26,1 37,0	161		32,3	0,4		31,4	223 ·
4-1	40,3	7,4	42,9	9,4	149	$7-5 \mid 2$	28,2	$0,4 \\ 0,4$		29,3 27,4	239 255
								- 1		1	

C-H-O-N	C º/o	H º/ ₀	O º/0	N º/0	M.G.	C-H-O-N	C º/o	H ⁰ / ₀	O º/o	N º/0	M.G.
6-1-8-5	26,6	0,4	47,2	25,8	271	6-3-9-1	30,9	1,3	61,8	6,0	233
9—5	25,1	0,3	50,2	24,4	287	3	27,6	1,1	55,2	16,1	261
10-5	23,8	0,3	52,8	23,1	303	5	24,9	1,0	49,8	24,2	289
$\begin{array}{c} 11-7 \\ 6-2-1-2 \end{array}$	20,7 61,0	0,3	50,7	28,2 23,7	347	6-4-1-2	60,0	3,3	13,3	23,3	120
4	49,3	1,4	11,0	38,3	146	6	48,6	2,3	10,8	37,8 47,7	148 176
6	41,4	1,1	9,2	48,3	172	2—2	53,0	2,9	23,5	20,6	136
2-2	53,7	1,5	23,9	20,9	134	4	43,9	2,4	19,5	34,2	164
4 6	44,4 37,9	1,2	19,8 16,8	34,6 44,2	162 190	6	37,5	2,1	16,7	43,7	192
3-2	48,0	1,3	32,0	18,7	150	3-2	47,4	2,6	31,6 26,7	18,4	152
4	40,4	1,1	27,0	31,5	178	6	34,6	1,9	23,1	40,4	208
• 6	34,9	1,0	23,3	40,8	206	4-2	42,8	2,4	38,1	16,7	168
4—2 4	43,4 37,1	1,2	38,6	16,8 28,8	166 194	4 6	36,7 32,1	2,0	32,7	28,6 37,5	196 224
6	32,4	0,9	28,8	37,8	222	5—2	39,1	1,8	28,6 43,5	15,2	184
5—2	39,6	1,1	.44,0	15,3	182	4	34,0	1,9	37,7	26,4	212
4	34,3	0,9	38,1	26,7	210	6	30,0	1,7	33,3	35,0	240
6 62	30,2 36,3	0,8	33,6 48,5	35,3 14,1	238 198	6-2	36,0	2,0	48,0	14,0 24,6	200 228
4	31,8	0,9	42,5	24,8	2 26	6	28,1	1,6	37,5	32,8	256
6	28,3	0,8	37,8	33,1	254	7-2	33,3	1,8	51,8	13,0	216
7-2	33,7	0,9	52,3	13,1	214	4	29,5	1,6	55,9	12,9	244
4	29,7 $26,7$	0,8	46,3	23,1	242 270	$6-\dot{5}-1-1$	26,5 67,3	1,5	41,1 14,9	30,9	272 107
8-2	31,3	0,9	41,5	12,2	230	3	53,3	3,7	11,8	31,1	135
4	27,9	0,8	49,6	21,7	258	5	44,2	3,1	9,8	42,9	163
6	25 2	0,8 0,7 0,8	44,7	29,4	286	. 2-1	58,5	4,1	26,0	11,4	123
9—2 4	29,3 26,3	0,8	58,5	11,4	246 274	3 5	47,6	3,3	21,2 17,9	27,8 39,1	151 179
- 6	23,8	0,6	47,7	27,8	302	3-1	51,8	3,6	34,5	10,1	139
10-2	27,5	0.7	61,1	10,7	262	3	43,1	3,0	28,7	25,2	167
4	24,8	0,7	55,2	19,3	290	5	36,9	2,6	24,6	35,9	195
6-3-1-1	22,6	0,6	50,3	26,4	318	$\begin{array}{ c c c c c }\hline & 4-1 \\ & 3 \\ \hline \end{array}$	46,5 39,3	3,2	41,3 35,0	9,0	155 183
3	68,6	2,2	12,0	31,6	133	5	34.1	2.4	30,3	33,2	211
5	44,7	1,9	9,9	43,5	161	5-1	42,1	2,9 2,5	46,8	8,2	171
2-1	59,5	2,5	26,4	11,6	121	3	36,2	$\begin{vmatrix} 2,5 \\ 2,2 \end{vmatrix}$	40,2	21,1	199
3 5	48,3	2,0	$\begin{vmatrix} 21,5\\18,1 \end{vmatrix}$	28,2 39,5	149 177	5 6-1	31,7	2,7	35,2 51,3	30,8	227 187
3-1	52,6	2,2	35,0	10,2	137	3	33,5	2,3	44,7	19,5	215
3	43,6	1,8	29,1	25,5	165	5	29,6	2,1	39,5	28,8	243
5	37,3	1,5	24,9	36,3	193	7-1	35,5 31,2	$\begin{vmatrix} 2,4\\2,1 \end{vmatrix}$	55,2 48,5	6,9	203 231
$\begin{array}{c} 7 \\ 4-1 \end{array}$	$\begin{vmatrix} 32,6 \\ 47,1 \end{vmatrix}$	$\begin{array}{ c c c c }\hline 1,4 \\ 2,0 \\ \end{array}$	21,7 41,8	44,3 9,1	221 153	5	27,8	1,9	43,2	27,0	259
3	39,8	1,6	35,4	23,2	181	8-1	32,9	2,3	58,4	6,4	219
5	34,4	1.4	30,6	33,5	209	3	29,1	2,0	51,8	17,0	247
5-1	42,6	1,8	47,3 40,6	8,3 21,3	169 197	6-6-1-2	26,2 59,0	1,8 4,9	46,5	25,4 22,9	275 122
3 5	36,5 32,0	1,3	35,5	31,1	225	4	48,0	4,0	10,7	37,3	150
6—1	38,9	1,6	51,9	7,6	185	6	40.4	3,4	9,0	47,2	178
3	33,8	1.4	45,1	19,7	2 13	2-2	52,2	4,3	23,2	20,3	138
5	29,9	1,2 1,5	39,8	29,0	241	4 6	43,4 37,1	3,6	19,3 16,5	43,3	166 194
7-1	35,8 31,4	1,5	55,7	7,0	201 229	3-2	46,7	3,9	31,2	18,2	154
5	28,0	1,2	43,6	27,2	257	4	39,6	3,3	26,4	30,8	182
8—1	33,2	1,4	59,0	6,4	217	6	34,3	2,8	22,9 37,6	40,0 $ 16,5$	210 170
3 5	29,4	1,2	52,2 46,9	17,1 25,6	245 273	4-2	42,3 36,4	3,5	32,3	28,3	198
5	26,4	1,1	10,0	20,0	2.0		1			1	

C-H-O-N	C º/o	H ⁰ / ₀	0 %	N º/0	M. G.	C-H-O-N	C°/0	H º/ ₀	O º/o	N º/o	м. G.
6-6-4-6 5-2	31,9	2,6	28,3 43,0	47,2 15,1	226 186	6-8-1-2	58,1 47,4	6,4 5,3	12,9 10,5	22,6 36,8	124 152
4 6	33,6 29,7	2,8 2,5	37,4 33,1	26,2 34,7	214 242	6 2—2	40,0	4,4 5,0	8,9 22,8	46,7 20,0	180 140
6-2	35,6	3,0	47,5	13,9 24,4	202	4 6	42,9 36,7	4.8	19,0	33,3 42,8	168 196
7—2	27,9	2,3	37,2 51,4	32,6 12,8	258 218	3—2 4	46,2 39,1	5,1	30,7	18,0	156 184
4 6 8–2	29, 3 26,3 30,8	2,4 2,2 2,5	45,5 40,9 54,7	22,8 30,6 12,0	274	6 4—2 4	34,0 41,9 36,0	3,8	$\begin{vmatrix} 22,6\\ 37,2\\ 32,0 \end{vmatrix}$	39,6 16,3 28,0	212 172 200
4	27,5 24,8	2,3 2,1	48,8	21,4 29,0	234 262 290	6 5-2	31,6 38,3	4,0 3,5 4,2	28,1 42,6	36,8 14,9	228 188
9-2	28,8 25,9	2,4	57,6 51,8	11,2 20,1	250 278	4 6	33,3 29,5	3,7	37,0 32,8	25,9 34,4	· 216 244
6 10—2	23,5 27,1	1,9	47,1 60,1	27,4 10,5	306 266	6-2	35,3 31,0	3,9	47,1 41,4	13,7	204 232
4 6	24,5 22,4	2,0 1,8	54,4 49,7	19,1 26,1	294 3 22	6 7—2	27,7 32,7	3,1 3,6	36,9 50,9	32,3 12,7	260 220
11-2	25,5 23,2	2,1	62,4 56,8	9,9 18,1	282 310	4 6	29,0 26,1	3,2 2,9	45,1 40,6	22,6 30,4	248 276
12—2	21,3	1,8	52,1	24,8	338 298	8-2	30,5	3,4	54,2 48,5	11,9	236 264
4 6 18—6	22,1 20,3 16,0	1,8	58,9 54,2	17,2 23,7 18,7	326 354	9-2	24,7	3,2	43,8	28,8	292 252
6-7-1-1	66,1 52,5	1,3 6,4 5,1	64,0 14,7 11,7	12,8 30,7	450 109 137	4 6 10—2	25,7 23,4 26,9	2,8 2,6 3,0	51,4 46,7 59,7	20,0 27,3 10,4	280 308 268
5 2—1	43,6 57,6	4,2 5,6	9,7	42,4 11,2	165 125	4	24,3 22,2	2,7 2,5	54,0	18,9 25,9	296 324
3 5	47,1	4,6	20,9	27 ,4 38 , 7	153 181	13—4 14—2	20,9 21,7	2,3	60,5	16,3 8,4	344 332
3-1	51,1 42,6	4,9	34,0 28,4	9,9	141 169	18—6 6—9—1—1	15,9 64,9	1,8	63,7 14,4	18,6 12,6	452 111
5 4—1	36,5	3,5	24,4 40,8	35,5 8,9	197 157	3 5	51,8 43,1	6,5 5,4	11,5 9,6	30,2	139 167
3 5	38,9	3,8	34,6	22,7 32,8	185 213	2-1	56,7	7,1 5,8	25,2 20,6	11,0	127 155
5—1 3 5	41,6 35,8 31,4	3,5	39,8	8,1 20,9	201	5 3—1	39,3 50,3	4,9	17,5 33,6	38,2	183 143
6-1	38,1 33,2	3,0 3,7 3,2	34,9 50,8 44,2	30,6 7,4 19,4	229 189 217	3 5 7	$\begin{vmatrix} 42,1\\36,2\\31,7 \end{vmatrix}$	5,3 4,5 3,9	$ \begin{bmatrix} 28,1 \\ 24,1 \\ 21,1 \end{bmatrix} $	24,5 35,2 43,2	171 199 22 7
5 71	29,4 35,1	2,8	39,2 54,6	28,6 6,8	245 205	9 4—1	28,2 45,3	3,5	18,8	49,4	255 159
3 5	30,9	3,0	48,1 42,9	18,0 26,8	233 261	3 5	38,5	4,8	34,2 29,8	22,5 32,5	187 215
8-1	32,6 28,9	3,2 2,8	57,9 51,4	6,3 16,9	221 249	5—1 3	41,1	5,1	45,7 39,4 34,6	8,0	175 203
5 9—1	26,0	2,5 2,9	46,2	25,3 5,9	277 237	6—1	35,5 31,2 37,7	4,4 3,9 4,7	50,2	30,3	231 191
3 5 10—1	27,2 24,6 28,5	2,6 2,4 2,8	54,3 49,1	15,8 23,9 5,5	265 293	3 5	32,9 29,1	3,6	43,8 38,9	19,2 28,3	219 247 207
3 5	25,6 23,3	2,8 2,5 2,3	63,2 56,9 51,8	5,5 14,9 22,6	253 281 309	7—1 3 5	34,8 30,6 27,4	3,8 3,4	54,1 47,7 42,6	6,7 17,9 26,6	207 235 263
11—3 15—5	24,2 18.5	2.4	59,3 61,7	14,1 18,0	297 389	8—1 3	32,3 28,7	4,0 3,6	57,4 51,0	6,3	203 223 251
16—5	17,8	1,8	63,2	17,3	405	5	25,8	3,2	45,9	25,1	279

C-H-O-N	C º/o	H ⁰ / ₀	O º/o	N º/0	M.G.	C-H-O-N	C º/0	H º/o	0 %	N 0/0	M.G.
6 - 99-1	30,1	3,8	60,2	5,8	239	8-11-5-3	35,1	5,4	39,0	20,5	205
3	27,0	3,4	53,9	15,7	267	5	30,9	4,7	34,4	30,0	233
5	24,4	3,1	48,8	23,7	295	6-1	37,3	5,7	49,7	7,2	193
10-1	$\begin{vmatrix} 28,2\\25,4 \end{vmatrix}$	3,5	62,7 56,5	5,5	255	3	32,6	5,0	43,4	19,0	221
5	23,1	2,9	51,4	22,5	283	5 7—1	28,9 34,4	4,4	38,5	28,1	249
11-1	26,6	3,3	64,9	5,2	271	3	30,4	5,3 4,6	53,6 47,2	6,7	209 237
3	24,1	3,0	58,8	14,0	299	5	27,2	4,1	42,3	26,4	265
5	22,0	2,7	53,8	21,4	327	8-1	32,0	4,9	56,9	6,2	225
12-1	25,1	3,1	66,9	4,9	287	3	28,5	4,3	50,6	16,6	253
3 5	22,9 21,0	2,8 2,6	56,0	13,3 20,4	315	6 10 1 0	25,6	3,9	45,5	24,9	281
16-5	17,7	2,0	62,9	17,2	343	6-12-1-2	56,2 46,2	9,3	12,5 $10,2$	21,9 35,9	128 156
6-10-1-2	57,1	7,9	12,7	22,2	126	6	39,1	6,5	8,7	45,7	184
4	46,7	6,5	10,4	36,4	154	2-2	50,0	8,3	22,2	19,4	144
6	39,5	5,5	8,8	46,2	182	4	41,9	7,0	18,6	32,5	172
2-2	50,7	7,0	22,5	19,7	142	6	36,0	6,0	16,0	42,0	200
4	42,3 36,4	5,9 5,0	18,8 16,2	32,9 42,4	170 198	3-2	45,0	7,5	30,0 $25,5$	17,5 29,8	160
3-2	45,6	6,3	30,4	17,7	158	6	33,3	5,5	22,2	38,9	188 216
4	38,7	5,4	25,8	30,1	186	4-2	40,9	6,8	36,3	15,9	176
6	33,6	4,7	22,5	39,2	214	4	35,3	5,9	31,4	27,4	204
4-2	41,4	5,7	36,8	16,1	174	6	31,0	5,2	27,6	36,2	232
4	35,6	4,9	31,7	27,7	202	5-2	37,5	6,2	41,7	14,6	192
6 8	31,3 27,9	4,3 3,9	27,8 24,8	36,5 43,4	230 258	4	32,7 29,0	5,4	36,4 32,2	$ 25,5 \\ 33,9 $	220 248
5-2	37,9	5,3	42,1	14,7	190	6-2	34,6	5,8	46,1	13,5	208
4	33,0	4,6	36,7	25,7	218	4	30,5	5,1	40,7	23,7	236
6	29,3	4,1	32,5	34,1	246	6	27,3	4,5	36,4	31,8	264
6—2	34,9	4,8	46,6	13,6	206	7-2	32,1	5,4	50,0	12,5	224.
[4	30,8	4,3	41,0	23,9	234	4	28,6	4,8	44,4	22,2	252
6 72	27,5 32,4	3,8 4,5	36,6 50,4	32,1 $12,6$	262 222	6 8—2	25,7 $30,0$	4,3 5,0	40,0 53,3	30,0	280 240
4	28,8	4,0	44,8	22,4	250	4	26,8	4,5	47,8	20,9	268
ē	25,9	3,6	40,3	30,2	278	6	24,3	4,0	43,2	28,4	296
8-2	30,2	- 4,2	53,8	11,8	2 38 ·	6-13-1-1	62,6	11,3	13,9	12,2	115
4	27,1	3,8	48,1	21,0	266	3	50,3	9,1	11,2	29,4	143
6	24,5	3,4	43,5	28,6	294	$\begin{array}{c} 5 \\ 2-1 \end{array}$	42,1 55,0	7,6	9,4 $24,4$	10,7	171 131
9—2 4	28,3 25,5	3,9 3,5	56,7 51,1	11,0	254 282	3	45,3	8,2	20,1	26,4	159
6	23,2	3,2	46,4	27,1	310	5	38,5	6,9	17,1	37,4	187
10-2	26,6	3,7	59,3	10,4	270	31	49,0	8,8	32,6	9,5	147
4	24,2	3,3	53,7	18,8	298	3	41,1	7,4	27,4	24,0	175
6 11 1 1	22,1	3,0	49,1	25,8	326	. 5 4—1	35,4 44,2	6,4	23,6 39,2	$\begin{array}{c c} 34,5 \\ 8,6 \end{array}$	203 163
6-11-1-1	63,7	9,7 7,8	14,2 11,3	12,4 29,8	113 141	3	37,7	6,8	33,5	22,0	191
. 5	42,6	6,5	9,5	41,4	169	5	32,9	5,9	29,2	32,0	219
2-1	55,8	8,5	24.8	10.9	129	5—1	40,2	7,3	44,7	7,8	179
3	45.9	7,0	20,4	26,7	157	3	34,8	6,3	38,6	20,3	207
5	38,9	5,9	17,3	37,8	185	5	30,6	5,5	34,0 49,2	29,8 7,2	235 195
3-1	49,7	7,6	33,1	9,6	145	6-1	36,9 32,3	6,7 5,8	43,0	18,8	223
3 5	41,6 35,8	6,3 5,5	27,8 23,9	24,3 34,8	173 201	5	28,7	5.2	38,2	27,9	251
7	31,4	4,8	21,0	42.8	229	7-1	34,1	6,2	53,1	6,6	211
ģ	28,0	4,3	18,7	48,0	257	3	30,1	5,4	46,9	17,6	239
4-1	44,7	6,8	39,7	8,7	161	5	27,0	4,8	41,9	26,2	267
3	38,1	5,8	33,9	22,2	189	$6-14-1-2 \ 4$	55,4 45,6	10,7	12,3 10,1	21,6 35,5	130 158
5	33,2	5,0 $6,2$	29,5 45,2	3 2 ,3 7,9	217 177	6	38,7	7,5	8,6	45,1	186
5—1	40,7	0,2	40,4	1,0	111	· ·	, , ,	,,,,	7-7	1-	

C-H-O-N	C º/o	H º/ ₀	O º/o	N º/o	M.G.	C-H-O-N	C º/ ₀	H °/ ₀	O %	N º/ ₀	M. G.
6-14-2-2 4 6 $3-2$	49,3 41,4 35,6 44,5	9,6 8,0 6,9 8,6	21,9 18,4 15,8 29,6	19,2 32,2 41,6 17,3	146 174 202 162	$6-18-2-6 \\ 3-4 \\ 6 \\ 7-3-1-3$	34,9 37,1 32,4 57,9	8,7 9,3 8,1 2,1	15,5 24,7 21,6 11,0	40,8 28,9 37,8 29,0	206 194 222 145
$\begin{array}{c} 4 \\ 6 \\ \mathbf{4-2} \\ 4 \end{array}$	37,9 33,0 40,4 35,0	7,4 6,4 7,8 ~ 6,8	25,2 22,0 36,0 31,0	29,5 38,5 15,7 27,2	190 218 178 206	2-3 3-1 3 43	52,0 56,4 47,5 43,5	1,9 2,0 1,7 1,5	19,9 32,2 27,1 33,2	26,1 9,4 23,7 21,8	161 149 177 193
6 5—2 4 6	30,8 37,1 32,4 28,8	6,0 7,2 6,3 5,6	27,3 41,2 36,0 32,0	35,9 14,4 25,2 33,6	234 194 222 250	5-3 6-1 3 5	40,2 42,6 37,3 33,2	1,4 1,5 1,3 1,2	38,3 48,7 42,7 37,9	20,1 7,1 18,7 27,7	209 197 225 253
$egin{array}{ccc} 6-2 & 4 & 6 & \\ 7-2 & 4 & \end{array}$	34,3 30,3 27,1 31,9 28,3	6,7 5,9 5,2 6,2 5,5	45,7 40,3 36,1 49,5 44,1	13,3 23,5 31,6 12,4 22,1	210 238 266 226 254	$7-1 \\ 3 \\ 5 \\ 8-1 \\ 3$	39,4 34,8 31,2 36,7 32,7	1,4 1,2 1,1 1,3 1,2	52,6 46,5 41,6 55,9 49,8	6,6 17,4 26,0 6,1 16,3	213 241 269 229 257
6 8 6—15—1—1 3	25,5 23,2 61,5 49,7	4,9 4,5 12,8 10,3	39,7 36,1 13,7 11,0	29,8 36,1 12,0 29,0	282 310 117 145	5 9—1 3 5	29,5 34,3 30,7 27,9	1,0 1,2 1,1 1,0	44,9 58,8 52,7 47,9	24,6 5,7 15,4 23,2	285 245 273 301
5 2-1 3 5 3-1	41,6 54,1 44,7 38,1 48,3	8,7 11,3 9,3 7,9 10,1	9,2 24,1 19,9 16,9 32,2	40,5 10,5 26,1 37,0 9,4	173 133 161 189 149	$egin{array}{cccccccccccccccccccccccccccccccccccc$	63,6 52,5 44,7 56,7 47,7	3,0 2,5 2,1 2,7 2,3	12,1 10,0 8,5 21,6 18,2 15,7	21,2 35,0 44,7 18,9 31,8	132 160 188 148 176
3 5 4—1 3	40,7 35,1 43,6 37,3	8,5 7,3 9,1 7,8	27,1 23,4 38,8 33,2	23,7 34,1 8,5 21,7	177 205 165 193	6 3-2 4 6	41,2 51,2 43,7 38,2	2,0 2,4 2,1 1,8	29,3 25,0 21.8	31,8 41,1 17,1 29,2 38,2	204 164 192 220
5 5—1 3 5	32,6 39,8 34,4 30,4	6,8 8,3 7,2 6,3	28,9 44,2 38,3 33,8	31,7 7,7 20,1 29,5	221 181 209 237	4—2 4 6 5—2	46,7 40,4 35,6 42,8	2,2 1,9 1,7 2,0	35,5 30,8 27,1 40,8 35,7	15,5 26,9 35,6 14,3	180 208 236 196
6-1 $6-16-1-2$ 4 6 $2-2$	36,5 54,5 45,0 38,3	7,6 12,1 10,0 8,5	48,7 12,1 10,0 8,5	7,1 21,2 35,0 44,7	197 132 160 188	$egin{array}{c} 4 \\ 6 \\ 6-2 \\ 4 \\ \end{array}$	37,5 33,3 39,6 35,0	1,8 1,6 1,9 1,7	31,7 45,3 40,0	25,0 33,3 13,2 23,3	224 252 212 240
$egin{array}{c} 2-2 \ 4 \ 6 \ 3-2 \ 4 \ \end{array}$	48,6 40,9 35,3 43,9 37,5	10,8 9,1 7,8 9,7 8,3	21,6 18,2 15,7 29,3 25,0	18,9 31,8 41,2 17,1 29,2	148 176 204 164 192	$egin{array}{cccccccccccccccccccccccccccccccccccc$	31,3 36,8 32,8 29,6 34,4	1,5 1,7 1,5 1,4 1,6	35,8 49,1 50,8 39,4	31,3 12,4 21,9 29,6 11,5	268 228 256 284 244
4-2 4 6	32,7 40,0 34,6 30,5	7,3 8,9 7,7 6,8	21,8 35,6 30,8 27,1	38,2 15,5 26,9 35,6	220 180 208 236	4 6 10-6 7-5-1-1	30,9 28,0 25,3 70,6	1,5 1,3 1,2 4,2	52,5 47,0 42,7 48,2 13,4	20,6 28,0 25,3 11,8	272 300 332 119
$ \begin{array}{c} 5 - 2 \\ 6 - 17 - 1 - 1 \\ 3 \\ 5 \end{array} $	36,7 60,5 49,0 41,1	8,2 14,3 11,5 9,7	40,8 13,4 10,9 9,1	14,3 11,7 28,6 40,0	196 119 147 175	3 5 2—1 3	57,1 48,0 62,2 51,5	3,4 2,9 3,7 3,1	10,9 9,1 23,7 19,6	28,6 40,0 10,4 25,8	147 175 135 163
21 3 5 31	53,3 44,2 37,7 47,7 40,2	12,6 10,4 8,9 11,2	23,7 19,6 16,7 31,8	10,4 25,8 36,7 9,3	135 163 191 151	5 3—1 3 5	44,0 55,6 46,9 40,6	2,6 3,3 2,8 2,4	16,7 31,8 26,8 23,2	36,7 9,3 23,5 33,8	191 151 179 207
3 5 61814 24	34,8 44,4 40,5	9,5 8,2 11,1 10,1	26,8 23,2 9,9 18,0	23,5 33,8 34,6 31,4	179 207 162 178	4—1 3 5 5—1	50,3 43,1 37,7 45,9	3,0 2,6 2,2 2,7	38,3 32,8 28,7 43,7	8,4 21,5 31,4 7,6	167 195 223 183

											_
C-H-O-N	C º/0	H ⁰ / ₀	O º/0	N º/0	M.G.	C-H-O-N	C º/o	H ⁰ / ₀	0%	N º/0	M.G.
7-5-5-3	39,8	2,4	37,9	19,9	211	7-7-8-5	29,1	2,4	44,3	24,2	289
5	35,1	2,1	33,5	29,3	239	7—7—8—5 7—8—1—2	61,8	5,9	11,8	20,6	136
6—1 3	42,2 37,0	2,5 2,2	48,2	7,0	199 227	4	51,2	4,9	9,7	34,1 43,8	164 192
5	33,0	2,0	37,6	27,4	255	$2-\overset{\circ}{2}$	55,3	5,3	21,0	18,4	152
7-1	39,1	2,3	52,1	6,5	215	4	46,7	4,4	17,8	31,1	180
3	34,6	2,0	46,1	17,3	243	3-2	40,4	3,8	$\begin{vmatrix} 15,4\\28,5 \end{vmatrix}$	140,4	208 168
5 8—1	$\begin{vmatrix} 31,0\\ 36,4 \end{vmatrix}$	1,8	41,3 55,4	$\begin{vmatrix} 25,8\\6,0 \end{vmatrix}$	271 231	3-2	42,8	4,1	24,5	28,6	196
3	32,4	1,9	49,4	16,2	259	6	37,5	3,6	21,4	37.5	224
5	29,3	.1,7	44,6	24,4	287	4-2	$\begin{vmatrix} 45,6\\39,6 \end{vmatrix}$	4,3	34,8	15,2 26,4	184 212
9-3 7-6-1-2	$\begin{vmatrix} 30,5 \\ 62,7 \end{vmatrix}$	1,8	52,3	$\begin{vmatrix} 15,3\\20,9 \end{vmatrix}$	275 134	$\frac{4}{6}$	35,0	3,3	26,7	35,0	240
4	51,8	4,5	9,9	34,6	162	5-2	42,0	4,0	40,0	14,0	200
6	44,2	3,2	8,4	44,2	190	4 6	36,8	3,5	35,1 31,3	$\begin{vmatrix} 24,6\\ 32,8 \end{vmatrix}$	228 256
2-2 4	56,0 47,2	4,0	21,3	18,7	150	6-2	32,8	3,1	44,4	12,9	216
6	40,8	2,9	15,5		206	4	34,4	3,3	39,3	23,0	244
3-2	50,6	3,6	28,9	16,9	166	6	30,9	2,9	35,3	30,9 $12,1$	272
4	43,3 37,8	$\begin{vmatrix} 3,1 \\ 2,7 \end{vmatrix}$	$\begin{vmatrix} 24,7\\21,6 \end{vmatrix}$	28,9 37,8		7-2	36,2 32,3	3,4	48,3 $ 43,1 $		260
$egin{array}{cccccccccccccccccccccccccccccccccccc$	46,1	3,3	35,2	15,4		6	29,1	2,8	38,9	29,2	288
4	40,0	2,9	30,4	26,7	210	8-2	33,9	3,2	$\begin{array}{ c c c c c } 51,6 \\ 46,4 \\ \end{array}$		248 276
6	35,3	2,5	26,9		238 198	4 6	$\begin{vmatrix} 30,4\\27,6 \end{vmatrix}$	2,9	42,1		
5-2	42,4 37,2		$\begin{vmatrix} 40,4\\35,4 \end{vmatrix}$			19-6	17,5	1,7	63,3	17,5	480
. 6	33,1	2,4	31,5	33,1	. 254	7-9-1-1	68,3		13,0		
6-2	39,2	2,8	$\begin{vmatrix} 44,9\\39,7 \end{vmatrix}$	13,1		3 5	55,6		8,9		
4 6	34,7		35,5	$\begin{vmatrix} 23,1 \\ 31,1 \end{vmatrix}$		2-1	60,4	6,5	23,0) 10,1	139
7-2	36,5	2,6	48,7	12,2	230	3	50,3		19,2	$\frac{2}{1}$ 25,1	
4	32,5		43,4			5 3—1	43,1 $ 54,2$		16,4 31,0	$\frac{1}{9,0}$	
6 8-2	29,4 $34,1$		39,1			3	45,9	4,9	26,2	$2 \mid 23.0$	183
4	30,7	$'\mid 2,2$	46,7	$7 \mid 20,4$	1 274	5	39,8	3 4,3	22,5 37,4		211
6	27,8	$3 \mid 2,0$	42,4	27,8		4-1	49,1 $42,2$	5,3	-132.2	2 21,1	
7-7-1-1	69,4 $56,4$		13,2			5	37,0) 3,9	28,5	2 30,8	227
5	47,5	$5 \mid 3.9$	9,0) 39,3	5 177	5-1				$ \begin{array}{c c} 3 & 7,5 \\ 2 & 19,5 \end{array} $	
2-1	61,3	3 5,1	23,4			3				$\frac{10,8}{28,8}$	
3 5	50,9		19,4	$egin{array}{c c} 4 & 25,4 \ 36,3 \ \end{array}$		6-1	41,4	4,4	47,	$3 \mid 6,9$	203
3-1	54,9	4,6	31,4	4 9,	2 153	3		1 3,9			
. 3	46,4	3,9	26,	5 23,	$ \begin{array}{c c} 2 & 181 \\ 5 & 209 \end{array} $	5 7—1					
5 41	40,2						34,0) 3,6	45,	$3 \mid 17,0$) 247
3	42,6		32,	5 21,	$3 \mid 197$	5					
_ 5	37,5	3,1	28,	4 31,	$\frac{1}{2}$ 225					7 16.0	263
5—1 3		$\begin{array}{c c} 1 & 3,8 \\ 4 & 3,3 \end{array}$				5	28,	9 3,1	44,	$0 \mid 24,0$	
5	34,8	3 2,9	33,	$2 \mid 29,$	$0 \mid 241$	21-7	7 15,	$9 \mid 1,7$	' 63,		
6-1	. 41.8	$3 \mid 3,5$	47,	7 7,	$ \begin{array}{c c} 0 & 201 \\ 3 & 229 \end{array} $		60,9 50,0) 9,	$6 \mid 33,'$	7 166
3 5		$ \begin{array}{c c} 7 & 3,1 \\ 7 & 2,7 \end{array} $	$\frac{41}{37}$	$ \begin{array}{c c} 9 & 18, \\ 4 & 27, \end{array} $		- 6	43,	3 5,1	1 8,	$2 \mid 43,$	3 194
7—1		$\begin{bmatrix} 2, 1 \\ 7 \\ 3, 2 \\ 3 \\ 2, 9 \end{bmatrix}$	51,	6 6,	$4 \mid 217$	2-2	1 54, 1 46,		$\begin{bmatrix} 5 & 20, \\ 5 & 17, \end{bmatrix}$		2 154
3	34,	3 2,9	45,	7 17,	$ \begin{array}{c c} 1 & 245 \\ 6 & 273 \end{array} $		3 40,	$0 \mid 4.8$	15,	2 40,0	0 210
5 S1					- 1 000	3—2	49,	4 5,9	28,	2 16,	5 170
3			49,	0 16,	1 261	4	₹ 42,	4 5,0	24,	2 28,	3 198
	1										

C-H-O-N	C º/0	H ⁰ / ₀	O º/o	N º/o	M,G.	C—H—O—N	C º/0	H °/0	0%	N º/o	M.G.
7-10-3-6 $4-2$ 4 6 $5-2$ 4 6 $6-2$ 4 6 $7-2$ $14-4$ $7-11-1-1$ 3 5 $3-1$ 3 5 $4-1$ 3 5 $5-1$ 3 5 $7-1$ 3 5 $7-12-1-2$ 4 6 $2-2$ 4 6 $3-2$ 4 4 6 $5-2$ 4 4 6 $5-2$ 4 6 6 $7-2$ 4 6 $8-2$ 4 6 $8-2$ 4	37,2 45,1 39,2 34,7 41,6 36,5 32,5 38,5 34,1 30,7 922,5 54,8 46,4 59,6 49,7 42,6 53,5 45,4 48,6 48,6 48,6 48,7 34,4 44,8 36,7 36,1	4,4 5,4 4,4 4,7 4,9 4,1 3,9 6,1 6,3 7,8 7,6 6,5 7,9 6,5 6,5 6,5 7,5 6,5 6,5 7,5 7,5 7,6 6,5 7,7 6,5 7,7 6,5 7,7 6,5 7,7 6,5 7,7 6,5 7,7 6,5 7,7 6,5 7,7 7,7 7,7 7,7 7,7 7,7 7,7 7	21,2 34,5 29,9 26,4 34,8 31,0 44,0 35,0 50,9 12,8 10,5 8,8,7 21,5 30,6 25,9 22,5 30,6 42,3 36,8 44,3 36,8 44,2 36,8 44,2 36,8 44,9 45,1 40,0 40,0 40,0 40,0 40,0 40,0 40,0 40	37,2 15,0 26,2 34,7 13,9 24,4 32,5 12,8 22,8 30,7 11,2 27,4 38,7 9 24,9 35,5 8,9 22,7 32,9 30,6 7,4 19,4 28,8 18,0 26,8 18,0 26,8 18,0 26,8 18,0 26,8 18,0 26,8 18,0 26,8 18,0 26,8 18,0 26,9 31,9 15,9 21,9 21,9 21,9 21,9 21,9 21,9 21,9 21	226 186 214 242 202 230 258 218 246 274 234 374 125 153 181 141 169 197 157 185 213 201 229 189 217 245 205 233 261 221 249 277 237 265 293 140 168 196 156 184 212 172 200 228 188 216 244 292 260 220 248 276 236 264 292 252 280	7-12-8-6 7-13-1-1 3 5 2-1 3 5 3-1 3 5 11 4-1 3 5 6-1 3 7-14-1-2 4 6 2-2 4 6 6-2 4 6 7-15-1-1 3 5 13 2-1 3 5 5-1 3 5 7-14-1-1 3 5 7-15-1-1 3 5 7-15-1-1 3 5 7-15-1-1 3 5 7-11 3 5 7-11 3 5 7-11 3 5 7-11	27,3 66,1 54,2 45,9 58,7 49,1 42,2 52,8 44,9 39,1 48,4 41,4 43,0 40,6 35,7 31,9 59,1 42,4 53,2 45,1 39,2 45,1 39,2 45,1 39,2 48,3 41,6 36,5 44,2 38,5 34,1 35,9 32,1 40,6 35,7 34,1 40,6 35,7 34,1 40,6 36,5 44,2 45,1 40,6 36,5 44,2 45,1 40,6 36,5 44,2 45,1 40,6 36,5 44,2 45,1 40,6 36,5 44,2 45,1 40,6 36,5 44,2 45,1 40,6 36,5 44,2 45,1 40,6 36,5 44,2 45,1 40,6 36,5 44,2 45,1 40,6 36,5 44,2 45,1 40,6 36,5 44,2 45,1 40,6 36,5 44,2 45,1 40,6 36,5 44,2 45,1 40,6 36,5 44,2 45,1 40,6 36,5 44,2 45,1 40,6 36,5 44,2 45,1 40,6 40,6 40,6 40,6 40,6 40,6 40,6 40,6	3,9 10,2 4,7,1 9,6,5 2,6,9 6,0 4,4,4 6,6,7 9,3,3 5,5,5 6,0 6,1 4,4,9 9,2 1,8,5,5 6,0 6,3,3 6,6,0 1,5,1 1,4,3,7 1,5,3 1,5,5 1,5 1	41,5 12,6 10,3 8,7 42,16,0 36,6 631,5 27,7 42,0,3 32,4 46,4 40,8 86,5 11,3 17,2 25,8 8,4 32,5 43,2 30,5 43,2 30,5 44,2 12,1 15,9 29,8 22,4 46,4 46,8 8,6 5,4 42,1 10,2 8,6 5,4 42,1 10,2 21,1 15,9 29,8 25,4 43,2 21,1 15,9 29,8 25,4 44,4 36,2 21,1 31,2 44,5 36,2 44,8 44,3	27,3 11,0 27,1 38,8. 24,6 35,2 8,8 22,5 32,6 51,5 8,0 20,7 30,3,3 7,9,2 228,3 6,7 17,9 26,6,7 32,9 42,4 17,7,7 36,5 14,7,7 36,5 14,7,7 34,1 12,6 23,9 32,1 112,6 21,6 21,7 31,8 31,8 31,8 31,8 31,8 31,8 31,8 31,8	308 127 155 183 143 171 199 159 187 215 299 175 203 231 191 247 207 235 263 142 170 198 158 186 214 174 202 230 190 218 246 234 262 222 250 278 129 157 185 297 145 173 201 161 189 217 177 205 233 193 221 249 237 265 2253

C-H-O-N	C.º/o	H °/0	O %	N º/0	M. G.	C-H-O-N	C º/o	H °/ ₀	O º/o	N º/o	M. G.
7—15—7—5 8—1 3	29,9 34,9 31,2	5,3 6,2 5,6	39,8 53,0 47,6	24,9 5,8 15,6	281 241 269	$8-4-1-6 \ 2-2 \ 4$	48,0 60,0 51,1	2,0 2,5	8,0 20,0	42,0 17,5	200
7-16-1-2	28,3 58,3 48,8	5,0 11,1 9,3	43,1 11,1 9,3	23,6 19,4 32,6	297 144 172	6 3-2 4	54,4 54,5 47,1	2,1 1,8 2,3 2,0	17,0 14,8 27,3 23,5	29,8 38,9 15,9 27,4	188 216 176
2—2 4	42,0 52,5 44,7	8,0 10,0- 8,5	8,0 20,0 17,0	42,0 17,5 29,8	200 160 188	$egin{pmatrix} rac{4}{6} \\ 4-2 \\ 4 \end{bmatrix}$	41,4 50,0 43,6	1,7 2,1 1,8	20,7 33,3 29,1	36,2 14,6 25,4	204 232 192
32 4	38,9 47,7 41,2	9,1 7,8	14,8 27,3 23,5	38,9 15,9 27,4	216 176 204	5-2 4	38,7 46,1 40,7	1,6 1,9 1,7	25,8 38,5 33,9	33,9 $13,5$ $23,7$	220 248 208 236
6 4-2 4	36,2 43,8 38,2	6,9 8,3. 7,3	20,7 33,3 29,1	36,2 14,6 25,4	232 192 220	6 $6-2$ 4	36,4 42,9 38,1	1,5 1,8 1,6	30,3 42,8 38,1	31,8 12,5 22,2	264 224 252
$\begin{array}{c} \ddot{6} \\ 5-4 \\ 7-17-1-1 \end{array}$	33,9 35,6 64,1	6,4 6,8 13,0	25,8 33,9 12,2	33,9 23,7 10,7	248 236 131	$\begin{array}{c} \overset{\circ}{6} \\ 7-2 \\ 4 \end{array}$	34,3 40,0 35,8	1,4 1,6 1,5	34,3 46,7 41,8	30,0 11,7 20,9	280 240 268
3 5 2—1	52,8 44,9 57,1	10,7 9,1 11,5	10,1 8,6 21,8	26,4 37,4 9,5	159 187 147	8-2 4	32,4 37,5 33,8	1,3 1,6 1,4	37,8 50,0 45,0	28,4 10,9 16,9	296 256 284
3 5 31	48,0 41,4 51,5	9,7 8,4 10,4	18,3 15,7 29,4	24,0 34,5 8,6	175 203 163	6 92 4	30,8 35,3 32,0	1,3 1,5 1,3	41,0 52,9 48,0	26,9 10,3 18,7	312 272 300
3 5 71812	44,0 38,4 57,5	8,9 7,7 12,3	25,1 21,9 11,0	22,0 32,0 19,2	191 219 146	$10-2 \\ 4$	29,3 33,3 30,4	1,2 1,4 1,2	43,9 55,5 50,6	25,6 9,7 17,7	328 288 316
4 6 22	48,3 41,6 51,9	10,3 8,9 11,1	9,2 7,9 19,7	32,2 41,6 17,3	174 202 162	8-5-1-1 3	73,3 60,4	1,2 3,8 3,1	46,5 12,2 10,1	24,4 10,7 26,4	344 131 159
4 6 7—19—1—1	44,2 38,5 63,2	9,4 8,3 14,3	16,9 14,7 12,0	29,5 38,5 10,5	190 218 133	$\begin{array}{c} 5 \\ 2-1 \\ 3 \end{array}$	51,3 65,3 54,9	2,7 3,4 2,8	8,6 21,8 18,3	37,4 9,5 24,0	187 147 175
3 5 2—1	52,5 44,4 56,4	11,8 10,1 12,7	9,9 8,5 21,5	26,1 37,0 9,4	161 189 149	5 3—1 3	47,3 58,9 50,3	2,4 3,1 2,6	15,6 29,4 25,1 21,9	34,5 8,6 22,0 32,0	163 191 219
$ \begin{array}{c} 3 \\ 5 \\ 8-2-4-2 \end{array} $	47,5 41,0 50,5	10,7 9,3 1,1	18,1 15,6 33,7	23,7 34,1 14,7	177 205 190	5 41 3 5	43,8 53,6 46,4 40,9	2,3 2,8 2,4 2,1	35,7 30,9 27,2	7,8 20,3 29,8	179 207 235
4 6 5—2	44,0 39,0 46,6	0,9 0,8 1,0	29,3 26,0 38,8 34,2	$\begin{vmatrix} 25,7\\ 34,1\\ 13,6\\ 23,9 \end{vmatrix}$	218 246 206 234	5—1 3 5	49,2 43,1 38,3	2,6 2,2 2,0	41,0 35,9 31,8	7,2 18,8 27,9	195 223 251
4 6 8-4 8-3-3-1	41,0 36,6 34,0	0,8 0,8 0,7 1,9	30,5 45,3 29.8	32,1 19,9 8,7	262 282 161	6—1 3 5	45,5 40,2 36,0	2,4 2,1 1,9	45,5 40,2 35,9	6,6 17,5 26,2	211 239 267
3 5	59,6 50,8 44,2 54,2	1,6 1,4 1,7		22,2 32,3 7,9	189 217 177	7—1 3 5	42,3 37,6 33,9	2,2 2,0 1,8	49,3 43,9 39,6	6,2 16,5 24,7	227 255 283
4—1 3 5—1	46,8 41,2 49,7	1,5 1,3 1,6	31,2 27,5 41,4	20,5 30,0 7,3	205 233 193	8—1 3 5	39,5 35,4 32,1	1,8 1,2	52,7 47,2 42,8	5,8 15,5 23,4	243 271 299
3 3 5 6—1	43,4 38,6 45,9	1,4 1,2 1,4	$ \begin{array}{c c} 36,2 \\ 32,1 \\ 45,9 \end{array} $	19,0 28,1 6,7	221 249 209	9-1 3 5	37,1 33,4 30,5	1,9 1,7 1,6	55,6 50,2 45,7	5,4 14,6 22,2	259 287 315
3 5 84-1-2	40,5 36,2 66,7	1,3 1,1 2,8	40,5 36,2 11,1	17,7 26,4 19,4	237 267 144	10—1 3 5	34,9 31,7 29,0	1,8 1,6 1,5	58,2 52,8 48,3	5,1 13,9 21,1	275 303 331
4	55,8	2,3	9,3	32,6	172	8-6-1-2	65,8	4,1	10,9	19,2	146

		1								1	
C-H-O-N	C º/0	H°/0	O º/o	N º/o	M. G.	C—H—O—N	C °/ ₀	H ⁰ / ₀	O º/o	N º/o	M.G.
8-6-1-4	55,1	3,4	9,2	32,2	174	8-7-10-5	28,8	2,1	42,1	21,0	333
6 2-2	47,5	3,0	7,9	41,6	202	7	26,6	1,9	43,3	27,1	361
4	59,3 50,5	3,7	19,7	17,3 29,5	162 190	8-8-1-2	64,8 54,5	5,4	10,8	18,9	148 176
. 6	44,0	2,7	14,7	38,5	218	6	47,1	3,9	7,8	41,2	204
3-2	53,9	3,4 2,9	27,0 23,3	15,7	178	$^{2-2}$	58,5	4,9	19,5	17,1	164
6	44,0	$\frac{2,9}{2,5}$	20,5	27,2 35,9	206 234	4 6	50,0	4,2 3,6	16,6 $ 14,5$	29,2 38,2	192 220
4-2	49,5	3,1	33,0	14,4	194	3-2	53,3	4,4	26,7	15,5	180
4 6	43,2 38,4	2,7 2,4	28,8 25,6	25,2 33,6	222 250	4 6	46,2	3,8	23,1	26,9	208
5-2	45,7	2,9	38,1	13,3	210	4-2	$\begin{vmatrix} 40,7 \\ 49,0 \end{vmatrix}$	3,4	20,3 32,6	35,6 14,3	236 196
4	40,3	2,5	33,6	23,5	238	4	42,9	3.5	28,6	25,0	224
6 6—2	$\begin{vmatrix} 36,1 \\ 42,5 \end{vmatrix}$	2,2 2,6	30,1 $42,5$	31,6 12,4	266 226	6 5—2	38,1	3,2 3,8	25,4	33,3	252 212
4	37,8	2,4	37,8	22,0	254	4	45,3	3,3	37,7 33,3	13,2 23,3	240
6	34,0	2,1	34,0	29,8	282	6	35,8	3,0	29,8	31,3	268
7-2 4	39,6 35,6	2,5 2,2	46,3 41,5	$\frac{11,6}{20,7}$	$\frac{242}{270}$	6-2	42,1 37,5	3,5 3,1	42,1	12,3	228 256
6	32,2	2,0	37,6	28,2	298	6	33,8	2,8	37,5	21,9 29,6	284
8-2	37,2	2,3	49,6	10,9	258	7-2	39,3	3,3	45,9	11,5	244
4	33,5 30,6	2,1 1,9	44,8	$\frac{19,6}{26,7}$	$\frac{286}{314}$	4 6	35,3 32,0	2,9 2,7	41,2 37,3	$\begin{vmatrix} 20,6\\28,0 \end{vmatrix}$	300
9-2	35,0	2,2	52,5	10,2	274	8-2	36,9	3,1	49,2	10,8	260
4	31,8	2,0	47,7	18,5	302	4	33,3	2,8	44,4	19,4	288
6 10—2	29,1 33,1	1,8 2,1	43,6 55,2	$25,4 \\ 9,6$	330 290	8—9 -1—1	30,4	2,5 6,7	40,5	26,6	316 135
4	30.2	1,9	50,3	17,6	318	3	58,9	5,5	9,8	25,8	163
6 8—7—1—1	27,7	1,7	46,2	24,3	346	5	50,3	4,7	8,4	36,6	191
3	72,2 59,6	5,3 4,3	12,0	10,5 $26,1$	133 161	2-1	63,6 53,6	5,9 5,0	21,2 $17,9$	9,3 23,5	151 179
5	50,8	3,7	8,5	37,0	189	5	46,4	4,3	15,4	33,8	207
2—1 3	64,4 54,2	4,7	21,5	9,4	149	7	40,8	3,8	13,6	41,7	235
5	46,8	3,9 3,4	18,1 15,6	23,7	$\frac{177}{205}$	3—1 3	57,5 49,2	5,4 4,6	28,7 $24,6$	8,4 21,5	167 195
3-1	58,2	4,2	29,1	8,5	165	5	43,1	4,0	21,5	31,4	223
3 5	49,7 43,4	3,6	24,9	21,7	193	41	52,4	4,9	35,0	7,6	183
4-1	53,0	3,2 3,9	$21,7 \\ 35,4$	31,7	221 181	3 5	45,5 $40,2$	4,3	30,3 26,7	19,9 29,3	$\begin{array}{c} 211 \\ 239 \end{array}$
3	45,9	3,3	30,6	20,1	209	5—1	48,2	4,5	40,2	. 7,0	199
5 5—1	40,5	2,9 3,5	27,0	29,5	237 197	3 5	42,3 37,6	4,0	35,2	18,5	227
3	42,6	3,1	35,6	18,6	$\frac{197}{225}$	6-1	44,6	3,5	31,4 44,6	27,5 6,5	255 215
5	37,9	2,8	31,6	27,7	253	3	39,5	4,2 3,7	39,5	17,3	243
6-1	45,1 39,8	3,3 2,9	45,1 39,8 ₁	6,5 17,4	$\frac{213}{241}$	5 7—1	35,4 41,6	3,3 3,9	35,4 48,5	25,8	271 231
5	35,7	2,6	35,7	26,0	269	3	37,1	3,5	$\frac{40,5}{42,2}$	16,2	259.
7	32,3	2.4	32,3	33,0	297	5	33,4	3,1	39,0	24,4	287
3	41,9 37.3	3,1 2,7	48,9 [$\begin{bmatrix} 6,1\\16,3 \end{bmatrix}$	229 257	8—1	38,9	3,6	51,8 46,5	5,7 15,3	247 275
5	37,3 33,7	2,4	39,3	24,6	285	5	34,9 31,7	3,0	42,2	23,1	303
8-1	39,2	2,8	52,2	5,7	245	8-10-1-2	64,0	6,7	10,7	18,6	150
3 5	35,1 31,9	2,6	46,9 + 42,6 +	$\frac{15,4}{23,2}$	273 301	4 6	53,9	5,6	9,0 7,8	31,5 40,8	178 206
9-1	36,8	2,7	55,2	5,3	261	2-2	57,8	6,0	19,3	16,9	166
3 5	33,2	2,4	49,8	14,5	289	4	49.5	5,1	16,5	28,9	194
10_1	30,3 34,7		45,4 57,8	22,1 5,0	317 . 277	6 3—2	43,2 52,7	4,5	$\frac{14,4}{26,4}$	37,8 15,4	222 182
3	31,5	2,3	52,4	13,8	305	4	45,7	5,5 4,8	22,7	26,7	210
		- 1		1		1	- 1			- 1	

C-H-O-N	C º/o	H º/ ₀	O º/o	N º/0	M.G.	C-H-0	D—N	C º/0	H °/ ₀	0 %	N º/o	M.G.
8-10-3-6	40,3	4,2	20,2	35,3	238	8-12-	7-4	34,8	4,3	40,6	20,3	276
4-2	48,5	5,0	32,3	14,1	198		6	31,6	3,9	36,8	27,6	304
4	42,5 37,8	4,4	28,3 25,2	24,8 33,1	$\begin{vmatrix} 226 \\ 254 \end{vmatrix}$		8-2	$36,4 \\ 32,9$	$\frac{4,5}{4,1}$	48,5 43,8	10,6 $19,2$	264 292
5-2	44,8	$\frac{3,9}{4,7}$	37,4	13,1	214		6	30,0	3,7	40,0	26,3	320
. 4	39,7	4,1	33,1	23,1	242		9-2	34,3	4,3	51,3	10,0	280
6	35,5	3,7	29,6	31,1	270		. 4	31,2	3,9	46,7	18,2	308
6—2 4	41,7 37,2	4,3. 3,9	41,7 37,2	12,2 21,7	230 258	1	6 102	28,6 32,4	3,6 4,0	42 ,8 54,0	25,0 9,5	336 2 96
6	33,5	3,5	33,6	29,4	286		4	29,6	3,7	49,4	17,3	324
7-2	39,0	4;1	45,5	11,4	246		6	27,3	3,4	45,4	23,9	352
4	35,0 31,8	$3,6 \\ 3,3$	40,9	20,7 27,8	302	8-13-	-11 3	69,1 57,5	9,3 7,8	11,5 9,6	10,1 $25,1$	139 167
8-2	36,6	3,8	37,1 48,8	10,7	262		5	49,2	6,7	8,2	35,9	195
4	33,1	3,4	44,1	19,3	290		2-1	61,9	8,4	20,7	9,0	155
6	30,2	3,1	40,2	26,4	318		3 5	52,4	7,1	17,5 15,2	23,0 33,2	183 211
8-11-1-1	70,1 58,2	8,0	11,7	$\begin{vmatrix} 10,2\\25,4 \end{vmatrix}$	137 165		3-1	45,5 $56,1$	6,1 7,6	28,1	8,2	171
5	49,7	5,7	8,2	36,3	193		3	48,2	6,5	24,1	21,2	199
2-1	62,7	7,2	20,9	9,2	153		5	42,3	5,7	21,1	30,8	227 187
3 5	53,0 45,9	6,1 5,3	17,7 $15,3$	23,2	181 209		$\frac{4-1}{3}$	51,3 44,6	7,0	34,2 29,8	7,5	215
3-1	56,8	6,5	28,4	8,3	169		5	39,5	5,3	26,3	28,8	243
3	48,7	5,6	24,4	21,3	197		5-1	47,3	6,4	39,4	6,9	203
5	42,7	4,9	21,3	31,1	225		3 5	$\begin{vmatrix} 41,6\\37,1 \end{vmatrix}$	5,6	34;6	18,2 27,0	231 259
$4-1 \\ 3$	51,9 45,1	5,9 5,2	34,6	$\begin{vmatrix} 7,6\\19,7 \end{vmatrix}$	185 213		6—1	43,8	5,9	43,8	6,4	219
5	39,8	4,6	26,5	29,0	241		3	38,9	5,2	38,9	17,0	247
5—1	47,7	5,5	39,8	7,0	201		5	34,9	4,7 5,5	34,9 47,6	25,4 6,0	$\begin{vmatrix} 275 \\ 235 \end{vmatrix}$
3 5	$\begin{vmatrix} 41,9\\37,3 \end{vmatrix}$	4,8	34,9	18,3 27,2	229 257		$7-1 \\ 3$	40,8	4,9	42,6	16,0	263
6-1	44,2	5,1	44,2	6,4	217		5	33,0	4,5	38,5	24,0	291
3	39,2	4,5	39,2	17,1	245		8-1	38,2	5,2 4,7	41,0	$\begin{vmatrix} 5,6\\15,0 \end{vmatrix}$	$\begin{vmatrix} 251 \\ 279 \end{vmatrix}$
5	35,2	4,0	35,2 48,1	25,6	2 73 2 33		3 5	34,4	4,7	45,9 41,7	2 2,8	307
7-1	41,2 36,8	4,7	42,9	$\begin{vmatrix} 6,0\\16,1 \end{vmatrix}$	261	8-14-	-1-2	62,3	9,1	10,4	18,2	154
5	33,2	3,8	38,8	24,2	289		4	52,7	7,7	8,8	30,8	182 210
8-1	38,5	4,4	51,4	5,6	249		$\frac{6}{2-2}$	45,7 56,4	6,7 8,2	7,6 18,8	40,0 16,5	170
3	34,6	4,0° 3,6	46,2 $ 42,0 $	$\begin{vmatrix} 15,2\\ 22,9 \end{vmatrix}$	277		4	48,5	6.1	16,1	28,3	198
8-12-1-2	63,2	7,9	10,5	18,4	152		- 6	42,5	6,2	14,1	37,2	226
4	53,3	6,7	8,9	31,1	180		3-2	51,6	7,5	25,8 22,4	15,1 26,2	186 214
6 2 - 2	$ 46,1 \\ 57,1 $	5,8	7,7 19,0	40,4	208		. 6	39,7	5,8	19,8	34,7	242
2-2	49,0	6,1	16,3	28,6	196		4-2	47,5	6,9	31,7	13,8	202
6	42,8	5,4	14,3	37,5	224		4	41,7 37,2	6,1 $5,4$	27,8 24,8	24,4 32,6	230 258
3-2	52,2	6,5	26,1	25,2 26,4	184 212		6 5—2	44,0	6,4	36,7	12,8	218
4 6	45,3 40,0	5,7	22,6 20,0	35,0	240		4	39,0	5,7	32,5	12,8	246
4-2	48,0	6,0	32,0	$ 14,0 \rangle$	200		6	35,0	5,1	29,2 41,0	30,7 12,0	274 234
4	42,1	5,2	28,1	24,6	228 256		6-2	41,0 36,7	6,0	36,7	21,3	262
6 5—2	37,5 44,4	4,7 5,5	25,0 $37,0$	32,8 13,0	256 216		6	33,1	4,8	33,1	29,0	290
5-2 4	39,3	4,9	32,8	23,0	244		7-2	38,4	5,6	44,8	11,2 20,1	$\begin{vmatrix} 250 \\ 278 \end{vmatrix}$
6	35,3	4,4	29,4	30,9	272		4 6	34,5	5,0	$\begin{vmatrix} 40,3\\36,5 \end{vmatrix}$	27,4	306
6-2	$\begin{vmatrix} 41,4\\36,9 \end{vmatrix}$	5,2	41,4 36,9	$\begin{vmatrix} 12,0\\21,6 \end{vmatrix}$	232 260		8-2	36,1	5,2	48,1	10,5	266
4 6	33,3	4,2	33,3	29,2	288		4	32,6	4,8	43,6	19,0	294 322
7-2	38,9	4,8	45,1	11,3	248		6	29,8	4,3	39,8	26,1	322
	1									150		

	1		1				1	1	1		
C—H—O—N	C º/o	H ⁰ / ₀	O º/o	N °/0	M.G.	C-H-O-N	C º/ ₀	H ⁰ / ₀	O º/0	N º/0	M.G.
C-H-O-N 8-15-1-1 3 5 2-1 3 5 3-1 3 5 4-1 3 5 6-1 3 5 8-11 3 8 8-11 8 8 8-11 8 8 8-11 8 8 8 8	68,1 56,8 48,7 61,1 51,9 45,1 55,5 47,7 41,9 50,8 44,2 36,8 43,4 38,5 34,6 40,5 32,8 37,9 34,2 31,1 35,7 32,3 55,8 48,0 42,1 51,1 44,4 39,3 44,4 43,6 43,6 43,6 43,6 43,6 43,6 43	10,66 8,97 7,66 9,66 8,11 7,77 7,55 6,57 7,99 6,91 6,57 7,56 5,44 6,63 7,55 7,99 8,00 7,85 6,51 10,22 8,77 7,38 6,93 8,77 8,75 8,76 8,77 8,75 8,76 8,76 8,76 8,76 8,76 8,76 8,76 8,76	0 % 11,3 9,5 8,1 120,4 17,3 15,0 27,7,7 231,0 33,9 29,5 26,1 33,0 6 43,4 43,8 5 45,5 44,3 38,5 44,2 44,4 41,4 45,4 54,5 45,5 54,6 64,0 25,5 22,2 27,7 31,4 42,7 66,3 32,9 40,7 36,4 44,0 46,3 11,2 27,4 42,6 8,0 117,1 14,9 27,4 23,6 8,0 33,5	9,9 24,8 35,5 8,9 22,7 32,9 8,1 20,9 30,6 6,8 18,0 26,8 18,0 26,8 23,9 5,5 14,9 22,6 5,5 14,1 21,5 17,9 30,4 39,6 6,3 28,0 36,8 14,9 25,3 14,1 21,5 17,9 30,4 31,0 31,0 31,0 31,0 31,0 31,0 31,0 31,0	M. G. 141 169 197 157 185 213 173 201 229 189 217 245 205 233 261 221 249 277 237 265 293 253 281 309 269 297 325 156 184 212 172 200 228 188 216 244 202 260 220 248 276 236 264 292 252 280 308 143 171 199 187 215 175 203 231 191	8-17-4-5 $5-1$ 3 5 $8-18-1-2$ 4 6 $2-2$ 4 6 $3-2$ 4 6 $8-19-1-1$ 3 5 $2-1$ 3 5 $3-1$ 3 5 $4-7$ $8-20-3-2$ $8-21-1-1$ $5-3$ $8-24-2-2$ $9-3-9-3$ $9-4-3-2$ $6-4$ $8-4$ $9-5-1-1$ 3 5 $2-1$ 3 5 $4-1$ 3 5 $5-1$ 3 5 $5-1$ 3 5 $5-1$	C°/₀ 38,9 46,4 40,9 560,8 51,6 644,9 55,2 47,8 59,6 50,8 44,2 46,8 41,2 34,7 50,5,3 45,5 53,3 36,3 57,4 40,9 57,5,5 63,2 54,3 67,9 57,5 53,2 46,8 43,7 52,2 46,8 43,7 52,2 46,8 43,7 52,2 46,8 43,7 52,2 46,8 642,3 38,7 45,9 41,1 43,0 38,7 52,2 40,4 43,0 38,7 68,3 50,5	H°/₀ 6,9 8,2 7,5 11,4 9,7 8,4 10,3 8,8 10,9 11,0 8,7 9,3 11,0 11,0 8,7 9,3 11,0 11,5 11,4 11,5 11,5 11,4 11,5 11,5 11,5	0°/₀ 38,66 30,44 10,11 8,66 7,55 118,58 119,9 125,30 19,95 119,91 14,7 127,11 23,44 20,66 23,11 25,09 37,9 17,8 48,55 25,54 34,00 17,11 14,9 27,4 23,66 23,11 22,00 25,9 38,66 34,00 43,00 43,00 44,00 38,33 44,44 46,90 10,10	28,3 6,8 17,9 20,6 17,7 30,1 39,2 16,1 27,7 36,5 14,7 24,3 34,8 8,7 22,2 32,3 30,0 35,4 14,6 9,5 6,6 15,5 14,1 14,9 21,2 21,2 18,9 9,8 24,5 35,2 8,4 32,3 19,2 21,2 18,9 21,2 18,9 21,2 18,9 21,2 18,9 21,2 18,9 21,2 18,9 21,2 18,9 21,2 18,9 21,2 18,9 21,2 18,9 21,2 18,9 21,2 18,9 21,2 18,9 21,2 18,9 21,2 18,9 21,2 18,9 21,2 18,9 21,2 18,9 21,2 21,2 21,2 21,2 21,2 21,2 21,2 21	247 207 235 263 158 186 214 174 202 230 190 218 246 145 173 201 161 189 217 177 205 233 277 192 147 211 180 297 188 264 296 143 171 199 159 187 215 175 203 231 191 219 247 207 235 263 223 251 279 239 267 295 283 311 1586 214

C-H-O-N	C º/o	H °/0	O º/o	N º/0	M.G.	C-H-O-N	C º/o	H °/0	0 º/0	N º/o	M.G.
9-6-2-4	53,5	3,0	15,8	27,7	202	9-8-6-2	45,0	3,3	40,0	11,7	240
3-2	47,0 56,8	2,6 3,2	13,9 25,3	36,5 14,7	230 190	4 6	40,3 36,5	3,0 2,7	35,8 32,4	20,9 28,4	268 296
4 6	49,5	2,7	22,0 19,5	25,7 34,2	218 246	7-2	42,2 38,0	3,1 2,8	43,7 39,4	10,9	256 284
4-2	52,4 46,2	2 ,9 2 ,6	31,1 27,3	13,6 23,9	206 234	8—2	34,6	2,6 2,9	35,9 47,1	26,9	312 272
. 6 5—2	41,2 48,6	2 ,3 2 ,7	24,4 36,0	32,1 12,6	262 222	4 6	36,0 32,9	2,7 2,4	42,7 39,0	18,6 25,6	300 328
4	43,2	2,4	32,0 28,8	22,4 30,2	250 278	9-2	37,5 34,2	2,8	50,0	9,7	288 316
6-2	38,8 45,4	2,5	40,3	11,8	238	6	31,4	2,3	45,6 $ 41,9 $	24,4	344
6	$\begin{vmatrix} 40,6\\36,7 \end{vmatrix}$	2,3 2,0	36,1 32,7	21,0 28,6	266 294	10-2	35,5 32,5	2,6	52,6 48,2	9,2	304
7—2 4	42,5 38,3	2,4 2,1	44,1 39,7	11,0	254 282	9-9-1-1	30,0	2,2 6,1	44,4 10,9	23,3	360 147
· 6 8-2	34,8	1,9	36,1 47,4	27,1	310 270	3 5	61,7	5,1	9,1	$\begin{vmatrix} 24,0\\ 34,5 \end{vmatrix}$	175 203
4 6	36,2 33,1	2,0 1,8	42,9	18,8 25,8	298 326	2-1	66,3	5,5	19,6 16,7	8,6 $22,0$	163 191
9-7-1-1	74,5	4,8	11,0	9,7	145 173	5 3-1	49,3 60,3	4,1 5,0	14,6 26,8	32,0 7,8	219 179
3 5	62,4 53,7	4,0	8,0	34,8	201	3	52,2	4,3	23,2	20,3 29,8	207 235
$2-1 \\ 3$	67,1 57,1	4,3 3,7	19,9 16,9	8,7 22,2	161	5 4—1	45,9 55,4	3,8	20,4	7,2	195
5 3—1	49,8	3,2	14,7 27,1	32,3	217	3 5	48,4	4,0 3,6	28,7 35,5	18,8 27,9	223 251
3 5	52,7 46,3	3,4	23,4 20,6	20,5	205 233	5—1	51,2 45,2	4,3	37,9	6,6	211 239
4-1	56,0	3,6	33,2 28,9	7,2 19,0	193 221	5 6—1	40,4	3,4	30,0 42,3	26,2	267 227
. 5	43,4	2,8 3,3	25,7	28,1	249 209	3 5	42,3 38,2	3.5	37,6	16,5 24,7	255 283
5—1 3	51,7 45,6	2,9	38,3	17,7	237	7-1	44,4 39,8	3,2 3,7 3,3	46,1 $ 41,3 $	5,8 15,5	243 271
5 6—1	40,8	2,6	30,2 42,7	$\begin{vmatrix} 26,4\\ 6,2 \end{vmatrix}$	265 225	3 5	36,1	3,0	37,4	23,4	299 259
3 5	42,7 38,4	2,8 2,5	$\begin{vmatrix} 37,9\\ 34,2 \end{vmatrix}$	16,6 $24,9$	253 281	8-1	41,7 37,6	3,5	49,4	5,4	287
7—1 3	44,8	2,9 2,6	46,5	5,8 15,6	- 241 269	5 9—3	34,3 35,6	2,8 3,0	40,6 $ 47,5 $	22,2 13,9	315 303
5 8—1	36,4 42,0	2,4 2,7	37,6 49,8	23,6 5,5	297 257	9-10-1-2	66,7	6,1 5,3	9,9	17,3	162 190
3	37,9	2,5	44,9	14,7	285 313	6 2-2	49,5	4,6 5,6	7,3	38,5	218 178
9-8-1-2	34,5 67,5	5,0	40,9	17,5	160	4 6	52,4 46,1	4,8	15,5	27,2 35,9	206 234
4 6	57,4	4,3	8,5	38.9	188 216	3-2	55,7	5,1	24,7	14,4	194 222
22 4	61,3 52,9	4,5	18,2 15,7	15,9 27,5	176 204	6	48,6	4,0	21,6	33,6	250
6 32	46,5	3,4	$\begin{vmatrix} 13,8 \\ 25,0 \end{vmatrix}$	+36,2	2 32	4-2	51,4 45,4	4,2	30,5 $26,9$	13,3	210 238
4	49,1	3,6	21,8 19,3	25,4		5-2	40,6 47,8	3,7	24,1 35,4		266 226
$\frac{6}{4-2}$	43,5	3,8	30,8	13,5	208 236	4 6	42,5 38,3	3,9	31,5 28,4	22,0	254 282
4 6	45,8 40,9	3,4	$\begin{vmatrix} 27,1\\ 24,2\\ 25,7 \end{vmatrix}$	31,8	264	6-2	44,5	4,1	39,7 35,5	11,6	242 270
5-2	48,2 42,8	3,6	35,7 31,7	22,2	224 252	6 7—2	$ \begin{array}{c c} 36,2 \\ 41,9 \end{array} $	3,3	32,2	$ 28,2 \\ 10,8 $	298 258
. 6	38,6	2,8	28,6	30,0	280	1-2	11,0		1 5,± 150*	10,0	1

	1		1								
C-H-O-N	C º/0	H ⁰ / ₀	O º/o	N °/0	M.G.	C-H-O-N	C º/0	H º/0	0%	N º/ ₀	M.G.
9-10-7-4	37,8	3,5	39,1	19,6	286	9-13-2-5	48,4	5,8	14,3	31,4	223
6	34,4	3,2	35,7	26,7	314	3-1	59,0	7,1	26,2	7,6	183
8-2	39,4	3,6	46,7	10,2	274	3	51,2	6,2	22,7	19,9	211
4 6	35,8	3,3	42,4 38,8	18,5 25,4	302	5 41	45,2	5,4	20,1	29,3	239
9-11-1-1	72,5	7,4	10,7	9,4	149	3	54,2 47,6	6,6	32,2 28,2	7,0	199 227
3	61,0	6,2	9,0	23,7	177	5	42,4	5,1	25,1	27,4	255
5	52,7	5,3	7,8	34,1	205	5-1	50,2	6,0	37,2	6,5	215
2-1	65,5	6,6	19,4	8,5	165	3	44,4	5,3	32,9	17,3	24 3
5	55,9	5,7 5,0	16,6 14,5	21,7 31,7	193 221	5 6—1	39,8 46,7	4,8 5,6	29,5 $41,6$	25,8	271
7	43,4	4,4	12,9	39,3	249	3	41,7	5,0	37,1	$6,1 \\ 16,2$	231 259
3-1	59,7	6,1	26,5	7,7	181	5	37,6	4,5	33,4	24,4	2 87
3 5	51,7	5,3	22,8	20,1	209	7	34,3	4,1	30,5	31,1	315
4-1	45,6 54,8	4,6 5,6	20,2 32,5	29,5 7,1	$\frac{237}{197}$	7-1	43,7	5,3	45,3	5,7	247
3	48,0	4,9	28,4	18,7	2 2 5	3 5	39,3 35,6	$^{-4,7}_{-4,3}$	$\frac{40,7}{36,9}$	15,3 $23,1$	275 303
5	42,7	4,3	25,3	27,7	253	8-1	41,1	4,9	48,7	5,3	2 63
5—1	50,7	5,1	37,6	6,6	213	. 3	37,1	4,5	44,0	14,4	291
3 5	44,8	4,5 4,1	33,2 29,7	17,4 26,0	241	5	33,8	4,1	40,1	21,9	319
6—1	47,2	4,8	41,9	6,1	$\begin{bmatrix} 269 \\ 229 \end{bmatrix}$	9-1 $9-14-1-2$	38,7 65,1	4,7 8,4	51,6 9,6	5,0	279 166
3	42,0	4,0	37,3	16,3	257	4	55,7	7,2	8,2	16,9 28,9	194
. 5	37,9	3,8	33,7	24,6	285	6	48,6	6,3	7,2	37,8	222
7—1 3	44,1	4,5	45,7	5,7	245	2-2	59,3	7,7	17,6	15,4	182
5	39,6 35,9	4,0 3,6	41,0 37,2	15,4 $23,2$	273 301	. 4	51,4	7,7	15,2	26,7	210
8—1	41,4	4,2	49,0	5,4	261	6 32	45,4 $ 54,5 $	5,9 $7,1$	$\begin{array}{c c} 13,4 \\ 24,2 \\ \end{array}$	35,3 14,1	238 198
3	37,4	3,8	44,3	14,5	289	4	47,8	6,2	21,1	24,8	22 6
0 10 1 0	34,1	3,4	40,4	22,1	317	6	42,5	5,5	18,9	33,1	254
$9-12-1-2 \\ 4$	65,8 56,3	7,3 6,2	9,7 8,3	17,1 29,2	164 192	4-2	50,5	6,5	29,9	13,1	214
6	49,1	5,4	7,3	38,2	220	4 6	44,6	5,8 5,2	26,4 23,7	23,1	242 270
22	60,0	6,7	17,8	15,5	180	5-2	46,9	6,1	34,8	$\begin{array}{c c} 31,1 \\ 12,2 \\ \end{array}$	230
. 4	51,9	5,8	15,4	26,9	.208	4	41,9	5,4	31,0	21,7	258
3-2	45,8 55,1	5,1	13,5	35,6	236	6	37,7	4,9	28,0	29,4	286
4	48,2	$6,1 \\ 5,3$	$24,5 \\ 21,4$	14,3 25,0	$\frac{196}{224}$	6-2	43,9	5,7	39,0	11,4	246
. 6	42,9	4,8	19,0	33,3	252	6	39,4 35,7	$5,1 \\ 4,6$	35,0 31,8	20,4 27,8	274 302
4-2	50,9	5,7	30,2	13,2	212	7-2	41,2	5,3	42,7	10,7	262
4 6	45,0 40,3	5,0	26,7	23,3	240	4	37,2	4,8	38,6	19,3	290
5-2	47,4	4,5 5,2	23,9 35,1	31,3 12,3	268 228	8—2	33,9	4,4	35,2	26,4	318
4	42,2	4,7	31,2	21,9	256	4	38,8 35,3	5,0 $4,6$	46,0 41,8	$10,1 \\ 18,3$	278 306
6	38,0	4,2	28,2	29,6	284	6	32,3	4.2	38,3	25,1	334
- 6 <u>-2</u>	44,3	4,9	39,3	11,5	244	9-15-1-1	70,6	9,8	10,4	9,1	153
- 6	36,0	4,4	35,3 32,0	20,6 28,0	272 300	3	59,7	8,3	8,8	23,2	181
7-2	41,5	4.6	43,1	10,8	260	$egin{array}{c} 5 \ 2 - 1 \end{array}$	51,7 63,9	7,2 8,9	7,6 18,9	33,5	209
4	37,5	4,2	38,9 +	19,4	288	3	54,8	7,6	16,2	21,3	169 197
8—2	34,2	3,8	35,4	26,6 +	316	5	48,0	6,7	14,2	31,1	2 25
4	39,1 35,5	4,3 3,9	46,4 42,1	10,1	276	3-1	58,4	8,1	25,9	7,6	185
. 6	32,5		38,5	25,3	304 332	3 5	50,7 44,8		22,5	19,7	213
9-13-1-1	71,5	8,6	10,6	9,3	151	4_1	53,7		19,9	29,0	241 201
3	60,3	7,3	8,9	23,5	179	3	47,2	6,5		18,3	229
5 21	52,2 64,7	6,3	7,7	33,8	207	5	42,0	5,8	24,9	27,2	257
3	55,4	7,8 6,7	16,4	$\begin{array}{c c} 8,4 \\ 21,5 \end{array}$	167 195	5—1 3	49,8		36,8	6,4	217
		-	/-	-,-		3	44,1	6,1	32,7	17,1	24 5

				1								
C-H-O-N	C º/0	H ⁰ / ₀	O º/0	N 0/0	M.G.	C-H-0	_ N	C º/ ₀	H ⁰ / ₀	O º/0	N º/0	M.G.
9-15-5-5	39,6	5,5	29,3	25,6	273	9-18-4	1_8	39,4	6,6	23,3	30,7	274
6-1	46,4	6,4	41,2	6,0	233		5-2	46,1	7,7	34,2	12,0	234
3 5	41,4 37,4	5,7 5,2	36,8 33, 2	$16,1 \\ 24,2$	261 289		4	41,2 37,2	6,9	30,5	21,4	262
7	34,1	4,7	30,3	30,9	317	6	3-2	43,2	7,2	27,6 38,4	29,0	$\frac{290}{250}$
916-1-2	64,3	9,5	9,5	16,7	168	9-19-		68,8	12,1	10,2	8,9	157
4	55,1 48,2	7,1	8, 2 - 7,1	28,5 37,5	196 224		3 5	58,4 50,7	10,3	8,6	22,7 32,9	185 213
2-2	58,7	8,7	17,4	15,2	184		2-1	62,4	11,0	18,5	8,1	173
4 6	50,9 45,0	7,5 6,7	15,1 13,3	26,4 35,0	212 240		3 5	53,7 47,1	9,4	15,9 $14,0$	20,8 30,6	201 229
3-2	54,0	8,0	24,0	14,0	200		3—1	57,1	10,0	25,4	7,4	189
4	47,4 42,2	7,0 6,2	21,0 18,7	24,6 32,8	228 256		3 5	49,8	8,7	22,1 19,6	19,3 28,6	$\begin{array}{c} 217 \\ 245 \end{array}$
4-2	50,0	7,4	29,6	13,0	216		4-1	52,7	9,3	31,2	6,8	205
4	44,3	6,5	26,2	22,9	244		3	46,3	8,1	27,5	18,0	233
5 – 2	39,7 46,5	5,9 6,9	23,5	30,9 12,1	272 232	9-20-	5 1—2	31,3 62,8	7,3 11,6	$24,5 \\ 9,3$	26,8 16,3	261 172
4	41,5	6,1	30,8	21,5	260		4	54,0	10,0	8,0	28,0	200
6 6—2	37,5 43,5	5,5 6,4	27,8 38,7	29,2 11,3	288 248	į.	6 2-2	47,4 57,4	8,8	7,0	36,8	228 188
4	39,1	5,8	34,8	20,3	276		4	50,0	9,3	13,8	25,9	216
7—2	35,5	5,3	$\begin{vmatrix} 31,6 \\ 42,4 \end{vmatrix}$	27,6	304 264	9	6 3-2	44,3 52,9	8,2 9,8	13,1 23,5	34,4	244 204
4	37,0	5,5	38,3	19,2	292		4	46,5	8,6	20,7	24,1	23 2
8—2	33,7	5,0 5,7	35,0 45,7	26,2	320 280	9-21-	6	41,5 67,9	7,7	18,5 10,1	32,3	$\frac{260}{159}$
4	35,1	5,2	41,5	18,2	308	0-21-	3	57,7	11,2	8,6	22,5	187
. 6	32,1	4,8	38,1	25,0 7,8	336		5 21	50,2 61,7	9,8 12 ,0	7,4 18,3	32,6	215 175
13-2 $9-17-1-1$	30,0 69,7	11,0	57,8	9,0	360 1 55		3	53,2	10,3	15,8	20,7	203
3	59,0	9,3	8,7	22,9	183		5 3—1	46,8 56,5	9,1	13,8 25,1	30,3	231 191
$\begin{array}{c} 5 \\ 2-1 \end{array}$	51,2 - 63,2	8,0	7,6 $18,7$	33,2 8,2	211		3	49,3	9,6	21,9	19,2	219
3	54,3	8,5	16,1	21,1	199	0 00 .	5	43,7	8,5	19,4	28,3 16,1	247 174
5 3—1	47,6 $ 57,7$	7,5 9,1	$14,1 \\ 25,7$	30,8	2 27 1 87	9—22—	$egin{array}{c c} 1-2 & 4 \end{array}$	62,0 53,5	12,6 10,9	7,9	27,7	202
3	50,2	7,9	22,3	19,5	_215		6	47,0	9,6	6,9	36,5 14,7	230 190
·5 4—1	44,4 53,2	7,0	19,7 31,5	2 8,8 6,9	243 203		$\begin{bmatrix} 2-2 \\ 4 \end{bmatrix}$	56,9 49,5	11,6 10,1	16,8 14,7	25,7	218
3	46,8	7,3	27,7	18,2	231	6	6	43,9	8,9	13,0	34,1 13,5	246 206
5 5—1	41,7	6,5	24,7 36,5	$\begin{vmatrix} 27,0\\ 6,4 \end{vmatrix}$	259 219		$\begin{bmatrix} 3-2 \\ 4 \end{bmatrix}$	52,4 46,1	10,7 9,4	20,5	23,9	234
3	43,7	6,9	32,4	17,0	247		6	41,2	8,4	18,3	32,1	262
5	39,3	6,2 7,2	2 9,1 4 0,8	25,4 6,0	275 235	9-23-	1-1	67,1 57,1	14,3 12,2	9,9	8,7 22,1	161 189
6—1	45,9 41,1	6,5	36,5	15,9	2 63		5	49,7	10,6	7,4	32,3	217
5	37,1	6,5	33,0	24,0	291 170		$\begin{bmatrix} 2-1 \\ 3 \end{bmatrix}$	61,0 $52,7$	13,0 11,2	18,1 15,6	7,9 20,5	177 205
9-18-1-2	63,5 54,5	10,6	8.1	16,5 28,3	198		5	46,3	9,9	13,7	30,0	2 33-
6	47,8	8.0	7,1	37,1	226		$3-1 \mid 3 \mid$	55,9 48,9	11,9 $10,4$	24,9 21,7	7,2 19,0	193 221
$egin{array}{c} 2-2 \ 4 \end{array}$	58,0	9,7	17,2 14,9	15,0 26,2	186 214		5	43,4	9,2	19,3	28,1	249
.6	44,6	7,4	13,2	34,7	242	10-3-8	3—5 9—5	37,4 35,6	0,9	39,9 42,7	21,8 20,8	321 337
3-2 4	53,5 47,0	8,9	23,8 20,9	13,8 24,3	202 230	10-4-5	32	60,0	2,0	24,0	14,0	200
6	41,9	7,0	18,6	32,5	258	4	$\begin{array}{c c} 4-2 \\ 3-2 \end{array}$	55,6 48,4	1,8 1,6	29,6 38,7	13,0 11,3	216 248
$egin{array}{c} 4-2 \ 4 \end{array}$	$\begin{vmatrix} 49,5 \\ 43,9 \end{vmatrix}$	8,2	29,3 26,0	12,8 22,8	218 246		$\begin{bmatrix} -2 \\ 4 \end{bmatrix}$	43,5	1,4	34,8	20,3	276
4	10,0	1 ,,0	1 - 3,0	,,,,	1							

C-H-O-N	C°/n	H °/0	0%	N º/o	M .G.	C-H-O-N	C º/o	H º/,	0 %	N º/o	M.G.
10-4-6-6 $7-4$	39,5 41,1	1,3 1,4	31,6 38,3	27,6 19,2	304 292	10-6-8-2	42,5 38,7	2,1 1,9	45,4 41,3	9,9 18,1	282 310
6 8–4	37,5 39,0	1,2 1,3	35,0 41,5	26,2 18,2	320 308	6 10—7—1—1	35,5 76,4	1,8 4,5	37,9 10,2	24,8 8,9	338 157
6 94	35,7 37,0	1,2 1,2	38,1 44,4	25,0 17,3	336 324	3 5	64,8 56,3	3,8	8,6 7,5	22,7 32,9	185 213
6-	34,1	1,1	40,9	23,9	352	2-1	69,4	4,0	18,5	8,1	173
12-4 $10-5-1-1$	32,3 77,4	1,1 3,2	51,6	15,0	372 155	3 5	59,7 52,4	3,5 3,1	15,9 13,9	20,9	201 229
3 5	65,6 56,9	2,7 2,4	8,7 7,6	22,9 33,2	183 211	3—1	63,5 55,3	3,7 3,2	25,4 22,1	7,4 19,3	189 217
2—1 3	70,2	2,9 2,5	18,7 16,1	8,2	171 199	5 4—1	49,0 58,5	2,9 3,4	19,6 31,2	28,5 6,8	245 205
5 3—1	52,8 64,2	2,2 2,7	14,1 25,6	30,8	227 187	3 5	51,5 46,0	3,0 2,7	27,5 24,5	18,0 26,8	233 261
3 5	55,8 49,4	2,3 2,0	22,3 19,7	19,5 28,8	215 243	5—1 3	54,3 48,2	- 3,2	36,2 32,1	6,3 16,9	221 249
4-1	59,1	2,5 2,2	31,5 27,7	6,9	203	5	43,3	2,8 2,5	28,9	25,3	277
5	51,9	1,9	24,7	18,2 27,0	231 259	6-1	50,6	2,9 2, 6	40,5	5,9	237 265
5—1 3	54,8 48,6	2,3 2,0	36,5 32,4	6,4 17,0	219 247	5 7—1	40,9 47,4	2,4 2,8	32,8 44,3	23,9 5,5	293 253
5 6—1	43,6 51,1	$\frac{1,8}{2,1}$	29,1 40,8	25,4 5,9	$\begin{array}{ c c }\hline 275 \\ 235 \\ \end{array}$	3 5	42,7 38,8	2,5 2,3	39,8 36,2	14,9 22,6	281 309
3 5	45,6 41,2	1,9 1,7	36,5 33,0	16,0 24,0	263 291	8-1	44,6	2,6 2,3	47,6	5,2 14,1	269 297
7—1 3	47,8 43,0	2,0 1,8	44,6 40,1	5,6 15,0	251 279	5 10—8—1—2	36,9 69,8	2,1 4,6	39,4	21,5	325 172
5 8—1	39,1 44,9	1,6	36,5	22,8	307	4	60,0	4,0	8,0	28,0	200
3	40,7	1,9 1,7	47,9 43,4	5,2 14,2	267 295	6 2—2	52,6 63,8	3,5 4,3	7,0 17,0	36,6 14,9	228 188
5 9—1	37,1 42,4	1,5 1,8	39,6 50,9	21,7 4,9	323 283	4 6	55,5	3,7 3,3	14,8	25,9 34,4	$\begin{array}{c} 216 \\ 244 \end{array}$
3 5	38,6 35,4	1,6 1,5	46,3 42,5	13,5 20,6	311	3-2 4	58,8	3,9 3,4	23,5 $20,7$	13,7 24,1	204 232
10-1	$\begin{array}{c c} 40,1 \\ 36,7 \end{array}$	1,7 1,5	53,5 48,9	4,7 12,8	299 327	6 4—2	46,1 54,5	3,1 3,6	18,4 29,1	32,3 12,7	260 220
5 10—6—1—2	33,8 70,6	1,4 3,5	45,1 9,4	19,7 16,5	355 170	4 6	48,4	3,2	25,8	22,6 30,4	248 276
4	60,6	3,0	8,1	28,3	198	5-2	43,5 50,8	2,9 3,4	23,2 33,9	11,9	236
2-2	53,1	2,6 3,2	7,1 17,2	37,2 15,1	226 186	6	45,4	3,0 2,7	30,3 27,4	21,2 28,8	264 292
4 6	56,1 49,6	2,8 2,5	14,9 13,2	26, 2 34,7	$\begin{array}{c c} 214 \\ 242 \end{array}$	6-2 4	$\begin{vmatrix} 47,6\\42,8 \end{vmatrix}$	3,2 2,9	38,1 34,3	$\frac{11,1}{20,0}$	25 2 280
3-2 4	59,4 52,2	3,0	23,8 20,9	13,8 24,3	202 230	6 7—2	38,9	2,6 3,0	31,2 41,8	27,3 10,4	308 268
6 4—2	46,5 55,0	2,3 2,8	18,6 29,3	32,5 12,8	258 218	4 6	40,5 37,0	2,7 2,5	37,8 34,6	18,9 25,9	296 3 24
4 6	48,8 43,8	2,4	26,0 23,4	22,8 30,6	$\frac{246}{274}$	8-2	42,2 38,5	2,8 2,5	45,1	9,9	284
5 -2	51,3	2,6	34,2	11,9	234	6	35,3	2,3	41,0 37,7	24,7	312 340
6	45 ,8 41 ,4	2,6 2,3 2,1	30,5 27,6	21,4 28,9	262 290	10-9-1-1	75,5 64,2	5,7 4,8	10,0 8,6	8,8 22,4	159 187
6-2	48,0 43,2	$\frac{2,4}{2,2}$	38,4 34,5	11,2 20,1	250 278	5 2—1	55,8 68,6	$\begin{array}{c c} 4,2\\5,1 \end{array}$	7,4 18,3	32,6 8,0	215 175
6 7—2	39,2 45,1	2,0 2,3	31,4 42,1	27,4 10,5	306 266	3 5	59,1 51,9	4,4 3,9	15,8 13,8	20,7 30,3	203 231
4 6	40,8 37,3	2,0 1,8	38,1 34,8	19,0 26,1	$\begin{bmatrix} 294 \\ 322 \end{bmatrix}$	31	62,8 54,8	4,7	25,1	7,3	191
	, ,	-,0	,,,	20,1	014	9	34,0	4,1	21,9	19,2	219

			-										
C—H—0	- N	C º/0	Hº/0	O º/o	N º/0	M.G.	C-H-	-O-N	C º/o	H ⁰ / ₀	0 %	N º/o	M.G.
10-9-8	3—5	48,6	3,6	19,4	28,3	247	10-11-	5 3	47,4	1 2	21.6	100	050
4	4-1	58,0	4,3	30,9	6,8	207	10-11	-0-5 5	42,7	4,3	31,6	16,6 24,9	253 281
	3	51,1	3,8	27,2	17,9	235		6-1	49,8	4,6	39,8	5,8	241
	5 5—1	45,6 53,8	3,4	24,3 35,9	26,6	263		3	44,6	4,1	35,7	15,6	269
•	3	47,8	3,6	31,9	6,3	223 251		5 71	40,4	3,7	32,3	23,6	297
	5	43,0	3,2	28,7	25,1	279		3	46,7	4,3 3,8	43,6 39,4	5,4	$\frac{257}{285}$
•	3—1	50,2	3,8	40,2	5,8	239		5	38,3	3,5	35,8	22,4	313
	3 5	$\begin{vmatrix} 44,9\\40,7 \end{vmatrix}$	3,4	35,9 3 2 ,5	15,7	267		8-1	43,9	4,0	46,9	5,1	273
	7—1	47,1	3,5	43,9	23,7 5,5	295 255		3 5	39,9 36,5	3,6	42,5	13,9 21,3	301
	3	42,4	3,2	39,6	14,8	283		9-3	37,9	3,5	38,9 45,4	13,2	329 317
	5	38,6	2,9	46,0	22,5	311	10-12-		68,2	6,8	9,1	15,9	176
•	3—1	44,3	3,3. 3,0	$\begin{vmatrix} 47,2\\42,8 \end{vmatrix}$	5,2 14,0	$\frac{271}{299}$		4	58,8	5,9	7,8	27,4	204
	5	36,7	2,7	39,1	21,4	327		$\frac{6}{2-2}$	51,7 62,5	5,2 6,2	$\begin{vmatrix} 6,9\\16,7 \end{vmatrix}$	36,2 14,6	232 19 2
ξ	- 1	41,8	3,1	50,2	4,9	287		4	54,5	5,4	14,5	25,5	220
	3	38,1	2,8	45,7	13,3	315		6	48,4	4,8	12,9	33,9	2 48
10	5)—1	35,0 39,6	2,6	42,0 52,8	20,4	343 303		3-2	57,7 50,8	5,8 5,1	23,1	13,4	208
	3	36,2	2,7	48,3	12,7	331		6	45,4	$\frac{5,1}{4,5}$	20,3 18,2	23,7	$\frac{236}{264}$
10 10 1	5	33,4	2.5	44,6	19,5	359		4-2	53,6	5,3	28,6	12,5	224
10-10-1	2 4	68,9 59,4	5,7 4,9	9,2	16,1 27,7	174 202		4	47,6	4,8	25,4	22,2	252
	6	52,2	4,3	$\begin{bmatrix} 6,9 \\ 6,9 \end{bmatrix}$	36,5	230		6 5-2	42,9	4,3 5,0	22,8 33,3	30,0	280 240
2	-2	63,2	5,2	16,8	14,7	190		4	44,8	4,5	29,8	20,9	268
	4	55,0	4,6	14,7	25,7	218		6	40,5	4,0	27,0	28,4	296
3	-2	48,8 58,2	4,1	$\begin{vmatrix} 13,0 \\ 23,3 \end{vmatrix}$	34,1 13,6	$\frac{246}{206}$	5	6-2	46,9 42,2	4,7	37,5 33,8	10,9	$\frac{256}{284}$
	4	51,3	4,3	20,5	23,9	234		6	38,5	3,8	30,8	26,9	312
4	6	45,8	3,8	18,3	32,1	262		7-2	44,1	4,4	41,2	10,3	272
4.	$egin{array}{c c} -2 & \\ 4 & \end{array}$	54,0	4,5 4,0	28,8 25,6	12,6 22,4	222 250		4	40,0 36,6	4,0	37,3 34,1	18,7 25,6	300 3 2 8
	6	43,2	3,6	23,0	30,2	278		8-2	41,7	$\frac{3,6}{4,2}$	14,4	9,7	288
5	-2	50,4	4,2	33,6	11,8	238		4	38,0	3,8	40,5	17,7	316
	6	45,1	3,8		21,0	$\frac{266}{294}$	10—13-	6	34,9	3,5	37,2	24,4	344
6	-2	47,2	$\frac{3,4}{3,9}$.		11,0	254	10—15-	$^{-1}$	73,6 62,8	8,0 6,8	9,8 8,4	8,6 22,0	163 191
	4	42,5	3,5	34,0	19,9	282		5	54,8	5.9	7,3	32,0	219
17	$ \begin{array}{c c} 6 \\ -2 \end{array} $	38,7	3,2	31,0	27,1	310		2-1	67,0	7,3	17,9	7,8	179
1.	4	44,4 40,3	3,7 3,3		10,4	270 298		3 5	58,0		15,4 13,6	20,3 29,8	207 235
	6	36,8	3,1		25,8	326		9	41,2		11,0	43,3	291
8-		42,0	3,5	44,7	9,8	286		3-1	61,5		24,6	7,2	195
		38,2 35,1	3,2 2,9	40,8 37,4	$\frac{17,8}{24,6}$	314 342		3 5	53,8 47,8		21,5 $19,1$	18,8 27,9	223 251
10 -11-1		74,5	6,8	9,9	8,7	161		4-1	56,9		30,3	6,6	211
	3	63,5	5,8	8.5	22.2	189		3	50,2	5,4	26.8	17,6	239
9	5	55,3	5,1	7,4	32,2	217		5	44,9	4,9	24,0	56,2	267
2	$-\frac{1}{3}$	67,8 58,5	6,2 5,3	18,1 15,6	7,9 $20,5$	177 205		5-1 3	52,9 47,0		35,2 31,4	$\begin{array}{c c} 6,2 \\ 16,5 \end{array}$	227 255
	5	51,5	4,7	13,7	$30.0 \pm$	233		5	42,4	4,6	28,3 +	24,7	283
3-	-1	62,2	5,7	24,8	7,2	193		6-1	49,4		39,5	5,8	243
		54,3 48,2	5,0	21,7 1 19,3 2	19,0 28,1	221 249		3 5	44,3		35,4 32,1		271 299
. 4	-1	57,4		30,6	6,7	209		7-1	46,3	5,0	43,2	5,4	259
	3	50,6	4,6	27,0	17,7	237		3	41,8		39,0	14,6	287
5.	5	45,3 53,3		$\frac{24,1}{35,5}$	$\begin{array}{c c} 26,4\\6,2\end{array}$	265 225		5 8—1			35,6 46,5		315 275
- 9-	-	00,0	1,0	00,0	3,2				20,0	-,•	3,0	,,,	_ , 0

C-H-O-	N C º/0	H º/ ₀	O º/o	N º/0	M. G.	C .–	-H-O-N	C º/o	H º/0	0.0/0	N 0/0	M.G.
10-13-8-		4,3	42,2	13,9	303	10-	-16-3-4	50,0	6,7	20,0	23,3	240
10—14—1—	5 36,2 -2 67,4	3,9	38,7	21,1 15,7	331 178		4-2	44,8 52,6	6,0 7,0	17,9 28,1	31,3	268
	4 58,2	6,8	7,8	27,2	206		4	46,9	6.2	25,0	$\begin{array}{c c} 12,3 \\ 21,9 \end{array}$	228 256
2-	6 51,3 2 61,9	$\begin{vmatrix} 6,0 \\ 7,2 \end{vmatrix}$	6,8	35,9 14,4	234 194		6 5—2	42,2 $ 49,2 $	5,6 6,5	22,5 32,8	29,6 11,5	$\begin{array}{c} 284 \\ 244 \end{array}$
	4 54,0 4 8,0	6,3	14,4	25,2	222		4	44,1	5,9	29,4	20,6	272
3		5,6	$\begin{bmatrix} 12,8 \\ 22,9 \end{bmatrix}$	33,6 13,3	250 210		6-2	40,0	5,3 6,1	26,7 36,9	$ \begin{array}{c} 28,0 \\ 10,8 \\ \end{array} $	300 2 60
	4 50,4 6 45,1	5,9 5,3	20,2 18,0	23,5 31,5	238		4	41,7	5,5	33,3	19,5	288
4	2 53,1	6,2	28,3	12,4	266 226		7—2	38,0 43,5	5,1 5,8	30,4 40,6	$ \begin{array}{c c} 26,5 \\ 10,1 \\ \end{array} $	316 276
	4 47,2 6 42,5	5,5 4,9	25,2 $22,7$	$\frac{22,0}{29,8}$	254 282		4 6	39,5	5,3	36,8	18,4	304
5—	2 49,6	5,8	33,1	11,5	242		8-2	36,1 41,1	4,8 5,5	38,3 43,8	28,8 9,6	332 292
	4 44,4 6 40,3	$\begin{bmatrix} 5,2 \\ 4,7 \end{bmatrix}$	29,6 26,8	20,7 28,2	270 298		4 6	37,5 34,5	5,0	40,0	17,5	320
6—	2 46,5	5,4	37,2	10,9	2 58		10-6	31,6	4,6	36,8 42,1	$24,1 \\ 22,1$	348 380
	4 42,0 38,2	4,9 4,5	33,5 30,6	19,6 26,7	$\frac{286}{314}$	10-	-17-1-1	71,8	10,2 8,7	9,6 8,2	$\begin{bmatrix} 8,4 \\ 21,5 \end{bmatrix}$	167 195
7—	2 43,8	5,1	40,9	10,2	274		5	53,8	7,6	7,2	31,4	22 3
	4 39,7 6 36,4	4,6	37,0 33,9	18,5 25,5	302 330		2-1	65,6 56,9	9,3	17,5 15,2	7,6	183 211
.8—	2 41,4 4 37,7	4,8	44,1 40,2	9,7 17,6	290 318		5	50,2	7,1	13,4	29,3	239
	6 34,7	4,0	37,0	24,3	346		3-1	60,3 52,9	8,5	24,1 21,1	7,0	199 227
9-1		3,6		28,7 15,3	390 366	. •	5 4—1	47,1	6,7	18,8	27,4	255
10—15—1—	1 72,7	9,1	9.7	8,5	165		3	55,8	7,9	29,8 26,3	$\begin{array}{c c} 6,5 \\ 17,3 \end{array}$	215 243
	62,2 5 54,3	7,8	8,3	21,7 31,7	193 221		5 5—1	44,3 51,9	-6,3	23,6 34,6	25,8	271
2—	1 66,2	8,3	17,7	7,7	181		. 3	46,3	6,6	30,9	16,2	231 259
Į.	5 50,6	7,2	13,5	20,1 $29,5$	209 237		5 6—1	41,8 48,6		$\frac{27,9}{38,9}$	24,4 5,6	287 247
3	1 60,9 3 53,3	7,6	24,4	7,1	197 225	7.0	7-1	45,6	6,5	42,6	5,3	263
Į.	5 47,4	5,9	19,0	27,7	253	10-	-18-1-2	65,9 57,1	9,9		15,4 $26,7$	182 210
4—	1 56,3 3 49,8	$\begin{array}{c c} 7,0 \\ 6,2 \end{array}$	30,1 $26,5$	6,6 $17,4$	213 241		6 2—2	50,4	7,6	6,7	35,3	238
Į	5 44,6	5,6	$23,8 \mid 3$	26,0	269		4	53,1	8,0	14,1	$\frac{14,1}{24,8}$	198 226
5:		5,8	34,9 31,1 :	$\begin{array}{c c} 6,1 \\ 16,3 \end{array}$	229 257		· 6 3-2	47,2 $56,1$		12,6	33,1 13,1	254 214
6—3		5,2	$28,1 \mid 2$	24,6	285		4	49,6	7,4	19,8	23,1	242
	3 43,9	5,5	$39,2 \mid 35,2 \mid 3$	5,7	245 273		6 4—2	44,4 52,2	6,7			270 230
7			$\begin{array}{c c} 31,9 & 2 \\ 42,9 & 3 \end{array}$	23,2 $5,4$	301 261		4	46,5	7,0	24,8	21.7	258
é	41.5	5,2	38.7 1	14.5	289		5-2	41,9	6,3 3 7,3 3	$22,4 \mid 32,5 \mid$		$\frac{286}{246}$
8—1	43,3	4,7 3 5,4 4	35,3 2 46,2	22,1 5,1	317 277		4 6	43,8	$6,6 \mid 3$	$29,2 \mid 1$	20.4	274
Ę	3 39,3 -	4,9	41,9 1	13,8	305	10-	19—1—1		11,2	9,5	8,3	30 2 - 169
10-16-1-2	66,7	8,9	8,9 1	21,0	333		3 5	60,9 53,3	9,6	8,1	21,3	197
4	57,7	7,7	7,7 2	26,9	208		2-1	64,8 1	10,3 1	17,3	7,6	$\begin{array}{c} 225 \\ 185 \end{array}$
22	61,2	6,8 8,2	16,3 1	4,3	236 196		3 5	56,4 49,8		$\begin{array}{c c} 15,0 & 1 \\ 13,3 & 2 \end{array}$		213 241
4	: 53,6	7,1 1	$14,3 \mid 2$	25,0	224 252		3-1	59,7	$9,4 \mid 2$	23,9	7,0	201
32	56,6	7,5	22,6		212		3 5	52,4 46,7	8,3 2 7,4 1	$\begin{array}{c c} 21,0 & 1\\ 8,7 & 2 \end{array}$		229 257
				1					1		1	

C-H-O-N	C °/0	H °/ ₀	O°/0	N °/0	M.G.	C-H-O-N	C º/0	H ⁰ / ₀	O º/0	N °/0	M.G.
10-19-4-1	55,3	8,7	29,5	6,4	217	11-7-1-5	58,7	9.1	77 1	21.1	995
3	49,0	7,8	26,1	17,1	245	2-1	71,3	3,1 3,8	7,1 17,3	31,1 7,6	225 185
5	43,9	7,0	23,4	25,6	273	3	62,0	3,3	15,0	19,7	213
51	51,5	8,2	34,3	5,9	2 33	5	54,8	2,9	13,3	29,0	241
10-20-1-2	65,2 56,6	10,9	8,7	15,2 $ 26,4 $	184 212	3-1	65,7	3,5	23,9	6,9	201
6	50,0	8,3	6,7	35,0	240	3 5	57,6	$\frac{3,1}{2,7}$	21,0 18,7	18,3 27,2	229 257
2-2	60,0	10,0	16,0	14,0	200	4-1	60,8	3,2	29,5	6,4	217
4	52,6	8,8	14,0	24,6	.228	3	53,9	2,8	26,2	17,1	245
6	46,9	7,8	12,5	32,8	256	5	48,3	2,6	23,4	25,6	273
3 - 2	55,5 49,2	9,2 8,2	22,2 19,7	13,0 $22,9$	$\begin{array}{c c} 216 \\ 244 \end{array}$	5-1	56,7	3,0	34,3	6,0	233
6	44,1	7,3	17,6	30,9	272	3	50,6	$\frac{2,7}{2,4}$	30,6 $27,7$	$16,1 \\ 24,2$	$\frac{261}{289}$
4-2	51,7	8,6.	27,6	12,0	232	6-1	53,0	2,8	38,5	5,6	249
4	46,2	7,7	24,6	21,5	260	3	47,6	2,5	34,6	15,2	277
6	41,7	6,9	22,2	29,2	288	5	43,3	2,3	31,5	22,9	305
52 4	46,4 43,5	8,1 $7,2$	32,2 29,0	11,3 20,3	248 276	7-1	49,8	2,6	42,3	5,3	265
. 6	39,5	6,6	26,3	27,6	276 304	3	45,0	$2,4 \\ 2,2$	38,2 34,9	14,3 21,8	293 321
8-2	40,5	6,8	43,2	9,5	296	81	47,0	2,5	45,5	5,0	281
10-21-1-1	70,2	12,3	9,3	8,2	171	3	42,7	2,3	41,4	13,6	309
3	60,3	10,6	8,0	21,1	199	5	39,2	2,1	37,9	20,8	337
5	52,9	9,2	7,0	30,8	227	11-8-1-2	71,7	4,3	8,7	15,2	184
2-1	64,2 55,8	11,2 9,8	17,1 14,9	7,5 19,5	187 215	: 4	62,2 55,0	3,8 3,3	7,5 6,7	26,4 35,0	212 240
-5	49,4	8,6	13,2	28,8	243	$2-\overset{\circ}{2}$	66,0	4,0	16,0	14,0	200
3-1	59,1	10,3	23,6	7,0	203	4	57,9	3,5	14,0	24,6	228
3	51,9	9,1	20,8	18,2	231	6	51,6	3,1	12,5	32,8	256
5	46,3	8,1 9,6	18,5 29,2	27,0	259	3 —2 4	61,1	3,7	22,2 19,7	13,0	$\frac{216}{244}$
4—1 3	48,6	8,5	25,9	6,4 $17,0$	$ \begin{array}{c c} 219 \\ 247 \end{array} $	6	54,1 48,5	3,3 2,9	17,6	22,9 30,9	272
5	43,6	7,6	23,3	25,4	275	4-2	56,9	3,4	27,6	12,1	232
10-22-1-2	64,5	11,8	8,6	15,0	186	4	50,8	3,1	24,6	21,5	260
4	56,1	10,3	7,5	26,2	214	. 6	45,8	2,8	22,2	29,2	288
6 22	49,6 59,4	$\begin{array}{c c} 9,1 \\ 10,9 \end{array}$	$\frac{6,6}{15,8}$	34,7 13,9	$\frac{242}{202}$	5—2 4	53,2 47,8	3,2 2,9	32,2 29,0	11,3 20,3	248 276
4	52,2	9,6	13.9	24,3	2 30	6	43,4	2,6	26,3	27,6	304
6	46,5	8,5	13,9 12,4	32,6	2 58	6-2	50,0	3,0	36,4	10,6	264
10-23-1-1	69,4	13,3	9,2	8,1-	173	4	45,2	2,7	32,9	19,2	292
3	59,7	11,4	8,0	20,9	201	7-2	41,2	2,5	30,0	26,2	320 280
5 2—1	52,4 63,5	10,0 12,2	7,0 16,9	30,6 7,4	229 189	4	47,1 42,8	2,8 2,6	40,0 36,4	10,0 18,2	308
3	55,3	10,6	14,7	19,3	217	6	39,3	2,4	33,3	25,0	336
5	49,0	9,4	13,0	28,6	245	8-2	44,6	2,7	43,2	9,5	296
11-4-5-2	54,1	1,6	32,8	11,5	244	4	40,7	2,5	39,5	17,3	324
11-5-3-1	66,3	2,5	24,1	7,0	199	$\begin{array}{c c} & 6 \\ 11-9-1-1 \end{array}$	37,5 77,2	2,3 5,3	36,4 9,3	23,8 8,2	35 2 171
$egin{array}{c} 5 \\ \mathbf{4-1} \end{array}$	51,8 61,4	2,0 2,3	18,8 29.8	$\frac{27,4}{6,5}$	$\begin{array}{c c} 255 \\ 215 \end{array}$	3	66,3	4,5	8,0	21,1	199
5-3	51,0	1,9	30,9	16.2	259	5	58,1	4,0	7,0	30,8 7,5	227
8-3	43,0	1,6	41,7	13,7	307	2-1	70,6	4,8	17,1	7,5	187
11-6-2-2	66,7	3.0	16,2	14,1	198	3	61,4	4,2	14,9	19,5 28,8	215 243
4	58,4	2,6 2,4	14,2	24,8	226	$\begin{array}{c} 5 \\ 3-1 \end{array}$	54,3 65,0	3,7	13,2 23,6	6,9	203
6 3—2	51,9 61,7	2,4	12,6 22,4	33,1 13,1	254 214	3	57,1	3,9	20,8	18,2	2 31
6-2	50,4	2,8 2,3 2,1	36,6	10,7	262	5	50,9	3,5	18,5	27,0	259
4	45,5	2,1	33,1	19,3	290	4-1	60,3	4,1	29,2	6,4	219
72	47,5	2,1	40,3	10,1	278	3	53,4	3,6	25,9	$\frac{17,0}{25,4}$	247 275
11-7-1-1	78,1	4,1	9,5	8,3	169 197	5 5—1	48,0 56,2	3,3	23,3 34,0	5,9	2 35
3	67,0	3,5	8,1	21,3	101	0-1	30,=	١	-,0	0,0	

C-H-O-N	C °/ ₉	H º/o	0 %	N 0/0	M.G.	C-	н-	O-N	C º/o	H ⁰ / ₀	0 %	N º/0	M.G.
11-14-4-2	55,4	5,9	26,9	11,8	238	11-	-16-	_76	38,4	4,6	32,6	24,4	344 •
4	49,6	5,3	24,1 $21,8$	$\begin{vmatrix} 21,0\\28,5 \end{vmatrix}$	$\begin{vmatrix} 266 \\ 294 \end{vmatrix}$			8-2	43,4 39,7	5,3 4,8	$\begin{vmatrix} 42,1\\38,5 \end{vmatrix}$	$\begin{vmatrix} 9,2\\16,9 \end{vmatrix}$	304 332
5-2	52,0	5,5	31,5	11,0	254		7 27	6	36,7	4,4	35,5	23,3 7,8	360 179
4 6	46,8	5,0	$\begin{vmatrix} 28,4\\25,8 \end{vmatrix}$	19,8 27,1	282 310	11	17	'-1-1 3	73,8	9,5 8,2	8,9	20,3	207
6-2	48,9	5,2	35,5	10,4	270			5	56,2	7,2 8,7	6,7	29,8	235
4 6	44,3	4,7	32,2 29,4	18,8 25,8	298 326			2-1	67,7 59,2	7,6	16,4 14,3	7,2	195 223
7-2	46,1	4,9	39,2	9,8	286			5	52,6	6,8	12,7	27,9	251
4	42,0	4,4	35,7 32,7	17,8 $ 24,5$	314			3-1	62,6 55,2	8,1 7,1	22,7 $20,1$	6,6	211 239
68-2	38,6	4,1	42,4	9,3	302			5	49,4	6,4	18,0	26,2	267
4	40,0	4,2.	38,8					4—1 3	58,1 $ 51,8 $	7,5	28,2 25,1	$\begin{vmatrix} 6,2\\16,4 \end{vmatrix}$	227 255
6 11—15—1—1	$\begin{vmatrix} 36,9 \\ 74,6 \end{vmatrix}$	3,9	35,7	$\begin{vmatrix} 23,5 \\ 7,9 \end{vmatrix}$				5	46,6	6,0	22,6	24,7	283
3	64,4	7,3	7,8	20,5	205			5—1 3	54,3	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$			
5 21	56,6		$\begin{array}{ c c c } 6,9 \\ 16,6 \end{array}$					5	44,1	5,7	26,7	23,4	299
3	59,7	6,8	- 14,5	19,0	221			$6-1 \\ 3$	51,0 $ 46,6 $	6,6			259
5 3—1	53,0 $ 63,1 $		12,8 23,0					5	41,9	5,4	1 30,3	$5 \mid 22,2$	315
3	55,7	' 6,3	20,2	17,7	7 237	11	18	3-1-2	68,1 59,4			$2 \mid 14,4 \\ 2 \mid 25,2$	
5 4—1	49,8		18,1 28,4		$\begin{vmatrix} 1 & 265 \\ 2 & 225 \end{vmatrix}$			4 6	52,8		2 - 6,4	1 33,6	250
3	52,2	2 5,9	25,8	$3 \mid 16,6$	$3 \mid 253$			2-2	62,9	8,6			
. 5	46,9) 5,3	22,8	$\begin{vmatrix} 24,9 \\ 2 & 5,8 \end{vmatrix}$				4 6	55,4 49,6				3 266
5— 1 3			29,5	7 15,0	6 269			3-2	58,4	L 8,0	21,	$2 \mid 12,4$	
5	44,4	1 5,0	26,9	$9 \mid 23,0$				4				0 29,8	
61 3			37,4 33,	$egin{array}{c c} 4 & 5, \\ 7 & 14, \end{array}$				4-2	54,	5 7,	4 26,	4 11,6	$3 \mid 242$
5	42,	1 4.8	30,	$7 \mid 22,$				4	1			$5 \mid 28,3$	2 298
7] 8			$\begin{vmatrix} 41,0\\37,0 \end{vmatrix}$		$ \begin{array}{c c} 1 & 273 \\ 9 & 301 \end{array} $			5—2	51,5	2 7,	0 31,	$0 \mid 10,$	3 258
Ę	40,	1 4,6	34,	$0 \mid 21,$	$3 \mid 329$			4	1 10'1	$\begin{bmatrix} 1 & 6, \\ 5 & 5, \end{bmatrix}$	$ \begin{array}{c c} 3 & 28, \\ 7 & 25, \end{array} $		
8—] {			44,					62	48,	2 6,	6 35,	0 10,	$2 \mid 274$
ę Į		$3 \mid 4, 5$	3 37,	$1 \mid 20;$	$3 \mid 345$			4				$ \begin{array}{c c} 8 & 18, \\ 1 & 25, \\ \end{array} $	
11-16-1-2		$ \begin{array}{c c} 8 & 8,3 \\ 0 & 7,3 \end{array} $		$\frac{3}{3} \mid \frac{14}{25}$			1	L9—1— []]	L 72,	9 10,	5 8,	8 7,	7 181
	53,	2 6,4	1 6,	4 33,	9 248			9			$ \begin{array}{c cccc} 1 & 7, \\ 0 & 6, \end{array} $	$\begin{array}{c c} 7 & 20, \\ 7 & 29, \end{array}$	
	2 63,	5 7,	$\begin{bmatrix} 7 & 15, \\ 8 & 13, \end{bmatrix}$		$\begin{vmatrix} 4 & 208 \\ 7 & 236 \end{vmatrix}$			2	L 67,	0 9,	6 16	2 7,	1 197
	1 55, 3 50,	0 6,	$1 \mid 12$	1 31	,8 264			6					
3	2 58	9 7,	1 21	4 12				3-	5 52, 1 62,	0 8	9 22	$5 \mid 6,$	6 213
	1 52 47	1 5.	$\begin{bmatrix} 3 & 19 \\ 7 & 17 \end{bmatrix}$	$\begin{vmatrix} 0 & 22 \\ 2 & 30 \end{vmatrix}$	0 280				3 54,	8 7	9 19 $1 17$		
4	2 55	,0 6,	7 26	7 11	$,6 \mid 240$			4-	5 49, 1 57,	6 8	3 27	,9+6,	1 229
	49 6 44			$\begin{array}{c c} 0,9 & 20 \\ 0,6 & 28 \end{array}$	7				$3 \mid 51,$	$3 \mid 7$	4 24		$ \begin{array}{c c} 3 & 257 \\ 6 & 285 \end{array} $
. 5—	2 51	$.6 \mid 6$	$2 \mid 31$	2 10	$,9 \mid 250$			5-	5 46, 1 53,		$.7 \mid 32$	$7 \mid 5$	7 245
	4 46 6 42		$\begin{bmatrix} 6 & 28 \\ 1 & 25 \end{bmatrix}$	$\begin{array}{c c} ,2 & 19 \\ .6 & 26 \end{array}$					3 48,	3 7	0 29	,3 15	,4 273
6		5 5	9 35	3 10	$\frac{1}{3}$ 27	2 1	1-2		2 67, 4 58.	$\begin{vmatrix} 3 & 10 \\ 9 & 8 \end{vmatrix}$.9 7	,2 14 ,1 25	
	4 44 6 40	$\begin{bmatrix} 0 & 5, \\ 2 & 4, \end{bmatrix}$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$						3 52	4 7	,9 6	,3 33	$3 \mid 252$
7	2 45	8 5	$6 \mid 38$	9 9	7 28	3		2-	2 62 4 55		$\begin{array}{c c} ,4 & 15 \\ ,3 & 13 \end{array}$	$\begin{bmatrix} 13 \\ 3 \end{bmatrix}$	$\frac{2}{3}$ $\frac{212}{240}$
	4 41	$,8 \mid 5,$	$1 \mid 25$,4 17	,7 31					,	1		1

C—H—O—N	C º/0	H ⁰ / ₀ O	°/ ₀ N °/	M.G.	C—H—O—N	C º/o	H ⁰ / ₀	O º/0	N º/o	M.G.
11-20-2-6	57,9	8,8 21	1,9 31,3 1,0 12 ,3	228	12-5-7-3 8-5	47,5 41,5	1,6 1,4	37,0 36,9	13,9	303 347
$egin{array}{c} 4 \\ 6 \\ 4-2 \\ 4 \\ 6-6 \\ 6-6 \\ 11-21-1-1 \\ 3 \\ 5 \\ 2-1 \\ 3 \\ 5 \\ \end{array}$	46,5 54,1 48,5 44,0 39,8 72,1 62,6 55,2 66,3 58,1	7,0 16 8,2 26 7,3 25 6,7 35 6,0 28 11,4 8 9,9 7 8,8 6 10,5 16 9,2 14	$egin{array}{c ccccccccccccccccccccccccccccccccccc$	256 284 244 272 300 332 183 211 239 199 227	$egin{array}{c} 7 \\ 9-7 \\ 10-3 \\ 12-7 \\ 13-7 \\ 12-6-1-2 \\ 2-4 \\ 4-2 \\ 5-2 \\ 6-6 \\ 7-6 \\ \end{array}$	38,4 36,8 41,0 32,8 31,6 74,2 60,5 59,5 55,8 43,6 41,6	1,3 1,3 1,4 1,1 1,1 3,1 0,2 2,5 2,3 1,8 1,7	34,1 36,8 45,6 43,7 45,7 8,2 13,4 26,4 31,0 29,1 32,4	26,1 25,1 12,0 22,3 21,5 14,4 23,5 11,6 10,9 25,5 24,3	375 391 351 439 455 194 238 242 258 330 346
5 $3-1$ 3 5 $4-1$ 3 5 $11-22-1-2$ 4 6 $2-2$ 4 6 $3-2$	51,8 61,4 54,3 48,7 57,1 51,0 46,0 66,7 58,4 52,0 61,7 54,5 48,9 57,4	10,3 14 9,1 13 8,2 11 9,5 20	,3 6,5 ,7 17,3 ,7 25,8 ,7 6,1 ,7 16,2 ,3 24,4 ,1 14,1 ,1 24,8 ,3 33,1 ,9 12,1 ,9 31,1 ,9 12,2	255 215 243 271 231 259 287 198 226 254 214 242 270 230	8-2 4 6 9-4 6 10-4 12-4 12-7-1-1 3 5 2-1 3 5	47,1 43,1 39,8 41,1 38,1 39,3 36,2 79,6 68,9 60,8 73,1 64,0 56,9 67,6	1,5 3,9 3,3 2,9 3,5 3,1 2,8 3,3	41,8 38,3 35,4 41,1 38,1 43,7 48,2 8,8 7,7 6,7 16,2 14,2	9,1 16,8 23,2 16,0 22,2 15,3 14,1 7,7 20,1 29,5 7,1 18,6 27,7 6,6	306 334 362 350 252 366 398 181 209 237 197 225 253 213
$egin{array}{c} 4 \\ 6 \\ 4-2 \\ 4 \\ 6 \\ 11-23-1-1 \\ 3 \\ 5 \\ 2-1 \\ 3 \\ 5 \\ \end{array}$	54,8 65,7	8,5 18, 7,7 16, 8,9 26, 8,0 23, 7,3 21, 12,4 8, 10,8 7, 9,5 6, 11,4 15, 10,0 14, 8,9 12,	8 29,4 0 11,4 4 20,4 2 27,8 6 7,6 5 19,7 6 29,0 9 7,0 0 18,3	258 286 246 274 302 185 213 241 201 229	$5 \\ 4-1 \\ 3 \\ 5 \\ 5-1 \\ 3 \\ 5 \\ 6-1 \\ 3 \\ 6 \\ 1 \\ 3 \\ $	47,8 55,2 49.8	2,6 3,1 2,7 2,5 2,8 2,6 2,3 2,7 2.4	17,8 27,9 24,9 22,4 32,7 29,3 26,6 36,8 33,2	17,4 26,0 6,1 16,3 24,6 5,7 15,4 23,2 5,3 14,5	241 269 229 257 285 245 273 301 261 289
$ \begin{array}{c} 6 - 9 \\ 11 - 24 - 1 - 2 \\ 4 \\ 6 \end{array} $	35,0 66,0 57,9	$ \begin{array}{c cccc} 6,1 & 25, \\ 12,0 & 8, \\ 10,5 & 7, \\ 8,4 & 6, \end{array} $	5 33,4 0 14,0 0 24,6	257 377 200 228 256	7—1 3 5	$egin{array}{c c} 47,2 & \\ 43,2 & \\ \hline \end{array}$	2,5 2,3 2,1 3	$\frac{40,4}{36,7}$	21,0	317 277 305 333
3 5	61,1 54,1 48,5 35,1 70,6 61,4 54,3 65,0 57,2 51,0	11,1 14,1 9,8 13, 8,8 11,1 6,4 21,1 13,4 8,1 11,6 7,1 10,3 6,6 11,3 15,6 10,8 13,5 9,7 12,5	8 13,0 1 23,0 8 30,9 3 37,2 5 7,5 4 19,5 6 28,8 8 6,9 8 18,2	216 244 272 376 187 215 243 203 231 259	3 5 9-1 3 5 10-1 3 4 10-1 12-8-1-2	44,8 41,2 46,6 42,7 39,4 44,3 40,8 37,8 73,4	2,2 2,0 2,3 4,1 1,9 2,1 4,2,0 4,1 4,1	39,9 36,7 46,6 42,7 139,4 19,2 45,3 149,2 15,3 12,0 18,2	13,1 20,0 4,5 12,5 19,2 4,3 11,9 8,4 4,3	293 321 349 309 337 365 325 353 381
11-26-1-2 6-2 12-3-6-3 12-4-4-2 8-2 16-6 12-5-5-1	65,3 46,8 50,5 60,0 47,4 29,5	12,9 7,9 9,2 34,0 1,1 33,7 1,7 26,7 1,3 42,1 0,8 52,4 2,0 32,9	13,9 9,9 14,7 11,6 9,2	202 282 285 240 304 488 243	6 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	57,1 3 51,4 2 57,9 3 50,0 3 53,7 3 53,1 3	3,2 2,9 3,8 1 3,3 1 3,0 1 3,5 2	6,3 3 5,7 4 5,1 1 3,3 2 1,9 3 1,0 1	3,3 0,0 3,2 3,3 1,3 2,4	224 252 280 212 240 268 228 256
					1	1		7] -	,	

C-H-O-N	C º/ ₀	H ⁰ / ₀	O°/0	N °/0	M.G.	C-H-O-N	C º/0	H °/0	O º/o	N°/0	M.G.
$\begin{array}{c} -2 \\ 12 - 8 - 3 - 6 \\ 4 - 2 \\ 4 \end{array}$	50,7 59,0 53,0	2,8 3,3 2,9	16,9 26,2 23,5	29,6 11,5 20,6	284 244 272	$12-10-5-6 \\ 6-2 \\ 4$	45,3 51,8 47,0	3,1 3,6 3,3	25,2 34,5 31,4	26,4 10,1 18,3	318 278 306
5-2 4	48,0 55,4 50,0	2,7 3,0 2,8	21,3 30,8 27,8	28,0 10,8 19,4	300 260 288	7-2 4	43,1 49,0 44,7	3,0 3,4 3,1	28,7 38,1 34,8	25,2 9,5 17,4	334 294 3 2 2 350
6 62 4 6	45,6 52,2 47,4 43,4	2,5 2,9 2,6 2,4	25,3 34,8 31,6 28,9	$ \begin{array}{c c} 26,6 \\ 10,1 \\ 18,4 \\ 25,3 \end{array} $	316 276 304 332	6 8-2 4 6	$\begin{vmatrix} 41,1\\ 46,5\\ 42,6\\ 39,3 \end{vmatrix}$	2,9 3,2 3,0 2,7	32,0 41,3 37,9 35,0	$ \begin{array}{c c} 24,0 \\ 9,0 \\ 16,5 \\ 23,0 \end{array} $	310 338 366
7—2 4 6	49,3 45,0 41,4	2,7 2,5 2,3	38,4 35,0 32,2	$ \begin{array}{c c} 9,6 \\ 17,5 \\ 24,1 \end{array} $	292 320 348	12-11-1-1 3 5	77,8 67,6 59,9	5,9 5,2 4,5	8,6 7,5 6,6	7,6 19,7 29,0	185 213 241
$egin{array}{cccccccccccccccccccccccccccccccccccc$	46,8 42,8 39,5 44,4	2,6 2,4 2,2 2,5	41,5 38,1 35,2 44,4	16,7 23,1 8,6	308 336 364 324	$egin{array}{cccc} 2-1 & & & & & & & & & & & & & & & & & & &$	71,6 62,9 56,0 66,3	5,5 4,8 4,3 5,1	$ \begin{array}{c c} 15,9 \\ 14,0 \\ 12,4 \\ 22,1 \end{array} $	7,0 18,3 27,2 6,5	201 229 257 217
4 6 10-6	40,9 37,9 36,4	2,3 2,1 2,0.	40,9 37,9 40,4	15,9 22,1 21,2	352 380 396	3 5 4—1	58,8 52,7 61,8	4,5 4,0 4,7	19,6 17,6 27,5	17,1 25,6 6,0	245 273 233
11-6 $12-9-1-1$ 3	35,0 78,7 68,2	1,9 4,9 4,3	42,7 8,7 7,6	20,4 7,6 19,9		$egin{array}{cccccccccccccccccccccccccccccccccccc$	55,2 49,8 57,8 52,0	4,2 3,8 4,4 4,0	24,5 22,1 32,1 28,9	$ \begin{array}{c c} 16,1 \\ 24,2 \\ 5,6 \\ 15,1 \end{array} $	261 289 249 277
$egin{array}{cccccccccccccccccccccccccccccccccccc$	60,2 72,4 63,4 56,5	3,8 4,5 3,9 3,5	6,7 16,1 14,1 12,5	$ \begin{array}{c c} 29,3 \\ 7,0 \\ 18,5 \\ 27,4 \end{array} $	199 227	5 6—1 3	47,2 54,3 49,1	3,6 4,2 3,7	26,2 36,2 32,8	22,9 5,3 14,3	305 265 293
3-1 3 5	67,0 59,3 53,1	4,2 3,7 3,3	22,3 19,7 17,7	$\begin{vmatrix} 6,5\\17,3\\25,8 \end{vmatrix}$	$\begin{array}{ c c c }\hline 215 \\ 243 \\ \hline 271 \end{array}$	$\begin{bmatrix} 5 \\ 7-1 \\ 3 \\ 5 \end{bmatrix}$	44,8 51,2 46,6 42,7	3,4 3,9 3,6 3,2	29,9 39,8 36,2 33,3	21,8 5,0 13,6 20,8	321 281 309 337
4—1 3 5 5—1	62,3 55,6 50,2 58,2	3,5	$ \begin{array}{c c} 27,7 \\ 24,7 \\ 22,3 \\ 32,4 \end{array} $	$\begin{vmatrix} 24,4\\5,7 \end{vmatrix}$	259 287 247	8-1 3 5	48,5 44,3 40,8	3,7 3,4 3,1	$\begin{vmatrix} 43,1\\ 39,4\\ 36,2 \end{vmatrix}$	$\begin{vmatrix} 4,7\\12,9\\19,8 \end{vmatrix}$	297 325 353
3 5 6—1	52,3 47,5 54,7	3,3 3,0 3,4	$\begin{vmatrix} 29,1\\ 26,4\\ 36,5 \end{vmatrix}$	15,3 23,1 5,3	275 303 263	$ \begin{array}{ c c c c c } \hline 12-12-1-2 \\ 4 \\ 6 \end{array} $	42,2 72,0 63,2 56,2	6,0	42,2 8,0 7,0 6,2	14,0	341 200 228 256
3 5 7—1 3	$ \begin{array}{c c} 49,5 \\ 45,1 \\ 51,6 \\ 46,9 \end{array} $	2,8	$ \begin{vmatrix} 33,0\\ 30,1\\ 40,1\\ 36,5 \end{vmatrix} $	21,9	319 1 279	2-2 4	66,7 59,0 52,9	5,6 4,9 4,4	14,8 13,1 11,8	12,9 32,9 30,9	216 244 272
5 8—1 3	43,0 58,8 44,6	$\begin{array}{c c} 2,7 \\ 3,0 \\ 5,2,8 \end{array}$	33,4 43,4 39,6	$\begin{vmatrix} 20,9 \\ 4,7 \\ 13,0 \end{vmatrix}$	335 295 323	3-2 4 6 4-2	$ \begin{array}{c c} 62,1 \\ 55,4 \\ 50,0 \\ 57,1 \end{array} $	4,6	20,7 18,4 16,6 25,8	$\begin{array}{c c} 21,5 \\ 29,2 \end{array}$	232 260 288 248
5 12—10—1—2 . 6		$\begin{array}{c c} 7 & 5,0 \\ 7 & 4,4 \end{array}$		$\begin{bmatrix} 14,1\\24,8 \end{bmatrix}$	198 226	4 4 6 5—2	52.2 47,3 54,5	4,3 3,9 5,5	23,2 21,1 30,3	$\begin{vmatrix} 20,3\\27,6\\10,6 \end{vmatrix}$	276 304 264
$egin{array}{c} 4 \ 2-2 \ 4 \ 6 \ \end{array}$	67,3 59,5	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{vmatrix} 14,9\\13,2\\11,8 \end{vmatrix}$	9 13,1 2 23,1 3 31,1	1 214 1 242 1 270	6—2	45,0 51,4	$ \begin{array}{c c} 4,1 \\ 3,7 \\ 4,3 \end{array} $	27,4 25,0 34,3 31,2	$\begin{vmatrix} 26,2\\ 10,0 \end{vmatrix}$	320 280
3—2 4 6	62,6 $55,8$ $50,3$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{vmatrix} 20,8\\18,6\\16,8 \end{vmatrix}$	$egin{array}{c c} 3 & 12,2 \ 5 & 21,5 \ 8 & 29,4 \ \hline \end{array}$	7 2 58 4 2 86	7—2 4	42,9	$\begin{array}{c c} 3,5 \\ 4,0 \\ \end{array}$	28,6 37,8 34,6	$\begin{array}{c c} 25,0 \\ 8 & 9,5 \\ 6 & 17,3 \end{array}$	336 296 324
$egin{array}{ccccc} 4 - 2 & 4 & 6 & 6 & 5 - 2 & 6 & 6 & 6 & 6 & 6 & 6 & 6 & 6 & 6 &$	52,6 47,6	$\begin{array}{c c} 3 & 3,6 \\ 3 & 3,3 \end{array}$	21,2	$ \begin{vmatrix} 20,4 \\ 2 & 27,8 \\ 5 & 10,4 \end{vmatrix} $	$ \begin{array}{c c} 4 & 274 \\ 3 & 302 \\ 7 & 262 \end{array} $	6 8-2 12-13-1-1	$\begin{vmatrix} 40,9\\46,3\\77,0 \end{vmatrix}$	$ \begin{array}{c c} 3,4 \\ 3,5 \\ 6,9 \end{array} $	31,8 41,1 8,5	$\begin{vmatrix} 23,8\\ 9,0\\ 7,5 \end{vmatrix}$	$\begin{vmatrix} 352 \\ 311 \\ 187 \end{vmatrix}$
. 4		7 3,4	27,0		3 290	3	67,0	6,0	7,	1 19,5	410

C—H—O—N	C º/o	H ⁰ / ₀	O º/0	N º/o	M.G.	C-H-O-N	C º/o	H ⁰ / ₀	0 %	N °/0	M.G.
12-13-1-5 2-1 3 5 9 3-1	59,2 70,9 62,3 55,6 45,7 65,7	5,3 6,4 5,6 5,0 4,1 5,9	6,6 15,8 13,8 12,3 10,2 21,9	28,8 6,9 18,2 27,0 40,0 6,4	243 203 231 259 315 219	$\begin{array}{c} 12-15-2-1 \\ & 3 \\ 5 \\ 3-1 \\ & 3 \\ 5 \end{array}$	70,2 61,8 55,2 65,2 57,8 52,0	7,3 6,4 5,7 6,8 6,0 5,4	15,6 13,7 12,2 21,7 19,3 17,3	6,8 18,0 26,8 6,3 16,9 25,3	205 233 261 221 249 277
$\begin{array}{c} 3\\5\\4-1\\3\\5\\5-1\end{array}$	58,3 52,4 61,3 54,8 49,4 57,3	5,3 4,7 5,5 4,9 4,5 5,1	19,4 17,4 27,2 24,3 22,0 31,9	17,0 25,4 5,9 16,0 24,0 5,6	247 275 235 263 291 251	$egin{array}{c} 4-1 \\ 3 \\ 5-1 \\ 3 \\ 5 \end{array}$	52,0 60,7 54,3 49,1 56,9 51,2 46,6	5, 4 6,3 5,7 5,1 5,9 5,3 4,8	27,0, 24,1 21,8 31,6 28,5 25,9	5,9 15,8 23,9 5,5 14,9 22,6	237 265 293 253 281 309
$egin{array}{c} 3 \\ 5 \\ 6-1 \\ 3 \\ 5 \\ 7-1 \end{array}$	51,6 46,9 53,9 48,8 44,6 50,9	4,6 4,2 4,9 4,4 4,0 4,6	28,7 26,1 35,9 32,5 29,7 39,6	15,1 22,8 5,2 14,2 21,7 4,9	279 307 267 295 323 283	$6-1 \\ 3 \\ 5 \\ 7-1 \\ 3 \\ 5$	53,5 48,5 44,3 50,5 46,0 42,2	5,6 5,0 4,6 5,3 4,8 4,4	35,7 32,3 29,5 39,3 35,8 32,8	5,2 14,1 21,5 4,9 13,4 20,5	269 297 325 285 313 341
3 5 8-1 3 5	46,3 42,5 48,1 44,0 40,6 45,7	4,2 3,8 4,3 4,0 3,5 4,1	36,0 33,0 42,8 39,1 36,1 45,7	13,5 20,6 4,7 12,8 19,7 4,4	311 339 299 327 355 315	$egin{array}{c} 8-1 \\ 3 \\ 5 \\ 9-3 \\ 20-5 \\ 12-16-1-2 \\ \end{array}$	47,8 43,8 40,3 41,7 26,2 70,6	5,0 4,6 4,2 4,3 2,7 7,8	42,5 38,9 35,8 41,7 58,3 7,8	4,6 12,7 19,6 12,2 12,7 13,7	301 329 357 345 549 204
$\begin{array}{c} 3 \\ 5 \\ 10-1 \\ 3 \\ 5 \\ 12-14-1-2 \end{array}$	42,0 38,8 43,5 40,1 37,2 71,3	3,8 3,5 3,9 3,6 3,3 6,9	42,0 38,8 48,3 44,6 41,3 7,9	12,2 18,9 4,2 11,7 18,1 13,9	343 371 331 359 387 202	$\begin{array}{c} 4 \\ 6 \\ 2-2 \\ 4 \\ 6 \\ 3-2 \end{array}$	62,1 55,4 65,5 58,1 52,2 61,0	6,9 6,1 7,3 6,4 5,8 6,8	6,9 6,1 14,5 12,9 11,6 20,3	24,1 32,3 12,7 22,6 30,4 11,9	232 260 220 248 276 236
$egin{array}{c} 4 \\ 6 \\ 2-2 \\ 4 \\ 6 \\ 3-2 \end{array}$	62,6 55,8 66,1 58,5 52,5 61,5	6,1 5,4 6,4 5,7 5,1 6,0	7,0 6,2 14,7 13,0 11,7 20,5	24,3 32,6 12,8 22,8 30,7 12,0	230 258 218 246 274 234	$egin{array}{c} 4 & 4 & 6 & 4 - 2 & 4 & 6 & 6 & 5 - 2 & 6 & 5 - 2 & 6 & 6 & 6 & 6 & 6 & 6 & 6 & 6 & 6 &$	54,5 49,3 57,2 51,4 46,7	6,1 5,5 6,3 5,7 5,2	18,2 16,4 25,4 22,8 20,8	21,2 28,8 11,1 20,0 27,3	264 292 252 280 308
$egin{matrix} 4 \\ 6 \\ 4-2 \\ 4 \\ 6 \end{bmatrix}$	55,0 49,7 57,6 51,8 47,1	5,3 4,8 5,6 5,0 4,6	18,3 16,6 25,6 23,0 20,9	21,4 28,9 11,2 20,1 27,4	262 290• 250 278 306	$egin{array}{c} 4 \\ 6 \\ 6-2 \\ 4 \\ 6 \end{array}$	53,7 48,6 44,4 50,7 46,2 42,3	6,0 5,4 4,9 5,6 5,1 4,7	29,8 27,0 24,7 33,8 30,7 28,2	10,4 18,9 25,9 9,9 18,0 24,7	268 296 324 284 312 340
5-2 4 6 6-2 4 6	54,1 49,0 44,7 51,1 46,4 42,6	5,3 4,8 4,3 4,9 4,5 4,1	30,1 27,2 24,8 34,0 31,0 28,4	10,5 19,0 26,1 9,9 18,1 24,9	266 294 322 282 310 338	7-2 4 6 $8-2$ 4 6	48,0 43,9 40,4 45,6 41,9 38,7	5,3 4,9 4,5 5,0 4,6 4,3	37,3 34,1 31,5 40,5 37,2 34,4	9,3 17,1 23,6 8,9 16,3 22,6	300 328 356 316 344 372
7 - 2 4 6 8 - 2 4 6	48,3 44,2 40,7 45,9 42,1 38,9	4,7 4,3 3,9 4,4 4,1 3,8	40,8	9,4 17,2 23,7 8,9 16,4 22,7	298 326 354 314 342 370	10-2 $18-4$ $23-6$ $12-17-1-1$ 3 5	41,4 28,6 23,5 75,4 65,7 58,3		45,9 57,1 60,2 8,4 7,3 6,5	8,0 11,1 13,7 7,3 19,2 28,3	348 504 612 191 219 247
11-2 $22-6$ $27-8$ $12-15-1-1$ 3 5	28,7 24,2 20,5 76,2 66,4 58,8	2,8	35,1 59,2 61,5 8,5 7,4	33,4 14,1 15,9 7,4 19,3 28,6	362 594 702 189 217 245	2—1 3 5 3—1 3—5	69,6 61,3 54,7 64,6 57,4 51,6	8,2 7,2 6,5 7,6 6,8	15,4 13,6 12,2 21,5 19,1	26,6 17,9 26,6 6,3 16,7 25,1	207 235 263 223 251 279

,			1		1						
C-H-O-N	C º/o	H °/ ₀	0 %	N º/0	M.G.	C-H-O-N	C º/ ₀	H º/ ₀	O %	N º/o	M.G.
12-17-4-1	60,2 53,9	7,1	26,8 24,0	5,8	239	12-19-6-1	52,7	6,9	35,2	5,1	2 73
5 5—1	48,8	5,8	21,7	15,7 23,7	267	3 5	47,8 43,8	6,3 5,7	31,9 29,2	13,9 21,3	301 3 2 9
3 5	50,9	6,0	31,4	5,5	255		49,8 39,0	6,6 5,1	38,7 52,0	4,8 3,8	2 89 369
6-1	53,1	5,5	25,7 35,4	22, 5 5,2	311 271	$\begin{vmatrix} 17-3 \\ 12-20-1-2 \end{vmatrix}$	30,2 69,2	4,0	57,0 7,7	8,8	477 208
3 5	48,1	5,7 5,2	32,1 29,3	14,0 21,4	299 327	4 6	61,0 54,5	8,5 7,6	6,8	23,7 31,8	236 264
7—1	50,2	5,9 5,4	39,0 35,6	4,8	287 315	22 4	64,3 57,1	8,9 7,9	14,3 12,7	12,5 22,2	$\frac{224}{252}$
5 8—1	42,0	4,9 5,5	32,6 42,2	20,4	343 303	$\begin{vmatrix} 6 \\ 3-2 \end{vmatrix}$	51,4 60,0	7,1 8,3	11,4 20,0	30,0	280 240
3 5	43,5 40,1	5,1 4,7	38,7 35,7	12,7 19,5	331 359	4 6	53,7 48,6	7,4 6,8	17,9 16,2	20,9 28,4	268 296
10-3 16-3	39,6 31,4	4,7 3,7.	44,1	11,6 9,1	363 459	4-2	56,2 50,7	7,8	25,0 $22,5$	10,9 19,7	256 284
21-5 $12-18-1-2$	25,4 69,9	3,0 8,7	59,3 7,8	12,3 13,6	567 206	$egin{array}{c} 6 \ 5-2 \end{array}$	46,2 52,9	6,4 7,3	20,5 29,4	26,9 10,3	312 272
4 6	61,5 55,0	7,7 6,8	- 6,8 6,1	23,9 32,1	234 262	4	48,0 43,9	6,7	26,7 24,4	18,6 25,6	300 328
$egin{array}{c} 2-2 \ 4 \end{array}$	64,9 57,6	8,1 7,2	14,4 12,8	12,6 22,4	222 250	6-2	50,0 45,6	6,9 6,3	33,3 30,4	9,7 17,7	288 316
6 3 –2	51,8	7,2 6,5 7,5	11,5 $20,2$	30,2	278 238	6	41,9 47,4	5,8 6,6	27,9 36,8	24,4 9,2	344 304
4 6	54,1 49,0	6,8 6,1	18,0	21,1	266 294	4	43,4	6,0 5,5	33,7 31,1	16,9 23,3	332 360
$\begin{array}{c} 4-2\\4\end{array}$	56,7 51,0	7,1 6,4	25,2 22,7	11,0	254 282	8-2	45,0 41,4	6,2 $5,7$	40,0	8,7 16,1	320 348
$\begin{array}{c} 6 \\ 5-2 \end{array}$	46,5 53,3	5,8 6,7	20,6 29,6	27,1 10,4	310 270	6	38,3 28,3	5,3 3,9	34,0 34,7	22,3 33,1	376 508
4 6	48,3	6,0 5,5	26,8 24,5	18,8 25,8	298 326	12-21-1-1	73,8 64,6	10,8	8,2 7,2	7,2 18,8	195 22 3
6-2	50,3 45,8	6,3 5,7	33,6 30,6	9,8 17,8	286 314	5	57,4 68,2	8,3	6,4 15,2	27,9 6,6	251 211
$\begin{array}{c} \bar{6} \\ 7-2 \end{array}$	42,1 47,7	5,3 5,9	28,1 37,1	24,5 9,3	342 302	3	60,2 53,9	8,8 7,9	13,4 12,0	17,6 26,2	239 267
4 6	43,6 40,2	5,4 5,0	33,9 31,3	17,0 23,5	330 358	3-1	63,4 56,4	9,2	21,1 18,8	6,2	227 255
8-2	45,3 41,6	5,7 5,2	40,2 37,0	8,8 16,2	318 346	5	50, 4 50,9 59,2	7,4	17,0 26,3	24,7	283 243
6 142	38,5 34,8	4,8	34,2	22,5	374 414	3	53,1	7,7	23,6 21,4	15,5 23,4	271 299
19-4 12-19-1-1	27,6 74,6	3,4	54,1 58,2	6,7 10,7	522	5-1	48,1 55,6	8,1 7,3	30,9 27,9	5,4 14,6	259 287
3	65,2	9,8	8,3	7,2	193 221	5	50,2 45,7	6,7	25,4	22,2	315
$egin{array}{cccc} & & 5 \ 2-1 \ & & \end{array}$	57,8	7,6 9,1	6,4	28,1	249 209	3	52,3 47,5	7,6 6,9	34,9 [†] 31,7 [†] 29,0	$\begin{bmatrix} 5,1\\13,8\\21,1 \end{bmatrix}$	275 303
· 3 5	60,7 54,3	8,0	13,5 12,1	26,4	237 265	11—1	43,5	5,9	49,6	3,9	331 355
3-1	64,0 56,9	8,4 7,5	21,3 19,0	6,2	225 253	4	68,6	10,5	7,6	13,3	210 238
$egin{array}{c} 5 \ 4-1 \ \end{array}$	51,1 59,7	6,8 7,9	17,1 26,5	24,9 5,8	281 241	2-2	54,1	8,3	14,2	36,5	266 226
3 5	53,5 48,5	$\begin{array}{c c} 7,1 \\ 6,4 \end{array}$	23,8 21,5	15,6 23,6	269 297	6	56,7	7,8	11,3	22,0	254 282
5—1 3	56,0 50,5	$\begin{array}{c c} 7,4 \\ 6,7 \end{array}$	31,1 28,1	5,4 14,7	257 285	4	59,5	8,1		11,6	242 270
5	46,0	6,0	25,6	22,4	313	6	48,3	7,4	16,1	28,2	298

C-H-O-N	C º/0	H °/ ₀	0 %	N º/0	M.G.	C-	-H-O-N	C º/o	H º/0	O º/0	N º/o	M.G.
12-22-4-2	55,8	8,5	24,8	10,9	258	12-	27-3-3		10,3	18,4	16,1	261
4 6	50,3	7,7	22,4 $20,4$	19,6	286 314		5 41	49,8	9,3	16,6	24,2	289
8-2	44,7	6,8	39,7	26,7 8,7	322	12-	$egin{array}{c} 4-1 \ -30-1-4 \end{array}$	1 7 -	10,8 12,2	25,7 6,5	5,6 22,8	249 246
22-6	23,9	3,6	58,5	13,9	602	13-	-5-10-3	43,0	1.4	44,1	11,5	363
12-23-1-1 3	73,1	11,7	8,1	7,1 18,7	197 225	13	$-6-2-2 \ \ 4-2$	70,3	2,7	14,4 25,2	12,6 11,0	$\frac{222}{254}$
5	56,9	9,1	6,3	27,7	2 53		5-2	57,8	2,7 2,4 2,2	29,6	10,4	270
21 3	67,6	10,8	15,0 13,3	6,6 $17,4$	213 241		6—2 9—4		2,1	33,6	9,8	286
5	53,5	8,5	11,9	26,0	269		11-4	39,6	1,6 1,5	39,8 44,7	15,5 14,2	$\begin{array}{c} 362 \\ 394 \end{array}$
3-1	62,9 56,0	10,0	21,0 18,7	6,1	229		12-8	33,5	1.3	41,2	24,0	466
5	50,5	8,1	16,8	16,3 24,6	$\begin{array}{c} 257 \\ 285 \end{array}$	18	13-8 $3-7-1-1$	32,4 80,9	1,2 3,6	43,2	23,2 7,2	48 2 193
4-1	58,8	9,4	26,1	5,7	245		3	70,6	3,2	7,2	19,0	221
3 5	52,7	8,4 7,6	23,4 21,3	15,4 23,2	273 301		$5 \\ 2-1$	$\begin{vmatrix} 62,6 \\ 74,6 \end{vmatrix}$	2 ,8 3,3	6,4 15,3	28,1 6,7	249 209
5-1	55,2	8,8	30,6	5,4	261		3	65,8	2,9	13.5	17,7	237
3 5	49,8	8,0	27,7 25,2	$\frac{14,5}{22,1}$	289 317		3-1	58,9	2,6	12,1 21,3	26,4	265
6-1	52,0	8,3	34,6	5,1	277		3	61,6	2,8	19,0	6,2	$\frac{225}{253}$
3 5	47,2	7,5 6,9	31,5 28,8	13,8 21,0	305 333		5 41	55,5	2,5 2,9	17,1	24,9	281
-10-1	42,2	6,7	46,9	4,1	341		4-1 3	64,7 58,0	2,6	26,5 23,8	5,8 15,6	241 269
12-24-1-2	67,9	11,3	7,5	13,2	212		5	52,5	2,4 2,7	21,5	23,6	297
8	53,7	9,0	$\begin{bmatrix} 6,7 \\ 6,0 \end{bmatrix}$	23,3 31,3	240 268		5—1 3	60,7 54,7	$\frac{2,7}{2.4}$	31,1 28,1	5,4 14,7	257 285
2-2	63,1	10,5	14,0	12,4	2 28		- 5	49,8	2,4 2,2 2,6	25,6	22,4	313
4	56,2 50,7	9,3 8,4	12,5 11,3	21,9 29,6	256 284		6—1	57,1 51,8	$\frac{2,6}{2,3}$	35,2 31,9	5,1 13,9	273 301
3-2	59,0	9,8	19,7	11,5	244		. 5	47,4	2.1	29,2	21,3	329
4 6	52,9 48,0	8,8 8,0		$\frac{20,6}{28,0}$	272 300		8-1	51,1 46,8	2,3 2,1	42,0 38,4	4,6	305
4-2	55,4	9,2	24,6	10,8	260		. 5	43,2	1,9	35,4	12,6 19,4	333 361
4 6	50,0	8,3		$\frac{19,4}{26,6}$	288 316		9-3 10-3	44,7	2,0 1,9	41,2	12,0	349
10-2	40,4	6,7	44,9	7,9	356		10—3 5	42,7 39,7	1,8	43,8 40,7	11,5 17,8	365 393
2 - 25 - 1 - 1	72,3 63,4	12,6	8,0	7,1	199 227	13	-8-1-2	75,0	3,8	7,7	13,5	208
5	56,5	9,8		18,5 27,4	255		4 6	66,1	3,4	6,8	23,7 31,8	236 264
2—1 3	67,0 59,2	11,6	14,9	6,5	215		2-2	69,6	3,6	14,3	12,5	224
5	53,1	10,69,2		17,3 $25,8$	243 271		4	61,9	3,2	12,7	22,2 30,0	252 280
5-11	35,7	6,2	19,8	38,2	403		3-2	65,0	3,3	20,0	11,7	240
11-1 $12-26-1-2$	$\begin{vmatrix} 40,1\\67,3 \end{vmatrix}$	7,0	$\begin{array}{c c} 49,0 \\ 7,5 \end{array}$	3,9	359 214		4 6	58,2 52,7			20,9	268
4	59.5	20.7	6,6	23.1	242		4-2	60,9	3,1		28,4 10,9	296 256
~6 2—2	53,3 62,6	9,6	$\begin{bmatrix} 5,9 \\ 13,9 \end{bmatrix}$	31,1 12,2	270 230		4	54,9	2,8		19,7	284
4	55,8	10,1	12,4 ?	$21.7 \pm$	258		5 <u></u> 2	57,3	2,6	$20,5 \mid 29,4 \mid$	26,9 10,3	312 272
6 32	50,3 58,5	9,1	11,2 9	29,4	286		4	52,0	2,7	26,7 :	18,6	300
12-27-1-1	71,6	13,4	8,0	7,0	246 201		6-2	47,6 54,2		$24,4 \mid 33,3 \mid$	25,6 9,7	328 288
3 5	62,9	11,8	7,0	18,3	229		4	49,3	2,5	30,4	17,7	316
2-1		$10,5 \mid 12,4 \mid $	14,7	$\begin{array}{c c} 27,2 & \\ 6,5 & \\ \end{array}$	257 217		7-2	45,3 51,3		$27,9 \mid 236,8 \mid$	24,4	344 304
3 =	58,8	11,0	13,1 1	17,1	245		4	47,0	2.4	33,7 1	16,9	332
5 3—1		$\begin{array}{c c} 9,9 & 1\\ 11,6 & 5 \end{array}$	$\begin{bmatrix} 11,7 & 2\\ 20,6 & 3 \end{bmatrix}$	25,6	273 233		8-2	43,3 48,8	2,2	31,1 40,0	23,3	360
	- / 1	, 1		7,0			0-2	10,0	2,0	10,0	8,7	3 2 0

C-H-C	N	C º/ ₀	H º/ ₀	0%	N º/o	M.G.	C-H-O-N	C º/o	H °/ ₀	0 º/0	N º/0	M.G.
13 -8-8	8-4	44,8	2,3	36,8	16,1	348	13-11-3-3	607	19	107	100	OFF
	6	41,5	2,1	34,0	22,3	376	5	60,7	4,2 3,9	18,7 16,8	16,3 24,6	257 285
•	9—2 4	$\begin{vmatrix} 46,4\\ 42,8 \end{vmatrix}$	2,4	42,8	8,3	336	41	63,7	4,5	26,1	5,7	245
	6	39,8	2,2 2,0	39,6 36,7	15,4 $21,4$	364 392	3	57,1	4,0	23,4	15,4	273
13 -9-		80,0	4,6	8,2	7,2	195	5 51	51,8 59,8	3,7	21,3	23,2	301
	3	70,0	4,0	7,2	18,8	223	3	54,0	3,8	$\begin{vmatrix} 30,6 \\ 27,7 \end{vmatrix}$	5,4	261 289
	5	62,1	3,6	6,4	27,9	251	5	49,2	3,5	25,2	22,0	317
	$^{2-1}_{3}$	73,9 65,3	4,3 3,7	15,2 13,4	6,6	211	6-1	56,3	4,0	34,7	5,0	277
	5	58,4	3,4	12,0	26,2	239 267	3 5	51,1 46,8	3,6	31,5	13,8	305
	3^{-1}	68,7	3,9	21,1	6,2	227	7-1	53,2	3,8	28,8	$\begin{vmatrix} 21,0\\4,8 \end{vmatrix}$	333 293
	3	61,2	3,5	18,8	16,5	255	. 3	48,6	3,4	34,9	13,1	321
	$\begin{array}{c} 5 \\ 4-1 \end{array}$	55,1 64,2	3,2 3,7	17,0 26,3	24,7 5,8	283	5	44,7	3,1	32,0	20,1	349
	3	57,6	3,3	23,6	15,5	$\frac{243}{271}$	9-3 $13-12-1-2$	40,9 73,6	2,9 5,7	37,8	18,4	381
	5	52,1	3,0	21,4	23,4	299	4	65,0	5,0	7,5 6,7	13,2 23,3	$\frac{212}{240}$
ŧ	5-1	60,2	3,5	30,9	5,4	259	6	58,2	4,5	6,0	31,3	268
	3 5	54,3 49,5	3,1 2,9	27,9 $25,4$	$\frac{14,6}{22,2}$	287	2-2	68,4	5,3	14,0	12,3	228
	7	45,5	2,6	23,3	28,6	315	4	$ 60,9 \\ 54,9 $	4,7	12,5 11,3	21,9 29,6	$\frac{256}{284}$
	6-1	56,7	3,3	34,9	5,1	275	3-2	63,9	4,9	19,7	11,5	244
	3	51,5	3,0	31,7	13,8	303	4	57,4	4,4	17,6	20,6	272
,	5 7—1	47,1	2,7	29,0	21,2	331	6	52,0	4,0	16,0	28,0	300
	3	53,6 48,9	3,1 2,8	38,5 35,1	4,8 13,2	291 319	42	60,0 54,2	4,6	24,6 22,2	10,8	260
	5	44,9	2,6	32,3	20,2	347	6	49,3	4,2 3,8	20,3	$\frac{19,4}{26,6}$	288 316
8	3-1	50,8	2,9 2,7	41,7	4,6	307	5-2	56,5	4,3	29,0	10,1	276
	3	46,6	2,7	38,2	12,5	335	4	51,3	3,9	26,3	18,4	304
g	5 5	$\begin{vmatrix} 43,0 \\ 41,1 \end{vmatrix}$	$2,5 \\ 2,4$	35,2 38,0	19,3 18,5	363 379	6 6—2	47,0 53,4	3,6 4,1	24,1 32,9	25,3 9,6	332 292
13-10-1		74,3	4,8	7,6	13,3	210	4	48,8	3,7	30,0	17,5	320
	4	.65,5	4,2	6,7	23,5	238	. 6	44,8	3,4	27,6	24,1	348
	6	58,6	3,8	6,0	31,6	266	7-2	50,6	3,9	36,4	9,1	308
2	$egin{array}{c c} 2-2 & 4 & \end{array}$	69,0 61,4	4,4 3,9	14,2 $12,6$	12,4 22,0	$\begin{array}{c c} 226 \\ 254 \end{array}$	4 6	46,4 $ 42,8 $	3,6	33,3 30,8	16,7 23,1	336 364
	6	55,3	3,5	11,3	29,8	282	8-2	48,2	3,7	39,5	8,6	324
3	3-2	64,5	4,1	19,8	11,6	242	4	44,3	3,4	36,4	15,9	352
	4	57,8	3,7	17,8	20,7	270	6	41,0	3,2	33,7	22,1	380
4	6	52,3 60,5	3,4 3,9	16,0 24,8	28,2 10,8	298 258	$\begin{array}{c c} 9-6 \\ 12-4 \end{array}$	39,4 37,5	$\begin{array}{c c} 3,0 \\ 2,9 \end{array}$	36,4 46,2	21,2	396 416
	4	54,5	3,5	22,4	19,6	286	13-13-1-1	78,4	6,5	8,0	7,0	199
_	6	49,7	3,2	20,4	26,7	314	3	68,7	5,7	7,0	18,5	227
5	$\begin{bmatrix} -2 \\ 4 \end{bmatrix}$	56,9	3,6	29,2	10,2	274	$\begin{bmatrix} 5 \\ 2-1 \end{bmatrix}$	61,2 72,6	5,1 6,0	6,2 14,9	27,4	$\frac{255}{215}$
	6	51,7 47,3	3,3	$26,5 \\ 24,2$	18,5 25,4	302 330	3	64,2	5,3	13,2	17,3	243
6	-2	53,8	3,4	33,1	9,7	290	5	57,6	4,8	11,8	25,8	271
	4	49,1	3,1	30,2	17,6	318	3-1	67,5	5,6	20,8	6,1	231
17	6	45,1	2,9	27,7	24,3	346	3	60,2	5,0	18,5	16,2	259 287
.7	$\begin{bmatrix} -2 \\ 4 \end{bmatrix}$	51,0 46,7	3,3	$\frac{36,6}{33,5}$	$\begin{array}{c c} 9,1 \\ 16,8 \end{array}$	306 334	$\begin{array}{c} 5 \\ 4-1 \end{array}$	54,3 63,2	$\frac{4,5}{5,2}$	16,7 25,9	24,4 5,7	287 247
	6	43,1	2,8	30,9	23,2 +	362	3	56,7	4,7	23,3	15,3	275
13-11-1		79,2	5,6	8,1	7,1	197	5	51,5	4.3	21,1	23,1	303
	3	69,3	4,9	7,0	18,7	225	5-1	59,3		30,4	5,3	263
9	5	61,7 73,2	4,3 5,2	6,3	27,7 6,6	253 213	3 5	53,6 48,9		27,5 $25,1$	14,4 21,9	291 319
	3	64,7	4,6	13,3	17,4	241	6—1	55,9	4.7	34,4	5,0	279
	5	58,0	4,1	11,9	26,0	269	3	50,8	4,2	31,3	13,7	307
3	3-1	68,1	4,8	21,0	6,1	229	5	46,6	3,9	28,6	20,9	335

C-H-O-N	C º/o	H °/ ₀	O º/o	N º/o	M.G.	C-	-H-	-O- N	C %	H °/ ₀	O º/o	N º/o	M.G.
13-19-2-1	70,6 62,6	8,6 7,6	14,5 12,9	6,3	221 249	13-	-22	$-4-4 \\ 5-4 \\ 7-2$	52,3 49,7	7,4	21,5 25,5	18,8 17,8	298 314
5 3-1	56,3 65,8 58,9	6,9 8,0 7,1	11,5 20,2 18,1	25,3 5,9 15,9	277 237 265	13	2 3	3-1-1	49,1 74,6 65,8	6,9 11,0 9,7	35,2 7,6 6,7	8,8 6,7 17,7	318 209 237
$egin{array}{c} 5 \ 4-1 \ 3 \end{array}$	53,2 61,7 55,5	6,5 7,5 6,8	16,4 25,3 22,8	23,9 5,5 14,9	293 253 281			5 2-1 3	58,9 69,3 61,7	8,7 10,2 9,1	6,0 14,2 12,6	26,4 6,2 16,6	265 225 253
5 5—1 3	50,5 58,0 5 2 ,5	$\begin{bmatrix} 6,1\\ 7,1\\ 6,4 \end{bmatrix}$	20,7 29,7 26,9	$\begin{bmatrix} 22,6 \\ 5,2 \\ 14,1 \end{bmatrix}$	309 269 297			5 31 3	55,5 64,7 58,0	8,2 9,5 8,5	11,4 19,9 17,8	24,9 5,8 15,6	281 241 269
5 6—1 3	48,0 54,7 49,8	5,8 6,7 6,1	24,6 33,7 30,7	$\begin{vmatrix} 21,5\\4,9\\13,4 \end{vmatrix}$	325 285 313			5 4—1 3	52,5 60,7 54,7	7,7 9,0 8,1	$ \begin{array}{c c} 16,2 \\ 24,9 \\ 22,5 \end{array} $	23,6 5,4 14,7	297 257 285
$ \begin{array}{c} 5 \\ \hline 13-20-1-2 \\ 4 \end{array} $	45,7 70,9 62,9	5,6 9,1 8,1	28,2 7,3 6,4	$\begin{bmatrix} 20,5 \\ 12,7 \\ 22,6 \end{bmatrix}$	341 220 248			5 5—1 3	49,9 57,1 51,8	7,3 8,4 7,6	20,4 29,3 26,6	22,4 5,1 14,0	313 273 301
$\begin{array}{c} 6 \\ 2\mathbf{-2} \\ 4 \end{array}$	56,5 66,1 59,1	7,2 8,5 7,6	5,8 13,6 12,1	30,4 11,8 21,2	276 236 264	13-	24	4	47,4 69,6 61,9	7,0 10,7 9,5	$\begin{bmatrix} 24,3\\ 7,1\\ 6,4 \end{bmatrix}$	21,3 12,5 22,2	329 224 252
$\begin{matrix} 6\\ 3-2\\ 4\end{matrix}$	53,4 61,9 55,7	6,8 7,9 7,1	11,0 19,0 17,1	$\begin{vmatrix} 28,8\\11,1\\20,0 \end{vmatrix}$	292 252 280			6 2-2 4	55,7 65,0 58,2	8,6 10,0 8,9	5,7 13,3 11,9	30,0 11,7 20,9	280 240 268
$\begin{array}{c} 6\\4-2\\4\end{array}$	50,6 58,2 52,7	6,5 7,4 6,7	15,6 23,9 21,6	27,3 10,4 18,9	308 268 296			6 3-2 4	53,7 60,9 54,9	8,1 9,4 8,4	10,8 18,7 16,9	28,3 10,9 19,7	296 256 284
$5 \begin{array}{c} \overline{6} \\ 5 - 2 \\ 4 \end{array}$	48,2 54,9 50,0	6.2 7,0 6,4	19,7 28,2 25,6	25,9 9,8 18,0	324 284 312			6 4—2 4	50,0 57,3 52,0	7,7 8,8 8,0	15,4 23,5 21,3	26,9 10,3 18,7	312 272 300
6 $6-2$ 4	45,9 52,0 47,5	5.9 6,7 6,1	23,5 32,0 29,3	24,7 9,3 17,1	340 300 328			$\begin{array}{c} 6 \\ 5-2 \\ 4 \end{array}$	47,5 54,1 49,4	7,3 8,3 7,6	19,5 27,8 25,3	$\begin{vmatrix} 25,6\\ 9,7\\ 17,7 \end{vmatrix}$	328 288 316
$\begin{array}{c} -6\\ 7-2\\ 13-21-1-1\end{array}$	43,8 49,4 75,4	5,6 6,3	27,0 35,4 7,7	23,6 8,9 6,8	356 316 207			6—4 7—2	45,3 47,0 48,7	7,0 7,2 7,5	23,3 28,9 35,0	16,9	344 332 320
3 5 2—1	66,4 59,3 70,0	8,9	6,8 6,1 14,3	17,9 26,6	235 263 223	13	-2	5—1—1 3 5	73,9 65,3 58,4	11,8 10,4 9,4	6,0	$ 17,6 \\ 26,2 $	211 239 267
$\begin{array}{c} 3 \\ 5 \\ 3-1 \end{array}$	62,2 55,9 65,3	8,4	12,7	16,7	251 279 239			2—1 3 5	68,7 61,2 55,1	11,0 9,8 8,8	14,1 12,5 11,3	16,5 24,7	227 255 283
3 5 4—1	58,4 52,9 61,2	7,9	18,0 16,3	15,7	267 295 255			3—1 3 5	$ \begin{array}{ c c c c } & 64,2 \\ & 57,6 \\ & 52,1 \\ \end{array} $	10,3 9,2 8,4	17,7 16,0	$ 15,5 \\ 23,4 $	243 271 299
3 5 5—1	55,1 50,2 57,6	$\begin{array}{ c c c c }\hline 7,4\\ 6,7 \end{array}$	22,6 $20,5$	$\begin{vmatrix} 14,8\\22,5 \end{vmatrix}$	283 311			4-1 3 5	$ \begin{array}{ c c c c } 60,2 \\ 54,4 \\ 49,5 \end{array} $	9,6 8,7 7,9	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$\begin{vmatrix} 14,6\\22,2 \end{vmatrix}$	259 287 315
3 5	52,2 47,7	$\begin{array}{ c c c c } 7,0 \\ 6,4 \end{array}$	$\begin{vmatrix} 26,7\\24,5 \end{vmatrix}$	$\begin{vmatrix} 14,0\\21,4 \end{vmatrix}$	299			5—1 3 5	56,7 51,4 47,1	9,1 8,3 7,6	26,4 $24,2$	13,9 21,1	275 303 331
13-22-1-2 4 6	70,3 62,4 56,1	8,8	6,4 $5,7$	$\begin{vmatrix} 22,4\\ 30,2 \end{vmatrix}$	250 278	13	20	3-1-2 4 6	$\begin{vmatrix} 69,0\\ 61,4\\ 55,3 \end{vmatrix}$	$\begin{vmatrix} 11,5\\10,2\\9,2 \end{vmatrix}$	$\begin{array}{ c c c } 7,1 \\ 6,3 \\ 5,7 \end{array}$	12,4 $ 22,1$ $ 29,8$	254 282
$egin{array}{cccccccccccccccccccccccccccccccccccc$	65,5 58,6 53,0	8,3	+10,9	$\begin{vmatrix} 21,1\\28,6 \end{vmatrix}$	266 294			2-2 4 6	64,5 57,8 52,4	10,7 9,6 8.7	13,2 11,8 10,7	$\begin{vmatrix} 11,6\\ 20,7\\ 28,2 \end{vmatrix}$	242 270 298
3-2 4	61,4 55,3 50,3	7,8	17,0 $15,5$	19,9 $27,1$	282 310			3—2 4 6	60,5 54,5 49,7	10,1	18,6	$\begin{array}{c c} 10,8 \\ 19,6 \end{array}$	258 286 314
42	57,8	8,1	23,7	10,4	210	1			1		151*	3	!

C-H-O-N	C º/o	H°/0	O º/o	N °/0	M.G.	C-H-O-N	C º/ ₀	H º/,	O º/o	N °/0	M.G.
13-26-4-2	56,9	9,5	23,4	10,2	274	14-7-3-1	70,9	2,9	20,2	5,9	237
4	51,7	8,6	21,2	18,5	302	3	63,4	2,6	18,1	15,9	265
. 6	47,3	7,9	19,4	25,4	330	5	57,3	2,4	16,4	23,9	293
5-2	53,8	9,0	27,6	9,6	290	4-1	.66,4	2,8	25,3	5,5	253
4	49,0	8,2	25,2	17,6	318	3	59,8	2,5	22,8	14,9	281
6	45,1	7,5	23,1	24,3	346	5	54,4	2,3	20,7	22,6	309
6-2	51,0	8,5	31,4	9,1	306	5—1	62,4	2,6	29,7	5,2	269
. 4	46,7	7.8	28,7	16,8	334	3	56,6	2,4	26,9	14,1	297
6	43,1	7,2	26,5	23,2	363	5	51,7	2,1	24,6	21,5	325
10-4	39,2	6,5	40,2	14,1	398	6-1	58,9	2.4	33,7	4,9	285.
13-27-1-1	73,2	12,7	7,5	6,6	2 13	3	53,7	2,2	30,7	13,4	313
3	64,7	11,2	6,6	17,4	241	_ 5	49,3	$^{2,0}_{2,3}$	28,2	20,5	341
5	58,0	10,0	5,9	26,0	269	7-1	55,8	2,3	37,2	4,6	301
2-1	68,1	11,8	14,0	6,1	229	3	51,1	2,1	34,0	12,8	329
3	60,7	10,5	12,4	16,3	257	5	47,0	2,0	31,4	19,6	357
5 3—1	54,7	9,5	11,2	24,6	285	8—1 3	53,0	2,2	40,4	4,4	317
3	57,1	9,9	19,6 17,6	5,7 15,4	$\frac{245}{273}$	5 5	48,7	2,0	37,1 34,3	12,2	345
5	51,8	9,0	15,9	23,2	301	10-5	45,0	1,9 1,7	39,5	18,8 17,3	373 405
41	59,8	10,3	24,5	5,4	261	11-3	42,7	1,8	44,8	10,7	393
- 3	54,0	9,3	22,1	14,5	289	14-8-1-2	76,4	3,6	7,3	12,7	2 2 0
5	49,2	8,5	20,2	22,1	317	4	67,7	3,2	6,4	22,6	248
13-28-1-2	68,4	12,3	7,0	12,3	228	6	60,9	2,9	5,8	30,4	276
• 4	60,9	10,9	6,2	21,9	256	2-2	71,2	3,4	13,6	11,8	236
6	54,9	9,9	5,6	29,6	284	4	63,6	3,0	12,1	21,2	264
2-2	63,9	11,5	13,1	11,5	244	6	57,5	2,7	10,9	28,8	292
4	57,3	10,3	11,8	20,6	272	3-2	66,7	3,2	19,0	11,1	252
6 3-2	52,0	9,3	10,7	28,0	300	4	60,0	2,9	17,1	20,0	280
3-2 4	60,0	10,8	18,4	10,8 19,4	260	6	54,5	2,6	15,6	27,3	308
6	49,4	9,7 8,8	16,7 15,2	26,6	288 316	$egin{array}{cccccccccccccccccccccccccccccccccccc$	62,7 56,7	3,0	23,9	10,4	268
6-4	46,4	8,3	28,6	16,7	336	6	51,8	2,7 2,5	21,6 19,7	18,9 25,9	296 3 2 4
13-29-1-1	72,6	13,5	7,4	6,5	215	5-2	59,2	2,8	28,2	9,8	284
3	64,2	11,9	6,6	17,3	243	$\frac{1}{4}$	53,8	2,6	25,6	17,9	312
5	57,6	10,7	5,9	25,8	271.	6	49,4	2,3	23,5	24,7	340
2-1	67,6	12,5	13,9	6,0	231	6-2	56,0	2,7	32,0	9,3	300
3	60,2	11,2	12,3	16,2	25 9	4	51,2	2,4	29,3	17,1	328
5	54,3	10,1	11,1	24,4	287	6	47,2	2,2	27,0	23,6	356
14-4-10-4	43,3	1,0	41,2	14,4	388	7-2	53,2	2,5	35,4	8,9	316
12-4 $14-5-11-5$	40,0	1,0	45,7	13,3	420	4	48,8	2,3	32,6	16,3	344
14-6-4-2	40,1	1,2	42,0	16,7	419	6	45,2	2,1	30,1	22,6	372
6-2	63,2	2,2 2,0	24,0	10,6	266	8-2	50,6	2,4	38,6	8,4	33 2
4	56,4	1,8	32,2 29,4	9,4 $17,2$	298	4	46,7	2,2	35,5	15,5	360
6	47,5	1,7	27,1	23,7	$\frac{326}{354}$	6 92	43,3 48,3	2,1	33,0 41,4	21,6	388
- 7—2	53,5	1,9	35,7	8,9	314	4	44,7	2,3 2,1	38,3	8,0	348 376
4	49,1	1.7	32,7	16,4	342	6	41,6	2,0	35,6	20,8	404
6-	45,4	1,6	29,2	22.7	370	10-6	40,0	1,9	38.1	20,0	420
8—2	50,9	1,8	38,8	8,5	330	14-10	31,1	1,5	41.5	25,9	540
4	46,9	1,7	35,7	15,6	358	14-9-1-1	81,2	4,3	41,5	6,8	207
6	43,5	1,5	33,2	21,8	386	3	81 ,2 71,5	3,8	6,8	17,9	235
$9-4 \\ 14-8$	44,9	1,6	38,5	15,0	374	5	63,9	3,4	6,1	26,6	263
14-7-1-1	32,9 82,0	1,2	43,9	22,0	510	2-1	75,3	4,0	14,3	6.3	223
3	72,1	3,4 3,0	7,8 6,9	6,8 18,0	205	3	66,9	3,6	12,7	16,7	251
5	64,4	2.7	6,1	26,8	233 261	$\begin{array}{c} 5 \\ 3-1 \end{array}$	60,2	3,2	11,5	25,1	279
2-1	76,0	2,7 3,2	14.5	6,3	221	3-1	71,4 62,9	3,7 3,4	20,1 18,0	5,8 15,7	$\frac{239}{267}$
3	67,5	2,8	12,9	16,8	249	5	56,9	3,0	16,3	23,7	295
5	60,6	2,8 2,5	11,6	25,3	277	4-1	65,9	3,5	25,1	5,5	255
							, ,	,,,		,,,,	

	1											
C-H-O-N	C º/0	H ⁰ / ₀	O º/o	N º/0	M.G.	C—H	-O-N	C 0/0	H ⁰ / ₀	O º/ ₀	N º/0	M.G.
14-9-4-3	59,4	3,2	22,6	14,8	283	14-1	1-4-5	53,7	3,5	20,4	22,4	313
5	54,0	2,9	20,6	22,5	311		5 - 1	61,5	4,0	29,3	5,1	2 73
5-1	62,0 56,2	3,3	29,5 26,7	5,2	$\frac{271}{299}$		3 5	55,8	3,6 3,3	26,6 24,3	14,0 21,3	301 3 2 9
5	51,4	2,7	24,5	21,4	327		6-1	58,1	3,8	33,2	4,8	289
6 –1	58,5	3,1	33,4	4,9	287		3	53,0	3,5	30,3	13,2	317
3 5	53,3	2,9 2,6	30,5 28,0	13,3 20,4	315 343		7—1	48,7	3,2	27,8 36,7	20,3	345 305
7-1	55,4	3,0	37,0	4,6	303		3	50,4	3,6 3,3	33,6	12,6	333
3	50,8	2,7	33,8	12,7	331		5	46,5	3,0	31,0	19,4	361
5 8—1	46,8 52,7	2,5 2,8	31,2 40,1	19,5 4,4	359 319		8-1	52,3	3,4	39,9 36,7	$\frac{4,4}{12,0}$	321 349
3	48,4	2,6	36,9	12,1	347		5	44,6	2,9	33,9	18,6	377
5 93	44,8	2,4 2,5	34,1	18,7	375		9-5	42,7	2,8	36,6	17,8	393
10-3	44,3	$^{2,3}_{2,4}$	39,6 42,2	11,6	363 379		$10-7 \\ 14-7$	38,4	2,5	36,6 44,7	22,4 19,6	437 501
12-7	36,0	1,9	41,1	21,0	467	14-1	2-1-2	75,0	5,4	7,1	12,5	224
14-10-1-2	75,7 67,2	$\frac{4,5}{4,0}$	7,2	12,6	222		4	66,7	4,8	6,3	22,2	252
6	60,4	3,6	6,4 5,8	22,4 30,2	250 278		2—2	$\begin{vmatrix} 60,0 \\ 70,0 \end{vmatrix}$	4,3 5,0	5,7 13,3	30,0	280 240
2-2	70,6	4,2	13,4	11,8	2 38		4	62,7	4,5	11,9	20,9	2 68-
4 6	63,2 57,1	3,8	12,0 10,9	21,0 28,6	266 294		6 3-2	56,8	4,0	10,8	28,4 10,9	296 256
3-2	66,1	3,9	18,9	11,0	254		4	65,6 59,2	4,2	18,7 16,9	19,7	284
4	59,6	3,5	17,0	19,9	282		6	53,8	3,8	15,4	26,9	312
6 42	54,2 62,2	3,2	15,5 $23,7$	27,1 10,4	$\begin{vmatrix} 310 \\ 270 \end{vmatrix}$		4-2	61,8	4,4	23,5 21,3	10,3 18,7	272 300
4	56,4	3,3	21,5	18,8	298		. 6	51,2	3.7	19,5	25,6	3 2 8,
6	51,5	3,1	19,6	25,8	326		5-2	58,3	4,2 3,8	27,8	9,7	288
8 52	47,5 58,7	2,8 3,5	18,1 28,0	31,6 9,8	354 286		6	53,2 48,8	3,8	25,3 23,3	17,7 24,4	316 344
4	53,5	3,2	25,5	17,8	314		6-2	55,3	3,9	31,6	9,2	304
6	49,1	2,9	23,4	24,6	342		4	50,6	3,6	28,9	16,9	332
6-2	55,6 50,9"	3,3	31,8 29,1	9,3 17,0	302		6 7—2	66,7 52,5	3,3 3,7	26,7 35,0	23,3 8,7	360 320
6	46,9	2,8	26,8	23,5	358	. *	4	48,3	3,4	32,2	16,1	348
7-2	52,8	3,1	35,2	8,8	318		6	44,7	3,2	29,8 38,1	22,3 8,3	376 336
4 6	48,6	2,9 2,7	32,2 30,0	16,2 22,4	346 374		8-2	50,0	3,3	35,2	15,4	364
8-2	50,3	3,0	38,3	8,4	334		. 6	42,9	3,1	32,6	21,4	392
4	$ \begin{array}{c c} 46,2 \\ 43,1 \\ \end{array} $	2,8 2,6	35,4 32,8	15,5 21,5	362 390	141	12-2 $3-1-1$	$\frac{42,0}{79,6}$	3,0 6,2	48,0 7,6	7,0	400 211
9-2	48,0	2,9	41,1	8,0	350	1.30	3	70,3	5,4	6,7	17,6	239
4	44,4	2,6	38,1	14,8	378		5	62,9	4,9	6,0	26,2 6,2	$\frac{267}{227}$
6 10 – 8	41,4 37,3	2,4 2,2	35,5 35,5	20,7	406 450		2-1	74,0	5,7 5,1	$14,1 \\ 12,5$	16,5	255
11-2	44,0	2,6	46,1	7,3	382		- 5	59,4	4,6	11,3	24,7	283
12-8	34,9	2,1	39,8	23,2	482		7	51,7	4,0 5,3	9,8 19,8	34,4 5,8	325 243
14-11-1-1	80,4 70,9	5,2 4,6	7,6 6,8	6,7 17,7	209 237		3-1	69,1 62,0	4,8	17,7	15,5	271
5	63,4	4,1	6,0	26,4	265		5	56,2	4,3	16,0	23,4	2 99 ·
2-1	74,7	4,9	14,2	6,2	225		4-1	64,9 58,6	5,0	24,7 22,3	5,4	259 287
. · 3	66,4 59,8	4,3 3,9	12,6 11,4	16,6 24,9	253 281		5 5	53,3	4,1	20,3	22,2	315
3-1	69,7	4,6	19,9	5,8	241		5 - 1	61,1	4,7	29,1	5,1	275
3	62,4	4,1	17,8	15,6	269		3 5	55,4 50,8	4,3	26,4 24,2	13,9 21,1	303 331
5 41	56,5 65,4	3,7	16,2 24,9	23,6	297 257		6 - 1	57,7	4,5	33,0	4,8	291
3	59,0	3,9	22,4	14,7	285		3	52,7	4,0	30,1	13,2	319
					-					1		

C-H-0-N	C º/0	H ⁰ / ₀	0 %	N 0/0	M.G.		н—	O-N	C º/0	H °/0	0 %	N º/o	M.G.
14-13-6-5	48,4 54,7	3,7 4,2	27,7 36,5	20,2	347 307	16	-16-	2-2	59, 2 68,8	5,6 6,6	5,6 13,1	29,6	284 244
3 5 8—1	50,2 46,3 52,0	3,9 3,6 4,0	33,4 30,8 39,6	12,5 19,3 4,3	335 363 323			3-2	61,8 56,0 64,6	5,9 5,3 6,1	11,8 10,7 18,5	20,6 28,0 10,8	272 300 260
3 5 14-14-1-2	47,9 44,3 74,3	3,7 3,4 6,2	36,5 33,8 7,1	11,9 18,5 12,4	351 379 226			$\begin{array}{c} {\bf 4} \\ {\bf 6} \\ {\bf 4-2} \end{array}$	58,3 53,1 60,9	5,5 5,1 5,8	16,7 15,2 23,2	19,4 26,6 10,1	288 316 276
4 6 22	66,1 59,6 69,4	5,5 4,9 5,8	6,3 5,7 13,2	22,0 29,8 11,6	254 282 242			4 6 5—2	55,3 50,6 57,5	5,3 4,8 5,5	21,0 19,3 27,4	18,4 25,3 9,6	304 332 292
4 6 3-2	62,2 56,4 65,1	5,2 4,5 5,4	11,8 10,7 18,6	20,7 28,2 10,9	270 298 258			4 6 6—2	52,5 48,3 54,5	5,0 4,6 5,2	25,0 23,0 31,2	17,5 24,1 9,1	320 348 308
4 6 4—2	58,7 53,5 61,3	4,9 4,5 5,1	16,8 15,3 23,4	19,6 26,7 10,2	286 314 274			4 6 8–2	50,0 46,1 49,4	4,8 4,4 4,7	28,5 26,4 37,6	16,7 23,1 8,2	336 364 340
4 6	55,6	4,6 4,2	21,2 19,4	18,6 25,4	302 330	14-	-17	-1-1	78,1 69,1	7,9 7.0	7,4 6,6	6,5	215 243
5-2 4 6	57,9 52,8 48,6	4,8 4,4 4,0	27,6 25,2 23,1	9,7 17,6 24,3	290 318 346			5 2—1 3	62,0 72,7 64,9	6,3 7,4 6,6	5,9 13,8 12,3	25,8 6,1 16,2	271 231 259
6-2 4 6	54,9 50,3 46,4	4,6 4,2 3,9	31,4 28,7 26,5	9,2 16,8 23,2	306 334 362			5 3—1 3	58,5 68,0 61,1	5,9 6,9 6, 2	11,2 19,4 17,4	24,4 5,7 15,3	287 247 275
7-2 4 6	52,2 48,0 44,4	4,3 4,0 3,7	34,8 32,0 29,6	8,7 16,0 22,2	322 350 378			5 41 3	55,4 63,9 57,7	5,6 6,5 5,8	15,8 24,3 22,0	23,1 5,3 14,4	303 263 291
8—2 4 6	49,7 45,9 42,6	4,1 3,8 3,5	37,9 35,0 3 2 ,5	8,3 15,3 21,3	338 366 394			5 5—1 3	52,7 60,2 54,7	5,3 6,1 5,5	20,1 28,7 26,1	21,9 5,0 13,7	319 279 307
10-2 14-15-1-1 3	45,4 78,9 69,7	3,8 7,0 6,2	43,2 7,5 6,6	7,6 6,6 17,4	370 213 241			6—1 3	50,1 56,9 52,0	5,1 5,8	23,9 32,5 29,7	20,9 4,7 13,0	335 295 323
5 2—1 3	62,4 73,4	5,6 6,5	5,9 14,0	26,0 $6,1$	269- 229	14	10	→5 7—1	47,9 54,0	5,3 4,8 5,5	27,4 36,0	19,9	351 311
5 3´—1	65,4 58,9 68,6	5,8 5,3 6,1	12,4 11,2 19,6	16,3 24,6 5,7	257 285 245	14-	-10	4 6	73,1 65,1 58,7	7,8 7,0 6,3	6,9 6,2 5,6	12,2 21,7 29,3	230 258 286
3 5 4—1	61,5 55,8 64,4	5,5 5,0 5,7	17,6 16,0 24,5	15,4 23,2 5,4	273 301 261			$ \begin{array}{c} 2-2 \\ 4 \\ 6 \end{array} $	68,3 61,3 55,6	7,3 6,6 6,0	13,0 11,7 10,6	11,4 20,4 27,8	246 274 302
3 5 7	58,1 53,0 48,7	5,2 4,7 4,3	22,1 20,2 18,6	14,5 22,1 28,4	289 317 345			3—2 4 6	64,1 57,9 52,8	6,9 6,2 5,7	18,3 16,5 15,1	10,7 19,3 26,4	262 290 318
5.—1 3 5	60,7 55,1 50,5	5,4 4,9 4,5	28,9 26,2 24,0	5,0 13,8 21,0	277 305 333			$egin{array}{ccc} 4-2 & 4 & 6 & 6 \end{array}$	60,4 54,9 50,3	6,5 5,9 5,4	23,0 20,9 19,2	10,1 18,3 25,1	278 306 334
6-1	57,3 52,3 48,1	5,1 4,7 4,3	32,8 29,9 27,5	4,8 13,1 20,1	293 321 349			5—2 4 6	57,1 52,2 48,0	6,1 5,6	27,2 24,8 22,9	9,5 17,4 24,0	294 322 350
7-1 3 5	54,4 49,8 46,0	4,8	36,2 33,2 30,7	4,5 $12,5$ $19,2$	309 337			6-2 4	54,2 49,7	5,1 5,8 5,3	31,0 28,4	9,0	310 338
8—1 3 5	51,7 47,6 44,1	4,1 4,6 4,2	39,4 36,3	4,3	365 3 2 5 3 5 3			$\begin{array}{c} 6 \\ 7-2 \\ 4 \end{array}$	45,9 51,5 47,5	4,9 5,5 5,1	26,2 34,3 31,6	23,0 8,6 15,8	366 326 354
14-16-1-2	73,7 65,6	3,9 7,0 6,2	33,6 7,0 6,2	$\begin{vmatrix} 18,4\\12,3\\21,9 \end{vmatrix}$	381 228 256			$10-\frac{6}{4}$	44,0 44,9 41,8	4,7 4,8 4,5	29,3 42,8 39,8	22,0 7,5 13,9	382 374 402

C-H-O-N	C º/o	H °/ ₀	0%	Nº/0	M.G.	C-H-O-N	C º/0	Hº/0	O º/o	N °/ ₀	M.G.
14-18-10-6 $14-19-1-1$ 3 5 $2-1$ 3 5 $3-1$ 3 5 $4-1$ 3 5 $6-1$ 3 5 $8-1$ $12-1$ $14-20-1-2$ 4 6 $2-2$ 4 6 $3-2$ 4 6 $4-2$ 4 6 $14-21-1-1$ 3 5 $5-1$ 3 5 $4-1$ 3 5 $5-1$ 3 5 $4-1$ 3 5 $5-1$ 3 5 $4-1$ 3 5 $5-1$ 3 5 $4-1$ 3 5 $5-1$ 3 5 $4-1$ 3 5 $5-1$ 3 5 $4-1$ 3 5 $5-1$ 3 5 $5-1$ 3 5 $4-1$ 3 5 $5-1$ 3 $5-1$ 4 4 4 $5-1$ 4 $5-1$ $5-1$ 4 $5-1$ $5-$		7,4 6,8 6,2 7,0 6,4 5,9 9,4	37,2 7,4 6,5 5,9 13,7 12,2 11,1 19,3 17,3 15,7 24,1,8 19,9 28,4 25,9 329,5 27,2 38,9 48,8 6,9 11,6 10,5 11,6 10,5 11,6 12,9 20,8 19,1 27,0 24,7 22,7 30,8 28,2 26,1 30,1 17,3 17,3 17,3 17,3 17,3 17,3 17,3 17	19,5 6,4 17,1 25,6 6,0 11,2 24,2 23,0 5,3 31,3 6 20,8 4,7 12,9 12,1 5 20,3 27,6 10,6 12,1 12,1 5 20,3 27,6 10,6 12,1 13,6 12,1 21,5 22,2 21,3 20,3 27,6 10,6 12,1 13,6 12,1 21,5 22,2 21,0 10,0 10,0 24,2 25,0 4,7 17,0 20,0 20,0 20,0 20,0 20,0 20,0 20,0 2	247 275 235 263 291 251 279 307 267 295 323 283 311 339 299 327 355 234	14-22-1-6 $2-2$ 4 6 $3-2$ 4 6 $4-2$ 4 6 $5-2$ 4 6 $7-2$ 4 6 $8-2$ $14-23-1-1$ 3 5 $3-1$ 3 5 $4-1$ 3 5 $4-1$ 3 5 $4-1$ 3 5 $4-1$ 3 5 $4-1$ 3 5 $4-1$ 3 5 $4-1$ 3 5 $4-1$ 3 5 $5-1$ 3 5 $4-1$ 3 5 $5-1$ 3 5 $4-1$ 3 5 $5-1$ 3 5 $5-1$ 3 5 $4-1$ 3 5 $5-1$ 3 5 5 $5-1$ 3 5 $5-1$ 3 5 $5-1$ 3 5 $5-1$ 3 5 $5-1$ 3 5 $5-1$ 3 5 $5-1$ 3 5 $5-1$ 3 5 $5-1$ 3 5 $5-1$ 3 5 $5-1$ 3 5 $5-1$ 3 5 $5-1$ 3 5 $5-1$ 3 5 $5-1$ 3 5 $5-1$ 3 5 $5-1$ 3 5 $5-1$ 3 5 5 $5-1$ 3 5 5 $5-1$ 3 5 5 $5-1$ 3 5 5 $5-1$ 3 5 5 $5-1$ 3 5 5 $5-1$ 3 5 5 $5-1$ 3 5 5 $5-1$ 3 5 5 $5-1$ 3 5 5 $5-1$ 3 5 5 $5-1$ 3 5 5 $5-1$ 3 5 5 $5-1$ 3 5 5 5 5 5 5 5 5 5 5	57,9 66,9 66,4 54,8 63,2 57,1 56,4 54,5 54,5 54,5 54,5 54,5 54,5 54,5	9,77 7,88,7 7,78,9 9,11 8,2 7,4,4 8,5 7,7 7,6,7 7,6,6 4,5 10,2 9,1 8,2 9,5 8,6,7 7,7 7,1 8,4 7,7 7,6 6,7 7,7 6,7 7,7 1,8 1,1 8,2 9,1 1,1 1,1 1,1 1,1 1,1 1,1 1,1 1,1 1,1	22,5 20,5 18,8 26,7 24,4 22,5 30,4 27,9 25,8	21,2 28,8 11,1 20,0 27,3 10,4 18,9 25,9 9,9 18,0 24,7 9,3 17,1 23,6 8,8 16,3 22,6 6,3	290 250 278 306 266 294 322 282 310 338 298 326 354 344 342 370 330 358 386 346 221 249 277 265 293 253 281 309 269 297 325 285 313 341 301 329 297 325 285 313 341 301 329 357 505 236 264 292 280 308 268 296 328 268 296 328 268 296 328 268 296 328 268 296 328 268 296 328 268 296 328 268 296 328 268 296 328 268 296 328 268 296 328 251

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C-H-O-N	C º/o	H 0/0	O %	N 0/0	M.G.	C -	-H-	-0	N	C 0/0	H ⁰ / ₀	O º/o	N º/0	M. G.
14-25-1-5	60,2	9,0	5,7	25,1	279	14-	-30-	-2-	-2	65,1	11,6	12,4	10,8	2 58
2-1	70,3	10,5	13,4	5,8	239				4	58,7	10,5	11,2	19,6	286
3 5	62,9 57,0	9,4	12,0	15,7 23,7	267 2 95			3	6 -2	53,5 61,3	9,5	10,2 $17,5$	26,8	314 274
3-1	65,9	9.8	18,8	5,5	255				4	55,6	9,9	15,9	18,6	302
3 5 <i>*</i>	59,4	8,8	17,0	14,8	283			4	6	50,9	9,1	14,5	25,4	330
4-1	54,0 62,0	8,0 9,2	15,4 23,6	22,5 5,2	311 271			4-	4	57,9 52,8	10,3	22,1 $20,1$	9,7	290 318
3	56,2	8,4	21,4	14,0	299				6	48,5	8,7	18,5	24,3	346
5 142612	51,4 70,6	7,6 10,9	$19,6 \\ 6,7$	21,4	327 238	14	91	$^{6-}_{-1-}$		48,0 73,4	8,6	27,4	16,0	350
4	63,2	9,8	6,0	21,0	266	THE	-01		3	65,4	13,5 12,1	7,0 $6,2$	6,1 $16,3$	229 257
6	57,1	8,8	5,4	28,6	294				5	58,9	10,9	5,6	24,6	285
$egin{array}{c} 2-2 \ 4 \end{array}$	66,1 59,6	10,2 9,2	12,6 11,4	11,0 19,8	254 282			2_	-1 3	68,6 61,5	12,6 11,3	13,1 11,7	5,7 15,4	245 273
6	54,2	8,4	10,3	27,1	310				5	55,8	10,3	10,6	23,2	301
3-2	62,2	9,6	17,8	10,4	270			3-		64,3	11,9	18,4	5,4	261
4 6	56,4 51,5	8,7 8,0	16,1 14,7	18,8 25,8	298 326				3 5	58,1 53,0	10,7 9,8	16,6 $15,1$	$\begin{array}{c c} 14,5 \\ 22,1 \end{array}$	289 317
4-2	58,7	9,1	22,4	9,8	286	14-	-32-	-1	2	68,9	13,1	6,5	11,5	244
4	53,5	8,3	20,4	17,8	314				4	61,9	11,8	5,9	20,6	272
6 10-2	49,1 44,0	6,7	18,7 42,0	24,6 7,3	342 38 2			2—	6	56,0 64,6	10,7 12,3	[*] 5,3 12,3	28,0 10,8	300 260
14-27-1-1	74,7	12,0	7,1	6,2	225				4	58,3	11,1	11,1	19,4	288
3	66,4	10,7	6,3	16,6	253	15		7.0	6	53,2	10,1	10,1	26,6	316
5 2—1	59,8 69,7	$9,6 \\ 11,2$	5,7 13,3	24,9 5,8	281 241	19	-6		4	41,5	1,4 1,3	44,2 $46,2$	12,9 $12,4$	434 450
3	62,4	10,0	11,9	15,6	269	15	-7-	-2		69,0	2,7	12,2	16,1	261
5 3—1	56,5	9,1	10,8	23,6	297				-1	72,3	2,8	19,3	5,6	249
.3	65,4 58,9	10,5	18,7 16,8	5,4	257 285			6-	3	60,6 55,4	$2,4 \\ 2,1$	32,3 29,5	$\frac{4,7}{12,9}$	297 325
5	53,7	8,6	15,3	22,4	313				5	51,0	2.0	27,2	19,8	353
4-1	61,5 55,8	9,9	23,4	5,1	273 301	15	8-		2	54,7	2,1	38,9	4,3	329
5	51,1	8,2	19,4	21,3	329	. 10		6		77,6 57,7	3,4 2,5	6,9 30,8	$\begin{array}{c c} 12,1 \\ 9,0 \\ \end{array}$	232 312
14-28-1-2	70,0	11,7	6,6	11,7	240				4	52,9	2,3	28,2	16,5	340
4 6	62,7 56,7	10,4	6,0 5,4	20,9 28,4	268 296			7— 8—		50,6 52,3	2,2 2,3	31,5 37,2	15,7	356 344
2-2	65,6	10,9	12,5	10,9	256			10-		44,5	2,0	39,6	13,8	404
4	59,1	9,9	11,3	19,7	284	15	-9		-1	82,2	4,1	7,3	6,4	219
6 ∂ 3 —2 ∂	53,8 61,8	9,0	10,2 17,6	26,9 10,3	312 272			2-	3	76,6 68,4	3,8	$\begin{array}{c c} 13,6 \\ 12,2 \\ \end{array}$	$\begin{array}{c c} 6.0 \\ 16.0 \end{array}$	235 2 63
4	56,0	9,3	16,0	18,7	300			3		71,7	3,6	19,1	5,6	251
4-2	51,2 58,3	8,5 9,7	14,6	25,6	328				3	64,5	3,2	17,2	15,0	279
4	53,2	8,8	22,2 20,3	9,7	288 316				5	58,6 67,4	2,9	$\frac{15,6}{24,0}$	22,8 5,2	307 267
6	48,8	8,1	18,6	24,4	344				3	61,0	3,0	21,7	14,2	295
14-29-1-1	74,0 65,9	12,8 11,4	7,0	6,2	227 255				5	55,7	2,8	19,8	21,7	323
5	59,4	10,2	5,6	24,7	283			5-	$\frac{1}{3}$	57,9	3,2	28,3 25,7	13,5	283 311
2-1	69.1	11.9	13,2	5,8	243				5	53,1	2,9	23,6	20,6	339
3 5	62,0 56,2	10,7	11,8 10,7	15,5 23,4	271 299			6-	-1	60,2 55,1	$\begin{array}{c c} 3,0 \\ 2,7 \end{array}$	32,1 29,3	4,7 12,8	299
3-1	64,9	9,7 11,2	18.5	5,4	2 59				ა 5	50,7	2,5	27,0	19,7	$\frac{327}{355}$
3 5	58,5	10,1	16,7	14,6	287			8	1	54,4	2,5	38,7	4,2	331
14-30-12	53,3 69,4	$ \begin{array}{c c} 9,2 \\ 12,4 \end{array} $	15,2 6,6	22,2	315 242			9— 10—		48,0 46,0	2,4	38,4	11,2 10,7	375
4	62,3	11,1	5,9	20,7	270	15-	-10-			76,9	4,3	$\frac{40,9}{6,8}$	12,0	391 234
6	56,4	10,0	5,4	28,2	298				4	68,7	3,8	6,1	21,4	262

C-H-O-N C% H% O% N% M.G. C-H-O-N C% H% O% N% M.G.													
2-2 72,0 4,0 128 11,2 250	C-H-O-N	C º/o	H ⁰ / ₀	O º/o	N º/0	M.G.	C-	-H-O-N	C º/0	H 0/0	O º/o	N º/0	M.G.
2-2 72,0 4,0 128 11,2 250	15 -10-1-6	62,1	3,4	5,5	29,0	290	15-	-12-7-6	46.4	3.1	28.9	21.6	388
3-2 67,7 3,8 18,0 10,5 266 4 61,2 3,4 16,3 19,1 294 6 55,9 3,1 14,9 261, 322 4-2 63,8 3,5 22,7 9,9 282 4 58,1 3,2 20,6 18,1 310 6 53,2 3,0 18,9 24,9 338 3-1 70,6 5,1 18,8 5,5 255 5-2 60,4 3,4 26,8 9,4 298 4 55,2 3,1 24,5 17,2 326 6 50,8 2,8 2,6 23,7 354 6 50,8 2,8 2,6 23,7 354 6 50,8 2,8 2,6 23,7 354 6 50,8 2,8 2,6 23,7 354 6 50,8 2,8 2,6 23,7 354 6 50,8 2,8 2,6 23,7 354 6 50,8 2,8 2,6 2,7 2,9 2,7 370 6 18,6 2,7 2,9 3,0 3,9 8,9 314 8 60,8 2,8 2,6 2,7 2,9 2,7 370 6 18,6 2,7 2,9 3,0 3,9 8,9 314 8 13.8 3,1 1,4 1,2 2,7 3,0 5,1 1,3 2,2 5,4 13,3 3,15 8 -2 50,0 2,9 37,0 8,0 346 15-11-1-1 8,1,4 5,0 7,2 6,3 221 15-11-1-1 8,1,4 5,0 7,2 6,3 227 2-1 75,9 4,1 12,1 15,9 265 5 61,4 3,7 10,9 3,7 2,7 3,9 3,9 2,9 3,1 3,1 4,4 3,1 3,1 3,1 3,1 3,1 3,1 3,1 3,1 3,1 3,1	$2\!-\!2$	72,0	4,0	12,8	11,2			9-6	42,9	2,8	34,3	20,0	420
3-2 67,7 3,8 18,0 10,5 266 4 61,2 3,4 16,3 191 294 5 65,9 3,1 14,9 26,1 322 4 -2 63,8 3,5 22,7 9,9 282 4 58,1 3,2 20,6 18,1 310 6 53,2 3,0 18,9 24,9 338 5 -2 60,4 3,4 26,8 9,4 298 6 55,2 3,1 24,5 17,2 326 6 55,2 3,1 24,5 17,2 326 6 55,2 3,1 24,5 17,2 326 6 50,8 28, 22,6 23,7 354 4 55,2 3,1 24,5 17,2 326 6 50,8 28, 22,6 23,7 354 4 56,2 3,1 24,5 17,2 326 6 50,8 28, 22,6 23,7 354 4 55,2 3,1 24,5 17,2 326 6 20,9 28,1 16,4 342 6 48,6 2,7 25,9 22,7 370 6 2,9 28,1 16,4 342 6 48,6 2,7 25,9 22,7 370 6 2,9 3,0 3,9 8,5 330 8 2,1 3,0 3,9 8,5 330 8 3,1 1,1 3,1 3,1 3,1 3,1 3,1 3,1 3,1 3,1			3,6				2 5					22,5	496
4 61,2 3,4 16,3 19,1 294 6 55,0 3,1 14,9 26,1 322 2		67.7	3.8				19			5,8			
4 2 63,8 3,5 22,7 9,9 282 4 58,1 3,2 20,6 18,1 310 6 53,2 3,0 18,9 24,9 38 5 5-2 60,4 3,4 26,8 9,4 298 6 53,2 3,1 24,5 17,2 326 6 50,8 2,8 22,6 23,7 354 4 55,2 3,1 24,5 17,2 326 6 50,8 2,8 22,6 23,7 354 4 1 66,4 48, 23,6 5,2 27,1 6 -2 57,3 3,2 30,6 8,9 314 4 52,2 3,9 28,1 16,4 342 6 48,6 2,7 25,9 22,7 370 7 -2 54,5 3,0 33,9 8,5 330 8 7 -2 2 54,5 3,0 33,9 8,5 330 115-11-1-1 81,4 5,0 7,2 6,3 221 3 7 8,2 3,6 15,5 2,5 3,7 3,5 4 1 8,8 3,3 2,0 40,8 21,9 510 6 -1 50,4 4,3 31,7 4,6 303 15-11-1-1 81,4 3,7 10,9 23,9 293 5 66,0 4,0 5,7 25,3 27,7 7-1 56,4 4,1 35,1 4,4 319 2 -1 75,9 4,6 13,5 5,9 23,7 35,1 3,2 25,4 3,3 31,5 3,3 3-1 71,2 4,3 19,0 5,5 25,3 3,7 3,5 4,2 3,5 3,5 2,5 3,8 23,3 2,4 4,2 3,5 3,7 3,5 2,5 3,5 3,5 3,5 3,5 3,5 3,5 3,5 3,5 3,5 3		61,2	3,4	16,3									279
4 58,1 3,2 20,6 18,1 310 5 6 61,0 4,4 10,9 23,7 295 5 5-2 60,4 3,4 26,8 9,4 298 3 63,6 4,6 17,0 14,8 283 4 55,2 3,1 24,5 17,2 326 5 57,9 4,2 15,4 22,5 31,1 24,5 17,2 326 5 57,9 4,2 15,4 22,5 31,1 24,5 17,2 326 6 50,8 2,8 22,6 23,7 354 4—1 66,4 4,8 23,6 5,2 271 6 2 57,3 3,2 30,6 8,9 314 3 60,2 4,3 21,4 14,0 297 6 48,6 2,7 25,9 22,7 370 5—1 62,7 4,5 27,9 4,9 28,7 7—2 54,5 3,0 33,9 8,5 330 3 57,5 1,2 25,4 13,3 315 8—2 52,0 2,9 37,0 8,0 346 5 52,5 3,8 23,3 20,4 343 13—8 35,3 2,0 40,8 21,9 510 6—1 59,4 4,3 31,7 4,6 331 15—11—1 81,4 5,0 7,2 6,3 221 3 54,4 3,9 29,0 12,7 331 3 72,3 4,4 6,4 16,9 249 5 50,2 3,6 26,7 19,5 331 2—1 75,9 4,6 13,5 5,9 237 7 7—1 56,4 4,1 35,1 4,4 319 281 3 64,0 3,9 17,1 14,9 281 3 3 64,0 3,9 17,1 14,9 281 3 3 64,0 3,9 17,1 14,9 281 3 3 64,0 3,9 17,1 14,9 281 3 3 64,0 3,9 17,1 14,9 281 3 3 64,0 3,9 17,1 14,9 281 3 3 64,0 3,9 17,1 14,9 281 5 56,2 3,8 23,2 23,2 23,3 20,4 323 3 54,4 3,7 2,9 4,1 12,1 15,9 265 3 6 58,2 3,6 15,5 22,6 300 4—1 66,9 4,1 23,8 5,2 269 3 6 6,2 3,6 2,2 3,5 2,5 2,5 3,8 23,2 2,2 3,5 2,5 3,5 2,2 3,2 3,2 3,2 3,2 3,2 3,2 3,2 3,2 3,2		55,9	3,1	14,9					75,3	5,4	13,4	5,9	2 39
6 53,2 3,0 18,9 24,9 338			3,5									15,7	267
5-2 60.4 3,4 26.8 9,4 298 3 63.6 4.6 17.0 14,8 283 4 55.2 31 24.5 17.2 326 5 57.3 3,2 31 24.5 17.2 326 6 55.7 4.2 15.4 22.5 311 4.6 6.2 57.3 3,2 30.6 8,9 314 3 60.2 4,3 21,4 14,0 297 6 48.6 2.7 25.9 22.7 370 5 -1 62.7 4.5 27.9 4.9 28.7 7-2 54.5 3.0 33.9 8.5 330 3 57.1 3.2 25.4 13.3 315 8-2 52.0 2.9 37.0 8.0 346 5 55.5 3.8 23.3 20.4 34.3 11.3 11.3 11.3 11.3 11.3 11.3 11			3,0										255
6 50,8 2,8 22,6 23,7 354 4 26,6 2,9 28,1 16,4 342 6 48,6 2,7 25,9 22,7 370 7 2 54,5 3,0 33,9 8,5 330 8 2 52,0 2,9 37,0 8,0 346 13 8 60,2 4,3 21,4 14,0 29,9 8 2 52,0 2,9 37,0 8,0 346 5 5 52,5 3,8 23,3 29,4 34,3 31,3 315 8 2 5 5,0 4,0 19,6 21,4 32,7 4,6 30,3 31,1 4,1 4,0 1,2 4,3 1,1 4,0		60,4	3,4	26,8	9,4	298			63,6	4,6	17,0	14,8	2 83
6-2 57.3 3.2 30.6 8.9 31.4 3 60.2 4.3 21.4 14.0 299 4 52.6 2.9 28.1 16.4 342 5 55.0 40 19.6 21.4 327 7-2 54.5 3.0 33.9 8.5 330 3 57.1 3.2 25.4 13.3 315 8-2 52.0 2.9 37.0 8.0 346 5 52.5 3.8 23.3 20.4 343 13-8 35.3 2.0 40.8 21.9 510 6-1 59.4 4.3 31.7 4.6 303 15-11-1-1 81.4 5.0 7.2 6.3 221 3 54.4 3.9 29.0 12.7 331 5 65.0 4.0 5.7 25.3 277 7-1 56.4 4.1 35.1 4.4 319 2-1 75.9 4.6 13.5 5.9 237 3 51.9 3.7 3 12.1 347 3 67.9 4.1 12.1 15.9 265 5 4.8 3.3 31.2 11 347 3 67.9 4.1 12.1 15.9 265 5 4.8 3.3 31.2 11 347 3 67.9 4.1 12.1 15.9 265 5 4.8 3.3 31.2 11 347 3 67.9 4.1 12.1 15.9 265 5 4.8 3.4 32.3 12.1 347 3 66.6 3.7 7 19.6 14.1 297 5 58.2 3.6 15.5 22.6 300 4-1 66.9 4.1 23.8 5.2 269 3 66.6 3.7 21.6 14.1 297 5 55.4 3.4 19.7 21.5 325 3 3 7.5 5.8 2.5 2.6 13.4 313 6 6.6 3.7 21.6 14.1 297 5 55.4 3.4 19.7 21.5 325 3 5 6.5 3.8 23.2 3.8 28.1 4.9 285 4 66.8 3.7 21.6 14.1 297 6 1 59.8 3.6 31.9 4.6 307 3 54.7 3.3 29.2 12.8 329 6 6 6 6 6 5.2 17.8 10.4 27.8 326 7-1 56.8 3.5 35.3 4.4 317 4 68.2 4.5 6.1 12.2 264 4 68.2 4.6 3.1 1.2 264 4 68.2 4.7 4.8 12.7 11.1 252 6 6 56.4 4.1 5.5 28.8 292 6 6 55.6 4.1 1.7 25.8 326 7-1 56.8 3.5 35.3 4.4 317 4 68.2 4.5 6.1 12.2 264 4 68.4 4.3 9.1 0.4 27.3 300 4 68.4 3.9 10.4 27.3 300 4 68.4 4.9 10.4 27.3 300 4 68.4 4.9 10.4 27.3 300 4 68.4 4.9 10.4 27.3 300 4 68.4 4.9 10.4 27.3 300 4 68.4 4.9 10.4 27.9 10.4 268 6 50.6 3.7 14.8 25.9 324 4 60.8 4.0 16.2 18.9 296 6 6 50.6 3.7 14.8 25.9 324 4 60.8 4.0 16.2 18.9 296 6 6 50.6 3.7 14.8 25.9 324 4 60.8 4.0 16.2 18.9 296 6 6 50.6 3.7 14.8 25.9 324 4 60.8 4.0 16.2 18.9 296 6 6 50.6 3.7 14.8 25.9 324 4 60.8 4.0 16.2 18.9 296 6 6 50.6 3.7 14.8 25.9 324 5 6 50.0 3.8 30.4 8.8 316 6 2 57.0 3.8 30.4 8.8 316 6 2 57.0 3.8 30.4 8.8 316 6 2 57.0 3.8 30.4 8.8 316 6 2 57.0 3.8 30.4 8.8 316 6 2 57.0 3.8 30.4 8.8 316 6 2 57.0 3.8 30.4 8.8 316 6 2 57.0 3.8 30.4 8.8 316 6 2 57.0 3.8 30.4 8.8 316 6 2 57.0 3.8 30.4 8.8 316 6 2 57.0 3.8 30.4 8.8 316 6 30.6 5.0 10.					17,2						15,4	22,5	311
4 52,6 2,9 28,1 16,4 342 6 48,6 2,7 25,9 22,7 370 7-2 54,5 3,0 33,9 8,5 330 8-2 52,0 2,9 37,0 8,0 346 5 52,5 3,8 23,3 20,4 93 15-11-1-1 81,4 5,0 7,2 6,3 221 3 72,3 4,4 6,4 16,9 249 5 50,2 3,6 24,1 13,3 315 8-2 56,0 4,0 5,7 25,3 277 7-1 56,4 4,1 35,1 4,4 319 2-1 75,9 4,6 13,5 5,9 237 3 67,9 4,1 12,1 15,9 265 5 61,4 3,7 10,9 23,9 293 3 64,0 3,9 17,1 14,9 281 5 58,2 3,6 15,5 22,6 309 4-1 66,9 4,1 23,8 5,2 269 3 60,6 3,7 21,6 14,1 297 5 55,4 3,4 19,7 21,5 325 5 16,8 3,7 23,3 8,2 1,4 9,2 85 5 16,8 3,8 23,3 22,3 5,2 6,1 3,4 313 5 52,8 3,2 23,5 20,5 341 5 56,8 3,5 3,2 3,5 2,5 6 13,4 313 5 58,8 3,2 3,2 3,5 2,5 6 13,4 313 5 58,8 3,2 3,2 3,5 2,5 6 13,4 313 5 58,8 3,2 3,2 3,5 2,5 6 13,4 313 5 58,8 3,2 3,2 3,5 2,5 6 13,4 313 5 58,8 3,2 3,2 3,5 2,1 3,4 5,2 6,4 3,4 3,4 3,4 3,4 19,7 21,5 325 6 1,4 3,7 10,9 28,9 28,1 4,9 28,5 5,4 28,6 29,4 5,5 12,6 11,0 25,4 4,5 1,5 1,5 1,5 1,5 1,5 1,5 1,5 1,5 1,5 1			3.2										299
7-2 54,5 3,0 33,9 8,5 330 8-2 52,0 2,9 37,0 8,0 346 5 52,5 3,8 20,4 343 15-11-1-1 81,4 5,0 7,2 6,3 221 3 54,4 3,9 29,0 12,7 331 5 66,0 4,0 5,7 25,3 277 7-1 56,4 4,1 35,1 4,4 319 2-1 75,9 4,6 13,5 5,9 237 3 51,9 3,7 32,3 12,1 347 3 67,9 4,1 12,1 15,9 265 5 58,0 36,6 15,5 22,6 309 4 -1 66,9 3,6 15,5 22,6 309 15-14-1-2 75,3 6,7 11,8 23 5 58,2 3,6 15,5 22,6 309 15-14-1-2 75,3 6,0 21,0 26,6 <tr< th=""><th></th><th></th><th>2,9</th><th></th><th>16,4</th><th></th><th></th><th></th><th>55,0</th><th></th><th>19,6</th><th>21,4</th><th>327</th></tr<>			2,9		16,4				55,0		19,6	21,4	327
S-2 52,0 2,9 37,0 8,0 346 5 52,5 3,8 23,3 20,4 348 15—11—1—1 81,4 5,0 7,2 6,3 221 3 54,4 3,9 29,0 12,7 331 5 65,0 4,0 5,7 25,3 277 7—1 56,4 4,1 35,1 19,5 359 5 65,0 4,0 5,7 25,3 277 7—1 56,4 4,1 35,1 19,5 359 5 65,0 4,0 13,5 5,9 237 3 51,9 3,7 32,3 12,1 347 34 39,2 312,1 347 34 39,2 312,1 347 34 39,3 312,1 347 39 38,2 34,2 35,3 34,4 39,2 39,3 312,1 347 39 38,2 34,2 35,5 253 34,4 39,2 39,3 38,2 34,4 <t< th=""><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th></th><th>27,9</th><th></th><th></th></t<>											27,9		
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15—11—1—1		35,3	2,0								31,7	4,6	303
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6 61,6 4,1 5,5 28,8 292 6 30,3 3,9 22,5 23,5 318 2-2 71,4 4,8 12,7 11,1 252 6-2 56,6 4,4 30,2 8,8 318 4 64,3 4,3 11,4 20,0 280 4 52,0 4,0 27,7 16,2 346 6 58,4 3,9 10,4 27,3 308 6 48,1 3,7 25,7 22,5 374 3-2 67,2 4,5 17,9 10,4 268 7-2 53,9 4,2 33,5 8,4 334 4 60,8 4,0 16,2 18,9 296 4 49,7 3,9 30,9 15,5 362 6 55,6 3,7 14,8 25,9 324 6 46,1 3,6 28,7 21,5 390 4-2 63,4 4,2 22,5 9,9 284 8-2 51,4 4,0 36,6 8,0 350 4 57,7 3,8 20,5 17,9 312 6 52,9 3,5 18,8 24,7 340 5-2 60,0 4,0 26,7 9,3 300 5-2 60,0 4,0 26,7 9,3 300 5-2 60,0 4,0 26,7 9,3 300 4 54,9 3,6 24,1 17,1 328 6 50,5 3,4 22,5 23,6 356 5 64,0 5,3 5,7 24,9 281 6-2 57,0 3,8 30,4 8,8 316 2-1 74,7 6,2 13,3 5,8 241 5 60,6 5,0 10,8 23,6 297 7-2 54,2 3,6 33,7 8,4 332 3 71,1 5,9 6,3 16,6 253 6 48,4 3,2 25,8 22,6 372 6 48,4 3,2 25,8 22,6 372 7-2 54,2 3,6 33,7 8,4 332			4,5	6,1	21,2	264							
4 64,3 4,3 11,4 20,0 280 6 48,1 3,7 25,7 22,5 374 60,8 4,0 16,2 18,9 296 6 55,6 3,7 14,8 25,9 324 60,8 4,0 16,2 18,9 296 6 55,6 3,7 14,8 25,9 324 6 64,1 3,6 28,7 21,5 390 4-2 63,4 4,2 22,5 9,9 284 8-2 51,4 4,0 36,6 8,0 350 4 57,7 3,8 20,5 17,9 312 4 47,6 3,7 33,9 14,8 378 6 52,9 3,5 18,8 24,7 340 5-2 60,0 4,0 26,7 9,3 300 5-2 60		61,6	4,1										
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			4,8								27,7	16,2	346
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$						308			48,1	3,7	25,7	22,5	
6 55,6 3,7 14,8 25,9 324 8-2 51,4 4,0 36,6 8,0 350 4-2 63,4 4,2 22,5 9,9 284 4 47,6 3,7 33,9 14,8 378 4 47,6 3,7 33,9 14,8 378 6 52,9 3,5 18,8 24,7 340 15—15—1—1 80,0 6,7 7,1 6,2 225 4 54,9 3,6 24,1 17,1 328 3 71,1 5,9 6,3 16,6 253 356 5 64,0 5,3 5,7 24,9 281 6-2 57,0 3,8 30,4 8,8 316 2—1 74,7 6,2 13,3 5,8 241 4,9 4,0		67,2	4,5		10,4								
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		60,8	4,0	16,2								21,5	390
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		63.4	4.2	22.5	9,9	284			51,4	4,0	36,6	8,0	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		57,7	3,8	20,5	17,9	312			47,6	3,7	33,9	14,8	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		52,9		18,8	24,7		15			6.7	7,1		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$					17.1		10	3	71,1	5.9	6,3	16,6	253
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$			3,4	22,5	23,6	356				5,3	5,7		
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$		57,0	3,8	30,4					66.9		11.9		
$7-2$ $\begin{bmatrix} 3.4 \\ 54.2 \end{bmatrix}$ $\begin{bmatrix} 3.5 \\ 33.7 \end{bmatrix}$ $\begin{bmatrix} 2.5 \\ 8.4 \end{bmatrix}$ $\begin{bmatrix} 332 \end{bmatrix}$ $\begin{bmatrix} 3-1 \\ 70.0 \end{bmatrix}$ $\begin{bmatrix} 5.8 \\ 18.7 \end{bmatrix}$ $\begin{bmatrix} 5.4 \\ 257 \end{bmatrix}$		52,3	3,5						60,6	5,0	10,8	23,6	297
4 50,0 3,3 31,1 15,6 360 3 63,2 5,2 16,8 14,7 285		54,2	3,6	33,7	8,4	332				5,8	18,7	5,4	
		50,0	3,3	31,1	15,6	360		3	05,2	0,4	10,0	14,	.200

C-H-O-N	C %	H ⁰ / ₀	0 %	N °/0	M.G.	C-H-O-N	C º/o	H°/0	0 0/0	N º/0	M.G.
15—15—3—5	57,5	4,8	15,3	22,4	313	15-17-6-5	49,6	4,7	26,4	19,3	363
4-1	65,9	5,5	23,4	5,1	273	8-1	53,1	5,0	37,8	4,1	339
3 5	59,8	5,0	21,3	13,9 21,3	$\begin{array}{c} 301 \\ 329 \end{array}$	$\begin{array}{ c c c c c }\hline 15-18-1-2\\ \hline 4\\ \hline\end{array}$	74,4	7,4	6,6	11,6	242
5—1	62,3	5.2	27,7	4.8	289	6	66,7	$\begin{vmatrix} 6,7 \\ 6,0 \end{vmatrix}$	5,9 5,4	20,7 28,2	270 2 98
3	56,8	4,7	25,2	13,3	317	2-2	69,8	7,0	12,4	10,8	258
6-1	52,2 59,0	4,3 4,9	23,2	20,3	345 305	4 6	62,9	6,3	11,2	19,6	286
3	54,0	4,5	28,8	12,6	333	3-2	57,3	5,7	10,2 17,5	26,8 10,2	314 274
. 5	49,9	4,1	26,6	19,4	361	4	59,6	6,0	15,9	18,5	302
7-1	56,1 51,6	4,7 4,3	34,9 32,1	$\frac{4,3}{12,0}$	3 2 1 3 4 9	. 6 42	54,5	5,4	14,5	25,5	330
5	47.7	4,0	29,7	18,6	377	4-2	62,1	6, 2 5,7	22,1 $20,1$	9,6 17,6	290 318
8-1	53,4	4,4	38,0	4,2	337	6	52,0	5,2	18,5	24,3	346
5 5	49,3 45,8	4,1 3,8	35,1 32,6	11,5 17,8	365 393	5—2 4	58,8	5,9	26,1	9,1	306
15-16-1-2	75,0	6,7	6,7	11,6	240	6	49,7	5,4 5,0	23,9 22,1	16,8 23,2	334 362
6	67,1	$6,0 \\ 5,4$	$\begin{array}{c c} 6,0 \\ 5,4 \\ \end{array}$	20,9 28,4	268	6-2	55,9	5,6	29,8	8,7	322
2-2	70,3	6,2	12,5	10,9	296 256	4	51,4	5,1 4,8	27,4 25,4	16,0 $22,1$	350 378
4	63,4	5,6	11,3	19,7	284	7-2	53,3	5,3	33,1	8,3	338
6 3 2	57,7 66,2	5,1 5,9	10,2 17,6	26,9 10,3	312 272	15-19-1-1	78,6	8,3	7,0	6.1	22 9
4	60,0	5,3	16,0	18,7	300	3	70,0	7,4 6,7	$\frac{6,2}{5,6}$	16,3 24,5	257 285
6	54,9	4,9	14,6	25,6	3 2 8	2-1	73,5	7,7	13,1	5,7	245
4-2	62,5 57,0	5,6 5,0	22,2 20,3	9,7 17,7	288 316	3	65,9	7,0	11,7	15,4	2 73
6	52,3	4,6	18,6	24,4	344	5 31	59,8	6,3 7,3	10,6 18,4	23,2	301 261
5-2	59,2	5,3	26,3	9,2	304	3	62,3	6,6	16,6	14,5	289
4 6	54,2 50,0	4,8	24,1 22,2	16,9 23,3	332 360	5	56,8	6,0	15,1	22,1	-317
6-2	56,2	5,0	30,0	8,7	320	$4-1 \\ 3$	65,0 59,0	$\frac{6,8}{6,2}$	23,1 21,0	5,1 13,8	277 305
6	51,7	4,6	27,6	16,1	348	5	54,0	5,7	19,2	21,0	333
7-2	47,9 53,6	4,3	25,5 33,3	22,3 8,3	376 336	5—1 3	61,4 56,1	6,5	27,3	4,8	293
4	49,4	4,4	30,8	15,4	364	5	$50,1 \\ 51,6$	5,9 5,4	24,9 22,9	13,1 20,1	321 349
$egin{array}{c} \cdot & 6 \\ 8-2 \end{array}$	45,9 51,1	4,1	28,6	21,4	392	6-1	58,2	6,1	31,1	4,5	309
, 4	47,4	4,5	36,4	8,0	352 380	3 5	53,4 49,3	5,6 5,2	28,5	12,5	337
6	44,1	3,9	31,4	20,6	408	7—1	55,4	5,8	26,3 34,5	19,2	365 325
15-17-1-1	79,3 70,6	7,4	7,1 6,3	6,2 16,5	227	9-1	50,4	5,3	40,3	3,9	357
5	63,6	6,0	5,6	24.7	255 283	15-20-1-2	73,8 66,2	8,2 7,3	6,5 5,9	$\frac{11,5}{20,6}$	244 272
2-1	74,1	7,0	13,2	5,7	243	. 6	60,0	6,7	5,3	28,0	300
3 ~: 5	66,4			15,5 $23,4$	271 299	2-2	69,2	7,7	12,2	10,8	2 60
3-1	69,5	6,5	18,5	5,4	259	4 6	62,5 57,0	6,9	11,1 10,1	19,4 26,6	288 316
3 5	62,7	5.9	16,7	14.6	287	3-2	65,2	7,2	17,4	10,1	276
	57,1 65,4	5,4 6,2	15,2 23,3	22,2 5,1	315 275	4	59,2	6,6	15,8	18,4	304
3	59,4	5,6	21,1	13,9 +	303	6 4-2	54,2 61,6	6,0	14,4 21,9	25,3 9,6	332 292
	54,4	5,1	19,3	21,2	331	4	56,3	6.2	20,2	17,5	320
9	46,5	4,7	17,8 1 16,5 1	27,3 32,6	359 387	$egin{array}{c} 6 \ 5-2 \end{array}$	51,7 58,4	5,7	18,4	24,1	348
5-1	61,9	5,8	27,5	4,8 13,2	291	4	53,6	6,5 5,9	26,0 23,8	$9,1 \\ 16,7$	308 336
3 5	56,4 51,9	5,3	$25,1 1 \\ 23,0 1$	$\begin{vmatrix} 13,2\\20,2 \end{vmatrix}$	319	6	49,4	5,5	22.0	23,1	364
6-1	58,6	5,5	31,3	4,6	347 307	$egin{array}{c} 6-2 \ 4 \ \end{array}$	55,6 51,1	6,2 5,7	29,6 27,3	$\begin{array}{c c} 8,6 \\ 15,9 \\ \end{array}$	324 352
3	53,7	5,1		12,5	335	6	47,4	5,3		22,1	380

C—H—O—N	C º/o	H ⁰ / ₀	0 %	N º/o	M.G.	C-	-H-O-N	C º/o	H º/ ₀	O º/o	N º/0	M.G.
15-20-8-2	50,6	5,6	36,0	7,8	356	15.	-24-1-2	72,6	9,7	61	11 2	248
15-21-1-1	77,9	9,1	6,9	6,1	231	. 10	4	65,2	8,7	6,4 5,8	11,3 20,3	276
3	69,5	8,1	6,2	16,2	259		6	59,2	7,9	5,3	27,5	304
5	62,7	7,3	5,6	24,4	287	. *	2-2	68,2	9,1	12,1	10,6	264
2-1	72,9	8,5	12,9	5,7	247		4	61,6	8,2	10,9	19,2	292
3	65,4	7,6	11,6	15,3	275		6	56,2	7,5	10,0	26,2	320
5 31	59,4	6,9	10,6	23,1 5,3	-303 263		3-2	64,3	8,6	17,1	10,0	280
3	61,9	7,2	16,5	14,4	291		. 6	58,4	7,8 7,1	15,6 14,3	18,2 25,0	308 336
5	56,4	6,6	15,0	21,9	319	2.7	4-2	60,8	8,1	21,6	9,4	296
4-1	64,5	7,5	22,9	5,0	279		4	55,6	7,4	19,7	17,3	324
3	58,6	6,8	20,8	13,7	307		6	51,1	68	18,2	23,9	352
5	53,8	6,2	19,1	20,9	335		5-2	57,7	7,7	25,6	9,0	312
5-1	61,0 55,7	7,1 6,5	27,1 $24,8$	4,8	295 323		4 6	52,9	7,1	23,5	16,5	340
5	51,3	6,0	22,8	19,9	351		6-2	48,9 54,9	6,5	21,7 29,3	22,8 8,5	368 328
6-1	57,9	6,7	30,9	4,5	311		8-2	50,0	6,7	35,6	7,7	360
3	53,1	6,2	28,3	12,4	339		9-2	47,9	6,4	38,3	7,4	376
5	49,1	5,7	26,1	19,1	367		4	44,6	5,9	35,6	13,9	404
8-1	52,5	6,1	37,3	4,1	343		12-6	37,5	5,0	40,0	17,5	480
9-3 $15-22-1-2$	46,5 73,2	5,4 8,9	37,2 6,5	10,9	387 246	15	-25-1-1 3	76,6	10,6	6,8	6,0	235 263
15-22-1-2	65,7	8,0	5,8	20,4	274		5	68,4	8,6	6,1 5,5	24.0	291
6	59,6	7,3	5,3	27,8	302		2-1	61,8	10,0	12,7	5,6	251
2-2	68,7	8,4	12,2	10,7	262		3	64,5	9,0	11,5	15,0	279
4	62,1	7,6	11,0	19,3	290		5	58,6	8,1	10,4	22,8	307
6	56,6	6,9	10,1	26,4	318		3-1	67,4	9,4	18,0	5,2	267
3-2	64,7	7,9	17,3 15,7	10,1	278		3 5	61,0	8,5 7,7	16,3	14,2 21,7	295 3 2 3
4 6	58,8 53,9	7,2 6,6	14,4	18,3 25,1	306		4-1	63,6	8,8	14,9 22,6	4,9	283
4-2	61,2	7,5	21,8	9,5	294		3	57,9	8,0	20,6	13,5	311
4	55,9	6,8	19,9	17,4	322		5	53,1	7.4	18,9	20,6	339
6	51,4	6,3	18,3	24,0	350		5-1	60,2	8,3	26,7	4,7	299
5-2	58,1	7,1	25,8	9,0	310		3	55,0	7,6	24,5	12,8	327
4	53,2	6,5	23,7 21,9	16,6	338		5 6—1	50,7 57,1	7,0	22,5 30,5	19,7	355 315
6 6—2	49,2 55,2	6,0	29,4	22,9 8,6	366		3	52,5	7,9 7,3	28,0	12,2	343
4	50,8	6,2	27,1	15,8	354		5	48,5	6,7	25,9	18,9	371
6	47,1	5,8	25,1	22,0	382		8-5	44,6	6,2	31,8	17,4	403
7-2	52,6	6.4	32,7	8,2	342	15		72,0	10,4	6,4	11,2	250
8-4	46,6	5,7	33,2	14,5	386		4	64,7	9,3 8,5	5,8 5,2	20,1 $27,4$	278 306
15-23-1-1	77,3	9,9	6,8	$\begin{array}{c c} 6,0 \\ 16,1 \end{array}$	233 261		2 <u>.</u> 2	58,8 67,7	9,8	12,0	10,5	266
5	62,3	8,0	5,5	24,2	289		4	61,2	8.8	10,9	19,0	294
2-1	72,3	9,2	12,8	5,6	249		. 6	55,9	8,1 9,2	9,9	26,1	3 2 2
3	65,0	9,2 8,3	11,6	15,1	277		3-2	63,8	9,2	17,0	9,9	282
5	59,0	7,5 8,7	10,5	23,0	305		4	58,1	8,4	15,5	18,0	310 338
3-1	67,9	8,7	18,1	5,3	265		$egin{array}{cccc} 4-2 \end{array}$	53,2	7,7	14,2 21,5	24,9 9,4	298
. 3	61,4 56,1	7,8	16,4 14,9	14,3 21,8	293 3 2 1		4-2	55,2	8,0	19,6	17,2	326
$egin{array}{c} 5 \ 4-1 \end{array}$	64,0	7,2 8,2	22,8	5,0	281		6	50,9	7,3	18,1	23,7	354
3	58,3	7,4	20,7	13,6	309		5-2	57,3	8,3	25,5	8,9	314
5	53,4	6.8	19,0	20,8	337		4	52,6	7,6	23,4	16,4	342
5-1	60,6	7,7	26,9	4,7	297		6	48,6	7,0	21,6	22,7	370 3 9 4
3	55,4	7,1	24,6	12,9	325	15	$10-2 \\ -27-1-1$	45,7 75,9	6,6	6,7	5,9	237
5 6—1	51,0	6,5	22,7 30,7	19,8 4,5	353	19	3	67,9	10.2	6,0	15,9	265
3	52,8	7,3 6,7	28,2	12,3	341		. 5	61,4	9,2 10,7	5,5	23,9	293
5	48,8	6,2	26,0	19,0	369		2-1	71,2	10,7	12,6	5,5	2 53
	1 /	1 /										

			,											
C—H-	-O-N	C º/ ₀	H º/ ₀	0 %	N º/0	M. G	C-	-H-	O-N	C º/o	H º/ ₀	O º/0	N º/0	M.G.
15-27	-2-3	64,0 58,3	9,6 8,7	11,4	14,9 22,7	281 309	15-	-30-	-5-2 4		9,4	25,2	8,8	318
	$3-1 \\ 3$	66,9	10,0	17,8 16,2	5,2 14,1	269 297			6 6—2	52,0 48,1 53,9	8,7 8,0 9,0	23,1 21,4 28,7	16,2 22,5 8,4	346
	$\begin{array}{c} 5\\ 4-1\end{array}$	55,4	8,3 9,5	14,8 22,4	21,5 $4,9$	325 285			4 6	49,7 46,2	8,3 7,7	$\begin{bmatrix} 26, 1 \\ 26, 5 \\ 24, 6 \end{bmatrix}$	15,5 21,5	334 362 390
	,3 5	57,5 52,8	8,6 7,9	20,4	13,4 20,5	.313 341	-		7-2	51,4	8,6 7,9	32,0 29,6	8,0	350 378
	5 –1 3	59,8	9,0 8,2	26,6	4,6 12,7	301 329	15	_31-	$^{6}_{-1-1}$	44,3 74,7	7,4 $12,9$	27,6 6,6	20,7	$\frac{406}{241}$
	$\begin{array}{c} 5 \\ 6-1 \\ 3 \end{array}$	50,4 56,8 52,2	7,6 8,5 7,8	30,3	19,6	357			3 5	66,9	11,5 10,4	5,9 5,4	15,6 23,6	269 297
	5 7—1	48,3 54,0	7,2 8,1	27,8 25,7 33,6	12,2 18,8 4,2	345 373 333			2-1 3	70,0	12,1	12,4	5,4	257 285
	3 5	49,9	7,5 6,9	31,0 28,8	11,6 18,0	361 389			5 3—1 3	57,5 65,9 59,8	9,9 11,4 10,3	10,2	5,1	313 273
15—28	$^{-1-2}_{4}$	71,4	11,1 10,0	6,3 5,7	11,1 20,0	252 - 280	15-	-32-	. 5	54,7 70,3	9,4 12,5	16,0 $14,6$ $6,2$	13,9 21,3 10,9	301 329 256
	$\begin{array}{c} 6 \\ 2-2 \end{array}$	58,4 67,2	9,1 10,4	5,2	27,3 10,4	308 268			4 6	63,4	11,3	5,6 5,2	19,7 26,9	284 312
	6	60,8 55,6	9,5 8,6	10,8	18,9 25,9	296 324			2-2 4	66,2	11,7 10,7	11,7 10,7	10,3 18,6	272 300
	3-2	63,4 57,7 5 2 ,9	9,8	16,9	9,8	284 312	15-	- 3 3	6 -3—1	54,9 65,4	9,7 12,0	9,7 17,4	25,6 $5,1$	328 275
	$\begin{array}{c} 6 \\ 4-2 \\ 4 \end{array}$	52,9 60,0 54,9	8,2 9,3 8,5	21,3	24,7	340	16- 16-	-2- -6-	2-2	60,4	0,6 2,3	30,2 12,4	8,8	318 258
	6 5—2	50,6	7,8 8,8	19,5 18,0 25,3	17,1 23,6 8,8	328 356 316		_7_ _8_		50,3	1,6 2,3	33,5	14,6	382 309
	4 6	52,3 48,4	8,1 7,5	23,3	16,3 22,6	344 372	10.		$\frac{2-2}{4}$ $4-2$	73,8 66,7 65,8	3,1 2,8 2,7	12,3 11,1 21,9	10,8	260 288
15—29	3	75,3	12,1 10,9	6,7	5,9 15,7	239 267			4	60,0	2,5	20,0 18,4	9,6 17,5 24,1	292 320 348
	5 2—1	61,0 70,6	9,8 11,4	$\begin{array}{c c} 5,4 \\ 12,6 \end{array}$	23,7 $5,4$	295 255			5-2	62,3 57,1	$\frac{2,6}{2,4}$	26,0 23,8	9,1	308 336
	3 5	57,9	10,2	10,3	14,8 22,5	283 311			6 6 –2	52,7 59,3	2,2	$\frac{22,0}{29,6}$	23,1	364 324
	3—1 3 5	60,2	10,7 9,7	17,7 16,0	5,2	271 299			4 6	54,5 50,5	2,1	25,3	15,9 22,1	352 380
	4-1	55,0 62,7 57,1	$ \begin{array}{c c} 8,9 \\ 10,1 \\ 9,2 \end{array} $	22,3	21,4 4,9 13,3	327 287 315			7-2	56,5 52,2	2,2	32,9	8,2 15,2	340 368
	5 5—1	52,5 59,4	8,4	18,6 26,4	20,4	343 303		10	$\begin{bmatrix} 6 \\ 0-4 \\ 3-4 \end{bmatrix}$	48,5 46,2 41,4	1,9	38,4 +		396 416
-	3 5	54,4 50,1	8,7	24,2	12,7	331 359	16	- 9-		83,1	3,9	6,9	6,1	464 231 2 59
15-30-	4	63,8	11,8	6,3	11,0	254 282			$\begin{bmatrix} 5 \\ 2-1 \end{bmatrix}$	66,9 77,7	3,1 3,6 3,3	5,6	24,4	287 28 7 24 7
	$\begin{bmatrix} 6 \\ 2-2 \end{bmatrix}$		9,7	11,8 1	10,4	310 270			3 5	69,8 63,4	3,3	11,6	15,3	275 303
	$\begin{array}{c c} 4 \\ 6 \\ 3-2 \end{array}$	60,4 55,2 62,9	9,2	9,8 2	25,8	298 326			3—1	73,0	3.4	18 ,2 16,5 1	$5,3 \mid 14,4 \mid$	263 291
	4	57,3 52,6	9,5	$egin{array}{c c} 16,8 & 15,3 & 114,0 & 2 \end{array}$	17,8	286 314 349		4	1-1	60,2	2,8	15,0 1 $22,9 1$	$21,9 \mid 15,0 \mid 15$	319 2 79
	4-2	59,6 54,5	9,9	21,2	9,3	342 302 330			5	62,5 57,3	2,9	19,1	20.91	307 335
		50,3	8,4	17,9 2		358				65,1 59,4	3,0 2,8	27,1 24,8		295 3 2 3

'											
C-H-O-N	C º/o	H %	0 %	N°0/0	M. G.	C-H-O-N	C º/0	H ⁰ / ₀	0 %	N °/0	M.G.
16-9-5-5	54,6	2,6	22,8	19,9	351	16-12-1-4	69,6	4,3	5,8	20,3	276
7	50,6	2,4	21,1	25,8	379	6	63,2	3,9	5,3	27,6	304
6-5 8-5	52,3 48,1	2,4	26,2	19,1	367	2-2	72,7	4,5	12,1	10,6	264
. 7	45,0	2,1	32,1	$\begin{vmatrix} 17,5\\22,9 \end{vmatrix}$	399 427	4	65,8	4,1 3,7	10,9	19,2	292 320
16-10-1-2	78,0	4,1	6,5	11,4	246	3-2	68,6	4,3	10,0	26,3 10,0	280
4	70,1	3,6	5,8	20,4	274	4	62,3	3,9	15,6	18,1	308
2-2	63,6	3,3	5,3	27,8	302	6	57,1	3,6	14,3	25,0	336
4	73,3 66,2	3,8	12,2 11,0	10,7 19,3	262 290	$egin{array}{c} 4-2 \ 4 \end{array}$	64,8 59,3	4,1	21,6	9,5	296 324
6	60,4	3,1	10,1	26,4	318	6	54,5	3,4	18,2	17,3 23,9	352
3-2	69,1	3,6	17,3	10,0	278	5-2	61,5	3,8	25,6	9,0	312
4	62,7	3,3	15,7	18,3	306	4	56,5	3,5	23,5	16,5	340
$\begin{array}{c} 6 \\ 4-2 \end{array}$	57,5 65,3	3,0	14,4 21,8	25,1 9,5	. 334 294	6-2	52,2 58,5	3,3	21,7 29,3	22,8	368 328
4	59,6	3,1	19,9	17,4	322	4	53,9	3,4	27,0	15,7	356
6	54,9	2,8	18,3	24,0	350	6	50,0	3,1	25,0	21,9	384
52 4	61,9 56,8	3,2 3,0	25,8 23,7	9,0	310 338	7-2	55,8	3,5	32,6	8,1	344
6	52,5	2,7	21,9	22,9	366	6	51,6	3,2	30,1 28,0	15,1 21,0	372 400
6-2	58.9	3,1	29,4	8,6	3 2 6	8-2	53,3	3,3	35,6	7,8	360
4	54,2	2,8	27,1	15,8	354	4	49,5	3,1	33,0	14,4	388
6 8	50,3 46,8	2,6	$\begin{vmatrix} 25,1 \\ 23,4 \end{vmatrix}$	22,0 27,3	382 410	6 9— 2	46,1 51,1	2,9	30,8	$\begin{vmatrix} 20,2\\ 7,4 \end{vmatrix}$	416 376
7-2	56,1	2,9	32,7	8,2	342	10-4	45,7	2,9	38,1	13,3	420
. 4	51,9	2,7	30,3	15,1	370	6	42,8	2,9 2,7	35,7	18,8	448
6 8—2	48,2 53,6	2,5	28,1	21,1	398	16-13-1-1	81,7	5,5	6,8	6,0	235 263
4	49,7	2,8	35,7 33,2	7,8	358 386	3 5	73,0 66,0	4,9	6,1 5,5	16,0	291
6	46.4	2,4	30,9	20,3	414	2-1	76,5	5,2	12,7	5,6	251
9-2	51,3	2,7	38,5	7,5	374	3	68,8	4,7	11,5	15,0	279
$\begin{matrix} 6 \\ 12-4 \end{matrix}$	$\begin{vmatrix} 44,6\\42,7 \end{vmatrix}$	2,3	33,5 42,7	19,5 12,4	430 450	5 3_1	62,5	4,2 4,9	10,4	22,8 5,2	307 267
16-11-1-1	82,4	4,7	6,9	6,0	233	3	65,1	4,4	16,3	14.2	295
3	73,6	4,2	6,1	16,1	261	5	59,4	4,0	14,9	21,7	323
5 21	66,4	3,8	5,5	24,2	289	4-1	67,9	4,6	22,6	4,9	283
3	77,1 69,3	4,4	12,8 11,5	5,6 $15,2$	249 277	3 5	56,6	4,2	20,6	13,5 20,6	339
5	62,9	3,6	10,5	22,9	305	5—1	64,2 58,7	4,3	26,7	4.7	299
3-1	72,5	4,1	18,1	5,3	265	3	58,7	4,0	24,5	12,8	327
3 5	65,5 59,8	3,7	16,4 15,0	14,3 21,8	293 321	5 6—1	54,1 61,0	3,7	22,5	19,7	355 315
41	68,3	3,9	22,8	5,0	281	3	56,0	3,8	28,0	12,2	343
3	62,1	3,6	20,7	13,6	309	5	51,7	3,5	25,9	18,9	371
5	57,0	3,2	19,0	20,8	337	7-1	58,0	3,9	33,8 31,2	4,3	331 359
5—1	64,7 59,1	3,7	26,9	4,7 12,9	297 325	5	49,6	3,4	28,9	18,1	387
5	54,4	3,1	22,7	19,8	353	8—1	55,3	3.7	36.9	4.0	347
6—1	54,4 61,3	3,5	30,7	4,5	313	3	51,2	3,5	34,1	11,2	375
3 5	56,3	3,2	28,2	12,3 19,0	341 369	5 9—5	47,5 45,8	3,2 3,1	31,8	17,4 16,7	403
7-1	52,0 58,4	3,3	26,0 34,1	4,2	329	10-3	47,2	3,2	39,3	10,3	407
3	53,8	3,1	31,4	11,7	357	16-14-1-2	76,8	5,6	6,4	11,2	250
5	49,9	2,8	29,1	18,2	385	4 6	$\begin{vmatrix} 69,1 \\ 62,7 \end{vmatrix}$	5,0	5,8 5,2	20,1 27,5	278 306
81	55,7 51,5	3,2 2,9	37,1 24,3	4,0	345	2-2	72,2	5,3	12,0	10,5	266
. 5	47,9	2,7	31,9	17,5	401	4	65,3	4,8	10,9	19,0	294
10-3	47,4	2,7	39,5	10,4	405	6 3-2	59,6	4.3	9,9	26,1 9,9	322 282
16—12—1—2	77,4	4,8	6,4	11,3	248	3-2	68,1	0,0	11,0	0,0	202

C-H-O-N	C º/o	H º/o	O º/0	N º/0	M.G.	C-	-H-	-O—N	C º/o	H°/0	O º/o	Nº/0	G.M.
16—14—3—4 6	61,9 56,8	4,5 4,1	15,5 14,2	18,1 24,8	310 338	16-	-16-	-5-2	60,6	5,1	25,3 23,3	8,9	316 344
$egin{array}{cccccccccccccccccccccccccccccccccccc$	64,4 58,9 54,2	4,7 4,3 3,9	21,5 19,6 18,1	9,4 17,2 23,7	298 326			6-2	51,6 57,8	4,3 4,8	$\begin{vmatrix} 21,5\\28,9 \end{vmatrix}$	22,6 8,4	372 332
5—2 ,4	61,2 56,1	4,4	25,5 23,4	8,9 16,4	354 314 342			6 7—2	53,3 49,5 55,2	$\begin{array}{ c c c } 4,4 \\ 4,1 \\ 4,6 \\ \end{array}$	26,7 $24,7$ $32,2$	15,5 21,6 8,0	360 388 348
6 6—2	51,9 58,2	3,8 4,2	21,6 $29,1$	22 ,7. 8,5	370 330	ı		4 6	51,1	4,2	29,8 27,7	14,9	376 404
$egin{array}{c} 4 \\ 6 \\ 7-2 \end{array}$	53,6 49,7 55,5	3,9 3,6 4,0	26,8 24,9 32,4	15,6 21,7	358 386			8-2	52,7 $ 49,0 $	4,4	35,2 32,6	7,7 14,3	364 392
4 6	51,3 47,8	3,7 3,5	30,0 27,8	8,1 15,0 20,9	346 374 402	16-	-17	6 8 11	45,7 42,9 80,3	3,8 3,5 7,1	30,5 28,6 6,7	20,0 $25,0$ $5,9$	420 448 239
8 <u>-2</u> 4	53,0	3,9	35,4 32,8	7,7 14,4	362 390	20	.,	3 5	71,9	6,4	6,0 5,4	15,7 23,7	267 295
6 92 4	45,9 50,8 47,3	3,3 3,7 3,4	30,6	20,1	418 378			2-1	75,3 67,9	6,6	12,6 11,3	5,5 14,8	255 283
6 16—15—1—1	44,2	3,2 6,3	35,5 33,2 6,7	13,8 19,3 5,9	406 434 237			5 3—1 3	61,7 70,9 64,2	5,5 6,3 5,7	10,3 17,7 16,0	22,5 5,2 14,0	311 271 299
3 5	72,5	5,7 5,1	6,1 5,5	15,8 23,9	265 293			5 4—1	58,7	5,2 5,9	$14,7 \\ 22,3$	21,4	327 287
; 2—1 3 5	75,9 68,3 62,1	5,9 5,3 4,8	12,6 10,8 10,4	5,5 14,9 22,7	253 281 309			5	60,9 56,0	5,4 4,9	20,3 18,7	13,3 20,4	315 343
3-1	71,4	5,6	17,8 16,2	5,2 14,1	269 297			5—1 3 5	63,4 58,0 53,5	5,6 5,1 4,7	26,4 24,2 22,3	4,6 12,7 19,5	303 331 359
5 4—1	59,1 67,4	4,6 5,3	14,8 22,4	21,5	325 285			6—1 3	60,2 55,3	5,3 4,9	30,1 27,7	4,4 12,1	319 347
$\begin{array}{c} 3 \\ 5 \\ 5 -1 \end{array}$	61,4 56,3 63,8	4,4	20,4 18,8 26,6	13,4 20,5 4,6	313 341 301			5 7—1	51,2	4,5 5,1	25,6 33,4	18,7	375 335
3 5	58,4 53,8	4,5	24,3 22,4	12,8 19,6	329 357			3 5 9-1	52,9 49,1 52,3	4,7 4,3 4,6	30,8 28,7 39,2	11,6 17,9 3,8	363 391 367
61	60,6	4,7 4,3	30,3 27,8	12,2	317 345	16-	-18	1-2	75,6 68,1	7,1	6,3 5,7	11,0 19,8	254 282
5 7—1 3	51,5 57,7 53,2	4,5	$25,7 \\ 33,6 \\ 31,0$	18,8 4,2 11,6	373 333 361			2-2	61,9	5,8	5,2 11,8 10,7	27,1	310 270
5 8—1	49,3 55,0	3,8	28,8 36,7	18,0	389 349			4 6 32	64,4 58,9 67,1	6,0 5,5 6,3	9,8 16,8	18,8 25,8 9,8	298 326 286
$\begin{array}{c} 3 \\ 5 \\ 9-1 \end{array}$	50,9 47,4	3,7	34,0 31,6	11,1	377 405			6	61,2 $56,1$	5,7 5,3	15,3 14,0	17,8 24,6	314 342
3.	52,6 48,9 45,6	3,8	39,5 36,6 34,1	3,8 10,7 16,6	365 393 421			4-2	63,6 58,2	5,4	21,2	9,3	302 330
16—16—1 <u>-2</u> 4	76,2 68,6	6,3 5,7	6,3 5,7	11,1	252 280			5 <u>-2</u>	53,6 60,4 55,5	5.6	25,2	$23,5 \\ 8,8 \\ 16,2$	358 318 346
$\begin{array}{c} 6 \\ 2-2 \\ 4 \end{array}$	62,3	5,2 6,0	$\begin{bmatrix} 5,2 \\ 11,9 \end{bmatrix}$	27,3 10,4	308 268			6-2	51,3 57,5	4,8 5,4	$\frac{21,4}{28.7}$	22,5	374 334
6 3-2	64,8 59,3 67,6	4,9	$ \begin{array}{c c} 10,8 \\ 9,9 \\ 16,9 \end{array} $	18,9 25,9 9,9	296 324 284			6	53,0 49,2	5,0	26,5 $24,6$	$15,5 \mid 21,5 \mid$	362 390
4 6	61,5 56,5	5,1	15,4 14,1	$17,9 \ 24,7$	312 340	16-	19_	8-2 -1-1 3	52,4 79,7 71,4	4,9 7,9 7,1	35,0 6,6 5,9	7,6 5,8 15,6	366 241 269
4—2 4 6	64,0 58,5	5,3 2	$21,3 \mid 19,5 \mid 1$	$\begin{array}{c c} 9,3 \\ 17.1 \end{array}$	300 328			5 2—1	64,6	$\frac{6,4}{7,4}$	5,4 $12,4$	23,6 5,4	297 257
	30,9	4,5	18,0	23,6	356			3	67,4	6,7	11,2	14,7	285

C-H-O-N	C º/0	H °/0	O º/o	N º/c	M.G.	C-H-O-N	C º/o	H ⁰ / ₀ O 0/	N °/ ₀	M.G.
16-19-2-5 3-1 3 5 4-1 3 5 5-1 3 5 6-1 3 5 4-1 4 6 2-2 4 6 3-2 4 6 4-2	61,3 70,3 63,8 58,4 60,6 60,6 55,7 62,9 57,7 53,2 59,8 55,9 75,0 67,6 61,5 70,6 64,0 58,5 66,7 60,8 55,2	6,1 7,0 6,3 5,7 6,6 6,0 5,5 6,2 5,2 5,2 5,4 5,0 7,8 7,4 6,7 6,1 6,9 6,8 6,8 6,6	10,2 17,6 15,9 14,6 22,1 20,2 21,8,5 26,2 24,0 22,2 29,9 27,5 6,2 5,6 11,8 10,7 9,7 15,2 14,0 21,0 21,1 21,0 21,1 21,0 21,1 21,1 21	22,4 5,1 13,9 21,3 4,8 13,2 20,3 4,6 12,6 19,4 4,4 12,0 18,6 10,9 10,9 10,3 18,6 25,6 9,7 17,7 24,4 9,2	313 273 301 329 289 317 345 305 333 361 321 349 377 256 284 312 272 300 328 288 316 344 304	C—H—O—N 16—22—3—6 4—2 4 6 5—2 4 6 6 6—2 4 13—4 16—23—1—1 3 5 2—1 3 5 4—1 3 5	55,5 62,7 57,5 53,0 59,6 56,8 56,8 52,5 48,7 48,2 78,4 70,3 63,8 63,8 66,4 60,6 69,3 62,9 57,7 559,8	6,3 13,6 7,2 20,9 6,6 19,7 6,1 17,7 6,8 24,5 6,4 22,5 6,5 28,6 6,0 26,5 5,6 24,5 5,5 32,7 4,6 43,7 7,6 5,8,8 12,8,0 11,7,2 10,8,3 17,7,5 15,6,9 14,7,8 21,7,2 19,6,6 18,	24,3 9,1 16,8 23,2 8,7 16,0 2,22,2 4,8,3 2,15,3 4,21,3 11,7 5,5,7 15,4 2,14,1 3,1 3,2 1,4,1 1,4,5 1,4,1 1,4,5 1,4,1 1,4,	M.G. 346 306 334 362 322 350 378 388 366 394 478 245 273 301 261 289 317 277 305 333 293 321 349
$egin{array}{c} 4 \\ 6 \\ 5-2 \\ 4 \\ \cdot \\ 6 \\ 6-2 \\ 8-2 \\ 8-2 \\ 8-2 \\ 8-2 \\ 5 \\ 2-1 \\ 3 \\ 5 \\ 2-1 \\ 3 \\ 5 \\ 4-1 \\ 3 \\ 5 \\ 4-1 \\ 3 \\ \end{array}$	57,8 53,3 60,0 55,2 51,1 57,1 52,2 42,5 43,6 64,2 79,0 66,9 69,8 63,4 58,0 66,0,2	6,0 5,6 6,2 5,3 5,9 5,4 4,4 4,5 8,6 7,7 7,6 6,9 6,9 6,9 6,9 6,9 6,9 6,9	19,3 17,8 25,0 23,0 21,3 28,6 34,7 28,3 32,7 6,6 5,9 5,3 11,1 10,2 17,4 15,8 14,5 22,0 20,0	22,3 8,3 7,6 24,8 19,1 5,8 15,5 23,4 14,6 22,2 5,1 13,9 21,1 4,8 13,2	299 259 287 315 - 275 303 331 291 319	$egin{array}{c} 5-1 \\ 3 \\ 5 \\ 6-1 \\ 3 \\ 5 \\ 9-5 \\ 16-24-1-2 \\ 4 \\ 6 \\ 2-2 \\ 4 \\ 6 \\ 3-2 \\ 4 \\ 6 \\ 4-2 \\ 4 \\ 6 \\ 6 \\ 6 \\ 6 \\ 6 \\ 6 \\ 6 \\ 6 \\ 6$	55,0 62,1 57,0 52,6 59,1 54,4 50,4 44,7 73,8 66,7 69,6 63,2 57,8 60,0 55,2 62,3 57,1 52,7	7,4 25,6,8 23,6,8 21,7,1 29,6,5 27,6,0 25,4 33,9,2 6,8,3 5,7,6 5,8,7 11,7,9 10,7,2 9,8,2 16,7,5 15,6,9 13,7,8 20,7,1 19,6,6 17,	7, 12,5 7, 12,5 19,22 11,92 2, 11,9 2,2 11,9 2,1 10,8 6,6 10,1 10,8 6,6 10,1 1,1 1,5 1,5 1,6 1,6 1,6 1,6 1,6 1,6 1,6 1,6 1,6 1,6	309 337 365 325 353 381 429 260 288 316 276 304 332 292 320 348 308 336 364
5 5 1 3 5 6 -1 7 -1 8 -1 10 -1 16 -22 -1 -2 4 6 2 -2 4 6 3 -2 4	55,3 62,5 57,3 52,9 59,4 56,6 54,1 49,6 74,4 67,1 61,2 70,1 63,6 58,2 66,2	6,0 6,8 6,3 5,8 6,5 6,5 6,5 7,7 7,0 8,0 8,0 7,3 8,0 7,3 8,0 7,3 8,0 7,3	18,4 26,1 23,9 22,0 39,7 33,0 41,3 6,2 5,6 5,1 11,7 10,6 9,7 16,5 15,1	$egin{array}{c ccccccccccccccccccccccccccccccccccc$	347 307 335 363 323 339 355 357 327 328 328 328 328 328 329 329 329 329 329 329 329 329 329 329	$\begin{array}{c} 5-2\\ 4\\ 6\\ 6-2\\ 8-2\\ 16-25-1-1\\ 3\\ 5\\ 2-1\\ 3\\ 5\\ 3-1\\ 3\\ 5\\ 4-1\\ 3\\ 3\\ 5\\ 4-1\\ 3\\ 3\\ 5\\ 4\\ 3\\ 5\\ 4\\ 3\\ 5\\ 4\\ 4\\ 3\\ 5\\ 4\\ 4\\ 3\\ 5\\ 4\\ 4\\ 3\\ 5\\ 4\\ 4\\ 3\\ 5\\ 4\\ 4\\ 4\\ 3\\ 5\\ 4\\ 4\\ 4\\ 4\\ 4\\ 4\\ 4\\ 4\\ 4\\ 4\\ 4\\ 4\\ 4\\$	59,3 54,6 50,5 56,5 51,6 77,7 69,8 63,3 73,0 66,0 66,0 68,8 62,5 57,3 65,1 59,4	6,8 22, 6,3 21, 7,1 28, 6,4 34, 10,1 6, 9,1 5, 8,2 5, 9,5 12, 8,6 11, 7,8 10, 9,0 17, 8,1 15, 7,5 14, 8,5 21,	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	380 340 372 247 275 303 263 291 319 279 307 335 295

		_											
C-H-O-N	C º/ ₀	H º/0	O º/o	N º/0	M.G.	C-	-H-	-ON	C 0/0	H ⁰ / ₀	O º/0	N °/o	M. G.
16-25-4-5	54,7	7,1	18,2	20,0	351	16	-29	-2-1	71,9	10,9	12,0	5,2	267
5-1 3	61,7 56,6	8,0	25,7 23,6	$\frac{4,5}{12,4}$	311 339			3 5	65,1	9,8	10,8	14,2	295
5	52,3	7,4 6,8	21,8	19,1	367			3-1	59,4	9,0 $10,2$	9,9 17,0	21,7	323 283
6—1	58,7	7,6	29,3	4,3	327			3	61,7	- 9,3	15,4	13,5	311
3 5	54,1 50,1	$\begin{array}{c c} 7,0 \\ 6,5 \end{array}$	27,0 25,1	11,8	355			5	56,6	8,6	14,2	20,6	339
16-26-1-2	73,3	9,9	6,1	10,7	383 262			41 3	64,2 58,7	9,7 8,9	21,4 19,6	4,7 12,8	$\frac{299}{327}$
4	66,2	9,0	5,5	19,3	2 90			5	54,1	8,2	18,0	19,7	355
. 2 -2	60,4 79,1	8,2 9,3	5,0	26,4	318 278	10	20	$ \begin{array}{c} 8-1 \\ -1-2 \end{array} $	52,6	7,9	35,1	4,4	365
4	62,7	8,5	11,5 10,5	18,3	306	10-	-30-	_1_2 4	72,2	11,3 10,2	6,0 5, 4	10,5	$\frac{266}{294}$
6	57,5	7,8	9,6	25,1	334			6	59,6	9,3	5,0	26,1	322
3-2	65,3 59,6	8,8	16,3 14,9	9,5 17,4	$\begin{array}{ c c }\hline 294\\ 322\\ \end{array}$			$egin{array}{c} 2-2 \ 4 \end{array}$	68,1	10,6 $9,7$	11,3	9,9	282
6	54,9		13,7	24,0	350			6	56,8	8,9	10,3	18,1 24,8	310 338
4-2	61,9	8,4	20,7	9,0	310			3-2	64,4	10,1	16,1	9,4	2 98
4	56,8 52,4		18,9	16,6	338			4 6	58,9	9,2 8,5	14,7	17,2	326
5-2	58,9		17,5 24,5	23,0 8,6	366 326			4-2	54,2 61,1	9,6	13,6 20,4	23,7 8,9	$\frac{354}{314}$
4	54,2	7,3	22,6	15,8	354			4	56,1	8,8	18,7	16,4	342
6 16—27—1—1	50,3	6,8	20,9	22,0 5,6	$\frac{382}{249}$			6 5—2	51,9	8,1	17,3	22,7	370
3	69,3	9,7	5,8	15,2	277			4	58,2 53,6	9,1 8,4	24,2 22,3	8,5 15,6	330 358
5	62,9	8,8	5,2	23,0	305			6	49,7	7,8	20,7	21,7	386
2—1 3	72,5 65,5		12,0 10,9	5,3 14,3	265 293	16	-31	-1-1 3	75,9	12,2 11,0	6,3	5,5	2 53
5	59,8	8,4	10,0	21,8	321			.5	68,3 62,1	10,0	5,7 5, 2	14,9 22,6	281 309
3-1	68,3	9,6	17,1	5,0	281			2-1	71,4	11,5	11,9	5,2	2 69
3 5	62,1 $57,0$		15,5 14,2	13,6 20,8	309 337			· 3 5	64,6	10,4	10,8	14,1	297
4-1	64,6		21,6	4,7	297			3—1	59,1 67,4	9,5 $10,9$	9,8 16,8	21,5 4,9	325 285
3	59,1	8,3	19,7	12,9	325			3	61,4	9,9	15,3	13,4	313
5 5—1	54,4 61,4		18,1 25,6	19,8 4,4	353 313			5 9	56,3	9,1 7,8	14,1	20,5	341
3	56,3	7,9	23,5	12,3	341			4-1	48,4 63,8	10,3	$12,1 \\ 21,3$	31,7 4,6	397 301
5	52,0	7,3	21,7	19,0	369			3	58,4	9,4	19,4	12,7	3 2 9
$8-3 \\ 16-28-1-2$	$\frac{49,3}{72,7}$	$\begin{array}{c c} 6,9 \\ 10,6 \end{array}$	$\frac{32,9}{6,1}$	10,8 10,6	389 264			5 5—1	53,8	8,7 9,8	17,9	19,6	357
4	65,7	9,6	5,5	19,2	292			3	55,7	9,0	25,2 23,2	$\frac{4,4}{12,1}$	317 345
6	60,0	8,7	5,0	26,2	. 320			5	51,5	8,3	21,4	18,8	373
$egin{array}{c} 2-2 \ 4 \end{array}$	68,6 $62,3$		11,4 10,4	10,0 18,2	280 308	16-	-32-	-1-2	71,6 64,8	11,9 10,8	6,0	10,5	268
6	57,1	8,3	9,5	25,0	336			6	59,2	9,9	5,4 4,9	18,9 25,9	$\frac{296}{324}$
3-2	64,8	9,5	16,2	9,5	296			8	54,5	9,1	4,5	31,8	352
$\frac{4}{6}$	59,3 54,5		14,8 13,6	17,3 23,9	324 352			2-2	67,6 61,6	11,3 10,2	$11,3 \\ 10,2$	9,8 17,9	$\frac{284}{312}$
4-2	61,5	9,0	20,5	9,0	312			6	56,5	9,4	9,4	24.7	340
4	56,4	8,2	18,8 17,4	16,5	340			3-2	64,0	10,7	16,0	9.3	300
6 5-2	52,2 58,5	8.5	24,4	22,8 8,5	368 328			4 6	58,5 53,9	9,7	14,6 13,5	17,1 23,6	328 356
4	53,9	7.9	22,5	15,7	356			4-2	60,8	10,1	20,2	8.9	316
6 6-2	50,0	7,3	20,8	21,9	384			4	55,8	9,3	18,6	16,3	344
4	55,8 51,6	8,1	27,9 25,8	8,1 15,1	344 372	16	-33	6 11	51,6 75,3	8,6 12,9	17,2 6,3	22,6 5,5	372 255
6	48,0	7,0	24,0	21,0	400	10-	-00	3	67,8	11,7	5,6	14,8	283
16-29-1-1	76,5 68,8	11,5	6,4	5,6	251			5	61,7	10,6	5,1	22,5	311
5	62,5	10,4	5,7 5,2	15,1 22,8	2 79 307			2-1 3	70,8 $64,2$	12,1 11,0	11,8 10,7	$\frac{5,2}{14,0}$	271 299
	7- 1	,-	,-	,-						11,0	10,1	14,0	200

C-H-O-N	C º/0	H º/ ₀	0%	N º/0	M.G.	C-H-O-N	C º/o	H º/ ₀	0%	N º/o	M.G.
16-33-2-5 3-1	58,7 66,9	10,1	9,8 16,7	21,4	327 287	17-12-1-6 2-2	64,6 73,9	3,8 4,3	5,0 11,6	26,6 10,1	316 276
3 5 41	61,0 56,0 63,4	$ \begin{array}{c c} 10,5 \\ 9,6 \\ 10,9 \end{array} $	15,2 14,0 21,1	13,3 20,4 4,6	315 343 303	4 6 3-2	67,1 61,4 69,9	3,9 3,6 4,1	10,5 9,6 16,4	18,4 25,3 9,6	304 332 292
3 5 16—34—1—2	58,0 53,5 71,1	$\begin{vmatrix} 10,0\\ 9,2\\ 12,6 \end{vmatrix}$	19,3 17,8 5,9	12,7 19,5 10,4	331 359 270	4 6 4—2	63,7 58,6	3,7 3,4	15,0 13,8	17,5 24,1	320 348
4	64,4 58,9	$\begin{vmatrix} 11,4\\10,4 \end{vmatrix}$	5,4 4,9	18,8 25,8	298 326	4 6	66,2 60,7 56,0	3,9 3,6 3,3	20,8 19,0 17,6	9,1 16,7 23,1	308 336 364
$egin{array}{c} 2-2 \ 4 \ 6 \end{array}$	67,1 61,1 56,1	11,9 10,8 9,9	11,2 10,2 9,3	9,8 17,8 24,6	286 314 342	5—2 4 6	63,0 58,0 53,7	3,7 3,4 3,2	24.7 22,7 21,0	8,6 15,9 22,1	324 352 380
3-4 $17-7-10-1$ $17-9-2-1$	58,2 53,0 78,8	10,3 1,8 3,5	14,5 41,6 12,3	17,0 3,6 5,4	330 385 259	6-2 4 6	60.0 55,4 51,5	3,5 3,3 3,0	28,2 26,1 24.2	8,2 15,2 21,2	340 368 396
3 5 3-1	71,1 64,8	3,1 2,9	11,1 10,1 17,4	$14,7 \\ 22,2$	287 315 275	8-2 17-13-1-1	54,8 82,6	3,2 5,3	34,4 6,5	7,5 5,6	372 247
3 5.	74.2 67,3 61,6	3,3 3,0 2,7	15,8 14,5	5,1 13,9 21,2	303 331	3 5 2—1	74,2 67,3 77,6	4,7 4,3 4,9	5,8 5,3 12,2	15,3 23,1 5,3	275 303 263
4—1 3 5	70,1 63,9 58,8	3,1 2,8 2,6	22,0 20,1 18,4	4,8 13,2 20,2	291 319 347	3 5 3—1	70,1 64,0 73,1	4,5 4,1 4,7	11,0 10,0 17,2	$\begin{vmatrix} 14,4\\21,9\\5,0 \end{vmatrix}$	291 319 279
5-1 6-1 3	66,4 63,2 58,1	2,9 2,8 2,5	26,1 29,7 27,4	4,6 4,3 12,0	307 323 351	3 5 4—1	66,4 60,9 69,2	4,2 3,9 4,4	15,6 14,3 21,7	13,8 20,9 4,7	307 335 295
7-1 8-1	60,2	2,7	33,0	4,1 3,9	339 355	3 5 5—1	73,2 58,1	4,0 3,7	19,8	13,0 19,9	323 351
17-10-2-2 $3-2$ 4	74,5 70,4 64,2	3,6 3,4 3,1	11,7 16,5 15,1	10,2 9,7 17,6	274 290 318	3 5	65,6 60,2 55,6	4,2 3,8 3,5	25,7 23,6 21,8	4,5 12,4 19,1	311 339 367
6 4-2 6-8	58,9 66,7 48,3	2,9 3,3 2,4	13,9 20,9 22,7	9,1 26,5	346 306 422	6-1 3 5	62,4 57,5 53,2	4,0 3,7 3,4	29,3 27,0 25,1	4,3 11,8 18.3	327 355 383
7-2 9-2	57,6 52,8	2,8 2,6	31,6 37,3 6,5	7,9	354 386 245	7—1 3 5	59,5 55,0 51,1	3,8 3,5 3,3	32,6 30,2 28,1	4,1 11,3 17,5	343 371 399
17—11—1—1 3 5	83,3 74,7 67,8	4,5 4,1 3,6	5,8 5,3	5,7 15,4 23,2	273 301	8—1 3	56,8 52,7	3,6 3,4	35,7 33,1	3,9 10,8	359 387
2—1 3 5	78,1 70,6 64,3	4,2 3,8 3,5	12,3 11,1 10,1	5,4 14,5 2 2,1	261 289 317	5 17—14—1—2 4	49,2 77,9 70,4	3,1 5,3 4,8	30,8 6,1 5,5	16,9 10,7 19,3	415 262 290
3—1 3 5	73,6 66,9 61,3	4,0 3,6 3,3	17,3 15,7 14,4	5,1 13,8 21,0	277 305 333	$egin{array}{c} 6 \ 2-2 \ 4 \end{array}$	64,2 73,4 66,7	4,4 5,0 4,6	5,0 11,5 10,4	26,4 10,1 18,3	318 278 306
4-1	69,6 63,5	3,7	21,8 19,9 18,3	4,8 13.1	293 321 349	6 3-2 4	61,1 69,4 63,3	4,2 4,8 4,3	9,6 16,3 14,9	25,1 9,5	334 294 322
5 5—1 3	58,4 66,0 60,5	3,2 3,6 3,3	25,9 23,7	20,1 4,5 12,5	309 337	6 4 -2	58,3 65,8	4,0	13,7 20,6	24,0 9,0 16.6	350 310
6-1 3	55,9 62,8 57,8	3,0 3,4 3,1	21,9/ 29,5 27,2	19,2 4,3 11,9	365 325 353	$\begin{matrix} 4 \\ 6 \\ 5 - 2 \end{matrix}$	60 3 55,7 62,6	4,1 3,8 4,3	18,9 17,5 24,5	22,9 8,6	338 366 326
5 9-3 12-7	53,5 50,9 40,4	2,9 2,7 2,2	25,2 35,9 38,0	18,4 10,5 19,4	381 401 405	4 6 6—2	57,6 53,4 59,6	4,0 3,7 4,1	22,6 20,9 28,1	15,8 22,0 8,2	354 382 342
17-12-1-2	78,4 70,8	4,6 4,2	6,2 5,6	10,8	260 288	4 6	55,1 51,3	3,8	25,9 24,1	15,1 21,0	370 398
T	1 77 - 1-3-	amata ffa	owh						152		

											-
C-H-O-N	C º/o	H ⁰ / ₀	0 %	N º/o	M. G.	C-H-O-N	C º/o	Hº/0	O º/o	N º/0	M. G.
17-14-7-4 8-2 10-4 17-15-1-1 3 5 2-1 3 5 4-1 3 5 6-1 17-16-1-2 4 6 2-2 4 6 3-2 4 6 4-2 4 6 6-2 4 6 17-17-1-1 3 5 5 1-1 3 5 6-1 3 5 6-1	\$\begin{array}{cccccccccccccccccccccccccccccccccccc	4,8 4,4 4,0 4,1 4,0 4,2 3,9 4,0 5,5 5,7 5,7 5,8 4,9 5,1 6,0 5,5 6,0 6,1 6,5 6,5 6,5 6,5 6,5 6,5 6,5 6,5	29,2 26,9 24,9 30,0 27,9 35,4 6,0 5,5 11,4 10,4 9,5 113,6 20,8 17,4 22,5 24,0 13,6 14,6 15,6 16	4,9 3,5 20,7 4,7 2,8 9,7 4,4 2,2 8,9	386 374 414 249 277 305 293 321 309 337 297 325 353 341 369 329 357 345 373 401 361 264 292 320 280 308 329 337 297 385 345 373 401 361 264 292 320 280 308 329 337 297 385 373 401 361 264 329 337 297 385 373 401 369 329 329 320 320 320 320 320 320 320 320	7—2	56,7 52,6 58,6 54,2 50,5 56,0	5,3 4,9 7,5 6,8 6,7 6,4 5,9 6,7 6,1 5,6 6,3 5,6 5,6 5,7 5,6 5,7 5,8 6,9 6,7 6,1 6,1 6,1 6,2 7,5 6,3 7,5 6,3 7,5 6,4 7,5 6,5 7,5 7,5 7,5 7,5 7,5 7,5 7,5 7,5 7,5 7	20,3 18,6 17,2 24,1 22,2 20,6 27,6 25,5 23,8 30,8	20,8	359 387 266 294 322 282 282 310 338 298 326 354 314 342 370 426 358 346 374 402 281 309 269 297 325 281 309 297 325 313 341 301 329 357 317 345 370 387 387 387 387 387 387 387 387

C-H-O-N	C°/0	H º/o	0 %	N º/o	M.G.	C-	-H-O-N	C º/0	H º/0	O º/o	N º/0	M.G.
17-20-7-6 8-2 17-21-1-1 3 5 2-1 3 5 3-1 3 5 4-1 3 5 5-1 3-1 17-22-1-2 4 6 2-2 4 6 3-2 4 6 4-2 17-23-1-1 3 5 5-1 3 5 1-1 17-24-1-2 4 6 2-2 4 6 3-2 4 6 5-2 17-24-1-2 4 6 5-2 6 5-2 6 5-2 6 6 1-2 6 6 7 7 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8	48,6 53,7 80,0 72,1 65,6 75,3 68,2 62,4 71,1 64,8 59,5 67,3 61,6 63,9 54,4 60,9 53,6 68,4 62,6 71,3 65,6 68,4 67,5 67,5 61,8 57,5 61,8 57,5 61,8 57,5 61,8 57,5 61,8 57,5 61,8 57,5 61,8 57,5 61,8 57,5 61,8 57,5 61,8 57,5 61,8 57,5 61,8 57,5 61,8 57,5 61,8 61,8 61,8 61,8 61,8 61,8 61,8 61,8	$\begin{array}{c} 4.8 \\ 5.2 \\ 2.7 \\ 7.7 \\ 7.0 \\ 6.3 \\ 5.6 \\ 6.3 \\ 5.5 \\ 6.6 \\ 1.7 \\ 7.7 \\ 7.0 \\ 6.3 \\ 8.7 \\ 6.7 \\ 7.7 \\ 7.0 \\ 6.3 \\ 8.7 \\ 7.7 \\ 6.3 \\ 8.7 \\ 7.7 \\ 8.7 \\ 7.7 \\ 8.7 \\ 7.7 \\ 9.2 \\ 7.7 \\ 6.3 \\ 8.7 \\ 7.7 \\ 9.2 \\ 7.7 \\ 6.3 \\ 8.7 \\ 7.7 \\ 9.2 \\ 7.7 \\ 9.2 \\ 7.7 \\ 9.2 \\ 7.7 \\ 9.2 \\ 7.7 \\ 9.2 \\ 7.7 \\ 9.3 \\ 9.3 \\ 9.3 \\ 9.4 \\$	26,6 33,7 6,3 5,6 5,1 11,8 10,7 9,8 16,7 15,2 21,4,0 21,1 19,8 25,1 23,0 21,3 28,6 37,6 9 11,2 10,2 9,3 11,5 11,8 11,9 11,0 11,1 11,0 11,0 11,0 11,0 11,0	20,0 7,4 5,5 142,6 5,5 142,8 5,5 142,8 5,2 14,0 21,4 4,9 3,3 20,4 4,6 12,7 19,5 4 4,1 12,1 18,7 4,2 3,6 11,8,8 25,8 9,8 17,8 24,6 3,1 7,0 23,5 8,8 16,2 22,4 5,1 4,7 22,4 4,1 13,3 20,3 4,4 4,1 13,3 20,3 4,4 4,1 13,1 8,7 25,6 19,4 4,4 4,1 13,1 8,7 25,6 19,4 4,1 13,1 8,7 25,6 12,4 4,1 13,1 8,7 25,6 12,4 4,1 13,1 8,7 25,6 12,4 4,4 1,1 12,2 3,3 18,7 12,5 16,9 23,3 3,3 18,7 12,3 8,3 8,3 12,3 8,3 8,3 8,3 8,3 8,3 8,3 8,3 8,3 8,3 8	420 380 255 283 311 271 299 327 287 315 343 303 311 359 347 375 383 270 298 326 286 286 286 286 314 342 302 330 351 351 351 351 361 361 361 361 361 361 361 36	17-	$egin{array}{cccccccccccccccccccccccccccccccccccc$	51,0 47,6 78,8 71,1,1 64,8 74,2 67,3 61,6 70,1 63,9 56,4 60,9 56,1,1 74,4 67,6 61,8 70,3 64,1 56,3 63,3 54,0 70,6 64,4 73,6 66,9 66,9 66,9 66,9 66,9 66,1 63,9 66,1 63,9 66,1 63,9 66,1 63,9 66,1 63,9 66,1 63,9 66,1 63,9 66,1 66,9 66,9 66,9 66,1 66,9 66,9 66		19,7 18,2 16,8 6,1 5,5 5,0 11,5 10,4	7,0 13,1 5,4 14,6 22,2 5,1 13,9 21,1 4,8 13,2 20,2 4,6 12,5 19,3 10,5 25,4,7 17,6 24,3 9,1 16,8 23,2 8,7 16,0 22,2 14,5 12,5 11,1 13,8 23,2 14,5 16,0 22,5 16,1 16,0 22,5 16,1 16,0 22,5 16,1 16,1 16,1 16,1 16,1 16,1 16,1 16	400 428 259 287 315 275 303 331 291 347 307 335 363 323 399 274 302 330 290 318 346 362 322 350 37 365 363 321 349 367 367 367 367 367 367 367 367 367 367
y –	00,		,-	-,-					1	- 1	1	

78.2 %

C-H-O-N	C º/0	H º/ ₀	0 %	N º/0	M.G.	C-	-HON	C º/o	H º/ ₀	0 %	N º/0	M. G.
18-11-5-5	57,3	2,9	21,2	18,6	377	18	-14-1-4	71,5	4,6	5,3	18,6	302
6-1	64,1	3,3	28,5	4,1	337		6	65,5	4,2	4,8	25,4	330
3	59,2	3,0	26,3	11,5	365		2-2	74,5	4,8	11,0	9,7	290
5	54,9	2,8	24,4	17,8	393		4	67,9	4,4	10,1	17,6	318
7-1	61,2	3,1	31,7	4,0	353		6	62,4	4,0	9,2	24,3	346
3	56,7	2,9 2,7	29,4	11,0	381		3-2	70,6	4,6	15,7	9,1	306
5 81	52,8 58,5	3,0	27,4 34,7	17,1 3,8	409 369		6	64,7	4,2	14,4	16,7 23,2	334 362
3	54,4	2,8	32,2	10,6	397		4-2	67,1	4,3	19,9	8,7	322
5	50,8	2,6	30,1	16,5	425		4	61,7	4,0	18,3	16,0	350
18-12-1-2	79,4	4,4	5,9	10,3	272		6	57,1	3,7	16,9	22,2	378
4	72,0	4,0	5,3	18,7	300		5-2	63,9	4,1	23,7	8,3	338
6	65,8	3,7	4,9	25,6	328		4	59,0	3,8	21,9	15,3	366
2-2	75,0	4,2	11,1	9,7	288		6	54,8	3,5	20,3	21,3	394
4 6	68,4	3,8	10,1	17,7 24,4	316		6-2 4	61,0	3,9	27,1 25,1	7,9	354 382
3-2	71,1	3,9	15,8	9,2	304		6	52,7	3,4	23,4	20,5	410
4	65,1	3,6	14,5	16,8	332		7-2	58,4	3,8	30,3	7,5	370
6	60,0	3,3	13,3	23,3	360		82	56,0	3,6	33,2	7,2	386
4-2	67,5	3,7	20,0	8,7	320	18	-15-1-1	82,8	5,7	6,1	5,4	261
4	62,1	3,4	18,4	16,1	348		3	74,7	5,2	5,5	14,5	289
6	57,4	3,2	17,0	22,3	376		5 2—1	68,2	4,7	5,0	22,1 5,1	317 277
5—2 4	64,3 59,3	3,6	23,8 22,0	8,3 15,4	336		3	70,8	5,4	10,5	13,8	305
6	55,1	3,1	20,4	21,4	392		5	64,9	4,5	9,6	21,0	333
6-2	61,4	3,4	27,3	7,9	352		3-1	73,7	5,1	16,4	4,8	293
4	56,8	3,2	25,3	14,7	380		3	67,3	4,7	14,9	13,1	321
6	52,9	2,9	23,5	20,6	408		5	61,9	4,3	13,8	20,0	349
.7-2	58,7	3,3	30,4	7,6	368		4-1	69,9	4,8	20,7	4,5	309
4	54,5	3,0	28,3	14,1	396 424		3	64,1 59,2	4,4	19,0	12,5	365
6	*50,9 47,8	2,8	26,4 24,8	$ 19,8 \\ 24,8 $	452		5-1	66,5	4,6	24,6	4,3	325
8—2	56,2	3,1	33,3	7,3	384		3	61,2	4,2	22,7	11,9	353
. 4	52,4	2,9	31,0	13,6	412		5	56,7	3,9	21,0	18,4	381
6	49,1	2,7	29,1	19,1	440		6-1	63,3	4,4	28,2	4,1	341
8	46,2	2,6	27,3	23,9	468		3	58,5	4,1	26,0	11,4	369 397
12-4	45,4	2,5	40,3	11,8	476	10	1612	54,4 78,3	3,8	24,2 5,8	17,6	276
15-6	39,1 83,4	2,2	$\begin{vmatrix} 43,5\\6,2 \end{vmatrix}$	15,2	552	19	1612 4	71,0	5,3	5,3	18,4	304
18-13-1-1	75,2	5,0	5,6	5,4	287		6	65,1	4,8	4,8	25,3	332
5	68,6	4,1	5,1	22,2	315		2-2	74,0	5,5	10,9	9,6	292
2-1	78,5	4,7	11,6	5,1	275		4	67,5	5,0	10,0	17,5	320
3	71,3	4,3	10,6	13,8	303		6	62,1	4,6	9,2	24,1	348
5	65,2	3,9	9,7	21,1	331		32	70,1 64,3	5,2	15,6 14,3	9,1	336
3-1	74,2 67,7	4,5	16,5	4,8	291 319		6	59,3	4,4	13,2	23,1	364
3 5	$\begin{vmatrix} 67,7\\62,2 \end{vmatrix}$	4,1 3,7	$\begin{vmatrix} 15,0\\13,8 \end{vmatrix}$	20,2	347		4-2	66,7	4,9	19,7	8,6	324
4-1	70,4	4,2	20,8	4,6	307		4	61,3	4,5	18,2	15,9	352
3	64,5	3,9	19,1	12,5	335		6	56,8	4,2	16,8	22,1	380
5	59,5	3,6	17,5	19,3	363		5-2	63,5	4,7	23,5	8,2	340
5-1	66,9	4,0	24,8	4,3	323		4	58,7	4,3	21,7 $20,2$	15,2 21,2	396
3	61,6	3,7	22,8	11,9	351		6 6—2	54,5	4,0	26,9	7,9	356
5	57,0	3,4	$\begin{vmatrix} 21,1\\28,3 \end{vmatrix}$	18,5	379		4	56,3	4,1	25,0	14,6	384
6-1	58,9	3,8	26,3 $26,2$	11,4	367		6	52,4	3,9	23,3	20,4	412
5	55,5	3,3	24,3	17,7	395		7-2	58,1	4,3	30,1	7,5	372
7-1	60,8	3,7	31,6	3,9	355		4	54,0	4,0	28,0	14,0	400 428
3	56,4	3,4	29,2	11,0	383		6	50,5	3,7	26,2 33,0	19,6 7,2	388
18—14—1—2	78,8	5,1	5,8	10,2	274		8-2	100,1	7,1	00,0	1 ,2	1

		1			1	1					1		
C-H-O-N	C º/ ₀	H ⁰ / ₀	O º/o	N º/0	M.G.	.C-	н-	-ON	C º/o	H ⁰ / ₀	O º/o	N º/0	M.G.
18—16—8—4	51,9	3,8	30,8	13,5	416	18-	-19	-6-1	62,6	5,5	27,8	4,1	345
10-6	48,7	3,6	28,8	18,9 17,6	444			3 5	57,9	5,1	25,7 23,9	11,3 17,5	373 401
18-17-1-1	82,1 74,2	6,5 5,8	6,1	5,3	263 291	18-	-20	-1-2 4	77,1	7,1 6,5	5,7 5,2	10,0	280 308
5	67,7	5,3	5,0	21,9	319			6	64,3	5,9	4,8	25,0	336
2— ½ 3	77,4	6,1 5,5	11,5	5,0 13,7	279 307			2-2 4	73,0 66,7	6,7	10,8 9,9	9,5	296 324
5	64,5	5,1	9,5	20,9	335			6	61,4	5,7	9,1	23,8	352
3-1	73,2 66,9	5,8 5,3	16,3 14,8	4,7 13,0	295 323			3-2 4	69 ,2 63 , 5	6,4	15,4 14,1	9,0 $16,5$	312 340
5 41	61,6	4,8 5,5	13,7 20,6	19,9 4,5	351 311			6 4-2	58,7	5,4 6,1	13,0 19,5	22,8 8,5	368 3 2 8
.3	63,7	5,0	18,9	12,4	339			4	60,7	5,6	18,0	15,7	356
5 5—1	58,9	4,6 5,2	17,4 24.5	19,1 4,3	$\frac{367}{327}$			6 5—2	56,2 62,8	5,2 5,8	16,7 23,3	21,9 8,1	384 344
3 5	60,8	4,8 4,4	22,5 20,9	11,8 18,3	355 383			4	58,1	5,4 5,0	21,5	15,0	372
6-1	62,9	5,0	28,0	4,1	343			6-2	54,0	5,6	20,0 $26,6$	21,0 7,8	400 360
3 5	58,2 54,1	4,6 4,3	25,9 $24,0$	11,3 17,5	371 399			4 6	55,7	5,1	$24,7 \\ 23,1$	$\begin{vmatrix} 14,4\\20,2 \end{vmatrix}$	388 416
71 3	60,2	4,7	31,2	3,9	359			7-2	57,4	5,3	29,8	7,4	376
10-3	55,8 49,7	4,4 3,9	28,9 36,8	10,8	387 435			4 6	53,5	4,9 4,6	27,7 25,9	13,9 19,5	$\frac{404}{432}$
18—18—1—2	46,6 77,7	3,7 6,5	34,6 5,7	15,1 10,1	463 278			8-2	55,1 51,4	5,1 4,8	32,7 30,5	7,1 13,3	39 2 420
4	70,6	5,9	5,2	18,3	306			6	48,2	4,5	28,6	18,6	448
6 2—2	64,7 73,5	5,4 $6,1$	4,8 10,9	25,1 9,5	334 2 94			10-2	50,9	4,7 4,2	37,8 33,3	6,6 17,5	424 480
4 6	67,1 61,7	5,6 $5,1$	9,9 9,1	17,4 24,0	322 350	18	91	$12-2 \\ -1-1$	47,4 80,9	4,4 7,9	42,1 6,0	6,1 5,2	$\frac{456}{267}$
3-2	69,7	5,8	15,5	9,0	310	10-	21	3	73,2	7,1	5,4	14,2	295
4 6	63,9 59,0	5,3 4,9	14,2 13,1	16,6 22,9	338 366			5 2—1	66,9	6,5 7,4	4,9 11,3	21,7 4,9	323 283
4—2 4	66,3	5,5 5,1	19,6 18,1	8,6 15,8	326 354			3 5	69,4	6,8 6,2	10,3	13,5	31 1 339
6	56,6	4,7	16,7	22,0	382			3-1	72,2	7,0	9,4 $16,0$	$20,6 \ 4,7$	299
5—2 4	63,1 58,4	5,3 4,9	23,4 21,6	8,2 15,1	342 370			3 5	$\begin{bmatrix} 66,1\\ 60,9 \end{bmatrix}$	$\begin{bmatrix} 6,4 \\ 5,9 \end{bmatrix}$	14,7 13.5	12,8 19,7	327 355
6-2	54,3 60,3	4,5	20,1 26,8	21,1	398			4 - 1	68,6	6,7	20,3	4,4	315
4	55,9	5,0 4,7	24,9	7,8 14,5	358 386			3 5	63,0 58,2	$\begin{bmatrix} 6,1 \\ 5,6 \end{bmatrix}$	18,6 17,2	12,2 18,9	343 371
6 84	52,2 51,7	4,3 4,3	23,2 30,6	20,3 13,4	414 418			5—1 3	65,3 60,2	6,3 5,8	24,2 22,3	4,2	331 359
18-19-1-1	81,5 73,7	7,2 6,5	6,0 5,5	5,3	265			5	55,8	5,4	20,7	18,1	387
5	67,3	5,9	5,0	14,3 21,8	293 321			6—1 3	62,3 57,6	6,0 5,6	27,7 25,6	4,0 11,2	347 375
2—1 3	76,8 70,0	6,8 6,1	11,4 10,3	5,0 13,6	281 309			5 7—3	53,6 55,2	5,2 5,4	23,8 28,6	17,4 10,7	.403 391
5	64,1	5,6	-9,5	20,8	337	10		8-11	21,6	2,1	60,9	15,4	999
3-1	72,7 66,5	6,4 5,8	16,2 14,8	$\frac{4,7}{12,9}$	297 325	18	-22-	$egin{array}{ccc} -1-2 & & \ & 4 & \end{array}$	76,6 69,7	7,8 7,1	5,7 5,1	9,9	282 310
5 4—1	61,2 69,0	5,4 6,1	13,6 20,4	19,8	353 313			6 2-2	63,9 72,5	6,5 7,4	4,7	24,8	338
3	63,3	5,6	18,8	12,3	341			4	66,3	6.7	10,7	9,4 17,2	298 326
5 5—1	58,5 55,7	5,1 5,8	17,3 24,3	19,0	369 329			3-2	61,0	6,2 7,0	9,0 15,3	23,7 8,9	354 314
'3 5	60,5 56,1	5,3	22,4	11,8 18,2	357 385			4	63.2	6,4	14,0	16,4	342
	00,1	1,0	20,0	10,2	909			6	58,4	5,9	13,0	22,7	370

C-H-O-N	C º/0	H ⁰ / ₀	O º/0	N º/o	M. G.	С—Н-	-O-N	C°/0	H º/0	O º/o	N º/0	M.G.
18-22-4-2	65,5	6,6	19,4	8,5	330	18-25		59,5	6,9	22,0	11,6	363 391
4	60,3	6,1 5,7	17,9 16,6	15,6 $21,7$	358		5 6—1	55,2	6,4 $7,1$	20,5 $27,3$	17,9	351
5-2	62,4	6,4	23,1	8,1	346	18-26	3-1-2	75,5	9,1	5,6	9,8	286
4	57,7 53,7	5,9	$\begin{vmatrix} 21,4\\19,9 \end{vmatrix}$	15,0 20,9	374		4 6	68,8	8,3 7,6	5,1	17,8	314 342
6-2	59,7	6,1	26,5	7,7	362		2-2	71,5	8,6	10,6	9,3	302
4 6	55,4	5,6 5,3	24,6 22,8	$\begin{vmatrix} 14,4\\20,1 \end{vmatrix}$	390 418		4 6	65,5	7,9 7,3	9,7	$\begin{vmatrix} 16,9\\23,5 \end{vmatrix}$	330 358
8-2	54,8	5,6	32,5	7,1	394		3-2	67,9	8,2 7,5	15,1	8,8	318
18-23-1-1	80,3	8,6	5,9	5,2	269 297		4 6	62,4	6.9	$\begin{vmatrix} 13,9\\12,9 \end{vmatrix}$	16,2 22,4	346 374
3 5	66,5	7,1	5,4	21,5	325		4-2	64,7	7,8 7,2 6,7	19,1	8,4	334
2-1	75,8	8,1	$\begin{vmatrix} 11,2\\10,2 \end{vmatrix}$	4,9	285		4 6	59,7	7,2	17,7	$\begin{array}{c c} 15,4 \\ 21,5 \end{array}$	362
3 5	$\begin{vmatrix} 69,0 \\ 63,4 \end{vmatrix}$	7,3	9,4	$\begin{vmatrix} 13,4\\ 20,5 \end{vmatrix}$			82	54,2	6,6	+32,2	7,0	398
3-1	71,8	7,6	16,0	4,6	301	18—2	27—1—1 3	79,1	9,9	5,9	$\begin{array}{c c} 5,1\\ 13,9 \end{array}$	273
3 5	65,6	7,0	14,6 $ 13,4$		329 357		5	65,7	8,2	4,8	$3 \mid 21,3$	329
4-1	68,2	7,2	20,2	4.4	317		$2-1 \\ 3$	74,7 68,1	9,3	$\begin{bmatrix} 11, 1 \\ 10, 1 \end{bmatrix}$		289
3 5	$\begin{vmatrix} 62,6\\ 57,9 \end{vmatrix}$		18,6	12,2	345		5	62,6	7,8	9,5	20,3	345
5—1	64,9	6,9	24,0	4,	2 333		3-1	70,8		3 15,7 14,4		
3 5	59,8		22,2				5 5	59,8	7,4	$\lfloor 13,4 \rangle$	4 19,4	361
6-1	61,9	0 + 6.6	27,5	4,0	349		4-1		8,4	119,9		
7—1 18—24—1 — 2	59,2	6,3	30,7		$ \begin{array}{c c} 3 & 365 \\ \hline 9 & 284 \\ \end{array} $		3 5		7,1	17,	0 18,6	377
18241 - 2		2 7,7	5,1	18,	312		14-1	44,9	5,6	6 46,	$6 \mid 2,9$	481 288
6	63,	5 7,0	4,7		7 340 3 300		28—1—2 4	1 0 0		9 5,	1 17,7	316
$2-2 \\ 4$	65.8	$3 \mid 7.3$	$\begin{vmatrix} 10, 7 \\ 9, 7 \end{vmatrix}$	7. 17,	1 3 2 8		. 6	62,8	8,	1 4,	$6 \mid 24,4$	1 344
6	60,	7 6,7	9,0) 23,	6 356		2 —2		9,5	$\begin{bmatrix} 2 & 10, \\ 4 & 9, \end{bmatrix}$	6 16,9	332
32 4			15,3		$\frac{3}{3}$. 6	60,0	7,	8 8,		
6	58,	1 6.4	. 12,	$9 \mid 22,$	$6 \mid 372$		32			$ \begin{array}{c c} 7 & 15, \\ 0 & 13, \end{array} $	8 16,	1 348
4 2			$\begin{array}{c c} & 19, \\ & 17, \end{array}$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$			(3 57,4	1 7,	4 12,	8 22,	3 376
6	55,	$7 \mid 6,2$	$2 \mid 16,$	5 21,	6 388		4-2	2 64,3 1 59,3		$ \begin{array}{c c} 3 & 19, \\ 7 & 17, \\ \end{array} $		
52 			$egin{array}{c c} 23, \ 21, \ \end{array}$	$ \begin{array}{c c} 0 & 8 \\ \hline 3 & 14 \end{array} $			($3 \mid 55,$	1 7,	1 16	3 21,	4 392
(53,	5 5,9	19,	8 20	8 404			2 54,0 1 50,1			9 13,	1 428
6—2	1 7 1	1 6.1	1 24.		$\begin{bmatrix} 7 & 364 \\ 3 & 392 \end{bmatrix}$	2	10-	2 50,	$0 \mid 6$	5 37	0 6,	5 432 1 275
(3 51	4 5,	7 22,	8 20	$,0 \mid 420$	_		1 78, 3 71,	$ \begin{array}{c c} 5 & 10, \\ 3 & 9. \end{array} $	$\begin{bmatrix} 5 \\ 6 \end{bmatrix} \begin{bmatrix} 5 \\ 5 \end{bmatrix}$	2 13	8 303
8-3 $18-25-1$		$\begin{bmatrix} 5 & 6, \\ 7 & 9, \end{bmatrix}$	$\begin{bmatrix} 1 & 32, \\ 2 & 5, \end{bmatrix}$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$,1 396 ,2 2 71			5 65,	$3 \mid 8$	7 4	,8 21,	1 331
	3 72	2 8,	4 5,	3 14	.0 + 299	9	2-	1 74, 3 67,	2 9 9	$ \begin{array}{c c} 9 & 11 \\ 1 & 10 \end{array} $		$ \begin{array}{c c} 8 & 291 \\ 2 & 319 \end{array} $
2—	5 66 1 75	3 8	$ \begin{array}{c c} 6 & 4 \\ 7 & 11 \end{array} $	$\begin{array}{c c} 9 & 21 \\ 1 & 4 \end{array}$	$\begin{array}{c c} ,4 & 32 \\ ,9 & 28 \end{array}$			5 62.	2 8	$.4 \mid 9$	$, 2 \mid 20,$	2 347
	3 68	,6 7,	9 10	2 13	$,3 \mid 31$	5		1 70, 3 64,	$ \begin{vmatrix} 3 & 9 \\ 5 & 8 \end{vmatrix} $,4 15 ,7 14	$3 \mid 12$	5 335
3	5 63	,0 $7,$ 3 $8,$	$\begin{bmatrix} 3 & 9 \\ 2 & 15 \end{bmatrix}$	$\frac{3}{8} \begin{vmatrix} 20 \\ 4 \end{vmatrix}$	$\begin{array}{c c} ,4 & 34 \\ ,6 & 30 \end{array}$			5 59,	5 8	,0 13	,2 19	3 363
	3 65	$,3 \mid 7,$	$\begin{bmatrix} 13 \\ 5 \end{bmatrix}$,5 12	,7 33	1	4-	1 66, 3 61,	$\frac{9}{6}$ $\frac{9}{8}$,0 19 ,3 18	,8 4 ,2 11	
	5 60	.2 6,	9 13		5 35 4 31			5 57,	0 7	6 16	,9 18	5 379
	1 67 3 62	$.2 \mid 7.$	2 18	$\frac{7}{4}$ 12	1 34	7 18-		2 74, 4 67,	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	$,3 \mid 5 \ ,4 \mid 5 \ $	$\begin{array}{c c} 5 & 9 \\ 0 & 17 \end{array}$	6 318
	5 57	,6 6,	6 17	$\begin{bmatrix} 18 \\ 9 \end{bmatrix}$	$\begin{array}{c c} 3,7 & 37 \\ 2,2 & 33 \end{array}$			6 62,	,4 8	,7 4	,6 24	
5	1 64	,0 1,	1 20	,	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	1		1			1	

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C-H-O-N	C %	H º/ ₀	O º/0	N º/0	M.G.	C-	-H-	-O-N	C º/0	H °/ ₀	O º/o	N º/0	M.G.
18-30-2-2	70,6	9,8	10,4	9,1	306	18.	_34	-3-6	56,6	8,9	195	1000	200
4	64,7	9,0	9,6	16,7	334		-01	$-3-0 \\ 4-2$	63,2	9,9	12,5 8,2	22,0	382 342
6	59,7	8,3	8,8	23,2	362			4	58,4	9,2	17,3	15,1	370
3-2	67,1	9,3	14,9	8,7	3 2 2			6	54,3	8,5	16,1	21,1	398
4	61,7	8,6	13,7	16,0	350	18	-35	-1-1	76,8	12,4	5,7	5,0	281
6	57,1	7,9	12,7	22,2	378			, 3	69,9	11,3	5,2	13,6	309
4-2	63,9	8,9	18,9	8,3	338			5	64,1	10,4	4,7	20,8	337
4 6	59,0	8,2 7,6	17,5	15,3	366			2-1	72,7	11,8	10,8	4,7	297
12-2	46,4	6,4	16,2 $41,2$	21,3	394 466			3	66,5	10,8	9,8	12,9	325
18-31-1-1	78,0	11.2	5,8	5,0	277			3—1	61,1	9,9	9,1	19,8	353
3	70,8	11,2 10,2 9,3	5,2	13,8	305			3	63,3	11,2	15,3 14,1	12,3	313 341
5	64,9	9,3	4,8	21,0	333			5	58,5	9,5	13,0	19,0	369
2-1	73,7	10,6	10,9	4,8	293			4-1	65,7		19,5	4,2	329
3	67,3	9,6	10,0	13,1	321			. 3	60,5	9,8	17,9	11,8	357
5	62,0	8,9	9,1	20,0	349			- 5	56,1	9,1	16,6	18,2	385
3-1	69,9	10,0	15,5	4,5	309	18-	-36		73,0	12,2	5,4	9.4	296
3	64,1	9,2	14,2	12,5	337			4	66,7	11,1	4,9	17,3	324
5 4–1	59,2	8,5 9,5	13,1 19,7	19,2 4,3	365 325			6	61,4	10,2	4,5	23,9	35 2
3	61,2	8,8	18,1	11,9	353			2-2	69,2	11,5	10,3	9,0	312
5	56,7	8,1	16,8	18,4	381			6	63,5	10,6	9,4 8,7	16,5	340
5—1	63,3	9,1	23,5	4,1	341			3-2	65,9	11,0	14,6	22,5 8,5	368 328
3	58,5	8,4	21,7	11,4	369			4	60,7	10,1	13,4	15,7	356
5	54,4	7,8	20,1	17,6	397			6	56,2	9,3	12,5	21,9	384
18-32-1-2	74,0	10,9	5,5	9,6	292			4-2	62,8	10,5	18,6	8,1	344
4	67,5	10,0	5,0	17,5	320			4	58,0	9,7	17,2	15,0	372
6 2—2	62,1	9,2	4,6	24,1	348			6	54,0	9,0	16,0	21,0	400
4	70,1	10,4	10,4	9,1	308	18-	_ 3 7-	-1-1	76,3	13,1	5,6	4,9	283
6	59,3	8,8	9,5	$16,7 \mid 23,1 \mid$	336 364			3	69,4	11,9	5,1	13,5	311
3-2	66,7	9,9	14,8	8,6	324			5 2—1	63,7	10,9	4,7	20,7	339
4	61,4	9,1		15,9	352			- 3	72,2	12,4 11,3	10,7 9,8	4,7 12,8	299 327
. 6	56,8	8,4	12,6	22,1	380			5	60,8	10,4	9,0	19,7	355
4-2	63,5	9,4	18,8	8,2	340.			3-1	68,6	11,7	15,2	4,4	315
4	58,7	8,7	17,4	15,2	368			3	63,0	10,8	14,0	12,2	343
6	54,5	8,1	16,2 31,7	21,2	396			5	58,2	10,0	12,9	18,9	371
8—2 18—33—1—1	53,5 77,4	7,9	51,7	6,9	404	18-	-38-		72,5	12,7	5,4	9,4	298
3	70,3	10,7	5,7 5,2	5,0	279 307			. 4	66,3	11,6	4,9	17,2	326
5	64,5	9,8		20,9	335			6 2—2	61,0	10,7	4,5	23,7	354
2-1	73,2	11,2	10,8	4,7	295			4	68,8 63,2	12,1	10,2	8,9	314 342
3	66,9	10,2		13,0	323	,		- 6	58,4	10,3	8,6	$\frac{16,4}{22,7}$	370
5	61,6	9,4	9,1	19,9	351	18-	40-		40,9	7,6	33,3	18,2	528
3-1	66,4	10,6	15,4	4,5	311	19 -	10-	-116 -64	58,4	2,6	24,6	14,4	390
- 3	63,7			12,4	339			11 /	48.5	2,1	37,5	11,9	470
5 4—1	58,8	9,0	13,1	19,1	367	19-	-11-	$ \begin{array}{c} 11 - 4 \\ -1 - 1 \\ 2 - 1 \\ 3 - 1 \end{array} $	84,7	4.1	5.9	5,2	269
3	60.8	10,1	19,6	4,3	327			2-1	80,0	3,9	11.2 +	4,9	285
5	60,8 56,4			11,8 18,3	355 383			3-1	75,7	3,7		4,6	301
10-3	47,3	7,2		10,5	457			$\begin{array}{c} 3 \\ 4-1 \end{array}$	69,3	3,3	14,6	12,8	329
18-34-1-2	73,5	11,6	5,4	9,5	294			3	66,1		20,2 18,5	4,4 12,2	317 345
. 4	67,1	10,6	5,0	17,3	322	19_	-12-	-1-2	49,6	2,6	41,7	6,1	460
6	61,7	9,7	4,6	24,0	350		:	4	73,1	3,8	5,1	17,9	312
2-2		11,0	10,3	9,0	310			2-2	76,0	4,0	10,7	9,3	300
4 6	63,9 59,0	10,1	9,5	16,5	338			3-2	72,2	3,8	15,2	8,8	316
3-2		9,3	8,7	22,9	366			4-2	68,7	3,6	19,3	8,4	332
4	61,0	9,6	14,7 13,6	8,6	326 354			4	63,3	3,3	17,8	15,6	360
	,,0	0,0	,0	15,8	304			5-2	65,5	3,4	23,0	8,0	348

C-H-O-N	C º/o	H ⁿ / ₀	O º/o	N °/0	M.G.	C-	-H-	-O- N	C º/o	H °/ ₀	0 %	N °/0	M.G.
19—12—5—6	56,4	3,0	19,8	20,8	404	19-	-15	-4 - 3	65,3	4,3	18,3	12,0	349
6-2	62,6	3,3	26,4	7,7	364			5	60,5	4,0	17,0	18,5	377
8-2 4	57,6 53,8	3,0 2,8	32,3 30,2	7,1 13,2	396 424			51 3	67,6	4,4	23,7 21,9	4,2 11,5	337 365
9-2	55,3	2,9	34,9	6,8	412			5	58,0	3,9	20.3	17,8	393
10-2	53,3	2,8	37,4	6,5	428			6-1	64,6	4,2	27,2 25,2	4,0	353 381
19-13-1-1	84,1 76,3	4,8 4,3	5,9 5,4	5,2	271 229			3 5	59,8	3,9	23,4	11,0	409
2-1	79,4	4,5	11,1	4,9	287			7-1	61,8	4,1	30,3	3,8	369
3	72,4 66,5	4,1	10,2 9,3	13,3	315			$8-1 \\ 12-1$	59,2 50,8	3,9	33,2 42,7	3,6	385 449
5 3—5	63,5	3,8	13,4	19,5	343 359	19	_16		79,2	5,5	5,5	9.7	288
4-1	71,5	4,1	20,0	4,4	319			4	72,2	5,0	5,0	17,7	316
5—1	68,0	3,9	23,9	4,2	335			2-2	56,3 75,0	4,6 5,3	4,6 10,5	24,4 9,2	344 304
3	62,8 58,3	3,6	$\begin{vmatrix} 22,0\\20,5 \end{vmatrix}$	11,6 17,9	391			4	68,7	4,8	9,6	16,9	332
6-1	65,0	3,7	27,3	4,0	351			6	63,3	4,4	8,9	23,3	360
3	60,1	3,4	25,3 23,6	11,1	379 407			3-2	71,2 65,5	5,0	15,0 13,8	8,7	320 348
5 7—1	56,0 62,1	3,5	30,5	3,8	367			6	60,6	4,2	12,8	22,3	376
3	57.7	3,3	28,3	10,6	395			4-2	67,8	4,8	19,1	8,3	336
5 8—1	53,9	3,1	26,5 33,4	16,5 3,6	423 383			4 6	62,6 58,2	4,4	17,6 16,3	$\begin{vmatrix} 15,4\\21,4 \end{vmatrix}$	364 392
3	59,5	3,2	31,1	10,2	411			5-2	64,8	4,5	22,7	7,9	352
. 5	51,9	3,0	29,1	16,0	439			4	60,0	4,2	21,1	14,7	380
9—1 3	57,1	3,3	$\begin{vmatrix} 36,1\\ 33,7 \end{vmatrix}$	3,5	399 427			6 6—2	55,9	3,9	19,6 26,1	$\begin{vmatrix} 20,6 \\ 7,6 \end{vmatrix}$	408 368
5	53,4	3,0	31,6	15,4	455			4	57.6	4,0	24,2	14,1	396
19-14-1-2	79,7	4,9	5,6	9,8	286			6	53,8	3,8	22,6		424 275
4 6	$\begin{vmatrix} 72,6\\66,7 \end{vmatrix}$	4,4	5,1	17,8 24,5	314	18)1'	7-1-1	82,9 75,2	6,2 5,6	5,8 $5,3$	$\begin{vmatrix} 5,1\\13,9 \end{vmatrix}$	303
2-2	75,5	4,1	10,6	9,3	302			5	68,9	5,1	4,8	21,2	331
4	69,1	4,2	9,7	17,0	330			2-1	78,3	5,8	11,0		291 319
6 3 —2	63,7	3,9	8,9		358			. 3	71,5 65,7	5,3	9,2	20,2	347
4	65,9	4,0	13,9	16,2	346			3-1	74,3	5,5	15,6	4,6	307
6	61,0	1 3,7	12.8	+22.5	374			3 5	68,1 62,8	5,1	14,3 13,2	12,5 $ 19,3$	335
$egin{array}{c} 4-2 \ 4 \end{array}$	68,2	4,2 3,9	19,2 17,7	8,4				4-1	70,6		19,8	4,3	323
6	58,5	3,6	16,4	21.5	390			3	65,0	4,8	18,2	12,0	351
5-2	65,1	4,0	22,9	8,0				5 5—1	$\begin{vmatrix} 60,1\\ 67,3 \end{vmatrix}$	4,5	16,9 $23,6$	18,5	379
4 6	60,3 $ 56,1 $	3,7	$\begin{vmatrix} 21,2\\19,7 \end{vmatrix}$	$\begin{vmatrix} 14,8\\20,7 \end{vmatrix}$	378			3	62,1	4,6	21,8	11,4	367
• 6—2	62,3	3,8	26,2	7,6	366			5	57,7	4,3	20,2	17,7	395 355
4	57,8	3,6	24,4	14,2	394	1		$6-1 \\ 3$	64,2		27,0 25,1		
6 8	54,0		22,7 $21,3$	19,9 25,0				5	55,5	4,1	23,4	17,0	411
10	57,7	2,9	20,1	29,3	478	1		7-1	61,4		30,2		
7-2	57,7 59,7	2,9 3,7	29,3	7,9	382 273			3	57,1	4,3 4,0	$\begin{vmatrix} 28,1\\ 26,2 \end{vmatrix}$		10-
19-15-1-1	83,5	$\begin{array}{c c} 5,5 \\ 5,0 \end{array}$	5,9	$0 \mid 5,1$ $3 \mid 14,0$				12-5	45,0	3,4	37,8	13,8	507
5	69,3	4,6	4,8	21,3	329			13-1	48,8	3,6	44,5		
2-1	78,9	5.2	11,0) 4,8	8 289	19	18	$8-1-2 \\ 4$	$ \begin{array}{c} 78,6 \\ 71,7 \end{array}$	6,2 5,7	5,0		318
3 5	71,9		10,1		2 317 3 345			6	65,9	5,2	4,6	24,3	346
3-1	74,7	4,9	15,7	$' \mid 4,6$	305			2-2	74,5		10,4		
3	68,4	4,5	14,4	12,7				4.6					
5 4—1	63,1		$\begin{vmatrix} 13,3\\19,9 \end{vmatrix}$					3-2					
4-1	. 2,0	x, 1	120,0			1			ŀ	1	1	1	

C-H-O-N	C º/ ₀	H º/ ₅	O º/0	N º/o	M.G.	.C-	н-	-O- N	C º/0	H ⁰ / ₀	O º/o	N º/0	M.G.
19-18-3-4	65,1	5,1	13,7	16,1	350	19-	-21	_4_3	64,2	5,9	18,0	11,8	355
6 4—2	60,3	4,8 5,3	12,7 18,9	22,2	378 338			5 5—1	59,5 66,5	5,5	16,7 23,3	18,3	383 343
4	62,3	4,9	17,5	15,3	366			3	61,4	5,7	21,6	11,3	371
6 5—2	57,9	4,6 5,1	16,2 $22,6$	21,3 7,9	394 354			5 6—1	57,1 63,5	5,3 5,8	20,1 26,7	17,5 3,9	399 359
4"	59,7	4,7	20,9	14,7	382			3	58,9	5,4	24,8	10,9	387
6-2	55,6	4,4	19,5 25,9	20,5	410 370			5 9—1	54,9	5,1	23,1	16,9	415 407
7-2	59,1	4,7	29,0	7,6	386			$\frac{9-1}{12-1}$	56,0	5,2 4,6	35,4 42,2	3,4	455
4	55,1	4,3	27,1	13,5	414	19-	-22	-1-2	77,5	7,5	5,4	9,5	294
10-4	49,3	3,9	34,6 36,8	12,1	462 478			4 6	70,8	6,8	$\begin{array}{ c c c c } 5,0 \\ 4,6 \end{array}$	17,4 24,0	322 350
19-19-1-1	82,3	6,8	5,8	5,1	277			2-2	73,6	7,1	10,3	9,0	310
3 5	74,7 68,5	6,2 5,7	5.2 4,8	13,8	305 333			4 6	67,4 $62,3$	6,5	9,5 8,7	16,6 23,0	338 366
2-1	77,8	6,5	10,9	4,8	293			3-2	69,9	6,7	14,7	8,6	326
3 5	71,0 65,3	5,9 5,4	$\begin{vmatrix} 10,0\\ 9,2 \end{vmatrix}$	$\begin{vmatrix} 13,1 \\ 20,1 \end{vmatrix}$	321 349			4 6	64,5	6,1 5,7	13,6 12,6	15,8 22,0	354 382
3-1	73,8	6,1	15,5	4,5	309			4-2	66,7	6,4	18,7	8,2	342
3 5	67,6	5,6 5,2	14,2 13,1	12,5 19,2	337 365	1		4 6	61,6	5,9	17,3 16,1	15,1 21,1	370 398
., 4-1	70,2	5,8	19,7	4,3	325			5-2	63,7	6,1	22,4	7,8	358
3 5	64,6 $ 59,8$	5,4	18,1 16,8	11,9	353 381			4	59,1 55,1	5,7	20,7	14,5 20,3	386 414
5—1	66,9	5,5	23,5	4,1	341			6-2	61,0	5,9	25,6	7,5	374
. 3 5	61,8 $ 57,4 $	5,1	$\begin{vmatrix} 21,7\\20,2 \end{vmatrix}$	11,4	369 397	10.	.99	7-4	54,5 81,1	5,3 8,2	26,8 5,7	13,4 5,0	418 281
6-1	63,9	5,3	26,9	3,9	357	10-		3	73,8	7,4	5,2	13,6	309
8—3 19—20—1—2	54,7 78,0	4,5 6,8	30,7	10,1 9,6	417 292			5 2—1	67,6	6,8	4,8 10,8	20,8	337 297
4	71,3	6,2	5,0	17,5	320			3	70,2	7,1	9,8	12,9	325
6 2—2	65,5	5,7	4,6	$\begin{bmatrix} 24,1\\ 9,1 \end{bmatrix}$	348 308			5 3—1	64,6 72,9	6,5	9,1 15,3	19,8 4,5	353 313
4	67,8	6,0	9,5	16,7	336			3—1	66,9	6,7	14,1	12,3	341
6 32	62,6	5,5 6,2	8,8	23,1	364			5	61,8	6,2	13,0 19,4	19,0	369 329
4	64,8	5,7	13,6	15,9	352			4—1 3	69,3	7,0	17,9	11,8	357
6 4-2	60,0 $67,1$	5,3	12,6 18,8	22,1 8,2	380		•	5-1	66,1	6,7	23,2	4,0	345 377
4	62,0	5,9	17,4	15,2	340 368			7-1 8-1	60,5	6,1 5,8	$\begin{vmatrix} 29,7\\ 32,6 \end{vmatrix}$	3,7	393
6 8	57,6	5,0	16,2	21,2	396	19-	-24		76,9	8,1	5,4	9,5	296
5—2	64,0	4,7 5,6	$ 15,1 \\ 22,5 $	26,4 7,9	424 356			4 6	70,4	7,4	4,9	17,3 23,9	324 352
4	59,4	5,2	20,8	14,6	384			2-2	73,1	7,7	10,2	9,0	312
6 6—2	55,4	5,4	$ 19,4 \\ 25,8 $	20,4	412 372			4 6	$\begin{vmatrix} 67,0\\ 62,0 \end{vmatrix}$	7,1	9,4	16,5 22,8	340 368
7—2 9—6	58,7	5,2	28.9	7.2	388			3-2	69.5	7,3	14,6	8.5	328
19-21-1-1	47,9	4,2 7,5	5,7	17,6 5,0	476 279			4 6	64,0 59,4	6,7	13,5 12,5	15,8 21,9	356 384
3	74,3	6,8	30,2 5,7 5,2	13,7	307			4-2	66,3	7,0	18,6	8,1	344
5 2—1	68,1 77,3	6,2 7,1	4,8 10,8	20,9	335 295			4 6	61,3	6,5	17,2 16,0	15,0 21,0	372 400
3	70,6	6,5	9,9	13,0	323			5-2	63,3	6,7	22,2	7,8	360
5 3—1	65,0 73,3	6,0	9,1 $15,4$	19,9	351			4 6	58,8 54,8	6,2 5,8	20,6 19,2	$\begin{vmatrix} 14,4\\20,2 \end{vmatrix}$	388 416
3	67,3	6,2	14,1	12,4	339			7-2	58,2	6.1	28,6	7,1	392
5 4—1	$\begin{vmatrix} 62,1 \\ 69,7 \end{vmatrix}$	5,7	13,1	19,1	367 327			8—2	54,3 55,9	5,7	26,7	13,3 6,8	420 408
	1	, ,,,	120,0	1,0	021			0-2	33,3	5,9	31,4	1 0,0	400

C-H-O-N	C°/0	H º/o	0%	N º/0	M.G.	C-H-O-N	C,º/0	H º/0	0 %	N º/0	M.G.
19-25-1-1	80,6	8,8	5,7	4,9	283	19-30-2-4	65,9	8,7	9,2	16,2	346
3 5	73,3	8,0	5,1	13,5 20,6	311 339	3-2	61,0	8,0	8,6	22,4 8,4	374 33 4
2-1	67,3 $ 76,2$	8,4	$\frac{4,7}{10,7}$	4,7	2 99	4	63,0	8,3	13,3	15,4	362
3	69,7	7,6	9,8	12,8	327	6	58,4	7,7 6,7	12,3	21,6	390 446
5 3—1	64,2 72,4	7,0	9,0 $15,2$	19,7 4,4	355 315	10-2 $19-31-1-1$	51,1 78,9	10,7	35,9 5,5	6,3	289
3	66,5	7,3	14,0	12,2	343	3	71,9	9,8	5,0	13,3	317
5 4-1	61,4	6,7	12,9 19,3	18,9	371	5 2—1	66,1 74,7	9,0 $10,2$	4,6	20,3	345 305
3	63,5	7,0	17,8	11,7	359	3	68,5	9,3	9,6	12,6	333
5 5—3	58,9 60,8	6,5 6,7	16,5 21,3	18,1	387	$\begin{array}{c} 5 \\ 3-1 \end{array}$	63,1	8,6	8,9 14,9	19,4	361 321
6-3	58,3	6,4	24,6	11,2 10,7	391	3	65,3	8.9	13,8	12,0	349
19-26-1-2	76,5	8,7	5,4	9,3	298 326	5 4-1	60,5	8,2 9,2	12,7 19,0	18,6	377 337
. 4	69,9	8,0	4,9	17,2 23,7	354	5—1	64,5	8,8	22,7	4,0	353
2-2	72,6	8,3	10,2	8,9	314	19-32-1-2	75,0	10,5	5,3	9,2	304
4	66,7	7,6	9,3	16,4 22,7	342	4 6	68,7 63,3	9,6	4,8 4,4	23,3	360
- 3-2	69,1	7,9	14,5	8,5	330	2-2	71,2	10,0	10,0	8,7	320
4	63,7	7,3	13,4 12,4		358	4 6	65,5	9,2 8,5	9,2	$\begin{vmatrix} 16,1\\22,3 \end{vmatrix}$	376
10-4	48,5	5,5	34,0	11,9	470	3-2	67,8	9,5	14,3	8,3	336
12-2	48,1	5,5		5,9	474	4 6	62,6 58,2	8,8	$\begin{vmatrix} 13,2\\12,2 \end{vmatrix}$	15,4 $21,4$	364 392
19-27-1-1 3	80,0	9,5	$\begin{array}{ c c c c c } & 5,6 \\ & 5,1 \\ \end{array}$		313	19-33-1-1	78.3	11,3	5,5	4,8	291
5	66,9	7,9	4,7	20,5	341	3 5	71,5 65,7	10,3	5,0	13,2 20,2	319
2 —1	75,769,3	9,0	10,6	$\begin{vmatrix} 4,7\\12,8 \end{vmatrix}$	301	2-1	74,2	10,7	10,4	. 4,6	307
5	63,9	7,5	9,0	19,6	357	3	68,1	9,8	9,6	$\begin{array}{c c} & 12,5 \\ \hline & 19,3 \end{array}$	335
3-1	71,9	8,5	15,1 $ 13,9$	$\begin{vmatrix} 4,4\\12,2\end{vmatrix}$	317	5 3—1	62,8	9,1	14,9	4,3	323
5	61,1	7,2	12,9	18.8	373	3	65,0	9,4	13,7	11,9	
4-1 5-1	68,5	8,1	$\begin{vmatrix} 19,2\\22,9 \end{vmatrix}$	4,2	333	19-34-1-2	60,1	8,7	5,2	9,1	306
19-28-1-2	65,3		5,3	9,3	300	4	68,2	10,2	4,8	16,8	334
4	69,5	8,5	4,9	17,1	328	6 2-2	62,9	9,4 $20,5$	4,4	$\begin{vmatrix} 23,2\\ 8,7 \end{vmatrix}$	362 322
6 2 2	64,0		$\frac{4}{5}$	$\begin{array}{c c} & 23,6 \\ & 8,9 \end{array}$		4	65,1	9,7	9,1	16,0	350
4	66,3	8,1	9,3	16,3	344	3-2	60,3 67,4	9,0		$\begin{array}{c c} 6 & 22,2 \\ 2 & 8,3 \end{array}$	378
6 3—2	61,8	$\frac{7,5}{2}$	14.5	$5 \mid 8,4$	$\begin{vmatrix} 372 \\ 4 & 332 \end{vmatrix}$	4	62,3	9,3	13,1	15,3	366
4	63,3	7,8	13,3	3 15,6	360	6	57,9 77,8	8,6	$\begin{vmatrix} 12,2\\ 5 & 5,4 \end{vmatrix}$	$\begin{array}{c c} 2 & 21,3 \\ 4 & 4,8 \end{array}$	
6 19 —29—1— 1	58,8	$\frac{3}{4}$ $\frac{7}{10}$	$2\mid 12,4$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$		19-35-1-1	71,0	10,9	5,0) 13,1	321
3	72,4	1 9,2	2 5,1	1 13,3	3 315	5	65,3	10,0	$) \mid 4,6$		
5	66,5	8,4	4,5	$\begin{bmatrix} 20,4\\ 4,6 \end{bmatrix}$	4 343 3 303	2-1		10,4	1 9,5	5 12,5	337
2—1 3	68,9	$9 \mid 8,8$	3 + 9.6	j 12,	7 331	5	62,5	9,6	$3 \mid 8,'$	$7 \mid 19,2 \\ 3 \mid 4,3$	365 325
5	-63,	5 8,	1 8,9	9 19,5	5 359	3-1	70,1	9,9	13,6	$3 \mid 11,9$	353
3—1 3			$ \begin{array}{c c} 1 & 15,0 \\ 4 & 13,0 \end{array} $	$3 \mid 12,$	1 347	19-36-1-2	74,0	11,7	$7 \mid 5,5$	2 9,1	1 308
5	60,8	3 7,'	7 12,8	$3 \mid 18,'$	$7 \mid 375$		67,8	10,5			364
$4-1 \\ 19-30-1-2$			$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{vmatrix} 1 & 4 & 4 \\ 3 & 9 & 9 \end{vmatrix}$	$egin{array}{c c} 2 & 335 \ 2 & 302 \end{array}$	2-2	70,4	11,1	1 9,	$9 \mid 8,6$	$3 \mid 324$
4	69,	1 9,	1 4.8	3 17,	0 330	4	64,8			$egin{array}{c c} 1 & 15,9 \\ 4 & 22,1 \\ \end{array}$	9 352 L 380
6 2 —2			$\begin{bmatrix} 4 & 4, \\ 4 & 10, \end{bmatrix}$	5 23, 1 8,	$egin{array}{c c} 4 & 358 \ 8 & 318 \end{array}$		67,1		3 14,	1 8,2	340
2-2	71,	,	10,	- 0,	0.10			1			'

C-H-O-N	C º/o	H °/ ₀	O º/o	N º/o	M.G.	C-H-O-N	C º/o	H º/ ₀	O º/0	N º/o	M . G.
1936-3-4	62,0	9,8	13,0	15,2	368	20-10-9-6	50,2	2,1	30,1	17,6	478
19-37-1-1	57,6	9,1 $12,5$	12,1 $5,4$	21,2	396	20-10-10-2	54,8	2,3	36,5	6,4	438 466
3	70,6	11,5	4,9	13,0	323	6	48,6	2,0	32,4	17,0	494
$\begin{array}{c} 5 \\ 2-1 \end{array}$	65,0 73,3	10,5	4,6 10,3	19,9	351	$oxed{12-4} 20-11-2-3$	48,2 73,8	2,0 3,4	38,5	11,2 $12,9$	498 325
3	67,3	10,9	9,4	12,4	339	3-1	76,7	3,5	15,3	4,5	313
5	62,1	10,1	8,7	19,1	367	8—3 5	57,0	2,6	30,4	10,0	421
$\frac{3-1}{3}$	69,7	11,3 10,4	14,7 13,5	4,3 11,8	327 355	10-3	53,4	$\frac{2,4}{2,4}$	28,5 35,3	15,6 $9,3$	449 506
5	59,5	9,7	12,5	18,3	383	20-12-1-2	81,1	4,1	5,4	9,4	296
19-38-1-2	73,6 67,5	12,2 11,2	5,2 4,7	9,0	310 338	$\begin{array}{c} 2-2 \\ 3-2 \end{array}$	76,9 73 ,2	3,8	10,3 14,6	9,0	312 3 2 8
6.	62,3	10,4	4,4	22,9	366	4-2	69,7	3,5	18,6	8,1	344
2-2	69,9	11,6	9,8 9,0	8,6 15,8	$\frac{326}{354}$	5—2	64,5 $66,7$	3,2 3,3	17,2 22,2	15,1 7,8	372 360
6	59,7	9,9	8,4	22,0	382	4	61,8	3,1	20,6	14,4	388
3—2 4	66,7	11,1 10,3	14,0	8,2 15,1	342 370	6 6—2	57,7 63,8	2,9 3, 2	19,2 25,5	20,2 7,4	416 376
6	57,3	9,5	12,1	21,1	398	4	59,4	3,0	23,8	13,8	404
19-39-1-1	76,8	13,1 12,0	5,4 $4,9$	4,7 12,9	$\frac{297}{325}$	6 7—2	55,6 61,2	2,8 3,1	22,2 28,6	19,4 7,1	$\frac{432}{392}$
5	64,6	11,0	4,5	19,8	353	4	57,1	2,9	26,7	13,3	420
2—1 3	7 2 ,9 66,9	12,4 11,4	10,2	4,5 12,3	313 341	$egin{array}{c} 6 \\ 8-2 \end{array}$	53,6	2,7	25,0 31,4	18,7	448 408
5	61.8	10,6	9,4 8,7	18,9	369	4	58,8 55,0	2,9 2,8	29,3	6,9 12,8	436
19-40-1-2	73,1 67,0	12,8	5.1	9,0	312	6	51,7	2,6	27,6	18,1	464
4 6	62,0	11,8	4,7 4,3	16,5 22,8	340 368	9-2	56,6 53,1	2,8 2,6	34,0 31,8	6,6 $12,4$	$\frac{424}{452}$
2-2	69,5	12,2	9,8	8,5	328	6	50,0	2,5	30,0	17,5	480
4	64,0 59,4	11,2	9,0	15,7 21,9	356 384	10-2	54,5 51,3	2,7 2,6	36,4 34,2	6,4 $1+,9$	440 468
20-7-13-5	45,7	1,3	39,6	13,3	525	. 6	48,4	2,4	32,3	16,9	496
$20-8 2-4 \\ 6-2$	71,4 64,5	2,4	9,5 25,8	16,7 7,5	336 37 2	12-4 20-13-1-1	48,0 84,8	2,4 4,6	38,4 5,6	11,2	500 283
9-4	53,6	1,8	32,1	12,5	448	2-1	80,3	4,3	10,7	4,7	299
13-4	46,9	1,6	40,6	10,9 15,6	512 540	$^{3}_{3-1}$	73,4 76,2	4,0 4,1	9,8 15,2	12,8	3 2 7 315
14-4	45,5	1,5	42,4	10,6	528	4-1	72,5	3,9	19,3	4,2	331
20-9-9-3	55,2	2,1	33,1 31,2	10,6 $15,1$	435 463	3 5	66,9 62,0	3,6 3,4	17,8 16,5	11,7	359 387
127	44,5	1,7	35,6	18,2	539	5-1	69,2	3,7	23,1	4,0	347
20-10-4-2	70,2 64,9	2,9	18,7 17,3	$\begin{array}{c c} 8,2 \\ 15,1 \end{array}$	342 370	3 5	64,0 59,5	3,5 3,2	21,3 19,8	11,2 17,4	375 403
. 6	60,3	2,5	16,1	21,1	398	6-1	66,1	3,6	26,4	3,9	363
5-2 4	67,0 $62,2$	2,8	$\frac{22,3}{20,7}$	7,8	358 386	3 5	61,4 57,3	3,3	24,5 22,9	10,7 16,7	391 419
6	58,0	2,4	19,3	20,3	414	7-1	63,3	3,1	29.5	3,7	379
6-2	64,2	2,7	25,6	7,5	374	3	59,0	3,2	27,5 25,7	10,3	407
4 6	59,7 55,8	2,3	23,9 22,3	13,9 19,5	402 430	5 7	55,2 51,8	3,0 2,8	$25,7 \\ 24,2$	16,1 21,2	435 463
7-2	61,5	2,6 2,4	28,7	7,2	390	8-1	60,7	3,3	32,4	3,6	395
4 6	57,4 53,8	2,4	26,8 25,1	13,4 18,8	418 446	3 5	56,7 53,2	$\frac{3,1}{2,9}$	30,3 28,4	9,9	423 451
8-2	59,1	2,2	31,5	6,9	406	20-14-1-2	80,5	4,7	5,4	9,4	298
4 6	55,3 51,9	2,3	29,5 27,7	12,9 18,2	434 462	4 6	73,6 67,8	4,3 4,0	4,9 4,5	17,2 23,7	326 354
9-2	56,9	2,4	34,1	6,6	422	2-2	76,4	4,5	10,2	8,9	314
4	53,3	2,2	32,0	12,4	450	4.	70,2	4,1	9,3	16,4	342

C-H-0	_ N	C º/0	H º/ ₀	0%	N º/0	м. с.	C-	-Н-	-O-N	C º/o	H º/ ₀	0%	N º/o	M.G.
20-14-2	3-6	64,8	3,8	8,6	22,7	370	20-	-16	-7-4	56,6	3,8	26,4	13,2	424
3		72,7	4,2	14,5	8,5	330			6	53,1	3,5	24,8	18,6	452
	4	67,0	3,9	13,4	15,6	358			8-2	58,2	3,9	31,1	6,8	412
	6	62,2	3,6	12,4	21,8	386			4	54,5	3,6	29,1	12,7	440
4	L-2	69,4	4,0	18,5	8,1	346			6	51,3	3,4	27,3	18,0	468
	4 6	64 ,2 59,7	3,7 3,5	17,1 15,9	$\begin{vmatrix} 15,0\\ 20,9 \end{vmatrix}$	374 402			9-4 10-4	52,6 50,8	3,5	31,6	12,3 11,9	456 472
5	5-2	66,3	3,9	22,1	7,7	362	20	15	7-1-1	83,6	3,4 5,9	5,6	4,9	287
· ·	4	61,5	3,6	20,5	14,4	390		~	3	76,2	5,4	5,1	13,3	315
	6	57,4	3,3	19,1	20,1	418			5	70,0	4,9	4,7	20,4	343
6	3-2	63,5	3,7	25,4	7,4	378			2-1	79,2	5,6	10,6	4,6	303
	4	59,1	3,4	23,6	13,8	406			3	72,5	5,1	9,7	12,7	331 359
-	6 7—2	55,3 60,9	3,2	22,1 28,4	19,3	394			5 31	66,9	4,7 5,3	8,9 15,0	19,5	319
	4	56,9	3,3	26,5	13,3	422			3	69,2	4,9	13,8	12,1	347
	6	53,3	3,1	24,9	18,7	450			5	64,0	4,5	12.8	18,7	375
. 8	3-2	58,5 54,8	3,4	31,2 29,2	6,8	410			4-1	71,6	5,1	19,1	4,2	335
	4	54,8	3,2	29,2	12,8	438			3	66,1	4,7	17,6	11,6	363
90 15	6	51,5	3,0	27,5	18,0	466			5 5—1	61,4	4,3	16,4 22,8	17,9	391 351
20—15—	11 3	84,2 76,7	5,3	5,6 5,1	4,9 13,4	285			3-1 3-	68,4	4,8 4,5	21,1	11,1	379
	5	70,4	4,4	4,7	20,5	341			5	59,0	4,2	19,6	17,2	407
4	2 - 1	79;7	5,0	10,6	4.6	301			6-1	65,4	4,6	26,2	3,8	367
	3	73,0	4,5	9,7	12,8	329			3	60,7	4,3	24,3	10,6	395
	5	67,2	4,2	9,0	19,6	357			5	56,7	4,0	22,7	16,5	423
, i	3-1	75,7	4,7	15,1	4,4	317			7-1	62,7	4,4	29,2 27,2	3,7	383 411
	3	69,6	4,3	13,9 12,9	12,2 18,8	345			8-1	58,4 60,2	4,1	32,0	3,5	399
_	$\begin{array}{c} 5 \\ 4-1 \end{array}$	64,3 72,1	4,0	19,2	4,2	333	20	_18	3-1-2	79,5	5,9	5,3	9,3	302
	3	66,5	4,1	17,7	11,6	361			4	72,7	5,4	4,8	17,0	330
	5	61,6	3,9	16,4	18,0	389			6	67,0	5,0	4,5	23,5	358
Į	5 - 1	68,8	4,3	22,9	4,0	349			2-2	75,5	5,7	10,0	8,8	318 346
	3	63,7	4,0	21,2	11,1	377			4	69,4	5,2	9,2	22,4	374
	6-1	59,3 65,8	3,7	19,7 26,3	17,3 3,8	405 365			3-2	71,8	5,4	14,4	8,4	334
	3	61,1	3,8	24,4	10,7	393			4	66,3	5,0	13,2	15,5	362
	5	56,9	3,6	22,8	16,6	421			6	61,5	4,6	12,3	21,5	390
. 1	7-1	63,0	3,9	29,4	3,7	381			4-2	68,6	5,1	18,3	8,0	350 378
	8-1	60,5	3,8	32,2	3,5	397			4	63,5	4,7	16,9 15,8	14,8 20,7	406
	9-3	54,4	3,4	32,6	9,5	300			6 5—2	59,1 65,6	4,4	21,9	7,6	366
20—16—	$egin{array}{c} 1-2 \ 4 \end{array}$	80,0	5,3	5,3	9,3	328			4	60,9	4,5	20,3	14,2	394
	6	67,4	4,5	4,5	23,6	356			6	56,9	4,3	18,9	19,9	422
2	2-2	75,9	5,1	10,1	8,9	316			6-2	62,8	4,7	25,1	7,3	382 410
	4	69,8	4,6	9,3	+16,3	344			4	58,5	4,4	$\begin{vmatrix} 23,4\\21,9 \end{vmatrix}$	13,6 19,2	438
	6	64,5	4,3	8,6		372			6 7—2	54,8 60,3	4,1	28,1	7,0	398
è	$3-2 \\ 4$	72,3	4,8	14,5 13,3	8,4 $ 15,6$	332			8-2	58,0	4,3	30,9	6,8	414
	6	66,7 61,9	4,4	13,3 $12,4$	21,6				10-2	53,8		35,9	6,3	446
4	1-2	69,0	4,6	18,4	8,0	348	20	-19	9-1-1	83,0	6,6	5,5	4,8	289
	4	63,8	4,3	17,0	14,9	376			3	75,7	6,0	5,0	13,3	317 345
	6	59,4	4,0	15,8	20,8	404			5	69,6	5,5	4,6	20,3 26,3	373
ŧ	5-2	65,9	4,4	22,0	7,7	364			7 2—1	64,3 78,7	6,2	10,5	4,6	305
	4	61,2	4,1	20,4	14,3 20,0	$\begin{vmatrix} 392 \\ 420 \end{vmatrix}$			3	72,1	5,7	9,6	12,6	333
	6 6—2	57,2 63,2	3,8	19,0 25,3	7,3	380			5	66,5	5,3	8,8	19,4	361
	4	58,8	3,9	23,5	13,7	408			3-1	74,8	5,9	14,9	4,4	321
	6	55,0	3,7	22,0	19,3	436			3	68,8	5,4	13,7 12,7	12,0 18,6	349
	7-2	60,6	4,0	28,3	7,1	396			5	05,0	3,0	12,1	13,0	
		1												

C-H-O-N	C.º/o	H ⁰ / ₀	O º/0	N º/o	M. G.	C-	-H-	-O-N	C º/0	H º/o	O º/o	N 0/0	M. G.
20-19-4-1	71.2	5,6	19,0	4,2	337	20-	-22	_1-6	66,3	6,1	4,4	23,2	362
3	71,2 65,8	5,2	17,5	11,5	365			2-2	74,5	6,8	9,9	8,7	322
5	61,1	4,8	16,3	17,8	393			4	68,6	6,3	9,1	16,0	350
5-1	68,0	5,4	22,7	3,9	353			6 3-2	63,5	5,8	8,5	22,2 8,3	378 338
3 5	63,0 58,7	5,0	21,0 19,6	11,0	381 409			4	71,0 65,6	6,5 6,0	13,1	15,3	366
6-1,	65,0	5,1	26,0	3,8	369			6	60,9	5.6	12,2	21,3	394
3	60,4	4,8	24,2	10,6	397			4-2	67,8	6,2 5,7	18,1	7.9	354
5	56,5	4,5	22,6	16,4	425			4	62,8	5,7	16,8	14,7	382
7-1	62,3 58,1	4,9	29,1 27,1	3,6	385 413			$\begin{array}{c} 6 \\ 5-2 \end{array}$	58,5	5,3 5,9	15,6 21,6	20,6	410 370
5	54,4	4,3	25,4	15,9	441			4.	60,3	5,5	20,1	14,1	398
8-1	59.9	4,7	31,9	3,5	401			6	56,3	5,2	18,8	19,7	426
3	55,9	4,4	29,8	9,8	429			6-2	62,2	5,2 5,7	24,8	7,2	386
5	52,5	4,2	28,0	15,3	457			4	58,0	5,3	23,2	13,5	414
9-1 $20-20-1-2$	57,6 78,9	4,6 6,6	34,5 5,3	3,3 9,2	417 304			6 7—2	54,3 59,7	5,0 5,5	21,7 27,8	19,0	442 402
4	72,3	6,0	4,8	16,9	332			4	55,8	5,3	26,0	13,0	430
6	66,7	5,5	4,4	23,3	360			6	52,4	4,8	24,4	18,3	458
2-2	75,0	6,2	10,0	8,7	320			8-2	57,4	5,3	30,6	6,7	418
4	68,9	5,7	9,2	16,1	348			4	53,8	4,9	28,7	12,6	446
6 3 –2	63,8	5,3	8,5 14,3	22,3 8,3	376			9-2	50,6	4,6 5,1	27,0	17,7	474 434
4	71,4 65,9	5,5	13,2	15,4	364			4	52,0	4,8	31,1	12,1	462
6	61,2	5,1	12,2	21,5	392			6	49,0	4,5	29,4	17.1	490
4-2	68,2	5,7	18,2	7,9	352			16-4	41,8	3,8	44,6	9,7	574
4	63,2	5,2	16,8	14,7	380	20	—2 3	3-1-1	81,9	7,8	5,5	4,8	293
6 5—2	58,8 65,2	4,9 5,4	15,7 21,7	20.6	408 368			3 5	74,8 68,8	7,1	5,0	13,1 20,0	321 349
4	60,6	5,0	20,2	14,1	396			2-1	77,7	7,4	10,4	4,5	309
6	56,6	4,7	18,9	19,8	424			3	71,2	6,8	9,5	12,5	337
6-2	62,5	5,2	25,0	7,3	384			5	65,8	6,3	8,7	19,2	365
4	58,2	4,8	23,3	13,6	412			3-1	73,8	7,1	14,8	4,3	325
6 7—2	54,5	4,5 5,0	21,8	19,1	440			3 5	68,0	6,5 6,0	13,6 12,6	11,9	353 381
4	56,1	4,7	26,1	13,1	428			4-1	70,4	6,7	11,8	4,1	341
6	52,6	4,4	24,6	18,4	456			3	65,0	6,2	17,3	11,4	369
8-2	57,7	4,8	30,8	6,7	416			5	60,4	5,8	16,2	17,6	397
$\begin{array}{c} 9-2 \\ 12-2 \end{array}$	55,6	4,6	33,3 40,0	6,5	432			5—1 3	67,2	6,4	22,4	$\begin{bmatrix} 3,9 \\ 10,9 \end{bmatrix}$	357 385
20-21-1-1	50,0 82,5	4,1 7,2	5,5	5,8 4,8	480			5	62,3 58,1	6,0 5,6	20,8 19,4	16,9	413
3	75,2	6,6	5,0	13,2	319			6—1	64,3	6.2	25,7	3,7	373
5	69,1	6,0	4,6	20,2	347			3	59,9	5,7	23,9	10,5	401
2-1	78,2	6,8	10,4	4,6	307			5	55,9	5,4	22,4	16,3	429
3 - 5	71,6	6,3	9,6	12,5 19,3	335 363			$\begin{array}{c} 7-1 \\ 9-1 \end{array}$	61,7 57,0	5,9 5,5	28,8	3,6	389 421
3-1	74,3	6,5	14,9	4,3	323			10-1	54,9	5,3	36,6	3,3	437
3	68,4	6,0	13.7	11,9	351			12-1	51,2	4,9	40,9	3,0	469
5	63,3	5,5	12,7	18,5	379			14-3	45.4	4,3	40,9 42,3	8,0	529
4-1	70,8	6,2 5,7	18,9	4,1	339	20-	-24	-1-2	77,9	7,8	5,2	9,1	308
5 5	65,4	5,7	17,4 16,2	11,4 17,7	367			4 6	71,4 65,9	7,1 6,6	4,8 4,4	16,7 23,1	336 364
5-1	67,6	5,9	22,5	3,9	355			2-2	74,1	7,4	9,9	8,6	324
3	62,7	5,5	20,9	10,9	383			4	68,2	6,8	9,1	15,9	352
5	58,4	5,1	19,5	17,0	411			6	63,1	6,3	8,4	22,1	380
7-1	62,0	5,4	28,9	3,6	387			3-2	70,6	7,1	14,1	8,2	340
10-1 $20-22-1-2$	55,2 78,4	4,8 7,2	36,8 5,2	3,2 9,1	435 306			4 6	65,2 $60,6$	6,5 6,1	13,0 12,1	15,2 21,2	368 396
4	71,8	6,6	4,8	16,8	334			4-2	67,4	6,7	18,0	7,9	356
	1	1	1	1	1	1			7	,	,	1	

C-H-O-N	C º/0	H °/ ₀	0 %	N °/0	M.G.	C-	-HON	C º/o	H _. °/ ₀	0 %	N º/0	M.G.
20-24-4-4	62,5	6,2	16,7	14,6	384	20.	-27-4-3	64,3	7,2	17,2	11,3	373
. 6	58,2	5,8	15,5	20,4	412	20	5	59,9	6,7	15,9	17,5	401
5-2	64,5	6,4	21,5	7,5	372		6-3	59,3	6,7	23,7	10,5	405
4	60,0	6,0	20,0	14,0	400		9 - 3	53,0	5,9	31.8	9,3	453
6	56,1	5,6	18,7	19,6	428		11-1	52,5	5,9	38,5	3,1	457
6-2	61,9	6,2	24,7	7,2	388	20		76,9	9,0	5,1	9,0	312
4	57,7	5,8	23,1	13,4	416		4.	70,6	8,2	4,7	16,5	340
6 72	54,1 59,5	5,4 5,7	$\begin{vmatrix} 21,6\\27,8 \end{vmatrix}$	18,9 6,9	444 403		2 <u>-2</u>	65,2 73,2	7,6	4,3 9,8	22,8	368 328
10-2	53,1	5,3	35,4	6,1	452		4	67,4	7,9	9,0	15,7	356
20-25-1-1	81,4	8,5	5,4	4,7	295		6	62,5	7,3	8,3	21,9	384
3	74,3	7,7	4,9	13,0	323		3-2	69,8	8,1	13 9	8,1	344
5	68,4	7,1	4,6	19,9	351		4	64,5	7,5	12,9	15,1	372
2-1	77,2	8,0	10,3	4,5	311		6	60,0	7,0	12,0	21,0	400
3	70,8	6,8	9,4	12,4	339 367		4-2	66,7	7,8	17,7	7,8	360
5 31	65,4	7,6	14,7	19,1	327		6	57,7	6,7	15,4	20,2	416
3	67,6	7,0	13,5	11,8	355		5-2	63,8	7,4	21,3	7,4	376
5	62,6	6,5	12,5	18,3	383		6-2	61,2	7,1	24,5	7,1.	392
4-1	69,9	7,3	18,6	4,1	343		4	57,1	6,7	22,9	13,3	420
3	64,7	6,7	17,2	11,3	371		7-2	58,8	6,9	27,4	6,9	408
5	60,1	6,3	16,0	17,5	399	20	2911	80,2	9,7	5,3	4,7 12,8	327
5-1	66,9	6,9	22,3 20,7	3,9	387		5	67,6	8.2	4,5	19,7	355
5	57,8	6,0	19,3	16,9	415		2-1	76,2	9,2	10,2	4,4	315
6-1	64,0	6,7	25,6	3,7	375		3	70,0	8,4	9,3	12,2	343
3	59,5	6,2	23,8	10,4	403		5	64,7	7,8	8,6	18,9	371
5	55,7	5,8	22,3	16,2	431		3-1	72,5	8,8	14,5	4,2	331
9-1	56,7	5,9	34,0	3,3	423		3 5	66,9	8,1	13,3 12,4	11,7	359
20-26-1-2	77,4	8,4	5,2	$\begin{vmatrix} 9.0 \\ 16,6 \end{vmatrix}$	310		4-1	62,0	7,4 8,4	18,4	4,0	347
4 6	71,0 65,6	7,1	4,4	22,9	366		3	64,0	7,7	17,1	11,2	375
2-2	73,6	8,0	9,8	8,6	326		5	59,5	7,2	15,9	17,4	403
4	67,8	7,3	9,0	15,8	354.	20	_30_1_2	76,4	9,6	5,1	8,9	314
6	62,8	6,8	8,4	22,0	382		4	70,2	8,8	4,6	16,4	342 370
3—2	70,2	7,6	14,0	8,2	342		6 2—2	64,8	8,1 9,1	4,3 9,7	22,7 8,5	330
. 4	64,8	7,0	13,0 12,1	15,1	370	١.	2-2	67,0	8,4	8,9	15,6	358
6 42	60,2	6,6 7,3	17,9	21,1 7,8	.358		6	62,2	7,8	8,3	21,7	386
4	62,2	6,7	16,6	14,5	386		3-2	69,3	8,7	13,9	8,1	346
6	58,0	6,3	15,4	20,3	414		4	64,2	8,0	12,8	15,0	374
5-2	64,2	6,9	21,4	7,5	374		6	59,7	7,5	11,9	20,9	402 362
4	59,7	6,5	19,9	13,9	402		4-2 10-6	66,2	8,3	31,1	16,3	514
6	55,8	6,0	18,6 24,6	19,5 7,2	430 390	20)-31-1-1	79,7	10,3	5,3	4,6	301
6-2 4	61,5 57,4	6,7	23,0	13,4	418	1 2	3	73,0	9,4	4,8	12,8	329
7-4	55,3	6,0	25,8	12,9	434		5	67,2	8,7	4,5		357
9-2	54.8	5,9	32,9	6.4	438		2-1	75,7	9,8	10,1	4,4	
10-2	52,9	5,9 5,7	35,2	+6,2	454		3	69,6		9,2	12,2 18,8	345
20-27-1-1	80,8	9,1	5,4	4,7	297		5 3—1	64,3 72,1	8,3	8,6		333
3	73,8	8,3	4,9	12,9 19,8	325 353		3-1	66,5		13,3		361
5 2—1	68,0	7,6	$\frac{4,5}{10,2}$	4,5	313		5	61,7	8,0	12,3	18,0	389
2-1	76,7 70,4	8,6	9,4	12,3	341	20	_32_1_2	76,0	10,1	5,1	8,8	316
5	65,0	7,3	8,7	19,0	369		4	69,8	9,3	4,6	16,3	344
3-1	73,0	8,2	14,6	4,2	329		6	64,5 $72,3$	8,6	4,3	22,6	372
3	67,2	7.6	13,4	11,8	357		2-2 4	66,7	8,9	8,9	15,5	360
5	62,3	7,0 7,8	12,5 18,6	18,2	385		6	61,9	8,2	8,2	21,6	388
4-1	69,6	1,0	10,0	1,0	040	1		1	1			1

$\begin{array}{c c c c c c c c c c c c c c c c c c c $	M. G.
20 -32-3-2 69,0 9,2 13,8 8,0 348 20 -39-1-5 65,7 10,7 4,4 19,	
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	3 325 353
4—2 65,9 8,8 17,6 7,7 364 5 63,0 10,2 8,4 18,	4 381
6—2 60,6 8,1 24,2 7,1 396 3 65,0 10,6 13,0 11,	4 369
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	397 9 357
20—33—1—1 79,2 10,9 5,3 4,6 303 3 62,3 10,1 16,6 10,	9 385
3 72,5 10,0 4,8 12,7 331 5 58,1 9,4 15,5 17,5 5 66,9 9,2 4,4 19,5 359 20—40—1—2 74,1 12,3 4,9 8,	
2—1 75,2 10,3 10,0 4,4 319 4 68,2 11,4 4,5 15,	352
5 640 8.8 8.5 18.7 375 2-2 70.6 11.8 9.4 8.	2 340
$egin{array}{c c c c c c c c c c c c c c c c c c c $	$\begin{vmatrix} 2 & 368 \\ 2 & 396 \end{vmatrix}$
5 61,4 8,4 12,3 17,9 391 3—2 67,4 11,2 13,5 7,	9 356
20 – 34 – 1 – 2 75,5 10,7 5,0 8,8 318 4 62,5 10,4 12,5 14,	
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	
4 66,3 9,4 8,8 15,5 36 2 6 56,2 9,3 14,9 19	6 428
6 61,5 8,7 8,2 21,5 390 20—41—1—1 77,1 13,2 5,1 4,	
4 63.5 9.0 12.7 14.8 378 5 65.4 11.2 4.3 19.	1 367
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	3 3 2 7 3 355
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	
5 66,5 9,7 4,4 19,4 361 4 67,8 11,9 4,5 15.	354
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	
5 63,6 9,3 8,5 18,6 377 4 64,9 11,3 8,6 15,	1 370
$3 \mid 65,8 \mid 9,6 \mid 13,1 \mid 11,5 \mid 365 \mid 20-43-1-1 \mid 76,7 \mid 13,7 \mid 5,1 \mid 4$	5 313
5 61,1 8,9 12,2 17,8 393 3 70,4 12,6 4,7 12,6 20—36—1—2 75,0 11,2 5,0 8,8 320 5 65,1 11,7 4,3 18,	
4 69.0 10.3 4 .6 16.1 348 2-1 73.0 13.1 9.7 4 .	2 329
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	357 385
4 65,9 9,9 8,8 15,4 364 4—3 61,7 11,0 16,4 10,	389
20-37-1-1 78,1 12,0 5,2 4,6 307 4 67,4 12,4 4,5 15,	7 356
3 71,6 11,0 4,8 12,5 335 6 62,5 11,4 4,2 21, 5 66,1 10,2 4,4 19,3 363 2—2 69,8 12,8 9,3 8,	384
7 61,4 9,4 4,1 25,1 391 4 64,5 11,8 8,6 15,	372
$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$	315
5 63,3 9,8 8,4 18,5 379 3 70,0 13,1 4,7 12, 10—3 50,1 7,7 33,4 8,8 479 5 64,7 12,1 4,3 18,	343
20-38-1-2 74.5 11.8 5.0 8.7 322 2-1 72.5 13.6 9.6 4.	3 331
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	7 359 1 387
2—2 71,0 11,2 9,5 8,3 338 21—10—6—2 65,3 2,6 24,9 7,	386
6 60.9 9.6 8.1 21.3 394 7-2 62.4 3.0 27.7 6.	404
$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	5 448
3 71,2 11,6 4,7 12,5 337 21—13—1—1 85,4 4,4 5,4 4,	3 295

C — H — O — N	C º/0	H ⁰ / ₀	0 %	N º/0	M.G.	C-H-O-N	C º/o	H ⁰ / ₀	O º/o	N º/0	M.G.
21-13-1-3	78,0	4,0	4,9	13,0	3 2 3	21-16-3-2	73,3	4,6	14,0	8,1	344
5	71,8	3,7	4,6	19,9	351	4	67,7	4,3	12,9	15,1	372
2-1	81,0 74,3	4,2 3,8	10,3	4,5 12,4	311 339	42	63,0	4,0	12,0	21,0	400
5	68,6	3,5	8,7	19,1	367	4	64,9	4,4	17,8 16,5	7,8	360
$3-1 \\ 3$	77,1	3,9	14,7	4,3	327	5-2	67,0	4,3	21,3	7,4	376
5	65,8	3,7	13,5 12,5	11,8	355 383	21-17-1-1	84,2	5,7 5, 2	5,3 4,9	$\begin{vmatrix} 4,7\\12,9 \end{vmatrix}$	299 327
4-1	73,5	3,8	18,6	4,1	343	5	71,0	4,8	4,5	19,7	355
- 3 - 5	67,9	3,5	17,2 16,1	11,3 17,5	371 399	2-1	80,0	5,4	20,2	4,4	315
5-1	70,2	3,6	22,3	3,9	359	5	73,4 67,9	5,0	9,3	12,2 18,9	343 371
3	65,1	3,4	20,7	10,8	387	3-1	76,1	5,1	14,5	4,2	331
5 6—1	60,7	3,1	19,3 25,6	16,9	415 375	3 5	70,2	4,7 4,4	13,4	11,7	359
3	62,5	3,2	23,8	10,4	403	4-1	72,6	4,9	18,4	4.0	387 347
5	58,5	3,0	22,3	16,2	431	3	67,2	4,5	17,1	11,2	375
7-1	64,5	3,3	28,6 26,7	3,6	391 419	5 5—3	62,5	4,2	15,9	17,4	403 391
5	56,4	2,9	25,0	15,7	447	21-18-1-2	80,3	5,7	5,1	8,9	314
8—3 21—14—1—2	57,9 81,3	3,0 4,5	29,4 5,2	9,7	435 310	. 6	73,7 78,1	5,2	4,7	16,4	342
4	74,6	4,1	4,7	16,6	338	2-2	76,4	4,8 5,4	4,3 9,7	22,7 8,5	370
2—2	77,3	4,3	9,8	8,6	326	. 4	70,4	5,0	8,9	15.7	358
$\frac{4}{3-2}$	71,2 73,7	$\frac{4,0}{4,1}$	9,0 $14,0$	15,8	354 342	3-2	65,3 72,8	4,7 5,2	8,3 13,9	21,7 8,1	386 346
4-2	70,4	3,9	17,9	7,8	358	4	67,4	4,8	12,8	15,0	374
4	65,3	3,6	16,6	14,5	386	6	62,7	4,5	11,9	20,9	402
6 7—4	60,9	$3,4 \\ 3,2$	15,4 25,8	20,3 12,9	414	4-2	69,6	5,0 4,6	17,7 16,4	7,7	362 390
8-2	59,7	3,3	30,3	6,6	422	6	60,3	4,3	15,3	20,1	418
21—15—1—1	84,8	5,0 4,6	5,4 4,9	4,7 12,9	297	5-2	66,7 $ 62,1 $	4,8 4,4	21,1 $19,7$	7,4 13,8	378 406
5	77,5	4,2	4,5	19,8	325 353	6	58,1	4,1	18,4	19,3	434
2-1	80,5	4,8	10,2	4,5	313	6-2	63,9	4,6	24,4	7,1	394
3 5	73,9 68,3	4,4	9,4 8,6	12,3 19,0	341 369	4 6	59,7 56,0	4,3	22,7 21,3	13,3 18,7	422 450
3-1	76,6	4,6	14,6	4,2	329	10-2	55,0	3,9	34,9	6,1	458
3	70,6	4,2	13,4	11,8	357	21-19-1-1	73,7 76,6	6,3	5,3 4,8	4,7	301 329
5 4—1	65,4 73,9	$\frac{3,9}{4,3}$	12,5 18,6	18,2 3,1	385 345	5	70,6	5,8 5,3	4,4	12,8 19,6	357
3	67,5	4,0	17,2	11,2	373	2-1	79,5	6,0	10,1	4,4	317
5 5—1	62,9 69,8	3,7 4,1	15,9 22,2	$\frac{17,5}{3,9}$	401 361	3 5	73,1 67,5	5,5 5,1	9,2 8,6	12,2 18,8	345 373
3	64,8	3,8	20,6	10,8	389	3-1	65,7	5,7	14,4	4,2	333
5	60,4	3,6	19,2	16,8	417	3	69,8	5,2	13,3	11,6	361 389
6-1	66,8 62,2	4,0 3,7	25,5 23,7	3,7 10,4	377 405	5 4-1	64,7 72,2	4,9 5,4	12,3 18,3	18,0	349
5	58,2	3,4	22,2	16,2	433	3	66,8	5.0	17.0	11.1	377
7-1	64,1	3,8	28,5	3,6	393	5 5—1	62,2 69,1	4,7 5,2	15,8 21,9	17 ,2 3,8	$\frac{405}{365}$
3 5	59,8 56,1	3,6	26,6 24,9	10,0 15,6	421 449	3 3	64,1	4,8	20,3	10,7	393
8-1	61,6	3,7	31,3	3,4	409	6-1	66,1	5,0	25,2	$-3.7 \pm$	381
21-16-1-2	80,8	5,1	5,1 4,7	$\begin{array}{c c} 9,0 \\ 16,5 \end{array}$	312 340	7—1 8—1	63,5	4,8	28,2	3,5 3,4	397 413
6	74,1 68,5	4,7 4,3	4,3	22,8	368	21-20-1-2	79,7	6,3	5,1	8,8	316
22	76,8	4,9	9,7	8,5	328	4 6	73,3	5,8 5,4	4,6 4,3	16,3 22,6	344 37 2
4 6	70,8	4,5	9,0	15,7 21,9	356 384	2-2	75,9	6,0	9,6	8,4	332
	1	1	1	,-	1				153		
RICHTER, Lex. o	ı. Kohle	nstolly	at n'						400		

C-H-O-N	C º/o	H ⁰ / ₀	O º/0	N º/0	M. G.	C-H-O-N	C º/0	H º/ ₀	0%	N º/0	M.G.
21-20-2-4 6 $3-2$ 4 6 $4-2$ 4 6 $5-2$ 4 6 $6-2$ 4 6 $21-21-1-1$ 3 5 $2-1$ 3 5 $4-1$ 3 5 $5-1$ 3 5 $7-1$ 3 $7-1$ 3 $7-1$ 3 $7-1$ 3 $7-1$ 3 5 5 $7-1$ 3 5 5 $7-1$ 3 5 5 $7-1$ 3 5 5 $7-1$ 3 $7-1$ 3 $7-1$ 3 $7-1$ 3 $7-1$ 3 $7-1$ 3 $7-1$ 3 $7-1$ 3 3 5 5 $7-1$ 3 5 5 $7-1$ 3 5 $7-1$ 3 $7-1$ 3 $7-1$ 3 $7-1$ 3 $7-1$ 3 $7-1$ 3 $7-1$ 3 3 5 $7-1$ 3 5 $7-1$ 3 3 5 $7-1$ 3 3 5 $7-1$ 3 3 5 $7-1$ 3 $7-1$ 3 $7-1$ 3 3 5 $7-1$ 3 $7-1$ 3 3 5 $7-1$ 3 $7-1$ 3 $7-1$ 3 $7-1$ 3 $7-1$ 3 3 $7-1$ 3 3 $7-1$ 3 3 $7-1$ 3 3 3 5 3 3 3 5 3 3 5 3 3 5 3 3 5 3 3 3 5 3 3 3 5 3 3 3 3 3 3 3 3 3 3	70,0 65,0 72,4 67,0 62,4 69,2 64,3 60,0 66,3 61,8 57,8 3,2 76,1 770,2 72,6 64,4 71,8 66,5 61,9 68,6 59,5 61,3 57,4 61,9 68,6 63,8 61,9 68,6 63,8 61,9 68,6 63,8 61,9 68,6 63,7 61,9 68,6 68,7 68,7 68,6 68,7 68,7 68,6 68,7 68,7	5,627,395,183,964,555,555,555,555,555,555,555,555,555,5	8,9 8,2 13,8 11,9 11,9 16,3 15,2 21,0 11,9 16,3 24,2 22,6 21,2 5,8 4,8 10,0 9,2 12,3 18,2 12,3 18,2 12,3 18,2 12,3 18,2 12,3 18,2 12,3 18,3 24,2 22,6 4,6 5,0 4,6 4,6 4,6 4,6 4,6 4,6 4,6 4,6 4,6 4,6	15,5 21,6 8,0 14,9 27,7 14,3 20,0 7,4 13,7 17,1 13,2 18,6 4,6,6 12,1 12,1 14,6 17,9 4,0 11,1 17,2 8,0 4,6 11,1 17,9 4,0 11,1 11,1 17,2 8,0 16,5 16,5 16,5 16,5 16,5 16,5 16,5 16,5	360 388 348 376 404 364 392 420 380 408 436 396 424 452 303 331 359 347 375 335 363 391 351 379 407 367 395 423 383 411 439 427 455 318 346 374 375 383 383 411 439 427 455 318 346 374 375 385 387 387 387 387 387 387 387 387	$\begin{array}{c} 21-23-4-1\\ & 3\\ & 5\\ 5-1\\ & 3\\ & 6-1\\ & 7-1\\ & 3\\ & 8-1\\ & 21-24-1-2\\ & 4\\ & 6\\ & 2-2\\ & 4\\ & 6\\ & 2-2\\ & 4\\ & 6\\ & 3-2\\ & 4-2\\ & 4-2\\ & 4-2\\ & 4-2\\ & 21-25-1-1\\ & 2-1\\ & 3\\ & 3-1\\ & 5-1\\ & 3\\ & 4-1\\ & 5-1\\ & 3\\ & 21-26-1-2\\ & 4-2\\ & 2-2\\ & 3-2\\ & 4-2\\ & 2-2\\ & 3-2\\ & 4-2\\ & 2-2\\ & 3-2\\ & 2-2\\ & 3-2\\ & 2-2\\ & 3-2\\ & 4-2\\ & 2-2\\ & 3-2\\ & 2-2\\ & 3-2\\ & 2-2\\ & 3-2\\ & 2-2\\ & 3-2\\ & 2-2\\ & 3-2\\ & 2-2\\ & 3-2\\ & 2-2\\ & 3-2\\ & 3-2\\ & 4-2\\ & 2-2\\ & 3-2\\ & 3-2\\ & 4-2\\ & 2-2\\ & 3-2\\ & 3-2\\ & 4-2\\ & 2-2\\ & 3-2\\ &$	71,4 66,1 61,6 68,3 63,5 65,4 62,8 58,7 75,0 67,0 75,0 69,2 71,3 68,5 63,6 63,6 63,6 63,6 63,6 63,6 63,7 71,0 68,5 74,3 74,3 74,3 74,5 74,5 74,5 74,5 74,5 74,5 74,5 74,5	6,50,65,28,00,74,50,25,55,55,76,66,65,55,87,77,76,67,78,14,77,77,76,67,78,97,66,77,77,76,68,87,77,76,68,87,77,76,68,87,77,76,68,87,77,76,68,87,77,76,68,87,77,76,68,87,77,76,68,87,77,76,68,88,77,77,76,68,88,77,77,76,68,88,78,78,78,78,78,78,78,78,78,78,78,78	18,1 16,8 15,6 21,7 24,9 27,9 26,1 30,7 28,8 3,6 4,3 9,5 8,2 4,6 4,3 9,5 8,2 4,6 4,3 9,5 8,2 4,6 4,3 9,5 8,2 4,6 4,3 9,5 8,2 4,6 4,3 9,5 8,2 4,6 4,3 9,5 8,2 4,6 4,6 4,3 9,5 8,7 13,6 17,4 4,6 17,3 29,5 8,7 13,6 17,4 17,9 9,4 11,7 12,7 12,7 12,7 13,6 17,3 12,7 12,7 12,7 12,7 12,7 12,7 12,7 13,6 17,3 12,7 13,7 14,7	4,0 11,0 17,1 3,8 10,6 3,5 9,8 4,9 7,6 14,1 7,9 16,1 22,3 15,4 21,4 17,5 16,7 4,6 4,3 12,0 11,4 11,4 12,3 15,8 15,8 15,8 15,8 15,8 15,8 15,8 16,1 17,9 18,9 18,9 18,9 18,9 18,9 18,9 18,9 18	353 381 409 369 397 385 401 429 417 445 320 348 376 336 364 392 368 394 400 428 416 307 323 351 367 355 371 399 325 341 357 358 368 368 376 377 378 378 378 378 378 378 378

C-H-O-N	C º/0	H ⁰ / ₀	O º/o	N º/o	M.G.	C-H-O-N	C º/o	H º/0	O º/o	N º/o	M.G.
$21-29-4-1 \\ 8-1$	70,2 59,6	8,1 6,8	17,8 30,3	3,9	359	2210188	39,2	1,5	42,7	16,6	674
21-30-1-2	77,3	9.2	4,9	8,6	423 326	$22-11-1-1 \ 22-12-1-2$	86,5	3,6	5,2 5,0	4,6 8,7	305 3 2 0
$\begin{array}{c} 2-2 \\ 3-2 \end{array}$	73,7 70,4	8,7 8,4	9,3 13,4	8,3	342 358	2—2 3—2	78,6 75,0	3,6 3,4	9,5	8,3	336
$\overset{\circ}{\overset{\circ}{\overset{\circ}{\overset{\circ}{\overset{\circ}{\overset{\circ}{\overset{\circ}{\overset{\circ}$	67,4 44,2	8,0 5,3	17,1	7,5	374	4-2	71,7	3,3	13,6 17,4	7,9	352 368
7-2	59,7	7.1	26,5	39,3 6,6	570 422	5—2 6—2	68,7	3,1 3,0	20,8 24,0	7,3 7,0	384 400
8-2 13-2	57,5	6,8 5,7	29,2 40,2	6,4 5,4	438 518	17-6 22-13-1-1	41,8 86,0	1,9 4,2	43,0	13,3	632
$21 - 31 - 1 - 1 \\ 2 - 1$	80,5	9,9	5,1	4,5	313	2-1	81,7	4,0	5,2 9,9	4,6 4,3	307 3 2 3
3-1	73,1	9,4	9,7 13,9	4,3 3,0	329 345	3-3 4-1	71,9 74,3	3,5 3,7	13,1 18,0	11,4 3,9	367 355
$21-32-1-2 \\ 2-2$	76,8 73,3	9,8 9,3	4,8 9,3	8,5	328 344	7—1 22—14—1—2	65,5	3,2 4,3	27,8 5,0	3,5 8,7	403 322
$\begin{array}{c} 3-2 \\ 21-33-1-1 \end{array}$	70,0	8,9	13,3	7,8	360	2-2	78,1	4,1	9,5	8,3	338
2-1	76,1	10,5	5,1 9,7	4,4	315 331	4 3-2	72,1 74,6	3,8 3,9	8,7 13,6	15,3 7,9	366 354
3-1 $21-34-1-2$	72,6 76,4	9,5	13,8 4,8	4,0	347 330	4-2 5-4	71,3	3,8 3,4	17,3 19,3	7,6 13,5	370 414
2—2 3—2	72,8 69,6	9,8	9,3 13,3	8,1	346	6-2	65,7	3,5	23,9	6,9	402
21-35-1-1	79,5	11,0	5,0	7,7	362 317	11-2	61,4 54,8	3,3 2,9	22,3 36,5	13,0 5,8	430 482
21 31	75,7 72,2	10,5	9,6 $13,7$	4,2	333 349	15-8 22-15-1-1	41,9 85,4	12,2 4,8	38,1 5,2	17,8 4,5	630 309
5-5 21-36-1-2	57,7 75,9	8,0	18,3 4,8	16,0	437 332	3 5	78,3	4,4	4,7	12,5	337
2-2	72,4	10,3	9,2	8,0	348	2-1	72,3 81,2	4,1 4,6	4,4 9,8	19,2 4,3	365 325
3—2 21—37—1—1	69,2	9,9	13,2	7,7	364	3-1	74,8 77,4	4,2	9,1	11,9 4,1	353 · 341
$\begin{array}{c} 2-1 \\ 3-1 \end{array}$	75,2 71,8	11,0	9,6 13,7	4,2	335 351	3 5	71,5	4,1 3,8	13,0	11,4	369 397
21-38-1-2	75,4	11,4	4,8	8,4	334	4-1	74,0	4,2	12,1 17,9	17,6 3,9	357
22 32	72,0	10,8	9,1	8,0 7,7	350 366	5 8-1	63,9 62,7	3,6 3,6	15,5 30,4	17,0 3,3	413 421
21 - 39 - 1 - 1 $2 - 1$	78,5	12,1 11,6	5,0 9,5	4,4	321 337	3 22-16-1-2	58,8 81,5	3,3 4,9	28,5 4,9	9,4 8,6	449 324
3-1	71,3	11,0	13,6	4.0	353	4	75.0	4,5	4,5	15,9	352
$21-40-1-2 \\ 2-2$	75,0 71,6	11,9 11,4	4,8 9,1	8,3 7,9	336 352	2-2	77,6	4,7	9,4	8,2 15,2	340 368
$\begin{array}{c} 3-2 \\ 4-2 \end{array}$	68,5	10,9	13,0 16,7	7,6	368 384	6 3 —2	66,7	4,0 4,5	8,1 13,5	21,2 7,9	396 356
5-2	63,0	10,0	20,0	7,0	400	4-2	71,0	4,3	17,2	7,5	372
$21-41-1-1 \ 2-1$	78,0 74,3	12,7 12,1	4,9 9,4	4,3	323 339	5—2	66,0	4,0	16,0 20,6	$\begin{array}{c c} 14,0 \\ 7,2 \end{array}$	400 388
$\begin{array}{c} 3-1 \\ 21-42-1-2 \end{array}$	71,0 74,6	11,6 12,4	13,5	3,9	355 338	$\begin{array}{c} 6-2 \\ 8-2 \end{array}$	65,3	4,0	23,7 29,3	6,9	404 436
2-2	71,2	11,9	9,0	7,9	354	10-2	56,4	3,4	34,2	6,0	468
3-2 21-43-1-1	68,1 77,5	11,3 13,2	4,9	4.3	325	22-17-1-1	84,9 77,9	5,5 5,0	4,7	4,5 12,4	339
$\begin{array}{c} 2-1 \\ 3-1 \end{array}$	73,9	12,6 12,0	9,4	4,1	341 357	2—1 3	80,7	5,2 4,8	9,8	4,3	3 2 7 3 5 5
21-44-1-2	74.1	12,9	4,7	8,2	340	5 3–1	68,9	4,4 5,0	8,4 14,0	18,3 4,1	383 343
2-2 4	70,8 65,6	12,3 11,5	9,0	7,9	356	3	71,1	4.6	12,9	11,3	371
$22-10-1-2 \\ 4-2$	83,0 72,1	$\frac{3,1}{2.7}$	5,0	8,8	318 366	5 4—1	66,2	4,3 4,7	$\begin{vmatrix} 12,0\\17,8 \end{vmatrix}$	17,5 3,9	399 359
4	67,0	2,5 2,5 2,5	16,2 24,1	14,2 7,0	394 398	5—1 6—1	70,4 67,5	4,5	21,3 $24,6$	3,7	375 391
6-2	66,3	2,5	24,1	1,0	390	1	701,0		152*	3,6	331

$^{\circ}$ C $^{-}$ H $^{-}$ O $^{-}$ N	C º/0	H°/0	O º/o	N º/0	M.G.	C-	-H-	-O-N	C º/o	H °/ ₀	O º/0	N º/o	M.G.
$22-17-7-3 \\ 8-5$	60,7	3,9 3,6	25,7 26,7	9,7 14,6	435 479	22	-22	7-2	67,0 62,0	5,6 5,1	20,3 26,3	7,1 6,6	394 426
13-1 $22-18-1-2$ 4	52,5 81,0 74,6	3,4 5,5 5,1	41,3 4,9 4,5	2,8 8,6 15,8	503 326 354	22	—23	8-2 9-2 -1-1	59,7 57,6 83,3	5,0 4,8 7,3	$\begin{vmatrix} 29,0\\ 31,4\\ 5,0 \end{vmatrix}$	6,3 6,1 4,4	442 458 317
22 4 32	77,2 71,4 73,7	5,3 4,9	9,3 8,6	8,2 15,1	342 370			3 5 2—1	76,5	$\begin{array}{ c c } 6,7 \\ 6,1 \end{array}$	4,6 4,3	12,2 18,8	345 373 333
$\begin{array}{c} \mathbf{4-2} \\ 4 \end{array}$	70,6 65,6	5,0 4,8 4,5	13,4 17,1 15,9	7,8 7,5 13,9	358 374 402	1		3 5	79,3 73,1 67,8	6,9 6,4 5,9	9,6 8,9 8,3	4,2 11,6 18,0	361 389
5—2 6—2 7—2	67,7 65,0 62,6	4,6 4,4 4,3	20,5 23,6 26,5	7,2 6,9 6,6	390 406 422	1		3—1 3 4—1	75,6 70,0 72,3	6,6 6,1 6,3	13,7 12,7 17,5	4,0 11,1 3,8	349 377 365
4 6 8–2	58,6 55,2 60,3	4,0 3,8 4,1	24,9 23,4 29,2	12,4 17,6 6,4	450 478 438			5—1 6—1 7—1	69,3 66,5 63,9	6,0 5,8 5,6	21,0	3,7	381 397 413
10-2	56,7	3,8 3,8	27,5	12,0 5,9	466 470			3 81	59,9	5,2 5,4	27,1 25,4 29,8	3,4 9,5 3,3	441 429
11-4 22-19-1-1 3	51,4 84,4 77,4	3,5 6,1 5,6	34,2 5,1 4,7	10,9 4,5 12,3	514 313 341	22-	-24-	$9-1 \\ -1-2 \\ 2-2$	59,3 79,5 75,9	5,2 7,2 6,9	32,4 4,8 9,2	3,1 8,4 8,0	445 332 348
21 3 31	80,2 73,9 76,6	5,8 5,3 5,5	9,7 9,0 13,9	4,2 11,8 4,0	329 357 345			4 6 32	70,2 65,3 72,5	6,4 5,9 6,6	8,5 7,9 13,2	14,9 20,8	376 404 364
3 4-1	70,8	5,1 5,3	12,9 17,7	11,2 3,9	373 361			$\begin{array}{c} 4-2 \\ 5-2 \end{array}$	69,5	6,3 6,0	16,8 $20,2$	7,7 7,4 7,1	380 396
3 5—3 6—3	67,8 65,2 62,6	4,9 4,7 4,5	16,4 19,7 22,8	10,8 10,4 10,0	389 405 421			$6-2 \\ 7-2$	58,4 64,1 61,6	5,3 5,8 5,6	17,7 23,3 26,2	18,6 6,8 6,5	452 412 428
$\begin{array}{c} 9-1 \\ 22-20-1-2 \\ 4 \end{array}$	59,9 80,5 74,1	4,3 6,1 5,6	32,6 4,9 4,5	3,2 8,5 15,7	328 356			$ \begin{array}{c} 6 \\ 8-2 \\ 16-2 \end{array} $	54,6 59,4	5,0 5,4	23,1 28,8	17,3 6,3 4,9	$484 \\ 444 \\ 572$
2-2 4	76,7 71,0	5,8 5,4	9,3 8,6	8,1 15,0	344 372	22		-1-1 3	46,1 82,8 76,1	4,2 7,8 7,2	44,8 5,0 4,6	4,4 12.1	319 347
$\begin{array}{c} 3-2 \\ 4 \\ 4-2 \end{array}$	73,3 68,0 70,2	5,6 5,2 5,3	13,3 12,4 17,0	7,8 14,4 7,5	360 388 376			$\begin{array}{c} 2-1 \\ 3-1 \\ 4-1 \end{array}$	78,8 75,2 71,9	7,5 7,1 6,8	9,5 13,7 17,4	4,2 4,0 3,8	335 351 367
6 5—2 6—2	61,1 67,3 64,7	4,6 5,1	14.8 20,4	19,4 7,1	432 392			5-3 6-1	64,2 66,2	$6,1 \\ 6,3$	19,5 24,0	$\begin{array}{c c} 10,2 \\ 3,5 \end{array}$	411 399 415
7—2	60,6 62,3	4,9 4,6 4,7	23,5 22,0 26,4	6,9 12,8 6,6	408 436 424	22-	-26-		63,6 61,2 79,0	6,0 5,8 7,8	27,0 29,7 4,8	3,4 3,3 8,4	431 334
$\begin{array}{c} 8-2 \\ 10-2 \\ 22-21-1-1 \end{array}$	60,0 55,9 83,8	4,5 4,2 6,7	29,1 33,9 5,1	6,4 5,9 4,4	$\begin{vmatrix} 440 \\ 472 \\ 315 \end{vmatrix}$			$\begin{array}{c} 2-2 \\ 3-2 \\ 4 \end{array}$	75,4 72,1 67,0	7,4 7,1 6,6	$9,1 \\ 13,1 \\ 12,2$	8,0 7,6 14,2	350 366 394
3 5 2—1	77,0 71,1 79,8	6,1 5,7	4,7 4,3 9,7	12,2 18,9 4,2	343 371 331			4-2 4 6-2	69,1 64,4	6,8 6,3	16,7 15,6	7,3 13,6 6,8	382 410 414
3 4—1	73,5	6,3 5,8 5,8	8,9 17,6	11,7 3,9	359 363			7—2	63,7 59,7 61,4	6,3 5,9 6,0	23,2 21,7 26,0	12,7	442 430
$5-1 \\ 3 \\ 22-22-1-2$	69,6 64,9 80,0	5,5 5,1 6,7	21,1 19,7 4,8	3,7 10,3 8,5	379 407 330	22-	-27-	$egin{array}{cccccccccccccccccccccccccccccccccccc$	82,2 75,6 78,3	8,4 7,7 8,0	5,0 4,6 9,5	4,4 12,0 4,2	321 349 337
$egin{array}{c} 4 \ 2-2 \ 4 \end{array}$	73,8 76,3 70,6	6,1 6,3 5,9	4.5 9,2	15,6 8,1 15,0	358 346 374			$\begin{array}{c} 5 \\ 3-1 \\ 4-1 \end{array}$	67,2 74,8 71,5	6,9 7,6 7,3	8,1 13,6 17,3	17,8 4,0 3,8	393 353 369
3-2 4 4-2	72,9 67,7	6,1 5,6	13,3 12,3	7,7	36 2 390	22_	-28-	$\begin{bmatrix} 5-1 \\ -1-2 \end{bmatrix}$	68,8 78,6	7,0	20,8	8,3	385 336
1-2	69,8	5,8	16,9	7,4	378			2-2	75,0	7,9	9,1	7,9	352

C-H-O-N	C º/0	H 0/0	0 %	№ º/₀	M. G.	C]	Ħ	O— N	C º/º	H °/ ₀	O º/o	Nº/0	M.G.
22-28-2-6	64,7	6,9	7,8	20,6	408	22_	44	10-2	53,2	8,9	32,3	5,6	496
3-2	71,7	7,6	13,0	7,6	.368	22-	45		77,9	13,3	4,7	4,1	339
4	66,7	7,1 7,3	12,1	14,1	396		40	2-1	74,4	12,7	9,0	3,9	355
$egin{array}{cccccccccccccccccccccccccccccccccccc$	68,7 66,0	7,3	16,7 $20,0$	7,3	384	22	-46-	$^{-1}$	74,6 71,3	13,0 12,4	4,5 8,6	7,9 7,6	354 370
8-2	58,9	6,2	28,6	6,2	448	22_	58-		59,7	13,1	14,5	12,7	442
6	52,4	5,6	25,4	16,6	504	23-	12-	-186	41,8	1,8	43,6	12,7	660
10-2	55,0	5,8	33,3	5,8	480 3 2 3	23-	-13	$-1-1 \\ 3$	86,5 79,5	$\frac{4,1}{3,7}$	5,0	4,4	319 347
$22-29-1-1 \\ 2-1$	81,7 77,9	9,0	4,9 9,4	4,5	339			3-1	78,6	3,7	13,7	4,0	351
5—1	68,2	7,5	20,7	3,6	387	23-	-14-	-3-2	75.4	3.8	13,1	7.6	366
22-30-1-2	78,1	-8,9	4,7	8,3	338			4-2	72,3	3,7	16,7	7,3	382 442
2-2	74,6	8,5	9,0	7,9	354			6-4	62,4 58,7	3,2 3,0	21,7 $20,4$	12,7	442
4 3—2	69,1 71,3	8,1	13,0	7,6	370			16-8	42,0	2,1	38,9	17,0	658
4-4	63.8	7,2	15,4	13,5	414	23-	-15	-1-1	86,0	4,7	5,0	4,3	321
6-4	59,2	6,7	21,5	12,6	446	: ' '		2-1	81,9	4,4	9,5	4,1	337
22-31-1-1	81,2	9,5	4,9	4,3	$\begin{vmatrix} 325 \\ 341 \end{vmatrix}$			2-3 3-1	75,6 78,2	4,1	8,8	11,5	353
2—1 3—5	77,4 63,9	7,5	11,6	16,9	413			4-1	74,7	4,1	17,3	3,8	369
22-32-1-2	77,6	9,4	4,7	8,2	340	1		3	69,5	3,8	16,1	10,6	397
2-2	74,1	9,0	9,0	7,9	356			5 8-7	64,9 53,4	3,5	15,1 $24,7$	16,5 19,0	425 517
4-4	63,5	7,7	15,4 4,9	13,4	416 327	23-	16	-1-2	82,1	4,8	4,8	8,3	336
$22 - 33 - 1 - 1 \\ 2 - 1$	77,0	9,6	9,3	4,1	343	-		4	75,8	4,4	4,4	15,4	364
3-1	73,5	9,2	13,4	3,9	359			2-2	78,4	4,5	9,1	7,9	352 380
4-1	70,4	8,8	17,1	3,7	375		1	3-2	72,6	4,2	8,4	7,6	368
5-1 $22-34-1-2$	67,5	8,4	$\begin{vmatrix} 20,5 \\ 4,7 \end{vmatrix}$	$\begin{vmatrix} 3,6\\8,2 \end{vmatrix}$	342			4	69,7	4,0	12,1	14,1	396
2-2	73,8	9,5	8,9	7,8	358			4-2	71,9	4,2	16,6		384
22-35-1-1	80,3	10,6	4,9	4,2	329			6-2	67,0	3,9			412 416
2-1	76,6	10,1	9,3 17,0	4,0 3,7	345	23	_17	7-1-1	66,3 85,4	5,3	4,9	4,3	323
41 61	70,0 64,5	9,3	23,5	3,4		1		3	78,7	4,8	4,6	11,9	351
22-36-1-2	76,7	10,5	4,6	8.1	344			2-1	81,4	5,0	9,4	4,1	339 367
2-2	73,3	10,0	8,9	7,8	360			3-1	75,2	4,6	8,7	$\begin{vmatrix} 11,4\\3,9 \end{vmatrix}$	
22-37-1-1	79,8	11,2	$\begin{vmatrix} 4,8\\9,2 \end{vmatrix}$	$\frac{4,2}{4,0}$	331			3	72,1			11,0	383
$\begin{array}{c} 2-1 \\ 22-38-1-2 \end{array}$	76,1	11,0	4,6	8,1	346			5-1	71,3	4,4	20,7	3,6	387
2 - 2	72,9	10,5	8.8	7.7	362	23-	18	3-1-2	81,6			$\begin{bmatrix} 8,3 \\ 15,3 \end{bmatrix}$	338
3-2	69,8		12,7	7,4	378			$\frac{4}{2-2}$	75,4		9,0		354
$\begin{array}{c} 4-2 \\ 9-20 \end{array}$	67,0			$\frac{2}{3}$ $\frac{7,1}{38,6}$	394			4	72,3	4,7	' 8,4	14,6	382
22-39-1-1	79,5		$' \mid 4,8$	$3 \mid 4.2$	2 + 333			3-2	74,6	4,9	12,9		370
2-1	75,6	11,2	9,1	4,0	349	1		4-2 9-8	71,5	4,7	$\begin{vmatrix} 16,5 \\ 26,5 \end{vmatrix}$	$\frac{7}{2}$	550
22-40-1-2			4,6	8,0) 348 7 364			9-8	52,5		1 33.5	2 10,6	526
$egin{array}{cccccccccccccccccccccccccccccccccccc$		$\begin{vmatrix} 11,0\\ 3 \end{vmatrix} = 12,2$	$\begin{vmatrix} 8,8 \\ 4,8 \end{vmatrix}$	3 7,7 3 4,2	$\frac{1}{2} \frac{304}{335}$		-19	9 - 1 - 1	84,9	5.8	3 4,	9 4,3	325
22-41-1-1 2-1		2 11,	7 9,	1 4,0	0 351			3		5,4			
4-1		10,	$7 \mid 16,$	7 3,	7 383			$2-1 \\ 3$			$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c c} 1 & 9,4 \\ 6 & 11,4 \end{array} $	
22-42-1-2				$\frac{6}{2}$ 8,0	$0 \mid 350 \\ 7 \mid 366$			4-1		5,		$2 \mid \cdot \mid 3,$	7 373
$egin{array}{cccccccccccccccccccccccccccccccccccc$			$5 \mid 16.$	$1 \mid 7.6$	0 398	_		3	68,8	3 4,	7 - 16,	0 10,	5 401
22-43-1-1	1 0'.		3 4,	7 4,	2 337			5-1			$ \begin{array}{c c} 9 & 20, \\ 7 & 23, \end{array} $	$\begin{bmatrix} 6 & 3, \\ 7 & 3, \end{bmatrix}$	$ \begin{array}{c c} 6 & 389 \\ 4 & 405 \end{array} $
2-1	74,	3 12,	2 9,	1 3,	9 353		_20	6-1 $1-2$	1	$\begin{bmatrix} 1 & 4, \\ 2 & 5, \end{bmatrix}$		$7 \mid 8,$	2 340
3-1	- 1 '				$egin{array}{c c} 8 & 369 \ 0 & 352 \end{array}$		2($\frac{3-1-2}{2-2}$	77,	5 5,	6 9,	0 7,	9 356
22-44-1-2 22		$ \begin{array}{c c} 0 & 12, \\ 7 & 12, \end{array} $		7 7,	$6 \mid 368$			3-2	74,	2 5,	4 12	9 - 7,	5 372
3-2	68,	7 11,		5 7,	3 384			4-2	71,	1 5.	2 16	5 7,	2 388
	,	- 1		1									

C-H-O-N	C º/0	H ⁰ / ₀	0 %	N º/0	M.G.	C-	-H-O-	N	C º/o	H °/ ₀	O º/0	N º/0	M.G.
23-20-4	66,3	4,8	15,4	13,5	416	23-	-272	1	79,1	7,7	9,2	4,0	349
5—2	68,3	4,9	19,8	6.9	404			-1	72,4	7,1	16,8	3,7	381
12-8 $23-21-1-1$	46,0 84,4	3,3	32,0 4,9	18,7	600	2	=	3	67,5	6,6	15,6	10,2	409
3	77,7	5,9	4,5	4,3	327 355			—1 —1	69,5	6,8	20,1 23,2	3,5	397 413
2-1	80,4	6,1	9,3	4,1	343			3	62,6	6,1	21,8	9,5	441
33	74,4 71,3	5,7 5,4	8,6	11,3	371		7	_1	64,3	6,3	26,1	3,3	429
4—1	73.6	5,6	12,4	10,8	387		8	3 -1	60,4	5,9	24,4 28,8	9,2	457 445
6-3	63,4	4,8	22,1	9,7	435	23-	-28-1	-2	79,3	8.0	4,6	8,0	348
23-22-1-2	80,7	$6,4 \\ 5,9$	4,7	8,2	342		2	-2	75,8	7,7	8,8	7,7	364
2-2	77,1	6,1	8,9	7,8	358	11	3	-2	70,4	7,1 7,4	8,2 12,6	14,3	392 380
4	71,5	5,7	8,3	14,5	386	ŀ	4	-2	69,7	7,1	16,1	7,1	396
3-2	73,8 68,6	5,9	12,8 11,9	7,5 13,9	374 402			$-2 \\ -2$	67,0	6,8	19,4	6,8	412
4-2	70,8	5,6	16,4	7,2	390		7	Z 2	64,5	6,5 6,3	22,4 25,2	6,5	428 444
4	66,0	5,3	15,3	13,4	418		8-	2	60,0	6,1	27,8	6,1	460
8-2 23-23-1-1	60,8	4,8 7,0	28,2	6,2	329	23			82,4	8,6	4,8	4,2	335
3	77,3	6,4	4,5	11,8	357			$-1 \\ 3$	78,7 72,8	8,2 7,6	9,1 8,4	4,0	351 379
2—1	80,0	6,7	9,3	4,0	345			5	67,8	7,1	7,9	17,2	407
$\begin{array}{c} 3 \\ 3-1 \end{array}$	74,0 76,4	6,2 6,4	8,6 13,3	11,2	373 361			$-1 \\ -1$	72,1	7,6	16,7	3,6	383
5—1	70,2	5,8	20,3	3,6	393	ľ		$-1 \\ -1$	69, 2 59,6	7,3 6,3	20,0 31,1	3,5	399 463
6-1	67,5	5,6	23,5	3,4	409		.11	-1	55,7	5.9	35,6	2,8	495
23-24-1-2	80,2	7,0	4,6 4,3	8,1 15,1	344 372	23-		$egin{array}{c} -2 \ -2 \end{array}$	78,8	8,6	4,6	8,0	350
2-2	76,7	6,6	8,9	7,8	360		3.	-2 - 2	75,4 72,3	8,6 8,2 7,8	8,7 12,6	7,6 7,3	366 38 2
4	71,1	6,2	8,2	14,4	388		4	-2	69,4	7,5 7,2	16,1	7,0	398
6 32	66,3 73,4	5,8 6,4	7,7	$20,2 \\ 7,4$	416 376	92	-5- 311	-2	66,6 81,9	7,2	19,3	6,8	414
$4\mathbf{-2}$	70,4	6,1	16,3	7,1	392	20		1 1	78,2	9 ,2 8,8	4,7 9,1	$\frac{4,1}{3,9}$	337 353
. 4	65,7	5,7	15,2	13,3	420			1	71,7	8,0	16,6	3,6	385
5—2 6—6	67,6	5,9 5,0	19,6 20,0	6,9 17,5	408	23-	-321	$egin{array}{c} -2 \ -2 \end{array}$	78,4 75,0	9,1 8,7	4,5	7,9	352
8-4	57,0	5,0	26,4	11,6	484			$-2 \\ -2$	69,0	8,0	8,7 16,0	7,6 7,0	36S 400
23-25-1-1	83,4	7,6	4,8	4,2	331	23-	-33-1		81.4	9,7	4,7	4,1	339
$\begin{array}{c} 5 \\ 2-1 \end{array}$	71,3 79,5	6,5 7,2	$\begin{bmatrix} 4,1\\9,2 \end{bmatrix}$	18,1 4,0	387 347			$-1 \\ -3$	77,8 57,6	9,3 6,9	$9,0 \\ 26,7$	3,9	3 5 5 479
3	73,6	6,7	8,5	11,2	375	23-	-34—1-		78,0	9.6	4,5	8,8	354
3-1	76,0 70,6	6,9	13,2	3,9	363	-		-2	74,6	9,2	8,7	7,5	370
4-1	72,8	$\begin{array}{c c} 6,4 \\ 6,6 \end{array}$	12,3 16,9	10,7	391 379	23-	351· 2·		80,9 77,3	10,3	4,7 9,0	3,9	341 357
5—1	69,9	6,3	20,2	3,5	395	23-	-36—1		77,5	10,1	4,5	7,9	356
6-1	67,1 62,9	6,1	23,4	3,4	411			-2	74,2	9,7	8,6	7,5	372
5	59,1	5,7 5,4	21,9 20,5	9,5 15,0	439 467	23-	-37—1	-2 - 1	71,1 80,4	9,3 10,8	12,4 4,7	7,2 4,1	388 343
8-1	62,3	5,6 7,5	28,9	3,2	443		2	_1	76,9	10,3	8,9	3,9	359
$23-26-1-2 \\ 2-2$	79,8 76,2	7,5	-4.61	8,1	346	23-	-38-1-		77,1	10,6	4,5	7,8	358
3-2	73,0	7,2 6,9	8,8 12,7	8,1 7,7 7,4	$\frac{362}{378}$			-2	73,8 70,8	10,1	8,6 12,3	7,5 7,2	374 390
4-2	70,1	6,6	16,2	7,1	394		6-	-4	59,2	8,2	20,6	12,0 +	466
5—2	65,4 67,3	6,2	15,1 19,5	13,3	422	23 -	391-		80,0	11,3	4,6	4,1	345
6-2	64,8	6,1	22,5	6,8	$\frac{410}{426}$	23 -	40-1-	$-1 \\ -2$		10,8	8,9	3,9	3 61 360
7-2	62,4	5,9	25,3	6,3	442		2-	-2	73,4	10,6	8,5	7,4	376
23-27-1-1	82,9 76,5	8,1 7,5	4,8 4,4	$\frac{4,2}{11,6}$	333 361	23-	-411-	-1 -1	79,5	11,8	4,6	4.0	347
	,,,,	.,0	1,1	11,0	301		2-	-1	76,0	11,3	8,8	3,9	363

			The State State Section 1									
C-H-O-N	C º/o	H º/ ₀	0%	N º/0	M.G.	C—H–	-ON	C º/0	H °/ ₀	Ö º/ð	N º/o	M.G.
23-42-1-2	76,2	11,6	4,4	7,7 7,4	362 378	2418	$-2-4 \\ 3-2$	73,1 75,4	4,6 4,7	8,1, 12,6	14,2 7,3	394 382
2-2 $23-43-1-1$	73,0	11,1	8,4	4,0	349		4	70,2	4,4 4,1	11,7	13,6 19,2	410 438
2-1 $23-44-1-2$	75,6	11,8	8,8	3,8	365		$\frac{6}{4-2}$	65,8	4,1 4,5 4,2	16,3 $16,1$ $15,0$	7,0	398. 426
2-2 $23-45-1-1$ $2-1$	72,6 78,7 75,2	11,6 12,8 12,3	8,4 4,5 8,7	7,4 4,0 3,8 3,1	380 351 367 447		$5-2 \\ 6-2 \\ 6$	67,6 69,6 67,0 59,3	4,3 4,2 3,7	19,3 22,3 19,7	6,8 6,5 17,3	414 430 486
7-1 $23-46-1-2$ $2-2$	61,7 75,4 72,3	$\begin{vmatrix} 10,1\\ 12,6\\ 12,0 \end{vmatrix}$	25,1 4,4 8,4	7,6 7,3	366		7—2 14—8	64,6	4,0	25,1 34,9	6,3	446 642
23-47-1-1	78,2 74,8	13,3 12,7	4,5	4,0	353 369	24-19		85,4 78,9	5,6 5,2	4,7	$\begin{vmatrix} 4,2\\11,5 \end{vmatrix}$	337 365
2-1 $23-48-1-2$ $2-2$	75,0 71,9	13,0 12,5	4,3	7,6	368 384		5 2—1	73,3 81,6	4,8	4,1	17,8	393 353
24-10-19-8	40,3	1,4	42,6	15,7	714		3 3—1	75,6	5,0	8,4 13,0		381 369
24-12-1-2 18-10	83,7	3,5	39,6	19,2	728		. 3	72,5	4,8	12,1 11,3	10,6	397
24 - 13 - 4 - 1 $24 - 14 - 1 - 2$	76,0	3,4	16,9	3,7	346		45 51	84,5	5,6	19,8	20,5	441
2-2 8-2	79,6 62,9	3,9	8,8 27,9	7,7 6,1	362 458		6—1	71,8	4,6	23,0	3,3	417
4 11—2	59,2	2,9	26,3 34,8	11,5	486	24-20	12-21 $0-1-2$	36,3 81,8	2,4	24,2	8,0	352
16-8 24-15-1-3	43,0 79,8	2,1	38,1	16,7	670		2-2	75,8	5,3	4,2	7,6	368
3-1	78,9	4,1	13,1	3,8	365		4 3-2	72,7	5,0	$ 8,1 \\ 12,5 $		396
53	73,3	3,5	18,8	9,9	425		$\frac{4-2}{5-2}$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	5,0	16,0	7,0	400
$\begin{array}{c} 6 - 3 \\ 7 - 3 \end{array}$	65,3 63,0	3,3	24,5	9,2	457		18	45,0	3,1	12,5	39,4	: 640
$8-5 \\ 9-3$	57,5	3,1	29,4	8,6	$3 \mid 489$		$6-2 \\ 7-2$	66,7	4,5	25,0) 6,2	448
10-11 $24-16-2-2$	46,	$? \mid 2,4$	1 25,9		$0 \mid 617 \ 7 \mid 364$		$9-2 \\ 10-6$	$\begin{vmatrix} 60,0\\ 52,2 \end{vmatrix}$	3,6	30,0) 15,2	2 552
3-2	75,8	$3 \mid 4,$	$2 \mid 12,6$	$3 \mid 7,4$	$4 \mid 380$	24-2	19-6 $21-1-1$	$\begin{vmatrix} 41,4\\85,0 \end{vmatrix}$) 6,2	43,0	$7 \mid 4,$	1 339
4-2	72,	7 4,0	0 16,2	2 7,	1 + 396		3 5	78,5	5 5,7	4,	4 11,4	1 367
5 - 4	,	4 3,	$6 \mid 18, 2$	2 12,	7 440		2—1 3	. 81,	1 5,9	9,	$0 \mid 3,$	355
6-4 7-4			4 23	7 11,	9 472		3-1	77,0	$3 \mid 5,6$	12,	$9 \mid 3,$	371
8-6 9-6	3 55,	8 3,	1 24,	8 16,	$ \begin{array}{c c} 3 & 516 \\ 8 & 532 \end{array} $		3	63,	$3 \mid 4, \epsilon$	10,	6 21,	5 455
10	3 52,	6 2,	9 29,	2 15.	$3 \mid 548$		4-1 5-1		4 5,2	2 19.	$8 \mid 3,$	5 403
	3 79,	$3 \mid 4$	7 4,	4 11	,6 363	3	6-3	L 68, 3 64,		$\begin{bmatrix} 22 \\ 7 \end{bmatrix}$	9 3,	4 447
2	1 78	$5 \mid 4$	$, 6 \mid 13,$	$,1 \mid 3$,8 36'	7	7	8 62,	$2 \mid 4,$	5 24	$.2 \mid 9.$	$\begin{vmatrix} 1 & 463 \\ 9 & 354 \end{vmatrix}$
4-	1 75 3 70	$1 \mid 4$,4 16 ,1 15	$,6 \mid 10$	$,7 \mid 383$ $,2 \mid 41$	1		4 75.	,4 5,	7 4	.2 14	,7 382 ,6 370
5	5 65	$,6 \mid 3$,9 14 ,5 16	,6 15	$,9 \mid 43 \\ ,3 \mid 48$	3	2—3 3—3	2 74	$,6 \mid 5,$	7 12	,4 7	$,2 \mid 386$
	5 61	$1 \mid 3$	$\begin{array}{c c} 6 & 20 \\ 5 & 23 \end{array}$,4 14	$,9 \mid 47$		4	4 69 2 71	$,6 \mid 5,$	$5 \mid 15$,9 7	$,0 \mid 402$
	2 82	$2,3 \mid 5$.1 4	$6 \mid 8$	3,0 35 1,8 37	0	5-	4 67 2 68	$5.9 \mid 5.$	$3 \mid 19$	1,1	,7 418
	6 70	9 4	$4.4 \mid 3$	3.9 20	$),7 \mid 40$	6	6-	2 66 4 62	,3 5	1 22	[2,1] 6 $[2,8]$ 12	$\begin{bmatrix} 3,5 & 434 \\ 2,1 & 462 \end{bmatrix}$
2	-2 78	3,7 4	1,9 8	, ,	7,6 36	·		.	1		1	į.

C-H-O-N	C º/o	H ⁰ / ₀	O º/0	N º/0	M.G.	C-	-HON	C º/o	H ⁰ / ₀	O º/o	N 0/0	M. G.
$\begin{array}{c} 24 - 22 - 6 - 18 \\ 7 - 2 \\ 4 \\ 12 - 2 \\ 24 - 23 - 1 - 1 \\ 2 - 1 \end{array}$	43,8 64,0 60,2 54,3 84,5 80,7	3,3 4,9 4,6 4,2 6,7 6,4	14,6 24,9 23,4 36,2 4,7 9,0	38,3 6,2 11,7 5,3 4,1 3,9	658 450 478 530 341 357		$ \begin{array}{r} -28 - 4 - 4 \\ 6 - 2 \\ 8 - 4 \\ 9 - 2 \\ -29 - 1 - 1 \\ 3 \end{array} $	66,1 65,5 57,6 59,0 83,0 76,8	6,4 6,3 5,6 5,7 8,3 7,7	14,7 21,8 25,6 29,5 4,6 4,3	12,8 6,3 11,2 5,7 4,0 11,2	436 440 500 488 347
3 5 3—1 3 4—1 3	74,8 69,7 77,2 71,8 74,0 69,1	5,6 5,6 6,2 5,7 5,9 5,5	8,3 7,7 12,9 12,0 16,4 15,3	10,9 17,0 3,7 10,5 3,6 10,1	385 413 373 401 389 417	24-	$ \begin{array}{c} 3 \\ 4-3 \\ 7-1 \\ 8-1 \\ 42-11 \\ -30-1-2 \end{array} $	79,3 68,1 65,0 62,7 25,2 79,6	8,0 6,8 6,6 6,3 2,5 8,3	8,8 15,1 25,3 27,9 58,8 4,4	3,9 9,9 3,1 3,0 13,5 7,7	375 363 423 443 459 1143 362
$ \begin{array}{r} 6-3 \\ 8-1 \\ 24-24-1-2 \\ 4 \\ 2-2 \\ 6 \end{array} $	64,1 63,6 80,9 75,0 77,4 67,3	5,1 5,1 6,7. 6,2 6,4 5,6	21,4 28,2 4,5 4,2 8,6 7,5	9,4 3,1 7,9 14,6 7,5 19,6	449 453 356 384 372 428		2-2 3-2 4 6 4-2 4	76,2 73,1 68,2 64,0 70,2 65,7	7,9 7,6 7,1 6,7 7,3 6,8	8,5 12,2 11,4 10,7 15,6 14,6	7,4 7,1 13,3 18,6 6,8 12,8	378 394 422 450 410 438
$ \begin{array}{c} 3-2 \\ 4 \\ 6 \\ 4-4 \\ 6 \\ 6-4 \end{array} $	74,2 69,2 64,9 66,7 62,6 62,1	6,2 5,8 5,4 5,6 5,2 5,2	12,4 11,5 10,8 14,8 13,9 20,7	7,2 13,5 18,9 12,9 18,3 12,0	388 416 444 432 460 464		5-2 $6-2$ $8-4$ $-31-1-1$ $2-1$ $6-1$	67,6 65,2 57,4 82,5 78,9 67,1	7,0 6,8 6,0 8,9 8,5 7,2	18,8 21,7 25,5 4,6 8,8 22,4	6,6 6,3 11,1 4,0 3,8 3,3	426 442 502 349 365 429
$\begin{matrix}&&&6\\8-2\\11-2\\24-25-1-1\\&&&3\\3-1\\4-1\end{matrix}$	58,5 61,6 55,8 83,9 77,6 76,8 73,6	4,9 5,1 4,6 7,3 6,7 6,7	19,5 27,3 34,1 4,6 4,3 12,8	17,1 6,0 5,4 4,1 11,3 3,7	492 468 516 343 371 375	24-	-32-1-2 2-2 4-2 9-4 -33-1-1 2-1	79,1 75,8 69,9 55,4 82,1 78,5	8,8 8,4 7,8 6,1 9,4 9,0	4,4 8,4 15,5 27,7 4,5 8,7	7,7 7,3 6,8 10,8 4,0 3,8	364 380 412 520 351 367
5-1 $6-1$ $8-1$ $16-1$ $24-26-1-2$	70,8 68,1 63,3 49,4 80,4 74,6	6,4 6,1 5,9 5,5 4,3 7,2 6,7	16,4 19,7 22,7 28,1 43,9 4,5 4,1	3,6 3,4 3,3 3,1 2,4 7,8 14,5	391 407 423 455 583 358 386	24-	$ \begin{array}{r} -34 - 1 - 2 \\ 2 - 2 \\ 12 - 6 \\ -35 - 1 - 1 \\ 2 - 1 \\ -36 - 1 - 2 \\ 2 - 2 \end{array} $	78,7 75,3 48,1 81,6 78,0 78,3	9,3 8,9 5,7 9,9 9,5 9,8	4,4 8,4 32,1 4,5 8,7 4,3	7,6 7,3 14,0 4,0 3,8 7,6	366 382 598 353 369 368
$ \begin{array}{r} 2 - 2 \\ 4 \\ 3 - 2 \\ 4 - 2 \\ 5 - 2 \\ 4 \end{array} $	77,0 71,6 73,8 70,9 68,2 64,0	6,9 6,5 6,7 6,4 6,2 5,8	8,5 8,0 12,3 15,8 18,9 17,8	7,5 13,9 7,2 6,9 6,6 12,4	374 402 390 406 422 450		$ \begin{array}{r} 2-2 \\ 8-2 \\ -37-1-1 \\ 2-1 \\ 5-3 \\ 9-1 \\ -38-1-2 \end{array} $	75,0 60,0 81,1 77,6 64,4 59,6 77,8	9,4 7,5 10,4 10,0 8,3 7,7 10,2	8,3 26,7 4,5 8,6 17,9 29,8	7,3 5,8 3,9 3,8 9,4 2,9 7,6	384 480 355 371 447 483
6-2 4 $7-8$ $8-4$ $24-27-1-1$	65,7 61,8 53,5 57,8 83,5 79,8	5,9 5,6 4,8 5,2 7,8	21,9 20,6 20,8 25,7	6,4 12,0 20,8 11,2 4,1 3,9	438 466 538 498 345 361	24-	2-2 -39-1-1 2-1 10-1 -40-1-2 2-2	74,6 80,7 77,2 57,5 77,4 74,2	9,8 10,9 10,4 7,8 10,7 10,3	4,3 8,3 4,5 8,6 21,9 4,3	7,2 3,9 3,7 2,8 7,5	370 386 357 373 501 372
$\begin{array}{c} 3\\ 3-1\\ 4-1\\ 5-1\\ 7-1\\ 13-3 \end{array}$	74,0 76,4 73,2 70,4 65,3 51,0	6,9 7,2 6,9 6,6 6,1 4,8	8,8 8,2 12,7 16,3 19,6 25,4 36,8	10,8 3,7 3,6 3,3 3,2 7,4	389 377 393 409 441 565	24	$ \begin{array}{c} 3-2 \\ 10-6 \\ 15-6 \\ -41-1-1 \\ 2-1 \\ 4-1 \end{array} $	71,3 50,3 44,2 80,2 76,8 60,8	9,9 7,0 6,1 11,4 10,9	8,2 11,9 28,0 36,8 4,5 8,5	7,2 6,9 14,7 12,9 3,9 3,7	388 404 572 652 359 375
$24-28-1-2 \\ 2-2 \\ 4 \\ 4-2$	80,0 76,6 71,3 70,6	7,8 7,4 6,9 6,8	4,4 8,5 7,9 15,7	7,8 7,4 13,9 6,8	360 376 404 408	24_	$egin{array}{c} 4-1 \\ 9-1 \\ -42-1-2 \\ 2-2 \\ 12-6 \\ \end{array}$	59,1 77,0 73,8 47,5	10,1 8,4 11,2 10,8 6,9	15,7 29,6 4,3 8,2 31,7	3,4 2,9 7,5 7,2 13,8	407 487 374 390 606

C-H-O-N	C º/0	H ⁰ / ₀	O º/0	N 0/0	M.G.	C-H-	O N	C º/ ₀	H°/0	0 0/0	N º/o	M.G.
$24-43-1-1 \ 2-1$	79,8 76,4	11,9 11,4	4,4 8,5	3,9 3,7	361 377	25—21-	$-1 - 3 \\ 2 - 1$	79,1	5,5 5,7	4,2 8,7	11,1 3,8	379 367
$24-44-1-2 \\ 2-2$	76,6 73,4	11,7 11,2	4,3 8,2	7,4 7,1	376 392		3	75,9	5,3 5,0	8,1	10,6 16,5	395 423
24-45-1-1 $2-1$	79,3 76,0	12,4 11,9	4,4 8,4	3,9 3,7	363 379		3-1	78,3 73,0	5,5 5,1	12,5 11,7	$\begin{vmatrix} 3,7\\10,2 \end{vmatrix}$	383
24-46-1-2 $2-2$	76,2 73,1	12,2 $11,7$	4,2 8,1	7,4	378 394		$\frac{4-3}{5-1}$	70,3	4,9 5,0	15,0 19,3	9,8	427 415
24-47-1-1 $2-1$	78,9 75,6	12,9 12,6	4,4 8,4	3,8	365 381	25—22-	$-1-2 \\ 2-2$	82,0 78,5	6,0	4,4	7,6	366 382
3-1	72,5	11,8	12,1	3,5	397		3-2	75,4	5,5	12,1	7,0	398
24—48—1—2 2—2	75,8 72,7	12,6 12,1	4,2 8,1	7,4	380 396	25 — 2 3		67,3 85,0	4,9 6,5	$\begin{vmatrix} 21,5\\4,5 \end{vmatrix}$	6,3	353 353
$24-49-1-1 \ 2-1$	78,5	13,4 12,8	4,3	3,8	367		2-1	73,4	5,6	3,9	17,1	409 369
24-50-1-2	75,4 72,3	13,1 12,6	4,2	7,3 7,1	382		3 3—1	75,6	5,8	8,0	10,6	397
25—14—8—6 17—8	57,0	2,7	24,3 39,0	16,0 16,0	526 698		4—1 5—1	74,8 71,9	5,7	15,9 19,2	3,5	401 417
25-15-1-1	87,0	4,3	4,6	4,1	345	25-24	7-3	62,9 81,5	4,8	23,5 4,3	8,8	477 368
$^{2-1}_{4-1}$	83,1 76,3	4,1 3,8	8,9 16,3	3,9	361	20-24	$^{2-2}$	78,1	6,2	8,3	7,3	384 416
25—16—1—2 2—2	83,3	4,4	8,5	7,8	360		4—2 4	72,1 67,6		15,4	12,6	444
3-2 4-4	76,5 68,8	4,1 3,7	12,2	7,1 12,8	392 436	25—25	3—1—1	84,5 78,3	6,5	4,5	11,0	355
8-4 10-6	60,0	3,2	25,6 28,6	11,2	500		$\frac{2-1}{3-3}$		6,7	8,6		371 415
25-17-1-1	86,5	4,9	4,6	4,0	347		4-1		6,2	15,9	3,5	403 431
$^{3}_{2-1}$	80,0	4.7	8,8	3,9	363	25-26	7-1	66,5	5,5	24,8	3,1	451
25-18-1-2	76,7 82,9	5,0	4,4	7,7	362	25-20	2-2	77,8	6,7	8,3	7,2	386
4 22	76,9		8,4	7.4	378		3-2	69,8	6,0	11,9	$2 \mid 13,0$	430
$\frac{4}{3-4}$	73,9	4,4	7,9	13,8	406		$\frac{4-2}{5-2}$		6,0	15,3 18,4	6,4	
$\overset{4-2}{4}$	73,2	4,4	15,6	6,8	410	2525	7—1—1 5		7,6	4,5		
5-4		4,0	17,6	12,3	454		2—1	. 80,4	$\lfloor 7,2 \rfloor$	8,6	3 3,7	
6-4 $25-19-1-1$	85,9	5,4	4,6	$6 \mid 4,0$	349		4-1	. 74,1	1 6,7	15,8	$3 \mid 3,4$	405
$egin{array}{cccccccccccccccccccccccccccccccccccc$	82,9	2 5,2	8,8	3 3,8	$3 \mid 365$		3-1-2	80,6	3 7,5	4,3	3 7,5	372
3 5	76,	$3 \mid 4,8$	8,1	1 10,7	$\begin{vmatrix} 393 \\ 421 \end{vmatrix}$		2—2 4—8	59,5	5 5,6	12,	7 22,2	504
3—1 4—1	. 78,'	7 5,0) 12,6	$3\mid 3,7$	7 381		5—2 7—2	64,	1 6,0	23,9	9 6,0	468
3	70,	6 4,5	$5 \mid 15.0$	9.9	9 425	25-2	9—1—3		$5 \mid 7.5$	4.	1 10.9	387
6-1 $25-20-1-2$	82,	4 5,5	$5 \mid 4,4$	4 7,'	7 364	:	2—3	L 80,0	0 7,7	8,	$ \begin{array}{c c} 5 & 3,5 \\ 9 & 10,4 \end{array} $	375
4	71,	$4 \mid 4,8$	$3 \mid 3,8$	$8 \mid 20,0$	$0 \mid 420$		4—3 7—3	8 69,0	$\begin{array}{c c} 6,7 \\ 6,7 \\ 6,0 \end{array}$	14, 23,	$7 \mid 9,6$	3 435
22 4	73,	$ \begin{array}{c c} 9 & 5, \\ 5 & 4, \end{array} $	$\begin{array}{c c} 3 & 8,4 \\ 9 & 7.8 \end{array}$	8 13.	7 408	25-30	0-1-2	2 80,	$2 \mid 8,0$) 4,	3 7,5	5 374
42 76	72,	$8 \mid 4,$	$8 \mid 15,5$	$5 \mid 6, 8$	$ \begin{array}{c c} 8 & 412 \\ 8 & 516 \end{array} $		2-2	1 74, 2 76,	9 7,7	8,	$2 \mid 7,3$	2 390
8-8 25-21-1-1	3 53,	6 3,	6 22,8	$8 \mid 20,$	0 560		3-2 4-4		$ \begin{array}{c c} 9 & 7,4 \\ 7 & 6,7 \\ \end{array} $	11,	$\begin{vmatrix} 6,9\\2 \end{vmatrix}$	$\begin{vmatrix} 400 \\ 4 \\ 450 \end{vmatrix}$
20-21-1-	100,	,	-,	,	1	E			1		1	,

C-H-O-N	C º/0	H ⁰ / ₀	O º/0	N º/0	M.G.	C-H-O-N	C º/0	H °/ ₀	0 º/0	N º/0	M.G.
25-30-5-2	68,5	6,8	18,3	6,4	438	25-51-1-1	78,7	13,4	4,2	3,7	381
6	60,7	6,1	16,2	17,0	494	2-1	75,6	12,8	8,1	3,5	397
6-2 25-31-1-1	66,1 83,1	6,6	21,1	6,2	454	25-52-1-2	75,7	13,1	4,0	7,1	396
3	77,1	8,6	4,4	3,9	361 389	2—2 3—2	72,8	12,6 12,1	7,8 11,2	6,8	412 428
2-1	79,6	8,2 7,9	8,5	3,7	377	4-8	56,8	9,8	12,1	6,5 $21,2$	528
3-1	76,3	7,9	12,2	3,6	393	25-54-4-2	67,3	12,1	14,3	6,3	446
4-1° 5-1		7,6 7,3	15,6	3,4	409	4	63,3	11,4	13,5	11.8	474
7-3	70,6	6,4	18,8 23,1	3,3 8,6	425 485	6 8	59,8	10,7	12,7	16,7	502
8-1	63,4	6,6	27,1	2,9	473	26-15-6-1	56,6 71,4	10,2	12,1 $22,0$	$\begin{bmatrix} 21,1\\ 3,2 \end{bmatrix}$	530 437
25-32-1-2	79,8	8,5	4,2	7,4	376	26-16-1-2	83,9	4,3	4,3	7,5	372
6	69,4	7,4	3,7	19,4	432	2-2	80,4	4,1	8,2	7,2	388
2-2 5-2	76,5 68,2	8,2 7,3	8,2	7,1	392	4-6	65,6	3,4	13,4	17,6	476
25-33-1-1	82,6	9,1	18,2 4,4	6,3	440 363	64 82	65,0 64,5	3,3 3,3	20,0 26,4	11,7	480
2-1	79,1	8,7	8,4	3,7	379	4	60,9	3,1	25,0	5,8 10,9	484 512
5-1	70,3	7,7	18,7	3,3	427	9-4	59,1	3.0	27,3	10,6	5 2 8
25—34—1—2 2—2	79,4	9,0	4,2	7,4	378	10-4	57,3	2,9	29,4	10,3	544
5-2	76,1	8,6	8,1 18,1	7,1 6,3	394 442	26-17-1-1	86,9	4,7	4,5	3,9	359
11-4	53,0	6,0	7,3	15,9	439	2-1	83,2	4,4 4,5	4,1 8,5	10,9	387 375
25-35-1-1	82,2	9,6	4,4	3,8	365	3-5	69,8	3.8	10,7	15,7	447
2-1	78,7	9,2	8,4	3,7	381	4-1	76,7	4.2	15,7	3,4	407
25-36-1-2	78,9 75,7	9,5	4,2	7,4	380	7-3	64,6	3,5	23,2	8,7	483
25-37-1-1	81,7	10,1	8,1 4,4	7,1	396 367	8-3 26-18-1-2	62,5 83,4	3,4 4,8	25,6 4,3	8,4	499 374
2-1	78,3	9,7	8,4	3,6	383	2-2	80,0	4,6	8,2	$\begin{bmatrix} 7,3\\7,2 \end{bmatrix}$	390
6-3	63,1	7,8	20,2	8,8	475	3-2	76,8	4,4	11,8	6,9	406
25 - 38 - 1 - 2 $2 - 2$	78,5	9,9	4,2	7,3	382	4-4	69,3	4,0	14,2	12,4	450
25-39-1-1	75,4 81,3	$\frac{9,5}{10,6}$	8,0 4,3	7,0	398 369	5—4 6—2	66,9	3,9	17,2	12,0	466
8-1	62,4	8,1	26,6	2,9	481	4	68,7 64,7	3,9	21,1 19,9	6,2	454 482
25-1	39.8	5,2	53.1	1,8	753	8-4	60,7	3.5	24,9	10,9	514
25-40-1-2	78,1	10,4	4,2	7,3	384	26-19-1-1	86,4	5,3	4,4	3,9	361
$egin{array}{c} 2-2 \ 25-41-1-1 \end{array}$	75,0 80,8	10,0	8,0 4,3	7,0	400 371	3	80,2	4,9	4,1	10,8	389
2-1	77,5	10,6	8,3	3,6	387	$\begin{array}{c} 2-1 \\ 3-1 \end{array}$	82,8	5,0 4,8	8,5 12,2	3,7	377 393
25-42-1-2	77,7	10,9	4,1	7,3	386	3	74,1	4,5	11,4	10,0	$\frac{333}{421}$
$\begin{array}{c} 2-2 \\ 9-6 \end{array}$	74,6	10,4	8,0	7,0	402	4-1	76,3	4,6	15,6	3,4	409
25-43-1-1	52,6 80,4	7,4	25,3 4,3	14,7 3,8	570 373	26-20-1-2	83,0	5,3	4,3	7,4	376
2-1	77,1	11.0	8,2	3,6	389	$egin{array}{cccccccccccccccccccccccccccccccccccc$	77,2 79,6	5,0 5,1	4,0 8,2	13,8	404 392
25-44-1-2	77.3	11,3	4,1	7,2	900	A	74,3	4.8	7,6	13,3	420
2-2	74,2	10,9	7,9	6,9	404	3-2	76,5	4,9	11,8	6,8	408
4 <u>2</u>	68,8	10,1	14,7	6,4	436	4	71,6	4,6	11,0	12,8	436
25-45-1-1	80.0	12.0	12,3	21,5	520 375	. 42	73,6 65,0	4,7	15,1	6,6	424 480
2-1	76,7	11,5	4,3 8,2	3,6	391	3-2 $ 4 $ $ 4-2 $ $ 6 $ $ 6-6$	60,9	3.9	13,3 18,7	17,5 16,4	512
25-46-1-2	76,9	11,8	4.1	3,6 7,2	390	7-2	66,1	4,2	23,7 +	5,9	472
$\begin{array}{c} 2-2 \\ 25-47-1-1 \end{array}$	73,9	11,3	7,9 4,2	6.9	406	26-21-1-1	86,0	5,8	4,4	3,8	363
2-1	79,6 76,3	12,5 12,0	4,2 8,1	3,7	377	3	79,8	5,4	4,1	10,7	391
25-48-1-2		12,0	4,1	3,6	393 392	2-1	82,3 76,7	5,5 5,2	8,4 7,8	3,7	379
2-2	73,4	11,8	7,8	6,9	408	4-3	71,1	4,8	14,6	10,3	407 439
$25-49-1-1 \\ 2-1$	79,1	12,9	4.2	3,7	379	. 5	66,8	4,5	13,7 +	15,0	467
25-50-1-2	75,9 76,1	12,4 $12,7$	8,1	3,5	395	26-22-1-2	82,5	5,81	4,2	7.4	378
2-2	73,2	12,2	7,8	7,1	394 410	4 6	76,8 71,9	5,4	3,9	13,8	406
	,	,-	,,,	,,0		, ,	11,0	5,1	3,7	19,3	434

C-H-O-N	C º/0	H ⁰ / ₀	0.0/0	N º/0	M.G.	C-H-O-N	C º/0	H°/0	O º/o	Nº/0	M.G.
26-22-2-2	79,2	5,6	8,1	7,1	394	26-30-4-8	60,2	5,8	12,4	21,6	518
4	73,9	5,2	7,6	13,3	422	6-4	63,1	6,1	19,4	11,3	$\frac{494}{482}$
$egin{array}{c} 3-2 \ 4-2 \end{array}$	76,1 73,2	5,4 5,2	11,7 15,0	6,8	$ \begin{array}{c c} 410 \\ 426 \\ \end{array} $	$7-2 \\ 8-4$	64,7	6,2 5,7	23,2 24,3	5,8	526
4-2	68,7	4,8	14,1	12,3	454	26-31-1-1	83,6	8,3	4,3	3,7	373
5-2	70,5	5,0	18,1	6,3	442	3	77,8	7,7	4,0	10,5	401
6-4	64,2	4,5	19,7 23,6	11,5	486	$2-1 \\ 3$	80,2	8,0	8,2 7,7	3,6	389 417
7-2 26-23-1-1	65,8	4,6 6,3	4,4	3,8	365	4-1	74.1	7,4	15.2	3.3	421
3	79,4	5,8	4,1	10,7	393	17-1	49,6	4.9	43,2	2,2	629
2-1	81,9	6,0	8,4	3,7	381	26-32-1-2	80,4	8,2 7,9	4,1 7,9	7,2	388 404
3-3	76,3 73,3	5,6	7,8	10,3	$\begin{vmatrix} 409 \\ 425 \end{vmatrix}$	5-2	69,0	7,1	17,7	6.2	452
6-3	66,0	4,8	20,3	8,9	473	8-2	62,4	6,4	25,6	5,6	500
26-24-1-2	82,1	6,3	4,2	7,4	380	26-33-1-1	83,2	8,8	4,3	3,7	375
2-2	78,8 73,6	6,0	8,1	7,1	396 424	2-1	77,4	8,4		10,4	391
6	69,0	5,3	7,1	18,6	452	3-1	76,7	8,1	11,8	3,4	407
3-2	75,7	5,8	11,6	-6,8	412	26-34-1-2	80,0	8,7	4,1	$\begin{array}{ c c c } 7,2 \\ 6,9 \end{array}$	390
$4-2 \\ 5-2$	72,9 70,3	5,6	15,0	6,5 16,3	428	2—2 3—2	76,8 73,9	8,4			422
62	68,8	5,4 $5,2$	20,9	6,1	460	4_2	71,2	7.7	14,6	6,4	438
26-25-1-1	85,0	6,8	4,4	3,8	367	4	67,0	7,3	-13.7	12,0	466
3	79,0		4,0			$\begin{bmatrix} 26 - 35 - 1 - 1 \\ 2 - 1 \end{bmatrix}$	82,8 79,4		4,2	3,7	377
5 2—1	73,8		3,8			6-1	68,3	7.6	21,0	3,1	457
3	75,9	6,1	7,8	10,2	411	26-36-1-2	79,6	9,2	4,1	7,1	392
3-1	78,2	6,3	12,0	3,5	399	$\begin{array}{c c} 2-2 \\ 6-4 \end{array}$	76,5 $62,4$	$\begin{array}{ c c c c c c c c c c c c c c c c c c c$	7,8	6,9	
4-3	73,1	5,8	11,2		$\begin{vmatrix} 427 \\ 443 \end{vmatrix}$	8	56,1		+17.3	20,1	556
51	72,4	5.8	18,6	1.3.2	431	7-4	60,5	7,0	+21,7	' 10,8	516
26-26-1-2	81,7	6,8	4,2	7,3	382	8-2 26-37-1-1	61,9 82,3		25,4 4,2	$\begin{bmatrix} 5,6 \\ 3,7 \end{bmatrix}$	
2—2 4	78,4 73,2	6,5	8,0		398	20-57-1-1	79,0	9,4	. 8.1	3.5	
3-4			10,8			3-1	75,9	9,0	11,7	3,4	411
46	64,2	5,3	13,2	17,3	486	26-38-1-2	79,2		4,1	7,1	394
5-2	69,9		17,9 21,0		5 446	2-2 $26-39-1-1$	76,1	10,2	4,2	3,7	381
$7-6 \\ 10-4$	1		28,9		554	2-1	₹78,6	9,8	8,1	1 3,5	397
26-27-1-1	. 84,5	5 7,3	4,3	3,8	3 369	3-1	75,5	9,4	11,6	$\frac{3}{3}$	413
$^{2-1}$) 7,0	8,5	$\begin{bmatrix} 3,6\\1&3,0 \end{bmatrix}$	385	$4-1 \\ 11-1$	72,7 57,6	9,1			541
$7-1 \\ 26-28-1-2$		$\begin{array}{c c} 1 & 5,8 \\ 2 & 7,3 \end{array}$	24,1	7,5	384	26-40-1-2	78,8	10,1	4,0	7,1	396
6	70,9	9 6,4	\parallel 3,6	$3 \mid 19,1$	1 440	2-2	75,7		7 7,8	$\begin{array}{c c} 6,8 \\ 2 & 3,6 \end{array}$	$\frac{3}{3} \begin{vmatrix} 412 \\ 383 \end{vmatrix}$
2-2	78,0	0. 7,0	8,0		$\frac{1}{1}$ $\frac{400}{456}$	$26-41-1-1 \ 2-1$	81,5	$\begin{bmatrix} 10, 7 \\ 10, 3 \end{bmatrix}$	$\frac{4}{8}$		
$egin{array}{cccccccccccccccccccccccccccccccccccc$	1 7	$\begin{bmatrix} 6,1 \\ 2 \end{bmatrix} = \begin{bmatrix} 6,5 \end{bmatrix}$	7,0 $14,8$	$0 \mid 18,4$		5-1	69.8	9,2	2 17,9	9 3,1	447
6		5,7	13,1	17,2	2 488	10-1	59,2	$2 \mid 7.8$	30,4	$\begin{array}{c cccc} 4 & 2,6 \\ 7,6 \\ \end{array}$	5 527
5—2	69,6	6 6,2	17,9	9 6,2	2 448	$26-42-1-2 \\ 2-2$	78,4		$\frac{1}{1}$ $\frac{4}{7}$	$\frac{7}{6}$, $\frac{6}{8}$	3 414
$26-29-1-1 \\ 2-1$		1 7,8	$\begin{array}{ c c c c }\hline 4,3\\8,3\\ \end{array}$	$\frac{3}{3}$ $\frac{3}{3}$	$\begin{vmatrix} 3 & 371 \\ 3 & 387 \end{vmatrix}$	5-2	67,	5 9,	1 17,	$ 6\rangle$	1 462
3—1		$\begin{bmatrix} 3 & 7,5 \\ 2 & 7,0 \end{bmatrix}$	7,	7/10,	1 415	26-43-1-1	. 81,0) 11.2	$2 \mid 4,$	1 + 3,6	385 5 401
3-3	72,	4 6,7	11,	1 9,	7 431	2—1 4—1		1 10,7	$7 \mid 8,9 \\ 14,8$	$\begin{bmatrix} 0 & 3, 3 \\ 3 & 3, 3 \end{bmatrix}$	2 433
4-1	1 /	$\frac{4}{2} \mid \frac{6,9}{7}$	15,3	$\begin{bmatrix} 3 & 3 & 3 \\ 1 & 7 & 7 \end{bmatrix}$	$\begin{vmatrix} 3 & 419 \\ 2 & 386 \end{vmatrix}$	5-1		$5 \mid 9,6$	3 17,8	$3 \mid 3,$	1 449
$26 - 30 - 1 - 2 \\ 2 - 2$			8,0	$0 \mid 7,$	$\begin{vmatrix} 300 \\ 402 \end{vmatrix}$	6-1	. 67,	1 9,	$2 \mid 20,$	$6 \mid 3,6$	$\begin{vmatrix} 465 \\ 400 \end{vmatrix}$
. 4	72,	$6 \mid 7,0$	7,	$4 \mid 13,0$	0 430		78,0			$\begin{bmatrix} 7 \\ 6 \end{bmatrix}$	7 416
3-2		$\frac{6}{6}$	11,	5 6,	$egin{array}{c c} 7 & 418 \ 4 & 434 \ \hline \end{array}$	1 AW 3 7	80,		$\vec{6} \mid \vec{4},$	$1 \mid 3,$	387
4—2	71,	9 6,9	14,	$7 \mid 6,$	± 404		1 ,	1 '	1	1	1

C-H-O-N	C º/0	H ⁰ / ₀	O º/o	N º/0	M.G.	C-	-HON	C º/o	H °/ ₀	O º/o	N °/0	M.G.
264521 41	77,4	11,2 10,3	7,9 14,7	3,5	403 435	27-	$-22 - 3 - 2 \\ 4 - 2$	76,8 74,0	5,2 5,0	11,4 14,6	6,6	422 438
8-1	62,5	9,0	25,6	2,8	499		$\tilde{5}$ $-\tilde{4}$	67,2	4,6	16,6	11,6	482
26-46-1-2	77,6	11,4	4,0	7,0	402	07	6-4	65,1	4,4	19,3	11,2	498
2-2 $26-47-1-1$	74,6 80,2	11,0	7,6 4,1	$\frac{6,7}{3,6}$	418 389	27.	-23-1-1 2-1	85,9 82,4	6,1 5,8	4,2 8,1	3,7	377 393
2-1,	77,0	11,6	7,9	3,4	405		3	77,0	5,5	7,6	9,9	421
26-48-1-2	77,2 74,3	11,9 11,4	4,0 7,6	6,9	404 420		4-1	76,2	5,4	15,1	3,3	425
26-49-1-1	79,8	12,5	4,1	3,6	391		61	71,5 70,9	5,1 $5,0$	14,1 21,0	9,3	$\frac{453}{457}$
2-1	76,6	12,0	7,9	3,4	407	27-	-24-1-2	82,6	6,1	4,1	7,1	392
7—3 26—50—1—2	60,6 76,8	9,5 $12,3$	21,7	8,2 6,9	515 406		4 6	77,1 72,3	5,7 5,4	3,8 3,6	13,3 18,7	$\frac{420}{448}$
2-2	73,9	11,8	7,6	6,6	422		2—2	79,4	5,9	7,8	6,9	408
26-51-1-1	79.4	13,0	4,1	3,5	393		4	74,3	5,5	7,3	12,8	436
2—1 3—1	76,3 73,4	12,5 12,0	7,8 11,3	3,4	409 425		3-4	71,7 67,5	5,3 5,0	10,6 10,0	12,4 17,5	$\frac{452}{480}$
26-52-1-2	76,5	12,7	3,9	6,9	408		6-2	68,6	5,1	20,3	5,9	472
2-2 26-53-1-1	73,6 79,0	12,3 13,4	7,5	6,6	424		6	61,3	4,5	18,2	15,9	528
2-1	75,9	15,4 $12,9$	7,8	3,5 3,4	395 411	27-	$12-4 \\ -25-1-1$	54,4 85,5	4,0 6,6	32,2 4,2	9,4	596 379
26-54-1-2	76,1	13,2	3,9	6,8	410		$^{2-1}$	82,0	6,3	8,1	3,5	395
$2-2 \\ 27-17-3-1$	73,2 70,4	$\frac{12,7}{4,2}$	7,5 11,9	$\frac{6,6}{3,5}$	426 403		3-1 4-1	78,8	6,1	11,7	3,4	411
4-1	77,3	4,1	15,3	3,3	419	27-	-26-1-2	67,1 82,2	5,2	13,2 4,1	$\begin{array}{c c} 14,5 \\ 7,1 \end{array}$	483 394
6-3	67,6	3.6	20,0	8,8	479		2-2	79,0	6,3	7,8	6,8	410
$27-18-1-2 \ 4$	83,9 78,3	4,7 4,3	$\frac{4,1}{3,9}$	7,2 13,5	386 414		$\begin{array}{c} 3-2 \\ 4-2 \end{array}$	76,1 73,3	$\frac{6,1}{5,9}$	11,2	6,6	$\frac{426}{442}$
2-2	80,6	4,5		6,9	402	27-	-27-1-1	85,0	7,1	$14,5 \\ 4,2$	6,3	381
$\begin{array}{cccccccccccccccccccccccccccccccccccc$	77,5	4,3	11,5	6,7	418		2-1	81,6	6,8	8,1	3,5	397
5-4	70,1 67,8	3,9	13,8 16,7	12,1 11,7	462 478		$\begin{array}{c} 3-3 \\ 4-1 \end{array}$	73,5 75,5	6,1 $6,3$	10,9 14,9	9,5 3,3	441 429
6-6	62,1	3,4	18,4	16,1	522		3	70,9	5.9	14,0	9,2	457
7-2	67,2 63,5	3,7	23,2	5,8	482		5-3	68,5	5,7	16,9	8,9	473
27-19-1-1	86,9	5,1	22,0	$\frac{11,0}{3,7}$	510		6—1 7—3	70,3 64,1	5,9 5,3	20,8 22,2	3,0 8,3	461 505
3	80,8	4,7	4,0	10,5	401	27-	-28-1-2	81,8	7,1	4,0	7,1	396
2-1	83,3	4,9	8,2	$\begin{bmatrix} 3,6 \\ 10,0 \end{bmatrix}$	389 417		$\begin{array}{c} 2-2 \\ 3-2 \end{array}$	78,6	6,8	7,8	6,8	412
3—1	80,0	4,7	11,8	3,5	405		3-2 4-2	75,7 73,0	6,5 6,3	11,2 14,4	6,5 6,3	428 444
3	74,8	4,4	11,1	9,7	433		4	68,7	5,9	13,6	11,8	472
$\begin{array}{c c} 4-1 & \\ 7-3 & \end{array}$	76,9 65,2	4,5 3,8	15,2 22,5	3,3 8,4	421 497	27.	$7-2 \\ -29-1-1$	65,9 84,6	5,7 7,6	22,7	5,7	492 383
27-20-1-2	83,5	5.2	4,1	7,2	388	21-	2-1	81,2	7,3	8,0	3,5	399
2-2	80,2	4,9	7,9	6,9	404		4-3	70,6	6,3	13,9	9,2	459
4_2	75,0 74,3	4,6	7,4	$\begin{array}{c c} 13,0 \\ 6,4 \end{array}$	432 436		$5-1 \\ 3$	72,5 68,2	6,5	17,9 16,8	3,1 8,8	447 . 475
5-2	71,7	4.4	17.7	6,2	452		10-1	61,5		30,3	2,6	527
$\begin{array}{c c} 6-4 \\ 27-21-1-1 \end{array}$	65,3 86,4	4,0	19,3	11,3	496	27-	-30-1-2	81,4	7,5	4,0	7,0	398
3	80,4	5,6 5,2	4,3	3,7 10,4	375 403		2-2	78,3 73,3	7,2 6,8	7,7	6,8	414 442
2-1	82.8	5,4	8,2	3,6	391		3-2	75,4	7,0	7,2 11,1	6,5	430
$3 \\ 3-1$	77,3 79,6	5,0	7,6	$\begin{array}{c c} 10,0 \\ 3,4 \end{array}$	419 407		4_4	70,7	6,5	10,5	12.2	458
3	74.5	4,8	11,0	97	435		4-4	68,4	6,3	13,5 12,7	11,8 16,7	474 502
63 93	67,1	4,3	19,9	8,7	483	27-	-3111	84,1	8,0	4,2	3,6	385
27-22-1-2	61,0 83,1	3,9 5,6	27,1 4,1	7,9 7,2	531 390	27_	$\begin{array}{c c} 2-1 \\ -32-1-2 \end{array}$	80,8	7,7	8,0	3,5	401
2-2	79,8	5,4	7,9	6,9	406		4	75,7	7,5	3,7	13,1	428
							1	14		1	, 1	

C-H-O-N	C º/o	H ⁰ / ₀	O º/o	N º/o	M.G.	C-H-O-N	C º/o	H ⁰ / ₀	O º/0	N º/0	M.G.
27-32-2-2	77,9	7,7	7,7	6,7	416	27-53-1-1	79,6	13,0	3,9	3,4	407
4-2	72,3	7,1	14,3	6,2	448	2-1	76,6	12,5	7,5	3,3	423
15-2	51,9	5,1	38,4	4,5	624	27-54-1-2	76,8	12,8	3,8	6,6	422
27-33-1-1	83,7	8,5	4,1	3,6	387	2-2	74,0	12,3	7,3	6,4	438
2-1	80,4 75,2	8,2 7,6	7,9 7,4	3,5 9,7	403 43i	$egin{array}{cccccccccccccccccccccccccccccccccccc$	79,2 76,2	13,4	3,9	3,4	409 4 2 5
6-1	69,4	7,0	20,6	3,0	467	27-56-1-2	76,4	12,9 13,2	7,5	3,3 6,6	424
13-1	56,0	5,7	35,9	2,4	579	2-2	73,6	12,7	7,3	6,4	440
27-34-1-2	80,6	8,4	4,0	7,0	402	28-12-14-4	53,5	1,9	35,7	8,9	628
2-2	77,5	8,1	7,6	6,7	418	28-14-8-4	62,9	2,6	24,0	10,5	534
5—2 6—2	69,5 67,2	7,3	17,2 19,9	6,0 5,8	466 482	$28-15-5-1 \\ 7-3$	75,5 66,5	3,4	18,0 22,2	3,1 8,3	445 505
27-35-1-1	83,3	9,0	4,1	3,6	389	18-7	45,6	2,0	39,1	13,3	737
2-1	80,0	8,6	7,9	3,5	405	28-16-1-2	84,8	4,0	4,0	7,2	396
27-36-1-2	80,2	8,9	4,0	6,9	404	2-2	81,5	3,9	7,8	6,8	412
2-2	77,1	8,6	7,6	6,7	420	3-2	78,5	3,7	11,2	6,5	428
6-2 $27-37-1-1$	66,9 82,9	7,4 9,4	19,8 4,1	5,8 3,6	484 391	$egin{array}{c} 4-2 \ 5-2 \end{array}$	75,7 73,0	3,6	14,4 17,4	6,3	444 460
2-1	79,6	9,1	7,9	3,4	407	6-2	70,6	3,4	20,1	5,9	476
27-38-1-2	79,8	9,4	3,9	6,9	406	4	66,7	3,2	19,0	11,1	504
2-2	76,8	9,0	7,6	6,6	422	6	63,2	3,0	18,0	15,8	532
27 - 39 - 1 - 1 $2 - 1$	82,4	9,9	7,8	3,6	393 409	8—6 16—12	59,6 43,3	2,8 2,1	22,7 33,0	14,9 21,6	564 776
$\begin{array}{c} 2-1 \\ 5-3 \end{array}$	66,8	8,0	16,5	8,7	485	28-17-1-1	87,7	4,4	4,2	3,7	383
5	63,1	7,6	15,6	13,6	513	2-1	84,2	4,3	8,0	3,5	399
8-1	64,2	7,7	25,3	2,8	505	4-3	73,3	3,7	13,9	9,1	459
27-40-1-2	79,4	9,8	3,9 7,6	6,9	408	83 5	64,2 61,0	3,2 3,1	24,5 23,2	8,0 12,7	523 551
2-2 $27-41-1-1$	76,4 82,0	9,4 $10,4$	4,0	6,6	395	9-3	62,3	3,1	26,7	7,8	539
2-1	78,8	10,0	7,8	3,4	411	12-3	57,2	2,9	32,7	7,1	587
9-1	61,9	7,8	27,5	2,7	'52 3	28-18-1-2	84,4	4,5	4,0	7,1	398
27-42-1-2	79,0	10,2	3,9	6,8	410	2-2	81,2 76,0	4,3 4,1	7,7 7,2	$\begin{array}{c c} 6,8 \\ 12,7 \end{array}$	414 442
$2-2 \\ 27-43-1-1$	76,1 81,6	9,8	7,5	6,6	397	6-2	71,4	3,7	20,1	5,8	478
2-1	78,4	10,4	7,7	3,4	413	7-2	68,0	3,6	22,7	5,7	494
3	73,5	9,8	7.2	9,5	441	4	64,4	3,5	21,4	10,7	522
5-1	70,3	9,3	17,3	3,0	461	$\begin{array}{c} 9-8 \\ 12-4 \end{array}$	55,1 55,8	2,9	23,6 31,9	18,4	$610 \\ 602$
$8-1 \\ 27-44-1-2$	63,6	8,4	25,1 3,9	2,8 6,8-	509 412	28-19-1-1	87,3	4,9	4,2	3,6	385
2-2	75,7	10,3	7,5	6,5	428	3	71,3	4,6	3,9	10,2	413
27-45-1-1	81,2	11,3	4,0	3,5	399	2-1	83,8	4,7	8,0	3,5	401
2 - 1	78,1	10,8	7,7	3,4	415	$\begin{array}{c c} 4-1 \\ 6-1 \end{array}$	77,6 72,2	4,4 4,1	14,8 20,6	3,2	433 465
8-1	63,4	8,8	25,0	2,7 6,8	$511 \\ 414$	28-20-1-2	84,0	5,0	4,0	17,0	400
274612	78,3 75,4	11,1	3,8 7,4	6,5	430	2-2	80,8	4,8	7,7	6,7	416
3-2	72,6	10,3	10,8	6,3	446	4	75,7	4,5	7,2	12,6	444
4-2	70,1	10,0	13,8	6,1	462	3-2	77,8	4,6	11,1 $10,4$	$\begin{array}{c c} 6,5 \\ 12,2 \end{array}$	432 460
27-47-1-1	80,8	11,7	4,0	3,5	401 417	4 42	73,0 75,0	4,5	14,3	6,2	448
$2-1 \\ 27-48-1-2$	77,7	11,3 11,5	7,7 3,8	6,7	416	6-2	70,0	4,2	20,0	5,8	480
2-2	75,0	11,1	7,4	6,5	432	88	56,4	3,3	21,5	18,8	596
$27-49-1-1 \ 2-1$	80,4 77,3	12,1 11,7	$\frac{4,0}{7,6}$	3,5	403 419	28-21-1-1	47,7 86,8	2,8	29,5	19,9	704 387
27-50-1-2	77,5 74,6	12,0 11,5	3,8	6,7 $6,4$	418 434		75,9 83,4	4,7 5,2	3,6	15,8	443
$27-51-1-1 \ 2-1$	80,0 77,0	12,6 $12,1$	3,9	3,4	$\frac{405}{421}$	3 5	78,0 73,2	4,9	7,4	9,7 15,2	431 459
27-52-1-2	77,1	12,4	3,8 7,3	6,7	420	3-1	80,2 75,2	5,0 4,7	11,4 10,7	3,3 9,4	419 447
2-2	74,3	11,9	7,3	6,4	436	3	.0,0	-, -	, ,	,-,-	

					(1			
С—н-	-O N	C º/o	H ⁰ / ₀	0 %	N º/0	M.G.	C-	H-	-O- N	C º/0	H ⁰ / ₀	0 0/0	N º/0	M.G.
28—21	_4_1	77,2	4,8	14,7	3,2	435	28	28	-5-2	71,2	50	17,0	5.0	170
20-21	5-1	74,5	4,6	17,7	3,1	451	20~	-20	6-2	68,8	5,9	19,7	5,9	472 488
	8-5	60,5	3,8	23,1	12,6	555			9-6	56,7	4.7	24,3	14.2	592
28-22	-1-2 4	83,6 78,1	5,5 5,1	4,0	$\begin{bmatrix} 6,9 \\ 13,0 \end{bmatrix}$	402	28	29	-1-1	85,0	7,3	4,1	3,5	395
	1-6	73,4	4,8	3,5	18,3	458			$\begin{array}{c} 2-1 \\ 5-3 \end{array}$	81,7	7,1 5,9	7,8 16,4	3,4	411 487
	2-2	80,4	5,2	7,6	6,7	418			6-1	70,7	6,1	20,2	2,9	475
	3-2	75,3	4,9	7,2	12,6	446	00	20	7-1	68,4	5,9	22,8	2,8	491
	$\frac{3-2}{4-2}$	77,4	5,1 4,9	$\begin{vmatrix} 11,0\\14,2 \end{vmatrix}$	$\begin{array}{ c c } 6,4\\ 6,2 \end{array}$	434 450	28-	-30	-1-2 4	81,9 76,7	7,3	3,9	6,8 12,8	410 438
	4	70,3	4,6	13,4	11,7	478			8	68,0	6,1	3,2	22,7	494
* 6 1	6-4	65,9	4,3	18,8	11,0	510			2-2	78,9	7,0	7,5	6,6	426
	6 7—4	62,4	$\frac{4,1}{4,2}$	17,8 21,3	15,6 10,6	538 - 526			3-2	76,0 69,1	6,8	10,9	6,3	442 486
	8-2	65,4	4,3	24,9	5,4	514			6-2	68,6	6,1	13,2 19,6	11,5 5,7	490
28 -23		86,4	5,9	4,1	3,6	389			12-6	52,3	4.7	29,9	13,1	642
	2-1	83,0	5,7 5,3	7,9	3,4	405	28	-31		84,6	7,8	4,0	3,5	397
	3-1	79,8	5,5	7,4 11,4	$[-9,7] \\ -3,3]$	433 421			2-1	79,0	7,3 7,5	3,8 7,7	9,9	$\frac{425}{413}$
	4-7	64,5	4,4	12,3	18,8	521			10-1	62,1	5,7	29,6	2,6	541
28-24	$\begin{array}{c} -1-2 \\ 4 \end{array}$	83,2	5,9	4,0	6,9	404	28-	-32-	-1-2	81,5	7,8	3,9	6,8	412
	2-2	77,8	5,5 5,7	3,7 7,6	13,0 6,7	432 420			2-2 5-2	78,5 70,6	7,5 6,7	7,5 16,8	6,5 5,9	428 476
	4	75,0	5,4	7,1	12,5	448			8-2	64,1	6,1	24,4	5,3	524
	3-2	77,1	5,5	11,0	6,4	436			4	60,9	5,8	23,2	10,1	552
	4-2	72,4 74,3	5,2 5,3	10,3 14,1	$\begin{array}{c c} 12,1 & \\ 6,2 & \end{array}$	$\frac{464}{452}$	28-	-33	-1-1 $2-1$	84,2 81,0	8,3	4,0	3,5	399
	4	70,0	5,0	13,3	11,7	480			3-3	73,2	7,2	10,5	9,1	415 459
	6-2	69,4	5,0	19,8	5,8	484			49	60,1	5.9	11,4	22,5	559
F4 .	7-2 8-4	67,2 61,8	4,8	22,4 23,5	$\begin{bmatrix} 5,6 \\ 10,3 \end{bmatrix}$	500 544	28-	-34-	$-1-2 \\ 2-2$	81,1 78,1	8,2 7,9	3,9	6,8	414
28-25		85,9	6,4	4,1	3,6	391			$\frac{2-2}{4-2}$	72,7	7,4	7,4	6,5	430 462
	3	80,2	6,0	3,8	10,0	419			6-2	61,1	6,2	17,4	15,3	550
	$\begin{bmatrix} 2-1\\ 3 \end{bmatrix}$	82,6 77,2	$\frac{6,1}{5,7}$	7,9	3,4 9,7	407 435	28~	-35-	1-1	83,8	8,7	4,0	3,5	401
	3-3	74,5	5,5	10,6	9,3	451			$\begin{array}{c} 2-1 \\ 6-1 \end{array}$	80,6	8,4	7,7	3,3	417 481
	4-1	76,5	5,7	14,6	3,2	439	28-	-36-	-1-2	80,8	8,6	3,8	6,7	416
28-26-	3	71,9 82,8	5,3	13,7	9,0	467			2-2	77,8	8,3	7,4	6,5	432
20-20-	2-2	79,6	$6,\frac{4}{6}$	3,9	6,9	406 422			5—10 8—2	56,7 54,9	$\begin{bmatrix} 6,1\\5,9 \end{bmatrix}$	13,5 20,9	23,6	592 612
	4	74,6	5,8	7,1	12,4	450	28-	-37-	_1_1	83,3	9,2	4,0	3,5	403
	3-2 4-2	76,7 74,0	5,9 5,7	10,9	6,4	438	00		2-1	80,2	8,8	7,6	3,3	419
	4	69,7	5,4	14,1 13,3	$\begin{array}{c c} 6,2\\11,6 \end{array}$	454 482	28	-38-	$^{-1-2}_{2-2}$	80,4 77,4	9,0	3,8	6,7	418 434
	5-4	67,5	5,2	16,1	11,2	498			4-2	73,3	8,3	12,2	6,1	458
	$6-2 \\ 8-18$	69,1 45,3	5,3	19,8	5,8	486	00:	00	5-2	69,7	7,9	16,6	5,8	482
2827		85,5	3,5 6,8	17,2 4,1	34,0	742 393	28-	-39-	-11 21	83,0	9,6	3,9 7,6	3,4	405 421
	3	79,8	6,4	-3,8	10,0	421	28_	40-	-1-2	79,8 80,0	9,5	3,8	6,7	420
	2-1 3	82,1	$6.6 \perp$	7,8	3,4	409			2-2	77.1	9,2	7,3	6,4	436
	6-1	76,9 71,0	6,2 5,7	7,3 20,3	9,6	437 473	28	_41	$5-2 \\ -1-1$	69,4 82,6	8,3	16,5	5,8	484 407
28-28-	-1-2	82,3	6,9	3,9	6,9	408	20	XI.	2-1	79,4	10,1	7,6	3,4	423
	2-2	79.2	6,6	7,6	6,6	424	28-	42-	-1-2	79,6	10,0	3,8	6,6	422
	4 6	74,3 70,0	6,2 5,8	7,1 6,7	12,4 17,5	452 480	28-	-43-	$egin{array}{cccccccccccccccccccccccccccccccccccc$	76,7 82,2	9,6	7,3	6,4	438
	3-2	76,3	6,4	10,9 +	6,4	440	40-	-±0-	2-1	79,1	10,5	3,9 7,5	3,4	409 425
	4	71.8	6,0	10,3	11,9	468			5—1	71,1	9,1	16.9 +	2.9	473
	4-2	73,7	6,1	14,0	6,1	456			7—1	66,5	8,5	22,2	2,8	505

C-H-O-N	C º/0	H ⁰ / ₀	O º/o	N 0/0	M.G.	C-	-H-	-O- N	C º/0	H ⁰ / ₀	O º/o	N º/0	M.G.
$28-44-1-2 \\ 2-2$	79,2 76,3	10,4 10,0	3,8 7,3	6,6 6,4	424 440	29-	-28	$-2-4 \\ 3-4$	75,0 72,5	6,0 5,8	6,9 10,0	12,1	464 480
28-45-1-1	81,7	10,9	3,9	3,4	411 427			-10-5 $-4-2$	57,3 74,0	4,8 6,4	26,3 13,6	11,5	607 470
$ \begin{array}{c} 2-1 \\ 8-1 \\ 28-46-1-2 \end{array} $	78,7 64,2 78,9	10,5 8,6 10,8	24,5	2,7	523 426			8-2	69,9	6,0 5,6	12,9 24,0	11,2 5,2	498 534
2-2 $28-47-1-1$	76,0	10,4	7,2	6,3	442			-1-3 $8-3$	79,6	7,1 5,6	3,7 23,3	9,6	437 549
$ \begin{array}{c} 6-1 \\ 28-48-1-2 \end{array} $	68,2 78,5	9,5	19,5	2,8	493 428			-3-4 $4-4$	71,9 69,6	6,6	9,9	11,6	484 500
2-2 $28-49-1-1$	75,7 81,0	10,8 11,8	7,2 3,8	6,3	444	29-	-37	-1-2 $-2-3$	81,3	8,4 8,1	3,7	6,5 9,1	428 459
2-1 $28-50-1-2$	78,0 78,1	11,4	7,4	3,2 6,5	431 430	29.	-40	-6-2 $-4-4$	68,2	7,4	18,8	5,5	510
$2-2 \\ 28-51-1-1 \\ 2-1$	75,3 80,6 77,6	11,2 12,2 11,8	7,2 3,8 7,4	6,3 3,4 3,2	446 417 433			-2-2 $4-2$ $3-7-1$	77,3 72,2 67,3	9,3 8,7 8,4	7,1 13,3 21,6	6,3 5,8 2,7	450 482 517
21—11 28—52—1—2	38,3 77,8	5,8 12,0	38,3	17,6 6,5	877	29	-44	-2-2 $3-1-2$	77,0	9,7 10,5	7,1	6,2	452 438
28—52—1—2 2—2 28—53—1—1	75,0	11,6 12,6	7,1	6,2	448			$\frac{\tilde{4}-2}{1-8-1}$	71,6	9,5	13,2	5,7	486 541
2-1	77,2	12,2	7,4 3,7	3,2	435	30	-15	-6-3 $7-3$	70,2	2,9	18,7	8,2	513 529
28-54-1-2 $2-2$	77,4	12,4 12,0	7.1	+6,2	1 450	30	-18	$3-1-2 \\ 2-2$	85,3 82,2	4,3 4,1	3,8	6,6	422
$28-55-1-1 \ 2-1$	79,8	13,1 12,6	3,8	3,2	437			$\frac{2-2}{4}$ $\frac{4-2}{4}$	77,2	3,9	6,9	12,0	466
28 - 56 - 1 - 2 $2 - 2$	77,1 74,3	12,8 12,4	7.1	6,4	452			9-1-3	82,4	4,3	3,7	9,6	437
$28-57-1-1 \ 2-1$	79,4	13,0	7,3	3,2	439	30	20	$0-1-2 \\ 2-2$	84,9	4,7	7.3	6,4	440
$28-58-1-2 \\ 2-2$	76,7 74,0	12,8	7,0	+6,2	454			8-6	76,3 60,8	3,4	21,6	14,2	592
$3-2 \\ 28-62-1-6$	71,5	12,4	$\begin{array}{c c} & 10,2 \\ \hline & 3,2 \end{array}$	15,9	498	30	2	9-2 $1-2-5$	65,2	3,6	6,6	14,5	483
$29-20-5-2 \\ 6-4$	73,1 66,9	4,2	116.8	5,9	476 520	30	— 2:	10-3 $2-1-2$	61,7 84,5	5,2	$\begin{vmatrix} 27,4\\ 3,7 \end{vmatrix}$	6,6	426
29-21-1-3	81,5	4,9	3,7	9,8	427 4 455			4 22	79,3	5,0) 7,2	2 6,3	442
3-3 $29-22-1-2$	75,8 84,0	$\begin{vmatrix} 4,6\\ 5,3 \end{vmatrix}$	$\begin{array}{c c} & 10,5 \\ 3,9 \end{array}$	$\frac{1}{6}$ $\frac{9,1}{6.8}$	$\begin{vmatrix} 459 \\ 414 \end{vmatrix}$			4-2	75,9	4,6	13,5	5 5,9	474
$\begin{array}{c} 2-4 \\ 4-2 \end{array}$	75,3	4,8	13,8	6,1	1 462			$egin{array}{cccccccccccccccccccccccccccccccccccc$	73,5	4,5	16,3	$3 \mid 5,7$	490
29 - 23 - 1 - 1 $2 - 1$	83,4	5,5	7,7	' 3,4	4 417	20		9-8 $3-1-1$	56,4	: 3,4	l 22,6	3 17,6	638
$\begin{array}{c} 3 \\ 29-24-1-4 \\ \end{array}$	78,4	l 5,4	$4 \mid 3,6$	$3 \mid 12,6$	3 444			$\frac{1}{5}$ $4-1-4$	76,7	4,9	3,4	1 14,9	469
2—2 3—2	77,7	5,5	10,7	7 6,2	2 448		<i>)</i> — <u>a</u>	$\begin{array}{c} 2-2 \\ 4-2 \end{array}$	81,1	. 5,4	1 7,2	2 6,3	444
42 64	: 66,4	$\lfloor \lfloor 4, 0 \rfloor$	$3 \mid 18,3$	$3 \mid 10,$	$7 \mid 524$			5-4	71,4	4,8	$\frac{3}{3}$ $\frac{12,5}{15,4}$	7 11,1	504
$29-25-2-1 \ 4-1$. 77,1	L 5,8	5 14,2	$2 \mid 3,$	1 451			6-2	70,9	4,	7 18,9	$9 \mid 5,5$	508
3 29—26—2—2	80,2	$2 \mid 6,0$	7,4	$\{ [6, 4] \}$	$4 \mid 434$			7—4 8—4	65,2	4,	20,3	3 10,1	. 552
5-4 29-27-1-3	80,4	$4 \mid 6,3$	$2\mid 3,6$	$3 \mid 9,$	7 433	30)_2	$5-1-5 \\ 2-1$	76,4	5,	$3 \mid 3,4$	$\begin{array}{c cccc} 4 & 14,9 \\ 4 & 3,2 \end{array}$	471 431
$egin{array}{c} 4 - 3 \ 5 - 3 \ 29 - 28 - 1 - 2 \end{array}$	70,0	$0 \mid 5,4$	4 16,	1 8,	4 497)2	$\frac{4}{4}$ -1 -1	. 77,8	5,4	4 13,8	$3 \mid 3,0$) 463
			- 1		-								

C-H-O-N	C º/o	H ⁰ / ₀	O º/o	N º/0	M.G.	C-H-O-N	C º/0	H °/ ₀	O º/o	N 0/0	M.G.
30-26-1-4	78,6	5,7	3,5	12,2	458	31-24-1-2	84,6	5,4	3,6	6,4	440
2-2	80,7	5,8	7,2	6,3	446	2-4	76,8	5,0	6,6	11,6	484
3-2	77,9	5,6	10,4	6,0	462	9—4	62,4	4,0	24,2	9,4	596
. 6-4	66,9	4,8	17,8	10,4	538	31-25-2-3	78,9	5,3	6,8	9,0	471
8-4 30-27-2-1	63,2 83,2	4,6	22,4	9,8	570 433	3-3 31-26-1-2	76,4	5,1	9,9	8,6	487
3-3	75,5	5,7	10,0	8,8	477	31-20-1-2	84,1 79,2	5,9 5,5	3,6	6,3	442
155	51,6	3,9	34,4	10,0	697	3-8	66,7	4,6	8,6	20,1	558
30-28-2-2	80,4	6,2	7,1	6,2	448	31-27-5-1	75,5	5,5	16,2	2,8	493
$^{4}_{3-2}$	75,6	5,9	6,7	11,8	476	31—28—5—2 31—30—1—8	73,2	5,5	15,7	5,5	508
3-2 4	73,2	6,0 5,7	10,3	6,0 $11,4$	$\frac{464}{492}$	31-30-1-8	70,2 80,5	5,7 6,5	3,0 6,9	21,1	530
6	69,2	5,4	9,2	16,1	520	4-2	75,3	6,1	12,9	5,7	462 494
4-2	75,0	5.8	13,3	5,8	480	31-31-2-1	82,8	6,9	7,1	3,1	449
6	67,2	5,2	11,9	15,7	536	31-33-3-3	75,1	6,7	9,7	8,5	495
8 54	63,8	5,0 5,3	11,3	19,8 10,7	564	31-34-4-8	63,9	5,8	11,0	19,2	582
12-2	59,2	4,6	15,3 31,6	4,6	524 608	$6-2 \\ 31-36-4-6$	70,2 66,9	6,4	18,1 11,5	5,3	530
30-29-3-5	71,0	5,7	9,5	13,8	507	8-2	65,9	6,4	$\frac{11,3}{22,7}$	15,1 5,0	$556 \\ 564$
6-5	64,9	5,2	17,3	12,6	555	31-37-4-3	72,2	7,2	12,4	8,2	515
13-1	58,9	4,7	34,0	2,3	611	31-41-10-1	63,4	7,0	27,2	2,4	587
30-30-1-4	77,9	6,5	3,5 10,3	12,1	$\begin{array}{c} 462 \\ 466 \end{array}$	$31-43-10-1 \\ 11-1$	63,2	7,3	27,2	2,3	589
. 6	68,9	5,7	9,2	16,1	422	31-48-9-2	61,5 62,8	7,1 8,1	29,1 24,3	2,3	$\frac{605}{592}$
42	34,7	6.2	13,3	5,8	482	31-50-16-30	33,9	4,5	23,3	38,3	1098
8	63,6	5,3	11,3	19,8	566	31-58-16-6	48,3	7,5	33,3	10,9	770
11-2 30-31-1-3	60,6 80,2	5,0	29,6	4,7	594	31-63-1-1	80,0	13,5	3,4	3,0	465
5-3	70,2	6,9	$\frac{3,6}{15,6}$	9,3 8,2	449 513	$32-18-6-2 \ 32-20-1-4$	73,0	3,4 4,2	18,2	5,3	526
30-32-3-2	76,9	6,8	10,3	6,0	468	5-4	71,1	3,7	3,4 14,8	11,7 10,4	476 540
4-2	74,4	6,6	13,2	5,8	484	32-21-1-3	82,9	4,5	3,4	9,1	463
4	70,3	6,2	12,5	10,9	512	8-5	63,7	3,4	21,2	11,7	603
$\begin{vmatrix} 14-2 \\ 30-34-3-4 \end{vmatrix}$	55,9 72,3	5,0	34,8	4,3	644	32-22-1-4	80,3	4,6	3,3	11,7	478
30-36-4-2	73,8	7,4	9,6	$\begin{array}{c c} 11,2 \\ 5,7 \end{array}$	498 488	2-2	82,4 77,7	4,7	6,9	6,0	$\frac{466}{494}$
10-2	61,6	6,2	27,4	4,8	584	6	73,6	4,2	6,1	16,1	522
30-38-3-2	76,0	8,0	10,1	5,9	474	3-2	77,4	4,4	9,7	8,5	496
$ \begin{array}{c c} 49-12 \\ 30-40-5-2 \end{array} $	26,7	2,8	58,1	12,4	1350	6	71,4	4,1	8,9	15,6	538
30-41-15-9	70,8 46,9	7,9	15,7 31,3	$\frac{5,5}{16,4}$	508 767	4—4 5—4	73,0 70,8	4,2	12,2 14,8	10,6	526
30-44-2-2	77,6	9,5	6,9	6,0	464	13-2	59,8		32,4	10,3	$\begin{array}{c} 542 \\ 642 \end{array}$
4-2	72,6	8,9	12,9	5,6	496	32-24-2-2	82,0	5,1	6,8	6,0	468
30-45-9-3	60,9	7,6	24,4	7,1	591	3-4	75,0	4,7		10,9	512
30-46-10-2 30-48-3-2	60,6	7,7 9,9	26,9 9,9	4,7 5,8	594 484	5-2	74,4	4,6	15,5	5,4	516
30-49-1-1	82,0	11,2	3,6	3,2	439		70,6 72,1		14,7 18,0	10,3	$544 \\ 532$
21-1-	47,4	6,4	44,3	1,8	759	32-25-1-5	77,6	5,0		14,1	495
30-57-6-17	47,9	7,6	12,8	31,7	751	32-26-2-2	81,7	5,5	6,8	6,0	470
30-60-6-18	46,9	7,8	12,5	32,8	768	4	77,1	5,2	6,4	11,2	498
	79,8	13,5 $13,1$	3,6 6,8	3,1	451 467	8	69,3	4,7	5,8	20,2	554
81—17	18,4	3,1	66,3		1955		76,5 72,5	5,2 4,9	12,7 12,1	$\begin{array}{c c} 5,6 \mid \\ 10,5 \mid . \end{array}$	502 530
31-17-6-1	74,5	3,4	19,2	2,8	499		70,3	4,8		10,3 $10,2$	546
31-20-1-4	80,2	4.3	3,4	12,1	464	6-4	68,3	4,6	17,1	10,0	562
6-4 31-22-1-4	68,4 79,8	3,7 4,7		10,3 12,0	544 466		65,1	4,4	16,3	14,2	590
4-2	76,5	4,5	13,2	5,7	486	32-27-1-3	48,4	3,3 3 5,7	$\begin{bmatrix} 34,2 & 1 \\ 3,4 & 1 \end{bmatrix}$	$\begin{array}{c c} 14,1 \\ 9,0 \\ \end{array}$	794 469
31-23-3-3	76,7	4.7	9,9	8,7	485	32-28-2-2	81,4	5,9	6,8	5,9	472
6—1	73,7	4,5	19,0	2,8	505	3—2	78,7	5,7	9,8	5,7	488

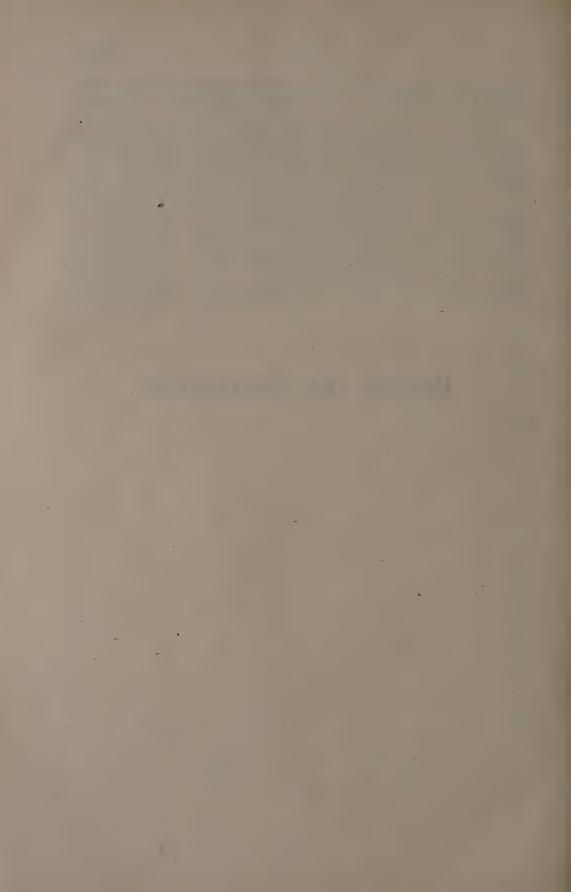
*			- 01		0	G 77 0 37	0.01	TOTAL O. /	001	DT 0/	TWE C
C-H-O-N	C %/0	H °/0	00/0	N 0/0	M.G.	C-H-O-N	C º/0	$\mathbf{H}^0/_0$	0 %	N º/0	M.G.
32-28-3-4	74,4	5,4	9,3	10,9		33-33-1-3	81,3	6,8	3,3	8,6	487
4-4	72,2	5,3	12,0	10,5	532	3—3 6—3	76,3	6,3	9,2	8,1 7,4	519 567
5-4	70,1	5,1	14,6	10,2 $5,2$	548 536	6-3 $33-34-2-2$	69,8	5,8 6,9	6,5	5,7	490
6-2 $8-2$	71,6 67,6	5,2	17,9 22,5	4,9	568	8-2	67,6	5,8	21,8	4,8	586
32-29-1-3	81,5	6,1	3,4	9,0	471	33-36-6-2	71,2	6,5	17,3	5,0	556
3-1	80,8	6,1	10,1	2,9	475	33-38-7-2	69,0	6,6	19,5	4,9	574
32-30-2-2	81,0	6,3	6,7	5,9	474	12-2	60,5	5,8	29,3	4,3	654 525
4-2	75,9	5,9	12,6	5,5	506	33-39-3-3 33-41-4-3	75,4 72,9	7,4	9,1	8,0	543
$\frac{4}{6-2}$	71,9	5,6 5,6	12,0 17,8	10,5 $5,2$	534 538	33-43-11-1	63.0	6,8	28,0	12,2	629
4	71,4	5,3	17,0	9,9	566	33-46-1-2	81,4	9,5	3,3	5.8	486
8-4	64,2	5,0	21,4	9,4	598	33 - 51 - 10 - 1	63,6	8,5	25,7	2,2	623
32-32-2-2	81,0	6,3	6,7	.5,9	474	34-20-4-4	74,5	3,6	11,7	10,2	548
4	76,2	6,3	6,3	11,1	504	$34-22-2-6 \\ 4-4$	74,7	4,1	5,8	15,4	550
3-6	70,1	5,8	8,8	15,3 4,9	548	6-4	70,1	3,8	16,5	9,6	582
$\begin{array}{c} 8-2 \\ 32-34-1-2 \end{array}$	67,1	5,6 7,4	22,4 3,5	6,0	462	7-2	71,6	3,8	19,7	4,9	570
2-4	75,9	6,3	6,7	11,1	506	9-2	67,8	3,6	23,9	4,6	602
$\frac{1}{4}$	75,3	6,6	12,6	5,5	510	34-23-7-1	73,3	4,1	20,1	2,5 5,3	557 524
4	71,4	6,3	11,9	10,4	538	34 - 24 - 4 - 2 $5 - 2$	77,8	4,6	12,2	5,2	540
8	64,6	5,7	10,8	18,8	594	52 62	73,4	4,3	17,3	5,0	556
5-4	69,3	6,1	14,4	10,1	554 570	34-25-3-3	78,0	4,8	9,2	8,0	523
$6-4 \\ 8-2$	67,4	5,9	22,3	4,9	574	53	73,5	4,5	14,4	7,6	555
12-6	55,3	4,9	27,7	12,1	694	34-26-2-6	74,2	4,7	5,8	15,3	550
32-35-1-3	80,5	7,3	3,3	8,8	477	4-4	73,6	4,7	11,5	10,1	554
2 - 3	77,9	7,1	6,5	8,5	493	5-2 $34-27-2-3$	75,3	4,8	6,3	8,2	509
32-36-4-2	75,0	7,0	12,5	5,5	512 588	5-5	69,7	4,6	13,7	12,0	585
$7-4 \\ 8-4$		$\begin{array}{ c c c } 6,1 \\ 5,9 \end{array}$	$\begin{vmatrix} 19,0\\21,2 \end{vmatrix}$	9,5		34-28-1-2	87,6	6,0	3,4		466
12-4		5,7	28,7	8,3		2-2	82,3	5,6	6,4		496
32-40-7-4		6,8	18,9	9,4	592	4-6	69,8	4,8	10,9		584
32-41-2-3	76,9	8,2	6,4			34—29—2—5 6—3	75,7	5,4	16,7	7,3	575
32-42-4-2		8,1	12,3	5,4		34-30-1-6			3,0		538
25—18	35,6	3,9	$\begin{vmatrix} 37,1\\28,4 \end{vmatrix}$	$\begin{vmatrix} 23,4\\2,3 \end{vmatrix}$		6-4		5,1	16,3	9,5	590
$32-45-11-1 \\ 32-46-6-2$		7,3	17,3		554	9-4			22,6	8,8	638
32-47-4-1			12,6	2,7	509	14-2		4,3	32,5		690
14-1				2,1	669	34 - 31 - 6 - 3 $34 - 32 - 4 - 2$	70,7	$\begin{array}{ c c c c } 5,4 \\ 6,0 \\ \end{array}$	12,0		532
[32-48-2-2	78,1	9,7	+6,5	5,7	492	$\begin{vmatrix} 34 - 32 - 4 - 2 \\ 34 - 33 - 3 - 3 \end{vmatrix}$			9,3	7,9	531
32-49-9-1			24,3		591	34 - 34 - 2 - 2	81,3	6,8	6,3	5,6	502
32-50-1-2 $32-51-11-1$	1 - / .			$\frac{5,5}{2,2}$		3-4	. 74,7	6,2	8,8		
32-52-3-2			9,4	5.5	512	4-4			11,4		562
33-20-3-2			9,6	5,7	492	5-4			3,2		1
33-21-3-3		4,1		8,3	507	34-35-1-3	59,6		21,0	14,3	
10-7		3,1	23,7	14,5		34-36-4-4		6,4	11,3	9,9	
33-24-1-2		$\begin{array}{c c} 5,2 \\ 4,7 \end{array}$	3,4	6,0		6-2	71,8	6,3	16,9		568
$egin{array}{cccccccccccccccccccccccccccccccccccc$	1	$\begin{array}{c c} 4,7 \\ 4,7 \end{array}$	6,3 $12,5$		512	9-2	66,2	2 5,8	10.5		
42		4,4		10,4	[540	34-38-9-10	55,9		19,7		
33-26-1-4		5,3	3,2	11.5	$3 \mid 494$	34-40-7-2	62,0				
2-2	82,2	5,4	6,6	5,8	482	$\begin{vmatrix} 25-10 \\ 34-41-18-1 \end{vmatrix}$		3 5,4	38,5	1,9	751
33-27-2-3					$\frac{1}{3}$ $\frac{497}{557}$	34-45-10-	65,1	7.2	25,5	$5 \mid 2,2$	1 627
4-5				$\begin{array}{c c} & 12,6 \\ 2 & 10,9 \end{array}$		34-47-11-	63,2	$\frac{1}{2}$ 7,3	27,3	2,2	645 612
33-28-2-4	1 -/-		11.8	$3 \mid 10,5$	544	34-48-8-2	66,	7,8	20,9		
33-31-6-3	70,1			7,4	565	34-50-1-2	81,5	9,9		0,0	1
00-01-0-0	, .		ou 1		1				154		

C-H-O-N	C º/o	H º/₀	0%	N º/0	M.G	. c-:	H-0-N	C º/o	H°/0	0%	Nº/0	G.M.
	1					I			10	- 70	10	
34-53-8-1	68,7	8,8	21,2	2,3	603	36-	-51-6-1	72,8	8,6	16,2	0.4	593
34-60-5-2	70,8	10,4		4,9	576		-54 - 6 - 2	70,8	8,8	15,7	2,4	610
35-19-10-1	68,5	3,1	26,1	2,3	613		20-2	51,8	6,5	38,4	3,3	834
35-22-7-2	72.2	3,8	19,2	4,8	582	36-	57-13-1	60,8	7,9	29,2	2,0	711
35-24-1-4	81,4	4,6	3,1	10,9	516		69-7-19	49,1	7,8	12,7	30,3	879
35-26-1-2	85,7	5,3	3,3	5,7	490		72-2-2	76,6	12,8	5,7	4,9	564
2-2	83,0	5,1	6,3	5,5	506		25-1-3	84,3	4,7	3,0	8,0	527
3-4	76,3	4,7	8,7	10,2	550	37_	-26-1-2	86,4	5,1	3,1	5,4	514
35-27-4-1	80,0	5,1	12,2	2,7	525		46	71,8	4.2	10,4	13,6	618
6-5	68,5	4,4	15,7	11,4	613	37-	27-1-5	79,7	4,2 4,8	2,9	12,6	557
35-28-1-2	85,4	5,7	3.2	5,7	492		28-2-4	79,3	5,0	5,7	10,0	560
3-2	80,1	5,3	9,2	5,3	524		30-3-2	80,7	5,4	8,7	5,1	550
4-4	74,0	4,9	11,3	9,8	568	37—	32-4-2	78,2	5,6	11,3	4,9	568
35-29-3-3	77,9	5,4	8,9	7,8	539		. 4	74,5	5,4	10,7	9,4	596
25 20 1 0	75,7	5,2	11,5	7,6	555		33-4-3	76,1	5,7	11,0	7,2	583 -
35—30—1—2 2—2	85,0	6,1 5,9	3,2	5,7	494	37—	34-1-4	80,7	6,2	2,9	10,2	550
35-32-3-4	75,6	5,9	6,3	5,5	510	0.2	2-4	78,4	6,0	5,6	9,9	566
35-33-5-1	75,6	5,7 6,0	8,6	10,0	556		36-9-2	68,1	5,5	22,1	4,3	652
35-36-5-2	74,5	6,4	14,0	2,6	547		38-9-2	67,9	5,8	22,0	4,3	654
9-2	66.9	5,7	22,9	4,5	564		47-13-1	62,3	6,6	29,2	1,9	713
35-38-6-2	72,1	6,5	16,5	4,8	628 582		49-14-1 53-11-1	60,7	6,7	30,6	1,9	731
35-40-6-4	68,6	6,5	15,7	9.1	612			64,6	7,7	25,6	2,0	687
35-45-6-3	69.6	7,5	15,9	7,0	603		24-4-2 28-3-4	79,7 77,5	4,2	11,2	4,9	572
12-1	62.6	6,7	28,6	2,1	671		33-1-3	83,4	4,8 6,0	8,2	9,5	588
35-47-13-1	61.0	6,8	30,2	2,0	689		34-5-2	76,1	5,7	2,9	7,7	547
35-69-3-1	76,2	12,5	8,7	2,5	551	38_	40-1-8	73,1	6,4	$\frac{13,4}{2,6}$	4,7	598 6 2 4
35-71-1-1	80,6	13,6	3,1	2,7	521	38	44 - 2 - 4	77,5	7,5	5,4	17,9	588
35-72-1-2	78,4	13,4	3,0	5,2	536		12-2	63,3	6,1	26,7	$\frac{9,3}{3,9}$	720
36-6-27-14	40,5	0,6	40,5	18,4	1066	38-4	46-2-4	77,3	7,8	5,4	9,5	590
36-20-7-4		3,2	18,1	9,0	620		17-12-1	64,3	6,6	27,1	2,0	709
36-24-2-6	75,5	4,2	5,6	14,7	572		49-12-1	64,1	6,9	27,0	2,0	711
36-25-10-3	65,5	3,8	24,3	6,4	659		51-13-1	62,6	7,0	28,5	1,9	729
36-26-4-4	74,7	4,5	11,1	9,7	578	39-2	28-4-4	76,0	4,5	10,4	9,1	616
36-27-1-3	83,5	5,2	3,1	8,1	517	39	32-1-6	78,0	5,3	2,7	14,0	600
36-28-2-2		5,4	6,1	5,4	520		64	71,8	4,9	14,7	8,6	652
5-2 6-4	76,1	4,9	14,1	4,9	568	39—3	35-3-3	78,9	5,9	8,1	7,1	593
9-14	70,6	4,6	15,7	9,1	612	394	10-2-4	78,5	6,7	5,4	9,4	596
36-29-4-3	54,0 76,2	3,5		24,5	800	. 5.0	11-2	65,7	5,6	24,7	3,9	712
10-3	65,2	5,1 4,4	$\frac{11,3}{24,1}$	7,4	567		46-3-4	75,7	7,4	7,8	9,1	618
36-30-1-4	80,9	5,6		$\begin{array}{c c} 6,3\\10,5 \end{array}$	663	394	48-4-4	73,6	7,5	10,1	8,8	636
2-4	78,5	5,4		10,5	534 550	30 =	1-15-1	60,5	6,6	31,0	1,8	773
4-2	78,0	5,4	11,5	5,1	554		3-10-1 6-16-8	67,3		23,0	2,0	695
7-2	71,7	5,0	18,6	4,6	602	40 4	27-1-3	54,9		29,3	12,8	874
- 9-4	65,2	4,5	21,8	8,5	662		28-2-2	84,5	4,8 4,9	2,8	7,4	565
36-33-12-3	61,8	4,7	27,5	6.0	466		4-2	80,0		$\begin{bmatrix} 5,6 \\ 10,6 \end{bmatrix}$	4,9	568 600
36-36-6-2	73,0	6,1	16.2	4.7	592	40-3	30-6-4	72,5		14,5	8,5	662
6	66,7	5,6	14,8	12,9	648	4.0	31-6-1	77,3		15,5	2,2	621
36-38-5-4	71,3	6,3	13,2	9,2	606			69,0	4,6	18,4	8,0	696
36-39-16-3	56,2	5,1	33,3	5,4	769			85,9	5,9	5,7	2.5	559
36-40-6-2	72,5	6,7	16,1	4,7	596			63,0	4,5	25,2	2,5 7,3	762
7-2	70,6	6,5	18,3	4,6	612	40-3	36-4-2	79,0	5,9	10,5	4,6	608
36-42-6-2	72,2	7,0	16,0	4,7	598	40	38-1-4	81,4	6,4	2,7		590
36-43-10-7 36-44-8-2	58,9	5,8	21,8	13,4	733		8-4	68,4	5,4	18,2		702
00 1-	68,3	7,0	20,2	4,4	632		10-6-6	68,6	5,7			700
36-47-11-1	68,6	7,3	15,2	8,9	630	40-4		67,9	5,8	20,4		707
36-49-12-1	62.0	7,1	26,3	2,1	669	40-4		61,7	5,4	18,5		778
	34,0	44	28,0	2,0	687	40-4	16-3-4	76,2	7,3	7,6	8,9	630

C-H-O-N	C %	H %	0%	N°/0	M.G.	C-H-O-N	C°/0	H°/0	0 %	N º/o	M.G.
40-468-2	70,4	6,7	11,8	4,1	682	44-65-4-1	700	0.77	0 -		071
9-12	57,3	5,5	17,2	20,0	838	44-84-4-2	78,8 75,0	9,7	9,5	2,0	671
40-47-6-11	61,8	6,0	12,3	19,8	777	45-33-3-3	81,4	5,0	9,1 7,2	4,0 6,3	704 663
12-1	65,5	6,4	26,2	1,9	733	45-34-9-18	55,7	3,5	14,8	26,0	970
40-48-4-4	74,1	7,4	9,9	8,6	648	45-44-2-6	77,1	6,3	4,6	12,0	700
6	71,0	7,1	9,5	12,4	676	45-48-10-8	62,8	5,6	18,6	13,0	860
10 40—49—4—11	65,6 64,3	6,5	8,7	19,1 20,5	732	45-53-18-5	56,8	5,6	30,3	7,3	951
40-50-4-4	73,9	7,7	9,8	8,6	747 650	46-35-6-3 46-37-6-3	76,1	4,8	13,2	5,8	725
40-52-5-2	75,0	8,1	12,5	4,4	640	46-45-3-7	75,9 74,3	5,1	13,2 6,5	5,8 13,2	727 743
40-53-14-1	62,3	6,9	29,0	1,8	771	46-46-9-8	64,6	5,4	16,9	13,1	854
40-54-8-4	66,8	7,5	17,8	7,8	718	46-54-7-4	71,3	7,0	14,5	7,2	774
40-56-12-2	63,5	7,4	25,4	3,7	756	46-60-3-4	77,1	8,4	6,7	7,8	716
21-4 $40-61-2-1$	51,7	6,0	36,2	6,0	928	46-74-4-2	76,9	10,3	8,9	3,9	718
40-61-2-1	81,8 75,5	10,4 10,0	5,4	2,4	587 636	46-83-15-1 47-36-4-4	62,1	9,3	27,0	1,6	889
41-28-1-2	87,2	5,0	2,8	5,0	564	47-44-3-6	78,3 76,2	6,0	8,8 6,5	7,8	720
41-32-4-2	79,9	5,2	10,4	4,5	616	47-70-19-4	56,7	7,0	30,6	11,3 5,6	740 994
41-33-10-1	70,4	4,7	22,9	2,0	699	48-32-19-6	57,8	3,2	30,5	8,4	996
41-35-10-5	65,0	4,6	21,1	9,2	757	48-38-5-4	76,8	5,1	10,7	7,4	750
41-37-10-5	64,8	4,8	21,1	9,2	759	48-39-3-3	81,7	5,5	6,8	6,0	705
41-39-1-3	83,5	6,6	2,8 22,6	7,1	589 777	9—11 10—1	63,1	4,3	15,8	16,8	913
41-41-4-3	77,0	5,0	10,0	9,0	639	18-1	73,0 62,8	4,9 4,3	20,3	1,8	789 917
41-42-6-6	68,9	5,9	13,4	11,8	714	48-42-27-4	52,1	3,8	31,4	1,5 5,1	1106
41-44-9-2	69,5	6,2	20,3	4,0	708	48-44-8-2	74,2	5,7	16,5	3,6	776
41-47-10-1	69,0	6,6	22,5	1,9	713	48-48-2-4	80,9	6,7	4,5	7,9	712
41-50-4-10	65,9	6,7	8,6	18,8	746	48-58-13-16	54,0	5,4	19,5	21,0	1066
41—76—6—12 41—81—9—1	59,1	9,1	11,5	20,2	832	48 - 60 - 9 - 2 $49 - 37 - 6 - 7$	71,3 71,8	7,4	17,8	3,5	808
41-84-6-12	58,5	11,1 10,0	19,7 11,4	$\frac{1,9}{20,0}$	731 840	50-33-2-5	81,6	4,5	11,7	12,0	819 735
42-21-3-1	85,9	3,6	8,2	2,3	587	50-47-17-11	55,9	4,4	25,3	14,3	1073
42-28-2-6	77,8	4,3	4,9	13,0	648	50-60-5-4	75,4	7,5	10,0	7,0	796
42-29-6-7	69,3	4,0	13,2	13,5	727	50-64-5-4	75,0	8,0	10,0	7,0	800
42-32-6-2	76,4	4,8	14,5	4,2	660	51-48-6-6	72,8	5,7	11,4	10,0	840
42-34-4-4	76,6 69,8	5,2 4,7	9,7 17,7	8,5 7,8	658 72 2	51-57-9-3 52-29-12-1	71,6 72,6	6,7	16,8 22,4	4,9 1,6	855 859
42-37-2-3	82,0	6,0	5,2	6,8	615	52-57-7-7	70,0	6,4	12,5	11,0	891
42-40-17-10	52,7	4,2	28,4	14,6	956	52-83-13-1	67,2	8,9	22,4	1,5	929
42-42-7-6	67,9	5,7	15,1	11,3	742	52-93-18-1	61,2	9,1	28,3	1,4	1019
42-44-6-6	69,2	6,0	13,2	11,5	728	52-95-15-1	64,1	9,8	24,6	1,4	973
42-46-5-4	73,5	6,7	11,7	8,1	686	53-38-6-4	77,0	4,6	11,6	6,8	826
74 42-48-10-10	70,2 59,1	6,4	15,6	7,8	718 852	53-42-9-2 54-56-9-2	74,8	4,9	16,9 16,4	3,2	850 876
42-48-10-10	68,1	5,6	18,8 17,3	7,6	740	54-59-15-1	67,4	6,1	25,0	1.4	961
42-54-6-4	71,0	7,6	13,5	7,8	710	54-63-9-3	72,2	7,0	16,0	4.7	897
42-63-14-1	62,6	7,8	27,8	1,7	805	54-78-45-4	43,1	5,2	47,9		1502
42-68-7-2	70,8	9,6	15,7	3,9	712	54-87-21-1	59,7	8,0	31,0	1,2	1085
43-51-12-1	66,7	6,6	34,8	1,8	773		86,7 75,2	5,6 5,2	2,1	5,5	761 878
44-29-10-3	69,6	3,8	21,1	5,5	759 846	55—46—9—2 55—85—22—17	49,4	6,4	26,4		1335
44 - 30 - 2 - 4 $44 - 32 - 2 - 2$	81,7 85,1	4,6 5,2	4,9 5,2	8,7	620	55-92-16-2	63,7	8,9	24,7		1036
44-34-2-4	81,3	5,2	4,9	8,6	650	55-109-22-9	52,9	8,7	28,2	10,1	1247
44-36-4-2	80,6	5,5	9,8	4,3	656	56-47-4-3	81,5	5,7	7,7	5,1	825
44-39-3-3	80,4	5,9	7,3	6,4	657	56-54-17-12	57,6		23,3		1166
44-47-2-3	81,4	7,2	4,9	6,5	649	21—12 56—56—11—2	54,6 72,1	6,0	27,3 18,9	13,7	$\frac{1230}{932}$
44-52-9-2	70,2	6,9	19,1 23,8	3,7	752 808				23,3		1029
44—60—12—2 44—63—18—1	65,3 59.1	7,4	32,2	1,6	893	57-110-15-2			22,6		1062
	30,1	.,0	,=	-,0	-			. 1	′ *</th <th></th> <th></th>		

C-H-O-N	C %	Hº/0	0 %	Nº/0	M.G.	C-H-	-0-	·N	C º/o	H º/ ₀	0 %	N º/0	M.G.
$\begin{array}{c} 60-48-11-9 \\ 60-86-15-4 \\ 64-100-20-16 \\ 65-128-19-2 \\ 66-51-21-1 \\ 66-88-21-2 \\ 68-68-17-4 \\ 68-78-7-8 \\ 68-80-10-4 \\ 68-88-10-4 \\ 70-138-12-2 \\ 70-140-13-2 \\ 72-84-12-4 \\ 76-124-29-24 \\ 78-180-32-24 \\ \end{array}$	65,3 54,4 62,9 66,4 63,7 60,3 71,6 73,0 73,4 72,9 70,1 69,1 72,2 49,7	7,0 6,8	21,8 22,7 24,5 28,2 27,0 20,1 16,8 10,0 14,4 14,3 16,0 17,1 16,1 25,3	5,1 15,8 2,3 1,1 2,2 14,5 4,9 10,0 5,0 5,0 2,3 2,3 4,7 18,2	1102 1412 1240 1193 1244 1352 1140 1118 1112 1120 1198 1216	80—90- 80—92- 98—94- 102-149 102-151- 102-206 104—98- 108-194-	-24- -17- -17- -16- -17- -38- -39- 3-19- -17- -29- 3-16-16	-11 -16 -20 -24 -16 -31 -31 -4 -16 28 -16 -8	62,4 60,1 57,9 70,4 66,6 50,7 50,3	8,3 5,3 6,4	32,1 24,9 17,7 17,0 16,4 18,8 15,4 25,2 25,6 17,0 14,8 19,8 14,2 11,9 15,7	10,0 14,6 17,5 20,3 4,1 12,7	1794 1541 1538 1598 1658 1364 1766 2415 2433 1790 1842 2346 1918 2136 2244

Register der Eigennamen.



Abietin C₄₄H₅₀ $C_{44}H_{52}$ $C_{44}H_{54}$ $C_{44}H_{56}$ $C_{44}H_{58}$ C44H60 Abietinsäure C₁₉H₂₈O₂ Abietinsaure $C_{10}L_{28}C_{2}$ Abrotin $C_{21}H_{22}OV_{3}$ Absintbiin $C_{15}H_{20}O_{4}$ $C_{20}H_{28}O_{4}$ Acekaffin $C_{6}H_{11}O_{2}N_{3}$ Acekonitsäure $C_{6}H_{6}O_{6}$ Acenaphten C₁₂H₁₀ Acenaphtylen C₁₂H₈ Acetal C6H14O2 Acetaldehydglykose $C_8H_{16}O_7$ Acetaldehydin $C_{10}H_{12}N_2$ Acetodiphosphorige Säure C,H8O,P2 Acetoguanamid C₄H₅O₂N₈ Acetoguanid C4H6ON4 Acetol C₈H₆O₂ Aceton C₈H₆O Acetonbenzil C17H16O3 Acetondibrenztraubensäure C9H10O5 Acetonchloroform C4H7OCl8 Acetondiessigsäure C7H10O5 Acetondioxalsaure C7H6O7 $\begin{array}{lll} \textbf{Acetonin} & C_9H_{18}N_2\\ \textbf{Acetonrhamnosid} & C_9H_{16}O_5 \end{array}$ Acetonsäure C₄H₈O₂ Acetonuraminsäure $\begin{array}{c} \textbf{C}_5\textbf{H}_{10}\textbf{O}_3\textbf{N}_2\\ \textbf{Acetonylbiuret} \ \textbf{C}_5\textbf{H}_7\textbf{O}_3\textbf{N}_8\\ \textbf{Acetonyleugenol} \ \textbf{C}_{13}\textbf{H}_{16}\textbf{O}_3\\ \end{array}$ Acetonylisoeugenol C₁₃H₁₆O₃ Acetophenin C₂₈H₁₇N Acetophenon C₈H₈() AcetophenonvanillinC₁₆H₁₄O₄ Acetovanillon C9H10O3 Acetoveratron $C_{10}H_{12}O_3$ Acetulminsaure $C_7H_{12}O_2$ Acetursäure $C_4H_7O_3\tilde{N}$ Acetylen C_2H_2 Achillein $C_{20}H_{38}O_{15}N_2$ Achilletin C₁₁H₁₇O₄N Achrodäscin C₅₂H₈₂O₂₃

Achroglobulin $\begin{array}{c} C_{36}H_{52}O_{31}\\ Achrooglykogen \ C_{6}H_{10}O_{5}\\ Aconin \ C_{24}H_{39}O_{10}N\\ Aconitin \ C_{34}H_{47}O_{11}N\\ Adenin \ C_{5}H_{5}N_{5}\\ Adipinsäure \ C_{6}H_{10}O_{4}\\ Adipinsäure \ C_{6}H_{10}O_{4}\\ \end{array}$ Adipomalsaure C6 H10 O1 Adipoweinsäure C₆H₁₀O₆ Adonin $C_{24}H_{40}O_9$ Adonit $C_5H_{12}O_5$ Aeolosomin $C_{420}H_{630}O_{152}N_{103}S_{2}Fe$ Aepfelsäure $C_{4}H_{6}O_{5}$ $\begin{array}{c} \text{Aescigenin} \quad C_{12} \text{H}_{20} \text{O}_2 \\ \text{Aescinsäure} \quad C_{24} \text{H}_{40} \text{O}_{12} \end{array}$ Aescioxalsäure C7H6O4 Aeskorcein CoH, O, N Aeskorcin C₉H₈O₄ Aeskuletin $\mathring{C}_9\mathring{H}_6\mathring{O}_4$ Aeskuletinsäure $\mathring{C}_9H_{12}O_7$ Aeskulin $C_{15}H_{16}O_9$ Aesthesin $C_{35}H_{69}O_3N$ Aethebenin $C_{20}H_{23}O_3N$ Aethebenin $C_{19}H_{18}O_3$ Aethen C_2H_4 Aethionsäure $C_2H_6O_7S_2$ Aethocodein $C_{20}H_{25}O_3N$ Aethylchinovosid $C_8H_{16}O_5$ Aethylgalaktosid $C_8H_{16}O_6$ Aethylglykosid C₈H₁₆O₅ Aethylidenurethan C8H16O4N2 Aethylrhamnosid C₈H₁₆O₅ Aethylsenföloxyd C6H10ON2S2 Agaricinsäure C₁₆H₃₀O₅ Agaricol $C_{10}H_{16}U$ Agavose $C_{12}H_{22}O_{11}$ Agoniadin $C_{10}H_{14}U_6$ Akonitanilsäure $C_{12}H_9O_4N$ Akonitsäure C₆H₆O₆ Akonsäure C₅H₄O₄ Akridin C₁₃H₉N

Akridinsäure C₁₁H₇O₄N Akridon $C_{13}H_9ON$ Akrit $C_6H_{14}O_6$ Akroleïn C_8H_4O Akropinakon C₆H₁₀O₂ Akrosamin C₆H₁₃O₅N Akroso $C_6H_{12}O_6$ Akroson $C_6H_{10}O_6$ Akrothialdin $C_9H_{13}NS_2$ Akryldiureid $C_5H_{10}O_2N_4$ Akrylkolloïd C3H4O3 Akrylmilchsäure C₃H₄O₃ Akrylsäure C₃H₄O₂ Alakreatin C₄H₉O₂N Alakreatin $C_4H_9O_2N_3$ Alakreatinin $C_4H_7ON_3$ Alanin $C_3H_7O_2N$ Alantol $C_{10}H_{16}O$ Alantolsäure $C_{15}H_{22}O_3$ Alantsäure $C_{15}H_{22}O_3$ Albamin $C_{12}H_{22}O_3N_2$ Albanin $C_{10}H_{16}O$ Albaspidin $C_{22}H_{28}O_7$ Albopannin $C_{21}H_{24}O_7$ Albomin $C_{22}H_{24}O_7$ C48H64O10 $C_{48}H_{64}O_{12}$ Aldehydovanillinsäure $C_9 \tilde{H_8} O_5$ Aldol $C_4 H_8 O_2$ Aleuritinsäure C₁₈H₂₆O₄ Alizarin $C_{14}H_8O_4$ Alizarinamid $C_{14}H_9O_8N$ Alizarinblau $C_{17}H_9O_4N$ Alizarinblauamid $C_{17}H_{10}O_8N_2$ Alizarineyanin $C_{14}H_8O_7$ Alizaringelb $C_{13}H_{10}O_4$ Alizaringrün $C_{17}H_9O_4NS$

 $\begin{array}{lll} Alizarinimid & C_{14}H_7O_2N \\ Alizarinimdigblau & C_{17}H_9O_7N \\ Alkalchlorophyll & C_{52}H_{57}O_7N_7 \end{array}$ Alkannin $C_{15}H_{14}O_4$ Alkansäure $C_4H_5O_5N_5$ Allantoin $C_4H_6O_3N_4$ Allantoinsäure $C_4H_8O_4N_4$ Allantoxardin $C_3H_3O_2N_3$ Allantoxansäure $C_4H_3O_4N_3$ Allantursäure $C_3H_4O_3N_2$ Allitursäure $C_6H_8O_4N_4$ Allocampholytischesäure C9H14O2 $\begin{array}{c} V_{9}^{15} I_{14} V_{2}^{2} \\ Allocinchonin & C_{19} H_{29} O N_{2} \\ Allofluoresce "in C_{14} H_{8} O_{4} \\ C_{20}^{1} H_{14} O_{6} \\ Allokaffein & C_{8} H_{9} O_{5} N_{3} \\ \end{array}$ Allokaffursäure C7H11O4N8 Allolemonal C10H16O Allophansäure C2H4O3N2 Allophanylweinsäure $C_6H_8O_8N_2$ Alloschleimsäure C6H10O8 Alloxan C₄H₂O₄N₂ Alloxansäure C₄H₄O₅N₂ Alloxantin C₈H₆O₈N₄ Alloxantinharnstoff Allursäure $C_5H_4O_4N_4$ $C_5H_6O_5N_4$ Allylen C_3H_4 Aloëresinsäure $C_7H_3O_6N$ C15 H16 O7 Aloërinsäure $C_{30}H_{34}O_{15}$ Aloëtinsäure $C_{14}H_4O_{10}N_4$ Aloëxanthin C15H10O6 Alorin $C_{17}H_{18}O_7$ Alorin $C_{17}H_{18}O_7$ Alorigrin $C_{22}H_{18}O_8$ Aloresitannol $C_{29}H_{26}O_8$ Aloresitannol $C_{29}H_{26}O_8$ Aloresitannol $C_{22}H_{26}U_6$ Alpinin $C_{17}H_{12}U_5$ Alstonin $C_{21}H_{20}U_4N_2$ Amalinsäure $C_{12}H_{14}U_8N_4$. Amanitin $C_5H_{15}U_2N$ — $C_{10}H_{18}U_6$ Amarin $C_{21}H_{18}N_2$ Amaron $C_{28}H_{20}N_2$ Amarsäure $C_{28}H_{22}U_3$ Amasantin $C_{16}H_{14}U_3N_4$ Ambraın $C_{25}H_{46}U_3$ Ameisensäure CH2O2 Amethensäure C7H14O Amidoazophenylen C₆H₅N₃ $\begin{array}{ll} \text{Amisatin} & \text{$C_{48}H_{99}O_9N_{11}$} \\ \text{Ammelid} & \text{$C_6H_9O_8N_9$} \end{array}$ Ammelidoessigsäure $C_5H_6O_4N_4$ Ammelin $C_3H_5ON_5$ Ammonchelidonsäure $C_7H_5O_5N$ Ammoresitannol C₁₈H₈₀O₈

Amphelochroïnsäure

 $\begin{array}{c} C_{17}H_{18}O_{10} \\ C_{19}H_{16}O_{10} \\ C_{26}H_{24}O_{16} \end{array}$ Amphikreatinin C₈H₁₉O₄N₇ Amphopepton Ampropeptor $C_{108}H_{178}O_{43}N_{50}S$ Amydekylensäure $C_{10}H_{18}O_{2}$ Amygdalin $C_{20}H_{27}O_{11}N$ Amygdalinsäure $C_{20}N_{18}O_{13}$ Amygdophenin $C_{17}H_{17}O_{5}N$ Amylan C₆H₁₀O₅ Amylen C₅H₁₀ Amylenvaleron C₁₄H₂₆O Amylodextrin C₃₆H₆₂O₃₁ Amyloid C₁₇H₂₀O₁₅ Amyloid C₁₇H₂₀O₁₅ Amylum C₂₄H₃₈O₁₉ Amyrilen C₃₀H₄₈ Amyrin C₃₀H₅₀O Amyron C₃₀H₄₈O Anabsinthin $C_{18}H_{24}O_4$ Anacardsäure $C_{22}H_{32}O_3$ Anagyrin $C_{14}H_{18}O_2N_2$ Anamirtin $C_{19}H_{24}O_{10}$ Andromedotoxin C₃₁H₅₀O₁₀ Anemonin $C_{10}H_8O_4$ Anemonolsäure $C_{10}H_{12}O_6$ Anemonsäure $C_{10}H_{10}O_5$ Anethol C₁₀H₁₂O Angelaktinsäure C5H8O8 Angelikasäure C, H, O, Anglicerinsäure C5H10O4 Angusturin $C_9H_{12}O_5$ Angusturaöl $C_{18}H_{24}O$ Anhalin $C_{10}H_{17}ON$ Anhalonidin $C_{12}H_{15}O_3N$ Anhalonin $C_{12}H_{15}O_3N$ Anhalonin $C_{12}H_{15}O_3N$ Anhydrocaprarsäure $C_{24}H_{18}O_{11}$ Anhydrodigitoxigenin C22 H30 O3 Anhydrodigitsäure C₁₀H₁₄O₂ $\begin{array}{c} - & C_{10}H_{16}O_4\\ \text{Anhydroeugonin} & C_9H_{13}O_2N\\ \text{Anhydroenneaheptit} & C_9H_{18}O_6 \end{array}$ Anhydrogeraniol C10 H16 Anhydroglykopyrogallol C8H6O4 Anhydrohomoconiinsäure $C_8H_{15}ON$ Anhydrolupinin $C_{21}H_{38}ON_2$ Anilbenzyl $C_{20}H_{15}ON$ Anilbenzoïn $C_{20}H_{17}ON$ Anilin C6H7N Anilinalloxan C10H9O4N3 Anilinschwarz $\hat{C}_{30}\hat{H}_{25}\hat{N}_5$ Anilpapaverinsäure $C_{22}H_{18}O_6N_2$ Aniluvitoninsäure C₁₁H₉O₂N Anilylmelamin C21 H21 N9 Anisaleumaranon C₁₆H₁₂O₃ Anisaldehyd C₈H₈O₂ Anisalpaeonol C17H16O4

Anisamidin $C_8H_{10}ON_2$ Aniscampher $C_{10}H_{16}O$ Anishumin $C_{18}H_{14}O_8$ Anishydramid $C_{24}H_{24}O_3N_2$ Anisil $C_{16}H_{14}O_4$ Anisilsäure $C_{16}H_{16}O_5$ Anisin $C_{24}H_{24}O_3N_2$ Anisodiureïd $C_{10}H_{14}O_3N_4$ $\begin{array}{cccc} \text{Anisoïn} & \text{C}_{10}\text{H}_{12}\text{O} \\ - & \text{C}_{16}\text{H}_{16}\text{O}_{4} \\ \text{Anisol} & \text{C}_{7}\text{H}_{8}\text{O} \end{array}$ Anisolisatin $C_{22}H_{19}O_3N$ Anissäure $C_8H_8O_3$ Anisuraminsäure $C_9H_{10}O_4N_2$ Anisylcocain C₁₈H₂₃O₅N Anisylecgonin C₁₇H₂₁O₅N Anisylhydroresorcin C13H14O3 Anol C9H10O Anthemen $C_{18}H_{36}$ Anthemen $C_{10}H_{16}O$ Anthracen $C_{14}H_{10}$ Anthraceniolin $C_{17}H_{11}N$ Anthrachinol $C_{14}H_{8}O_{2}$ Anthrachryson C₁₄H₈()₆ Anthracumarin C16H8() Anthraflavinsäure C14H8O4 Anthragallol C₁₄H₈O₅ Anthranil C₇H₅ON Anthranilcarbonsäure C₈H₅O₃N Anthranilsäure C, H,O, N Anthrapurpurin $C_{14}H_8O_5$ Anthrapyridin $C_{13}H_9N$ Anthrapyridinchinon C18 H7 O2 N Anthrarufin C14H8O4 Anthrol C₁₄H₁₀O Apigenin C15H10O5 $\begin{array}{cccc} \text{Apiin } & \text{C_{15}} & \text{C_{16}} & \text{C_{15}} \\ \text{Apiol } & \text{C_{12}} & \text{H_{14}} & \text{O_{4}} \\ \text{Apiolsäure } & \text{C_{10}} & \text{H_{10}} & \text{O_{6}} \end{array}$ Apion C9H10O4 Apionakrylsäure C₁₂H₁₂O₆ Apionerotonsäure C₁₃H₁₄O₆ Apionylglyoxylsäure C11 H10 O7 Apoaconitin $C_{38}H_{43}O_{11}N$ Apoatropin $C_{17}H_{21}O_{2}N$ Apochinamin $C_{19}H_{22}ON_{2}$ Apocinchen $C_{19}H_{19}^{10}O_2^2N_2$ Apocinchen $C_{19}H_{19}ON$

Apocinchonicin C19H22ON2

Apocinchonidin C19H22ON2 Apocinchonin C₁₉H₂₂ON₂ Apoisocinchonin C₁₉H₂₂ON₂ Apokaffe'in $C_7H_7O_5N_3$ Apokotinin $C_9H_9ON_3$ Apomorphin $C_{17}H_{17}O_2N$ Aponsäure $C_{14}H_{12}O_6$ Apophyllensäure $C_8H_7O_4N$ Apopseudoaconin $C_{27}H_{39}O_8N$ Apopseudoaconitin $C_{36}H_{47}O_{11}N$ Aposafranin C₁₈H₁₃N₃ Aposafranon $C_{18}H_{12}ON_2$ Aposorbinsäure $C_5H_8O_7$ Apostorinsaure $C_6H_8O_7$ Apotheobromin $C_6H_5O_5N_3$ Apovellosidin $C_{49}H_5O_6N_4$ Apovellosin $C_{49}H_{54}O_7N_4$ Apovellosol $C_{42}H_{46}O_7N_4$ Arabin $C_{10}H_{18}O_9$ Arabinochloral $C_7H_9O_5Cl_9$ Arabinon C₁₀H₁₈O₉ Arabinosamin C₅H₁₁O₄N Arabinose C₅H₁₀O₅ C23H38O22 $\begin{array}{c} C_{29}H_{48}O_{27} \\ C_{35}H_{58}O_{32} \\ C_{41}H_{68}O_{37} \\ C_{71}H_{112}O_{59} \end{array}$ Arabinoseäthylenmerkaptal $C_7H_{14}O_4S_2$ Arabinosecarbonsäure $C_6H_{12}O_7$ Arabinosidoglykonsäure $C_{11}H_{20}O_{11}$ Arabinsäure $C_{10}H_{18}O_{9}$ $C_{89}H_{142}O_{74}$ Arabit C₅H₁₂O₅
Arabonsäure C₅H₁₀O₆ Arachinsäure C20H40O2 Arbutin $C_{12}H_{16}O_7$ Arekaïdin $C_7H_{11}O_2N$ Arekaim $C_7H_{11}O_2N$ Arekaim $C_8H_{12}O_2N$ Arekolin $C_8H_{12}O_2N$ Arginin $C_6H_{14}O_2N_4$ Argyräscetin $C_{21}H_{30}O_6$ Argyräscin $C_{27}H_{42}O_{12}$ $\begin{array}{lll} \text{Ariginators} & \textbf{C}_{27}\textbf{H}_{42}\textbf{C}_{12}\\ \text{Aribin} & \textbf{C}_{23}\textbf{H}_{20}\textbf{N}_{4}\\ \text{Aricin} & \textbf{C}_{23}\textbf{H}_{20}\textbf{O}_{4}\textbf{N}_{2}\\ \text{Aristidinsäure} & \textbf{C}_{18}\textbf{H}_{13}\textbf{O}_{7}\textbf{N}\\ \text{Aristinsäure} & \textbf{C}_{18}\textbf{H}_{13}\textbf{O}_{7}\textbf{N} \end{array}$ Aristolia $C_{15}H_{28}O_3$ Aristolochin $C_{32}H_{22}O_{13}N_2$ Aristolsäure $C_{15}H_{11}O_7N$ Arnicin $C_{29}H_{30}O_4$ Aromadendrin $C_{29}H_{28}O_{12}$ $\begin{array}{c} \text{Arsenobenzol} \quad C_{12}H_{10}\text{As}_2 \\ \text{Arsenonaphtalin} \quad C_{20}H_{14}\text{As}_2 \\ \text{Artarin} \quad C_{21}H_{23}O_4N \end{array}$

Artesemin C₁₅H₁₈O₄

Artolin C₁₈₅H₂₈₈O₅₈N₅₀S Asaresinotannol C24H34O5 Asaron C₁₂H₁₆O₃ Asaron C₁₂H₁₆C₃
Asaronsaure C₁₀H₁₂O₅
Asclepion C₂₀H₃₄O₃
Asebofuscin C₁₈H₁₈O₈
Asebogenin C₁₈H₁₈O₇
Asebotin C₂₄H₂₈O₁₂ Asebotoxin $C_{31}H_{50}O_{10}$ Asellin $C_{25}H_{32}N_4$ Asellinsäure $C_{17}H_{32}O_2$ Asparacemsäure $C_4H_7O_4N$ Asparagin $C_4H_8O_3N_2$ Asparaginsäure C4H7O4N Aspidin $C_{23}H_{32}O_7$ Aspidinol $C_{12}H_{16}O_4$ Aspidosamin $C_{22}H_{28}O_2N_2$ $\begin{array}{lll} Aspidospermatin & C_{22}H_{28}\tilde{O}_2N_2\\ Aspidospermin & C_{22}H_{30}\tilde{O}_2N_2 \end{array}$ Assamar C20H22O11 Assamar $C_{20}H_{22}O_{11}$ Athamantin $C_{24}H_{30}O_{7}$ Atisin $C_{22}H_{31}O_{2}N$ — $C_{46}H_{74}O_{4}N_{2}$ Atisinhydrat $C_{22}H_{33}O_{3}N$ Atractylen $C_{20}H_{30}O_{6}$ Atranopin C. H. $O_{20}H_{30}O_{18}$ Atranorin C19 H18 O Atrarsäure $C_{10}H_{16}O_8$ Atripasäure $C_6H_6O_{12}$ Atroglycerinsäure $C_9H_{10}O_4$ Atrolaktinsäure C9H10O3 $\begin{array}{c} \textbf{Atronol} \ \ \textbf{C}_{16}\textbf{H}_{14} \\ \textbf{Atrons\"{a}ure} \ \ \textbf{C}_{17}\textbf{H}_{14}\textbf{O}_{2} \\ \textbf{Atropas\"{a}ure} \ \ \textbf{C}_{9}\textbf{H}_{8}\textbf{O}_{2} \end{array}$ $\begin{array}{lll} & \textbf{Atropin} & \textbf{C}_{17}\textbf{H}_{23}\textbf{O}_{3}\textbf{N}^{2} \\ & \textbf{Atropyltropein} & \textbf{C}_{17}\textbf{H}_{21}\textbf{O}_{2}\textbf{N} \\ & \textbf{Atroscin} & \textbf{C}_{17}\textbf{H}_{21}\textbf{O}_{4}\textbf{N} \\ & \textbf{Atroxindol} & \textbf{C}_{9}\textbf{H}_{9}\textbf{O}\textbf{N} \end{array}$ Auramin C₁₇H₂₁N₃ Auranthiol C10H18O Aurantiamarinsäure C10 H12 O4 Aurantiin C₂₁H₂₆O₁₁ Aurin C₁₉H₁₄O₃ Auron C₂₆H₂₀O₆ Austracamphen C10 H16 Axinsaure C₁₈H₂₈O₂ Azelaïnketon C₈H₁₄O Azelaïnsäure C₉H₁₆O₄ Azelaol C₈H₁₆O Azelaon C₈H₁₄O Azelomalsäure C9H16O5 Azimidobenzoësäure C7H5O2N3 Azimidobenzol C6H5N3 Azimidol C6H5ON3 Azimidotoluol C7H7N3 Azinbernsteinsäure $C_8H_8O_8N_2$ Azoanissäure C₁₆H₁₄O₆N₂ Azobenzil $C_{21}H_{15}ON$ Azobenzoïlid $C_{42}H_{33}N_5$ Azobenzol $C_{12}H_{10}N_2$

 $\begin{array}{c} \textbf{Azobenzoyl} \quad C_{22}H_{16}N_2 \\ \textbf{Azocamphanon} \quad C_{18}H_{28}O_2N_2 \\ \textbf{Azoconhydrin} \quad C_8H_{16}ON_2 \end{array}$ Azocymol C₂₀H₂₆N₂ Azodicarbonsaure C2H2O4N2 Azodioxindol C₈H₆O₂N₂ Azodiphenylblau $C_{18}H_{15}N_3$ Azoimidokaffe'in $C_8H_9O_2N_7$ Azoisatin C₈H₅ON₃ Azomekoninessigsäure C24H22O12N2 Azomesitylen C18H22N2 Azoncarbonsäure C₆H₃O₅N Azoopiansäure C₁₀H₉O₅N $\begin{array}{cccc} & - & C_{10}U_{19} & C_{10}N_{2} \\ - & C_{20}H_{18}O_{10}N_{2} \\ - & C_{20}H_{20}O_{9}N_{2} \end{array}$ Azoorcin $C_{14}H_{11}O_{3}N$ Azophenin $C_{30}H_{24}N_{4}$ Azophenylen C12H8N2 Azophenylmethazonsäure C8H8O8N4 $\begin{array}{c} {\rm Azopseudocumol} \ C_{18} {\rm H}_{22} {\rm N}_2 \\ {\rm Azoresorein} \ C_{12} {\rm H}_7 {\rm O}_4 {\rm N} \\ {\rm Azoresorufyl} \ C_{24} {\rm H}_{14} {\rm O}_5 {\rm N}_2 {\rm Cl}_2 \\ {\rm Azostyrol} \ C_{16} {\rm H}_{14} {\rm N}_2 \\ {\rm Azotetrazol} \ C_2 {\rm H}_2 {\rm N}_{10} \end{array}$ Azotriazol C4H4N8 Azontazol $C_{4}H_{4}N_{8}$ Azoxybenzol $C_{12}H_{10}ON_{2}$ Azulminsäure $C_{9}H_{3}ON_{5}$ — $C_{4}H_{5}ON_{5}$ Azulmoxin $C_{4}H_{3}O_{2}N_{5}$ Azurilsäure $C_{4}H_{5}O_{3}N_{5}$ Azurin C35H32O3N4

Balata $C_{10}\overline{H}_{16}$ Baphiasäure $C_{24}\overline{H}_{22}O_{10}$ Baphini C₁₂H₁₀O₄ Baphinitin C₄H₄O Baphiniton $C_{26}H_{26}O_6$ Baphtigenetin $C_{12}H_{10}O_4$ Baptigenin $C_{14}H_{12}O_6$ Baptisin $C_{26}H_{32}O_{14}$ Barbaloïn C₁₆H₁₆O₇ $\begin{array}{ccc} - & C_{16} H_{18} O_7 \\ \text{Barbatin} & C_9 H_{14} O \end{array}$ Barbatinsäure $C_{19}H_{20}O_7$ $C_{22}H_{24}O_8$ Barbitursäure C₄H₄O₃N₂ Basilicumcampher C₁₀H₂₂O Bassorin C₆H₁₀O₅ Bastin $C_{19}H_{24}O_9$ Bebeerin $C_{18}H_{21}O_3N$ Bebirin $C_{18}H_{21}O_3N$ Behenolsäure $C_{22}H_{40}O_2$ Behensäure $C_{22}H_{40}O_2$ Belladonin $C_{17}H_{21}O_2N$ Bellatropin $C_8H_{15}O_2N$ Benylen $C_{15}H_{28}$ Benzacin $C_{82}H_{27}ON_3$ Benzalazin $C_{14}H_{12}N_2$ Benzaldiacetonamin C13H17ON Renzaldiacetonin C₁₃H₁₇N

Benzaldoxim C7H7ON Benzalimid C₄₂H₈₇O₂N₃ Benzalpaeonol C₁₆H₁₄O₃ Benzalpinakolin C₁₈H₁₆O Benzamaron $C_{13}C_{18}$ O₂
Benzamaron $C_{35}H_{28}$ O₂
Benzaminsaure C_7H_7 O₂N
Benzazid C_7H_5 ON₃
Benzazimid C_7H_5 ON₃
Benzazimid C_7H_5 ON₃
Benzatimid C_8H_4 N₆
Benzeyanidin $C_{24}H_{19}$ O₂N Benzeigazin $C_8H_6N_2$ Benzerythren $C_{23}H_{18}$ Benzfuran C₈H₆O Benzfuril $C_{12}H_8O_8$ Benzfurilsäure $C_{12}H_{10}O_4$ Benzfuroïn $C_{12}H_{10}O_3$ Benzhydramid $C_{22}H_{18}ON_2$ Benzhydrazoïn $C_{10}H_{16}N_2$ Benzhydroxamsäure $C_7H_7O_2N$ Benzhydrylamin C₁₃H₁₈N Benzhydrylphenol $C_{13}H_{12}O_2$ $\begin{array}{c} Benzidylopians \"{a}ure \\ C_{32}H_{28}O_8N_2 \\ Benzidylphtalaldehyds \"{a}ure \end{array}$ Benzidylphtalaldehydsäu $C_{28}H_{20}O_4N_2$ Benzil $C_{14}H_{10}O_2$ Benzilam $C_{21}H_{15}ON$ Benzilide $C_{28}H_{20}O_4$ Benziltropeïn $C_{22}H_{25}O_5N$ Benzimid $C_{23}H_{18}O_2N_2$ Benzimidazol $C_7H_6N_2$ Benzisothiazol C_7H_5NS Benzobrenzkatechin $C_{13}H_{10}O_{2}$ Benzoësäure $C_7H_6O_2$ Benzohydrochinon C₁₃H₁₀O₃ Benzohydrochinon $C_{13}H_{10}O_{8}$ Benzoin $C_{14}H_{12}O_{2}$ Benzoinäther $C_{28}H_{22}O_{3}$ Benzoinam $C_{21}H_{18}N_{2}$ $- C_{28}H_{24}ON_{2}$ Benzoinamid $C_{21}H_{18}N_{2}$ Benzoingelb $C_{21}H_{12}O_{4}$ Benzoinidam $C_{28}H_{23}O_{2}N$ Benzoinidam $C_{28}H_{20}O_{2}$ Benzoiniketazin $C_{28}H_{24}O_{2}N_{2}$ Benzoinketazin $C_{28}H_{24}O_{2}N_{2}$ Benzoinketazin $C_{28}H_{24}O_{2}N_{2}$ Benzoinketazin $C_{28}H_{24}O_{2}N_{2}$ Benzoinketazin $C_{28}H_{24}O_{2}N_{2}$ $\begin{array}{l} \text{Benzol } C_{6}H_{6} \\ \text{Benzoleïnsäure } C_{7}H_{10}O_{2} \\ \text{Benzolindon } C_{18}H_{12}ON_{2} \\ \text{Benzophenanthrolin } C_{18}H_{10}N_{2} \end{array}$ Benzophenon C₁₈H₁₀O Benzoresinol $C_{13}H_{10}O_3$ Benzoresinol $C_{13}H_{10}O_3$ Benzoresorein $C_{13}H_{10}O_3$ Benzosuccinin $C_{14}H_{14}O_6$ Benzotriphenazin $C_{24}H_{12}N_6$ Benzotritolazin $C_{27}H_{18}N_6$ Benzoylazotid $C_{15}H_{12}N_2$ Benzpyron C₉H₆O₂ Benzthiazol C₇H₅NS Benzthiofuran C₈H₆S Benzthiopyron C₉H₆OS Benztriazin C, H, N

Benztriazol C₆H₅N₃ Berbamin $C_{18}H_{19}O_3N$ Berberal $C_{20}H_{17}O_7N$ Berberilsäure $C_{20}H_{19}O_9N$ Berberin $C_{20}H_{19}O_4N$ Berberinsäure $C_8H_8O_4$ Berberolin $C_{18}H_{13}O_4N$ Berberonsäure $C_8H_5O_6N$ Bergapten $C_{12}H_8O_4$ Bergenin $C_6H_8O_4$ Bergenit $C_8H_{10}O_5$ Berilsäure $C_{20}H_{15}O_8N$ Bernsteinsäure $C_4H_6O_4$ Betain $C_5H_{11}O_2N$ Betulin $C_6H_6O_3$ Betulinamarsäure C₈₆H₅₂O₁₆ Betulinsäure $C_{36}H_{54}O_{6}$ Betuloretinsäure $C_{36}H_{66}O_{5}$ Bichinhydron C₁₂H₈O₄
Bichinhydron C₁₂H₈O₄
Bichinolyl C₁₃H₁₂N₂
Bichinon C₁₂H₆O₄
Bidesyl C₂₂H₂₂O₂
Bidurochinon C₂₂H₃₆O₈
Bilifuscin C₁₈H₁₀O₄N₂
Biliansäure C₂₅H₃₆O₈
Bilifuscin C₁₈H₁₀O₄N₂
Bilinsäure C₁₆H₂₂O₆
Biliprasin C₁₆H₂₂O₆N₂
Bilirubin C₁₈H₁₈O₈N₂
Bilirubin C₁₈H₁₈O₈N₄
Biliverdin Säure C₃H₃₆O₈N₄
Biliverdinsäure C₅H₉O₄N
Bilitidin C₁₄H₁₈N₂
Bindon C₁₈H₁₀O₈
Bipikolin C₁₂H₁₄N₂
Bipyridyl C₁₀H₈N₂
Bisabolen C₂₀H₃₂
Bisabolresen C₂₉H₄₇O₆
Bisantipyrin C₂₂H₂₂O₂N₄
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Bithi Bichinhydron C₁₂H₈O₄ Bismarckbraun C₁₂H₁₃N₅ Bithiophen $C_8H_6S_2$ Bithymochinon C20 H24 O4 Bitnymoenhon C.
Biuret $C_2H_5O_2N_3$ Bixin $C_{28}H_{34}O_5$ Blausäure CHN Boheasäure $C_7H_{10}O_6$ Boldoglykosid $C_{30}H_{52}O_8$ Borneocamphen C₁₀H₁₆ Borneol $C_{10}H_{18}O$ Borneolkohlensäure $C_{11}H_{18}O_8$ Borneoikoniensaure C₁₁H₁O₆
Bornesit C₇H₁₄O₆
Bornylamin C₁₀H₁₀N
Boswellinsäure C₃₂H₅₂O₄
Brasileïn C₁₆H₁₂O₅
Brasilin C₁₆H₁₄O₅
Brassidinsäure C₃₂H₄₃O₂
Brassidinsäure C₁₈H₂₄O₄
Brassylsäure C₁₈H₂₄O₄
Brassylsäure C₁₈H₂₄O₄ Brenzchinovasäure $C_{81}H_{48}O_4$ Brenzkatechin $C_8H_8O_2$ Brenzkatechinphtalein $C_{20}H_{14}O_{6}$ Brenzschleimsäure C5H4O3 Brenzterebinsäure C₆H₁₀O₂ Brenztraubenalkohol C3H6O2

Brenztraubensäure $C_3H_4O_3$ Brenzweinsäure $C_5H_8O_4$ Bromal $C_5H_0Br_5$ Bromalid $C_5H_2O_3$ Br $_6$ Bromalid $C_5H_2O_3$ Br $_6$ Bromalide $C_5H_2O_3$ Br $_6$ Bromalide $C_5H_2O_3$ Br $_6$ Bromitonsäure $C_3H_4O_2$ Br $_2$ Bromocodid $C_{16}H_{20}O_2$ NBr
Bromoform $CHBr_3$ Brucin $C_{23}H_{26}O_4N_2$ Brucin $C_{23}H_{26}O_4N_2$ Bryogenin $C_{26}H_{38}O_3$ Bryogenin $C_{26}H_{38}O_4$ Bryoridin $C_{20}H_{38}O_3$ Bryonan $C_{20}H_{42}$ Bryonin $C_{44}H_{30}O_{19}$ Bryoresin $C_{37}H_{68}O_{18}$ Bryoretin $C_{21}H_{35}O_7$ Buchweizengelb $C_{15}H_{20}O_{10}$ Bulnocapnin $C_{19}H_{19}O_4N$ Buttersäure $C_4H_8O_2$ Butyllaktinsäure $C_4H_8O_2$ Butyral $C_4H_8O_2$ Butyreloralaldol $C_8H_{13}O_8Cl_8$ Butyrcumarin $C_{11}H_{10}O_2$ Butyrcumarsäure $C_{11}H_{12}O_3$ Butyrofuronsäure $C_9H_{12}O_5$ Butyrofuronsäure $C_9H_{12}O_5$ Butyrofuronsäure $C_9H_{12}O_5$ Butyrofuronsäure $C_7H_{14}O_8$ Butyrofuronsäure $C_7H_{14}O_8$

 $\begin{array}{c} Cacaonin \ C_{60}H_{86}O_{15}N_4 \\ Cadaverin \ C_5H_{14}N_2 \\ Cadinen \ C_{15}H_{24} \\ Caïncasäure \ C_{40}H_{64}O_{18} \\ Caïncetin \ C_{22}H_{34}O_3 \\ Caïncienin \ C_{14}H_{24}O_2 \\ Caïncin \ C_{40}H_{84}O_{18} \\ Cajeputen \ C_{10}H_{16} \\ Cajeputen \ C_{10}H_{16}O \\ Callitrolsäure \ C_{65}H_{84}O_8 \\ Callutansäure \ C_{14}H_{14}O_9 \\ Calluxanthin \ C_{14}H_{10}O_7 \\ Calycanthin \ C_{18}H_{40}O_{11}N_5 \\ Callycin \ C_{18}H_{12}O_5 \\ Camellin \ C_{53}H_{84}O_{19} \\ Camphanoncamphersäure \\ C_{20}H_{30}O_3 \\ Camphansäure \ C_{10}H_{14}O_4 \\ Camphelylalkohol \ C_9H_{18}O \\ Camphen \ C_{10}H_{16}O \\ Camphenon \ C_{10}H_{16}O \\ Camphenon \ C_{10}H_{16}O \\ Camphenon \ C_{10}H_{14}O \\ Camphenon \ C_{10}H_{14}O \\ Camphenon \ C_{10}H_{14}O \\ Camphensäure \ C_{10}H_{14}O \\ Camphensäure \ C_{10}H_{14}O \\ Camphensäure \ C_{10}H_{14}O \\ Camphen \ C_{10}H_{16}O \\ Campher \ C_{10}H_{14}O \\ Campher$

Campherimidazolon Campherimin $C_{10}H_{16}O_2$ Campherimin $C_{10}H_{17}N$ Campherol $C_{10}H_{16}O_2$ Campheroxalsaure $C_{13}H_{16}O_4$ Campherphoron $C_9H_{14}O$ Campherpinakon $C_{20}H_{34}O_2$ Camphersäure C₁₀H₁₆O₄ Camphilen $C_{10}H_{16}$ Camphimid $C_{10}H_{15}N$ $\begin{array}{c} \textbf{Camphin} \quad \textbf{C}_{10} \textbf{H}_{18} \\ \textbf{Camphins} \\ \textbf{aure} \quad \textbf{C}_{10} \textbf{H}_{16} \textbf{O}_{2} \\ \textbf{Camphocarbons} \\ \textbf{aureC}_{11} \textbf{H}_{16} \textbf{O}_{3} \\ \end{array}$ Camphoglykuronsäure C16H24O8 Campholakton C₉H₁₄O₂ Campholaktonsäure C₉H₁₆O₃ Campholalkohol C₁₀H₁₈O Campholamin $C_{10}H_{21}$ N Campholen C_9H_{14} — C_9H_{16} — $C_{10}H_{18}$ Campholenlakton $C_{10}H_{14}O_2$ Campholenoxydsäure C10 H16 O3 Campholensäure C₁₀H₁₆O₂ Campholid C10H18O2 $egin{array}{c} Campholons \ddot{a}ure & C_{10}H_{16}O_8 \\ Camphols \ddot{a}ure & C_{10}H_{18}O_2 \\ \end{array}$ CampholytischesäureC9H14O2 Camphoransäure C9H12O6 $C_9H_{14}O_7$ Camphorensäure C₁₀H₁₆O₂ Camphorogenol C₁₀H₁₈O₂ Camphoronanilsäure $C_{15}H_{19}O_5N$ Camphoronsäure $C_9H_{14}O_6$ Camphorylcodeïn $C_{28}H_{35}O_6N$ Camphotereben $C_{20}H_{32}$ Camphotricarbonsäure $C_{10}H_{14}O_{6}$ Camphylamin C10H19N Camphylisoxazol C11H15ON Camphylsäure C9H12O2 Canadin $C_{20}H_{21}O_4N$ Cancerin $C_8H_{20}O_5N$ Cannabidon $C_8H_{12}O$ Cannabidon $C_{21}H_{28}O_2$ Cannabinol $C_{21}H_{28}O_2$ Cannabinolakton $C_{11}H_{12}O_2$ Cannabinolaktonsäure Cannabinotaktonsaure $C_{11}H_{10}O_4$ Cantharen C_8H_{12} Cantharidin $C_{10}H_{12}O_4$ Cantharidinimid $C_{10}H_{13}O_3N$ Cantharidinsaure $C_{10}H_{14}O_5$ Cantharsaure $C_{10}H_{12}O_4$ Caparrapinsaure $C_{15}H_{24}$ Caparrapinsaure $C_{15}H_{26}O_3$ Caparrapinel $C_{15}H_{24}O_3$ Caparrapiol C₁₅H₂₆O Caperatid C22 H36 O7 Caperatsäure C₂₂H₃₈O₈ Caperidin $C_{24}H_{40}O_{2}$ Caperin $C_{36}H_{60}O_{3}$

Capranid C₄₆H₃₈O₁₉

Capransäure $C_{23}H_{20}O_{10}$ Caprarsaure C24H20O12 Caprinon C19 H88O Caprinsäure $C_{10}H_{20}O_2$ Caprolakton $C_6H_{10}O_2$ Capron C₁₁H₂₂O Capronsäure C₆H₁₂O₂ Capryliden C8H14 Caprylon C₁₅H₈₀O Caprylsäure $C_8H_{16}O_2$ Caprylsäure $C_8H_{16}O_2$ Capsacutin $C_{35}H_{54}O_4N_3$ Capsaicin $C_9H_{14}O_2$ $C_{18}H_{28}O_3N$ Capsuläscinsäure C₁₈H₁₂O₈ Caramelan C₁₂H₁₈O₉ Caramelen C₈₆H₅₀O₂₅ Caramelin C6H4O2 Carbamid CH4ON2 Carbamidin CH, N Carbaminsäure CH₃O₂N Carbanil C7H5ON Carbazoakridon C₁₃H₇ON Carbazol C12H9N $\begin{array}{c} Carbazolblau & C_{87}H_{25}O\,N_3\\ Carbazolin & C_{12}H_{15}N\\ Carbazols\"{a}ure & C_{18}H_9O_2\,N \end{array}$ Carbocaprolaktonsäure C7H10O4 Carbocinchomeronsäure $C_8H_5O_6N$ Carbodiphenylimid C₁₃H₁₀N₂ Carbohydrazid CH6ON4 Carbohydrazimin C2H8N6 Carbomesyl C₁₀H₁₁ÔN Carbondinikotinsäure CaHsOaN Carbonpimelinsäure C₈H₁₂O₆ Carbonyldibiuret C₅H₈O₅N₆ Carbonyldipiperazin C9H18ON4 Carbonyldiurethan $C_7H_{12}O_5N_2$ Carbopetrocen C24H8 Carbopyrotitrarsäure C₈H₈O₅ Carbostyril C9H7ON Carbothialdin C5H10N2S2 Carbousninsäure C₁₈H₁₆O₇ Carbovaleraldin C₁₁H₂₂N₂S₂ Carbovalerolaktonsäure ${
m C_6H_8O_4}$ Carboxamidohippursäure C19H18O7N4 Carbuvinsäure CaHaO5 Carbylodiacetonamin C7H14ON2 $\begin{array}{c} \text{Carden } C_8 H_8 \\ \text{Cardensäure } C_{16} H_{30} O_7 \\ \text{Cardol } C_{21} H_{30} O_2 \\ - C_{32} H_{50} O_3 \\ \end{array}$

Cardolsäure C₁₅H₂₈O₇

Cardsäure C₁₃H₂₄O₅ Carminroth C₁₁H₁₂O₇ Carminsäure C₁₇H₁₈O₁₀ $\begin{array}{c} - C_{24}H_{14}O_{22} \\ Carminzucker C_6H_8O_4 \end{array}$ $C_6H_{10}O_5$ $\begin{array}{c} Carmufels\"{a}ure \quad C_{12}\overset{1}{H}_{20}\overset{1}{O}_{16} \\ Carnaubas\"{a}ure \quad C_{24}\overset{1}{H}_{43}\overset{1}{O}_{2} \\ Carnaubylalkohol \quad C_{24}\overset{1}{H}_{50}\overset{1}{O} \end{array}$ Carnin C7H8O3N4 Caron $C_{10}H_{16}O$ Carotin $C_{26}H_{38}$ Carpaïn $C_{14}H_{25}O_2N$ Carpen CoH14 Carragheenschleim C6H10O5 Carthamin C14H16O7 Carubin $C_6H_{10}O_5$ Carubinose $C_6H_{12}O_6$ Carvakrol C10H14O Carvakrol $C_{10}H_{14}O_8$ Carvakrylamin $C_{10}H_{15}N$ Carvanol $C_{10}H_{20}O$ Carvanon $C_{10}H_{18}O$ Carvenolid $C_{10}H_{14}O_2$ Carvenolsäure C10H16O3 Carveol C₁₀H₁₆O Carven $C_{10}H_{16}$ Carvenol $C_{10}H_{16}$ Carvenon $C_{10}H_{16}$ Carvestren $C_{10}H_{16}$ Carvolin $C_{10}H_{16}$ Carvon $C_{10}H_{16}$ Carvonpinakon C₂₀H₈₀O₂ Carvotanaceton C₁₀H₁₆O $\begin{array}{cccc} \text{Carvolamacton} & C_{10} H_{18} \\ \text{Carvolamin} & C_{10} H_{17} \\ \text{N} & & C_{10} H_{19} \\ \text{Caryophyllen} & C_{18} H_{24} \\ \text{Caryophyllenhydrat} & C_{15} H_{26} \\ \text{O} \end{array}$ Caryophyllin C₂₀H₃₂O₂ Caryophyllinsäure C₂₀H₃₂O₆ Cascarillin C₁₂H₁₈O₄ Cascarin C₁₂H₁₀O₅ Caseïn $C_{108}H_{194}O_{29}N_{28}$ Cassonsäure $C_5H_8O_7$ Catalpinsäure $C_{14}H_{14}O_6$ Caulosterin $C_{26}H_4$ Cederncampher C₁₅H₂₆O $\begin{array}{c} \text{Cedren } C_{15} H_{24} \\ \text{Cedriret } C_{16} H_{16} O_6 \end{array}$ $\begin{array}{c} \text{Cedrific} \ C_{15} H_{26} O \\ \text{Cedron} \ C_{15} H_{26} O \\ \text{Cedron} \ C_{15} H_{24} O \\ \text{Cellulose} \ C_{6} H_{10} O_{5} \\ \hline - C_{18} H_{32} O_{16} \\ \text{Cellulosin} \ C_{6} H_{10} O_{5} \\ \end{array}$ Cephaelin C₁₄H₂₀O₂N Cephalin $C_{42}H_{79}O_{13}NP$ Cerasinose $C_6H_{12}O_6$ Cerberin C₂₇H₄₀O₈ Cerebrose C₆H₁₂O₆ Cerebrosische Säure C6H12O6 Cerin C₁₇H₂₈O

 $\begin{array}{ccc} \text{Cerin} & \text{C}_{20}\text{H}_{82}\text{O} \\ - & \text{C}_{29}\text{H}_{48}\text{O}_4 \\ - & \text{C}_{80}\text{H}_{50}\text{O}_2 \end{array}$ $\begin{array}{c} \bullet \quad \textbf{Cerins\"aure} \quad C_{18} H_{20} O_4 \\ \textbf{Ceropins\"aure} \quad C_{36} H_{68} O_5 \end{array}$ Cerosinsäure $C_{24}H_{48}O$ Cerosinsäure $C_{24}H_{48}O_2$ Cerotino $C_{27}H_{54}$ Cerotino $C_{59}H_{106}O$ Cerotinsäure $C_{25}H_{50}O_2$ Cetylalkohol C₁₆H₃₄O Cetylaikonoi $C_{18}H_{34}O$ Cetylen $C_{16}H_{30}$ Cetylen $C_{16}H_{30}$ Cetylid $C_{22}H_{42}O_5$ Cevadilin $C_{34}H_{55}O_8N$ Cevadin $C_{32}H_{49}O_9N$ Cevin $C_{27}H_{43}O_8N$ Chairamidin $C_{22}H_{26}O_4N_2$ Chairamin $C_{22}H_{26}O_4N_2$ Champakol C₁₅H₂₆O — C₁₇H₈₀O Chavicol C9H10O Chavicor $C_{0}H_{10}O$ Chebulinsäure $C_{14}H_{14}O_{10}$ — $C_{28}H_{24}O_{19}$ Chekenin $C_{12}H_{11}O_{3}$ Chekenitin $C_{11}H_{7}O_{6}$ Chekenon $C_{20}H_{22}O_{4}$ Chelerythrin $C_{21}H_{17}O_{4}N$ Chelidemöüre $C_{11}O_{17}O_{4}N$ Chelidamsäure C7H5O5N Chelidonin C20H19O5N Chelidonsäure C7H4O6 Chenocholsäure $C_{27}H_{44}O_4$ Chinacetophenon $C_8H_8O_3$ Chinäthonsäure $C_{14}H_{18}O_8$ $\begin{array}{c} \text{Chinakridin} \quad C_{20} H_{12} N_2 \\ \text{Chinaldin} \quad C_{10} H_{9} N \end{array}$ Chinaldinalkin C11 H11 ON Chinaldinoxalsäure $C_{12}H_9O_8N$ Chinaldinsäure C₁₀H₇O₂N Chinen $C_{20}H_{22}ON_2$ Chinhydron $C_{12}H_{10}O_4$ Chinicin $C_{20}H_{24}O_2N_2$ Chinicin $C_{70}H_{10}O_5$ Chinidin C20H24O2N2

 $\begin{array}{c} Chinin \ \ C_{20}H_{24}O_2N_2 \\ Chinindolin \ \ C_{16}H_{10}N_2 \\ Chininsäure \ \ C_{11}H_9O_3N \\ Chinisatinsäure \ \ C_0H_7O_4N \end{array}$ Chinisatoxim C9H6O3N2 Chinis C₃H₁₂O₂
Chinit C₃H₁₂O₂
Chinizarin C₁₄H₈O₄
Chinoisthylin C₂₁H₂₆O₂N₂
Chinoisoamylin C₂₄H₃₃O₂N₂
Chinoisopropylin C₂₂H₂₈O₂N₂
Chinolin C₃H₇N
Chinolin C₃H₇N Chinolinehloral $C_{11}H_8ONCl_8$ Chinolingelb $C_{18}H_{11}O_2N$ Chinolinhydrochinon $\begin{array}{c} C_{24}H_{20}\tilde{O_2}N_2 \\ Chinolin resorcin \quad C_{24}H_{20}O_2N_2 \end{array}$ $\begin{array}{c} \text{Chinolins}\\ \text{Sure} & C_7 H_5 \overset{24}{\text{O}_4} \overset{26}{\text{N}} \\ & - & C_9 H_9 O_3 \overset{24}{\text{N}} \end{array}$ Chinolsäure $C_9H_6O_4N_2$ Chinonphenolazin $C_{13}H_8O_2N_2$ Chinophtalon $C_{18}H_{11}O_{2}N$ Chinophenol $C_{9}H_{7}ON$ Chinopropylin C22H28O2N2 Chinoterpen C₁₀H₁₆ Chinoxalonphenazin $C_{14}H_8N_4$ Chinoxagerbsäure $C_{14}H_{18}O_8$ Chinovaroth $C_{38}H_{26}O_{12}$ Chinovasäure $C_{32}H_{48}O_6$ Chinovin $C_{30}H_{48}O_8$ Chinovit $C_{8}H_{16}O_5$ Chinovose C₆H₁₀O₅ $\begin{array}{c} - \quad \quad C_6 H_{12} O_5 \\ \text{Chinoxalin} \quad C_8 H_6 N_2 \end{array}$ Chiratin C₂₆H₄₈O₁₅ Chiratogenin C₁₃H₂₄O₃ Chiratogenin $C_{13}H_{14}O_3$ Chironol $C_{28}H_{48}O$ Chironolsäure $C_{28}H_{48}O_4$ Chitaminsäure $C_6H_{13}O_6N$ Chitarsäure $C_6H_{10}O_6$ Chitenol $C_{18}H_{20}O_4N_2$ Chitenin $C_{19}H_{22}O_4N_2$ Chitenin $C_{19}H_{22}O_4N_3$ $\begin{array}{c} \text{Chitin} \ C_{15} H_{26} O_{10}^2 N_2 \\ \text{Chitonsäure} \ C_6 H_{12} O_7 \end{array}$ $\begin{array}{c} \text{Chitosamin} \quad C_6 H_{13} O_5 N \\ \text{Chitosan} \quad C_{14} H_{26} O_{10} N_2 \\ \text{Chloräthulminsäure} \end{array}$ C₆H₉O₂Cl Chloral C₂HOCl₃ Chloralaceton C5H7O2Cl3 Chloralacetophenon $\mathrm{C_{10}H_{9}O_{2}Cl_{3}^{2}}$ $\begin{array}{c} Chloral_2O_3\\ Chloralaldol \ C_8H_9O_8Cl_3\\ Chloralchinin \ C_{22}H_{25}O_8N_2Cl_8\\ Chloralglykolat \ C_6H_8O_4Cl_6\\ Chloralharnstoff C_5H_6O_3N_2Cl_6\\ \end{array}$ $\begin{array}{c} \text{Chloralid} \ \ C_5 H_2 O_3 \text{Cl}_6 \\ \text{Chloralimid} \ \ C_2 H_2 \text{NCl}_3 \\ \text{Chloralose} \ \ C_8 H_{11} O_6 \text{Cl}_3 \\ \end{array}$ Chloralosedischwefelsäure $\begin{array}{c} C_8H_{11}O_{12}Cl_3S_2 \\ Chlorals\"{a}ure \ \ C_7H_9O_8Cl_3 \\ Chloralurethan \ \ \ C_5H_8O_3NCl_3 \end{array}$ Chloranil C₆O₂Cl₄

Chloranilaminsäure $C_6H_3O_3NCl_2$ Chlorkyaminsäure C₈H₈O₄NCl Chlorocodid C18H20O2NCl Chlorocruorin ${
m C_{560}H_{845}O_{167}N_{148}S_3Fe} \ {
m Chloroform\ CHCl_3}$ Chlorophyllinsäure C₅₂H₅₇O₇N₇ Chloroxynaphtalinsäure C₁₀H₇O₅Cl Cholansäure $C_{25}H_{38}O_7$ Cholecamphersäure $C_{10}H_{18}O_4$ Choleïnsäure C24H40O4 Cholesten $C_{26}H_{46}$ Cholestensäure $C_{25}H_{40}O_4$ Cholesterilen $C_{27}H_{48}$ $C_{54}H_{84}$ $C_{64}H_{64}$ $C_{64}H_{64}$ $C_{64}H_{64}$ Cholesterinsäure C₁₂H₁₆O₇ Cholesteron C₂₇H₄₂ Cholesteryläther $C_{54}H_{86}O$ Cholestol $C_{22}H_{38}O$ $\begin{array}{c} \text{Cholestof} \ C_{22} \text{H}_{33} \text{V} \\ \text{Cholestrophan} \ \ C_{5} \text{H}_{6} \text{O}_{3} \text{N}_{2} \\ \text{Choletelin} \ \ C_{15} \text{H}_{13} \text{O}_{6} \text{N}_{2} \\ \text{Cholin} \ \ C_{5} \text{H}_{15} \text{O}_{2} \text{N} \\ \text{Chologlykolsäure} \ \ C_{26} \text{H}_{42} \text{O}_{7} \\ \text{Choloïdansäure} \ \ C_{16} \text{H}_{16} \text{O}_{4} \\ \hline C_{17} \text{H}_{25} \text{O}_{7} \\ \end{array}$ $\begin{array}{c} \text{Cholphosphilism}, \\ C_{72}H_{114}O_{15}P_2 \\ \text{Cholsäure} \ \ C_{24}H_{40}O_5 \\ - C_{25}H_{42}O_5 \\ \text{Chondroïtin} \ \ C_{18}H_{27}O_{14}N \\ \text{Chondronsäure} \ \ C_4H_6O_5 \\ - C_4H_8O_5 \\ - C_4H_8O_5 \\ \end{array}$ Chondrosin C₁₂H₂₁O₁₁N Chryiodin C₂₈H₈O₁₄N₃ Chrysammidsäure C14H5O11N5 Chrysanilin C₁₉H₁₅N₃ Chrysanthemin C₁₄H₂₈O₃N₂ Chrysarobin $C_{30}H_{26}O_7$ Chrysatinsäure $C_{24}H_{20}O_{19}N_6$ Chrysatropasäure $C_{10}H_8O_4$ Chrysazin $C_{14}H_8O_4$ Chrysazol $C_{14}H_{10}O_2$ Chrysean $C_4H_5N_8S_2$ Chrysen C₁₈H₁₂ Chrysensäure C₁₇H₁₂O₂ Chrysidin C₁₇H₁₁N Chrysin C₁₅H₁₀O₄ Chrysocetrarsäure C₁₉H₁₄O₆ Chrysochinon C₁₈H₁₀O₃ Chrysocyamminsäure C18H6O12N6 Chrysoïdin $C_{12}H_{12}N_4$ Chrysoïdin $C_{12}H_{12}N_4$ Chrysoïdinharnstoff $C_{13}H_{10}ON_4$

 $\begin{array}{c} Chrysoketon \ C_{17}H_{10}O \\ Chrysokreatin \ C_{5}H_{8}ON_{4} \end{array}$ Chrysonaphtazin C28 H16 N2 Chrysophanhydroanthron $C_{15}H_{12}O_3$ Chrysophansäure $C_{15}H_{10}O_4$ Chrysophenol $C_{19}H_{14}ON_2$ Chrysopiazin $C_{20}H_{12}N_2$ Chrysotoluazin $C_{25}H_{16}N_2$ Chrysotoluidin $C_{21}H_{21}N_3$ Chrysotoxin $C_{21}H_{22}O_9$ Chrysoxyessigsäure $C_{18}II_{12}O_3$ Chryssaminsäure C₁₄H₄O₁₂N₄ Cicuten $C_{10}H_{16}$ Ciliansäure $C_{20}H_{30}O_{10}$ Cinnicinsäure $C_{15}H_{28}O_{2}$ Cinchamidin $C_{19}H_{24}O_{N_2}$ Cinchamidin $C_{19}H_{24}ON_2$ Cinchen $C_{19}H_{29}N_2$ Cinchol $C_{20}H_{34}O$ Cincholepidin $C_{10}H_{9}N$ Cincholin $C_{10}H_{21}N$ Cincholoipon $C_{9}H_{17}O_{2}N$ Cincholoiponsäure $C_{8}H_{18}O_{4}N$ Cinchomeronsäure $C_{7}H_{6}O_{4}N$ Cinchonamin $C_{19}H_{24}ON_2$ Cinchonibin $C_{19}H_{22}ON_2$ $\begin{array}{c} \text{Cinchonicin} \quad C_{19} H_{22} \text{ON}_2 \\ \text{Cinchonidin} \quad C_{19} H_{22} \text{ON}_2 \end{array}$ Cinchonifin $C_{19}H_{22}ON_2$ Cinchonilin $C_{19}H_{22}ON_2$ Cinchonilin $C_{19}H_{22}ON_2$ Cinchonin $C_{19}H_{22}ON_2$ Cinchoninsäure $C_{10}H_7O_2N$ Cinchonnsaure $C_{10}H_7O_2N$ Cinchonsaure $C_7H_8O_6$ Cinchotenicin $C_{18}H_{20}O_3N_2$ Cinchotenidin $C_{18}H_{20}O_3N_2$ Cinchotenin $C_{19}H_{20}O_3N_2$ Cinchotoxin $C_{19}H_{24}ON_2$ Cinen $C_{10}H_{16}$ Cineol $C_{10}H_{18}O$ Cineolensäure $C_9H_{16}O_3$ Cineolsäure $C_{10}H_{16}O_5$ Cinnamenylangelikasäure $C_{13}H_{14}O_{2}$ Cinnimabenzil C37 H30 O3 N2 Cinnolin C₈H₆N₂ Citracetsäure C₆H₆O₆ Citracumalsäure $C_{10}H_8O_8$ Citrakonfluoresceïn $C_{17}H_{12}O_5$ Citrakonsäure C₅H₆O₄ Citral C₁₀H₁₆O Citramalsaure $C_5H_8O_5$ Citramethan $C_8H_14O_5N_2$ Citramissaure $C_{12}H_{11}O_5N$ Citraweinsaure $C_5H_8O_6$ Citrazinsäure C₆H₅O₄N Citren C₁₀H₁₆ Citriodoraldehyd C₁₀H₁₆O Citrobenzidylsäure $C_{18}H_{16}O_5N_2$ Citrodiglycerin C₁₂H₁₈O₁₀ Citromannitan C12H14O9 Citronellal C₁₀H₁₈O Citronellalsäure $C_{10}H_{18}O_2$

Citronellol C₁₀H₂₀O Citronelloterpen C₁₀H₁₆ Citronensäure C6H8O7 Citronentellurigesäure $C_{12}H_{14}O_{15}Te$ Cladoninsäure C₁₈H₁₈O₇ Cloven $C_{15}H_{24}$ Clupeïn $C_{30}H_{57}O_6N_{17}$ Cnicin $C_{42}H_{56}O_{15}$ Cocăthylin $C_{18}H_{23}O_4N$ $\begin{array}{c} \text{Cocain } C_{17} H_{21} O_4 N \\ \text{Cocamin } C_{19} H_{23} O_4 N \\ \text{Cocasaure } C_{18} H_{16} O_4 \end{array}$ Cocayloxyessigsäure $C_8H_{13}O_8N$ $\begin{array}{c} \operatorname{Coccels\"{a}ure} & \operatorname{C}_{20}\operatorname{H}_{22}\operatorname{O}_7 \\ \operatorname{Coccerylalkohol} & \operatorname{C}_{30}\operatorname{H}_{62}\operatorname{O}_2 \end{array}$ Coccinin C₁₄H₁₂O₅ Coccinsäure C₉H₈O₅ Cocconsaure $C_9H_8O_5$ Coccolin $C_{10}H_{20}O_8$ Cocculin $C_{10}H_{26}O_{10}$ Coccrinsäure $C_{31}H_{62}O_3$ Cochenillesäure $C_{10}H_3O_5$ Codathylin $C_{10}H_{23}O_5N$ Codamin $C_{20}H_{25}O_4N$ Codeïn $C_{18}H_{21}O_3N$ Codeïnviolet $C_{28}H_{31}O_4N$ Coerulein C20H8O6 Coerulignon $C_{20}H_8O_6$ Coerulin $C_{20}H_{16}O_8$ Coerulin $C_{20}H_{12}O_6$ Caffearin $C_{14}H_{16}O_4N_2$ Colchiceïn $C_{21}H_{23}O_6N$ Colchicins $C_{22}H_{25}O_6N$ Colchicins aure $C_{18}H_{15}O_5N$ Cole $C_{10}H_{10}O_5$ Cole opter $C_7H_5O_5N$ Collagen $C_{102}H_{149}O_{38}N_{31}$ Collidin $C_8H_{11}N$ Collidincarbonsäure C9H11O2N Collidinpiperidin C₁₃H₂₀N₂ Colocynthein $C_{44}H_{64}O_{13}$ Colocynthin $C_{56}H_{84}O_{23}$ $\begin{array}{c} \text{Colloidin} \quad C_{18} H_{30} O_{12} N_2 \\ \text{Colombosäure} \quad C_{21} H_{22} O_6 \end{array}$ Colophalumina C₁₀H₆O₂ Colophaluminasäure C₁₀H₆O₄ Colophén $C_{20}H_{32}$ Colophonin $C_{10}H_{22}O_3$ Colophtalin $C_{11}II_{10}$ Columbin $C_{21}H_{22}O_7$ $\begin{array}{lll} \text{Columbin} & C_{21}H_{22}O_7 \\ & - & C_{21}H_{21}O_7 \\ & - & C_{21}H_{22}O_7 \\ \text{Columbosäure} & C_{21}H_{22}O_5 \\ \text{Conchairamidin} & C_{22}H_{26}O_4N_2 \\ \text{Conchairamin} & C_{12}H_{26}O_4N_2 \\ \text{Conchinin} & C_{12}H_{24}O_2N_2 \\ \text{Conchinin} & C_{30}H_{24}O_2N_2 \\ \text{Conchiolin} & C_{30}H_{46}O_{11}N_6 \\ \text{Concusconin} & C_{23}H_{26}O_4N_2 \\ \text{Condurangin} & C_{18}H_{28}O_7 \\ & - & C_{20}H_{32}O_6 \\ \text{Conduransterin} & C_{30}H_{50}O_2 \\ \text{Conessin} & C_{24}H_{40}N_2 \\ \text{Conhydrin} & C_8H_{17}ON \\ \end{array}$

 $\begin{array}{c} \textbf{Conice\"idin} \quad \textbf{C}_{16}\textbf{H}_{26}\textbf{N}_2\\ \textbf{Conice\"in} \quad \textbf{C}_{8}\textbf{H}_{15}\textbf{N}\\ \textbf{Coniferin} \quad \textbf{C}_{16}\textbf{H}_{22}\textbf{O}_8 \end{array}$ Coniferylalkohol C₁₀H₁₂O₃ Coniin C₈H₁₇N Coniinsäure C₇H₁₅O₂N Conimen C₁₅H₂₄ Continen $C_{15}H_{24}$ Convallamarin $C_{29}H_{44}O_{18}$ Convallamarin $C_{23}H_{44}O_{12}$ Convallarin $C_{34}H_{62}O_{11}$ Convicin $C_{10}H_{16}O_8N_3$ Convolvulin $C_{32}H_{62}O_{16}$ Convolvulinolsäure $C_{13}H_{24}O_3$ $C_{15}H_{30}O_3$ Convolvulinsäure C₄₅H₈₀O₂₈ Convulvulin C54H96O27 Convlete C_8H_{14} Conylen $C_8H_{16}O_2$ Conylenglykol $C_8H_{16}O_2$ Conylurethan $C_{11}H_{21}O_2N$ Conyrin $C_8H_{11}N$ Copaïvaölhydrat C₆₀H₉₈O Copalvaoniyurai $C_{60}H_{60}O_2$ Copalvaoniyurai $C_{20}H_{30}O_2$ Copalresen $C_{25}H_{38}O_4$ $C_{41}H_{66}O_4$ Copellidin $C_8H_{17}N$ Corallinphtalein $C_{20}H_{14}O_4$ Cordol C13H7O3Br3 Coriamyrtin C₃₀H₃₆O₁₀ Coriandrol C₁₀H₁₈O $\begin{array}{c} \text{Coridin} \ \ C_{10}H_{15}^{15}N \\ \text{Corneïn} \ \ C_{30}H_{44}O_{13}N_9 \\ \text{Cornicularsäure} \ \ C_{17}H_{14}O_3 \end{array}$ Coronillin C7H12O5 $\begin{array}{c} \text{Coronillin } C_7 H_{12} O_5 \\ \text{Corriin } C_6 H_{10} O_3 N_2 \\ \text{Corticinsaure } C_{12} H_{10} O_6 \\ \text{Corybulbin } C_{21} H_{25} O_4 N \\ \text{Corycavin } C_{23} H_{25} O_6 N \\ \text{Corydalin } C_{11} H_{13} O_3 N \\ - C_{22} H_{27} O_4 N \\ \text{Corydalinsaure } C_{18} H_{21} O_{12} N \\ \text{Corydalsaure } C_7 H_8 O_6 \\ \text{Corydinsaure } C_{18} H_{17} O_6 N \\ \text{Corytuberin } C_{16} H_{25} O_4 N \\ \text{Cotarnlaktonsaure } C_{11} H_{19} O_7 \end{array}$ Cotarnlaktonsäure $C_{11}H_{12}O_7$ Cotarnaminsäure $C_{11}H_{11}O_8N$ Cotarnin $C_{12}H_{15}O_4N$ Cotarninsäure $C_{11}H_{12}O_5$ $\begin{array}{c} Cotarnon \ C_{11}H_{10}O_4 \\ Cotarnsäure \ C_{10}H_8O_7 \end{array}$ Cotogenin C₁₆H
₁₆O₆ $\begin{array}{ccc} \text{Coto"in} & C_{14}H_{12}O_4 \\ \text{Coto"inazobenzol} & C_{20}H_{16}O_4N_2 \end{array}$ $\begin{array}{c} \text{Cotomazobenzoi} \ C_{24} \\ \text{Crocetin} \ \ C_{34} \\ - C_{34} \\ \text{H}_{46} \\ \text{O}_{11} \\ \text{Crocin} \ \ C_{16} \\ \text{H}_{18} \\ \text{O}_{6} \\ - C_{40} \\ \text{H}_{70} \\ \text{O}_{28} \\ - C_{44} \\ \text{H}_{70} \\ \text{O}_{20} \\ \end{array}$ $\begin{array}{c} - & C_{44} H_{70} \odot_{28} \\ - & C_{55} H_{86} O_{31} \\ \text{Crotakonsäure } C_5 H_6 O_4 \\ \text{Crotonharz } C_{13} H_{18} O_4 \\ \text{Crotonsäure } C_4 H_6 O_2 \end{array}$ Crotonylen C4H6 Crotylalkohol C4H8O Cryptopin C21 H23 O5 N

 $\begin{array}{c} \text{Cubeben } C_{15} \text{H}_{24}, \\ \text{Cubebencampher } C_{15} \text{H}_{26} \text{O} \\ \text{Cubebensäure } C_{13} \text{H}_{14} \text{O}_{7} \\ & - C_{28} \text{H}_{30} \text{O}_{7} \\ \text{Cubebin } C_{10} \text{H}_{10} \text{O}_{3} \\ \text{Cumalin } C_{5} \text{H}_{4} \text{O}_{2} \\ \text{Cumalin } C_{5} \text{H}_{4} \text{O}_{2} \\ \end{array}$ Cumalinsäure C6H4O4 Cumarilsäure C9H6O3 $\begin{array}{ccc} Cumarin & C_9H_6O_2\\ Cumaron & C_8H_6O \end{array}$ $\begin{array}{c} Cumaroxyessigs \ddot{a}ure\,C_{11}H_{10}O_5\\ Cumars \ddot{a}ure\,\,C_9H_8O_3 \end{array}$ Cumenylcrotonsäure $\begin{array}{c} C_{13}H_{16}O_2\\ Cumidin \ C_9H_{13}N\\ Cumidinsäure \ C_{10}H_{10}O_4\\ Cuminalkohol \ C_{10}H_{14}O\\ \end{array}$ Cuminalmalonsäure $\hat{C}_{13}H_{14}O_4$ Cumindiure id $C_{12}H_{18}O_2N_4$ Cuminilsäure $C_{20}H_{24}O_3$ Cumino in $C_{20}H_{24}O_2$ Cumino in $C_{10}H_{12}O_3$ Cuminolaceton C₁₈H₁₆O Cuminolglykose C₁₆H₂₄O₇ $\begin{array}{c} \text{Cuminsäure} \ C_{10} H_{12} O_2 \\ - C_{12} H_{15} O_3 N \\ \text{Cumochinolin} \ C_{12} H_{13} N \end{array}$ Cumol C₉H₁₂
Cumylamin C₁₀H₁₅N
Cumylmalonsaur C₁₃H₁₆O₄ Cumylsäure C₁₀H₁₂O₂ Curin C₁₈H₁₉O₃N Cusconin C₂₃H₂₆O₄N₂ Cuskhygrin C₁₈H₂₄ON₂ Cusparidin C₁₉H₁₇O₃N Cusparin C₁₉H₁₇O₃N — C₂₀H₁₉O₃N Cyalbidin C₇₆H₁₁₂O₂₆N₂S Cyamelid CHON Cyamellon $C_9H_3N_{13}$ Cyamelursäure $C_6H_3O_3N_7$ Cyamidoamalinsäure C₁₃H₁₄O₇N₅
Cyan C₂N₂
Cyanatholin C₃H₅ON
Cyanamid CH₂N₂
Cyanamin C₂₆H₂₆O₂N₄
Cyanamin C₁₅H₂₆O₂N₄ Cyananilin $C_1H_{14}N_4$ Cyananilin $C_3H_{30}N_3$ Cyanilsäure $C_3H_{30}N_2J$ Cyanin $C_{30}H_{39}N_2J$ Cyanmelamidin $C_7H_{15}ON_{18}$ Cyanmethazonsäure C₄H₂O₃N₄ Cyanoform C₄HN₃ Cyanomaklurin C15H12O6

 \mathbf{D} ahlia $\mathbf{C}_{29}\mathbf{H}_{28}\mathbf{N}_{4}$ $\begin{array}{c} \text{Damalurs\"aure} \quad C_7 H_{12} O_2 \\ \text{Damascenin} \quad C_{10} H_{15} O_3 N \\ \text{Dambonit} \quad C_8 H_{16} O_6 \end{array}$ Dambose C₆H₁₂O₆ Damaran C40H62O6 Dammaresen $C_{11}H_{17}O$ Dammarolsäure $C_{56}H_{80}O_8$ Dammarsäure $C_{40}H_{62}O_7$ Dammaryl $C_{45}H_{72}$ Dammarylsäure $C_{45}H_{72}O_3$ Damolsäure C₁₂H₂₂O₂ Danaïdin C22H20O6 Danain $C_{14}\overset{?}{H}_{14}\overset{?}{O}_{5}$ Daphnetin $C_{9}\overset{?}{H}_{6}\overset{?}{O}_{4}$ Daphnetin $C_{3}H_{6}O_{4}$ Daphnin $C_{15}H_{16}O_{9}$ Datiscetin $C_{15}H_{12}O_{8}$ Datiscin $C_{21}H_{24}O_{11}$ Daturinsäure $C_{17}H_{34}O_{2}$ Daturon $C_{33}H_{66}O$ Decarbousnin $C_{17}H_{18}O_{6}$ Decarbousninsäure C9H10O3 Decarbusneïn C₁₇H₁₈O₆ Dehydracetcarbonsäure $C_9H_8O_6$ Dehydracetsäure C₈H₈O₄ Dehydroacetylpäonol $C_{11}H_{10}O_{3}$

Dehydroacetylpäonol $C_{11}H_{10}O_3$ Dehydroamarsäure $C_{23}H_{20}O_3$ Dehydrocamphenylsäure $C_{10}H_{14}O_2$ Dehydrocampher $C_{10}H_{14}O$ Dehydrocampher $C_{20}H_{20}ON_2$ Dehydrochinen $C_{20}H_{20}ON_2$ Dehydrocholeïnsäure

C24H34O4

Dehydrocholeïnsäure

Dehydrocholcaire $C_{24}H_{36}O_4$ Dehydrocholsäure $C_{24}H_{34}O_5$ Dehydrocinchen $C_{19}H_{18}N_2$ Dehydrocinchonin $C_{19}H_{20}ON_2$ Dehydrodedsäure $C_4H_8O_4$ Dehydrodivanillin $C_{18}H_{14}O_6$ Dehydromorphin $C_{34}H_{36}O_6N_2$ Dehydrophotosantonsäure

 $\begin{array}{c} C_{15}^{\circ}H_{20}O_4 \\ Dehydroschleimsäure \ C_8H_4O_5 \\ Dehydrospartein \ C_{15}H_{24}N_2 \\ Dehydrothiohydantoinessigsäure \ C_5H_4O_3N_2S \\ Dehydrotriacetonamin \end{array}$

 $C_9^{}H_{15}N$ Dekakrylsäure $C_{10}H_{18}O_2$ Dekamethylenimin $C_{10}H_{21}N$ Dekanaphten $C_{10}H_{20}$ Delokansäure $C_{15}H_9O_6$ Delphinin $C_{22}H_{35}O_6N$ Delphinoïdin $C_{42}H_{68}O_7N_2$ Delphisin $C_{27}H_{46}O_4N_2$ Desamidoalbuminsäure $C_{160}H_{239}O_{65}N_{27}S_2$

 $\begin{array}{c} C_{160}H_{289}O_{65}N_{27}S_2\\ Desaurin \ \ C_{15}H_{10}OS\\ Desmotroposantoniges \"{a}ure\\ C_{15}H_{20}O_3 \end{array}$

 $C_{15}H_{20}O_8$ Desmotroposantonin $C_{15}H_{18}O_3$

 $\begin{array}{c} \text{Desmotroposantoninsäure} \\ \text{C}_{15}\text{H}_{20}\text{O}_4 \\ \text{Desoxalsäure} \ \text{C}_5\text{H}_6\text{O}_8 \end{array}$

 $\begin{array}{c} Desoxyamalinsäure \\ C_{12}H_{14}O_6N_4 \\ Desoxyanisoïn \ C_{16}H_{16}O_3 \\ Desoxybenzoïn \ C_{14}H_{19}O \\ Desoxychinin \ C_{20}H_{24}ON_2 \\ Desoxycholsäure \ C_{24}H_{40}O_4 \\ Desoxycinchonidin \ C_{19}H_{22}N_2 \\ Desoxycinchonin \ C_{19}H_{22}N_2 \\ Desoxycodeïn \ C_{18}H_{21}O_2N \\ Desoxyconchinin \ C_{20}H_{24}ON_2 \end{array}$

 $\begin{array}{c} {\rm Desoxydigitogens\"{a}ure} \\ {\rm C}_{14}{\rm H}_{22}{\rm O}_3 \\ {\rm Desoxyfulminurs\"{a}ure} \\ {\rm C}_3{\rm H}_3{\rm O}_2{\rm N}_3 \end{array}$

 $C_3H_3O_2A_3$ Desoxyfuroïn $C_{10}H_3O_3$ Desoxyisoanthraflavinsäure $C_{14}H_{10}O_3$

DesoxyIsoanthranavinsaure $C_{14}H_{10}O_3$ 'Desoxykaffeı̈n $C_8H_{14}O_2N_4$ Desoxymesityloxyd $C_{12}H_{20}O$ Desoxymorphin $C_{17}H_{19}O_2N$ Desoxyphoron $C_{18}H_{28}O$ Desoxyphoronpinakon $C_{46}H_{58}O_2$

 $\begin{array}{c} \operatorname{Desoxystrychnins\"{a}ure} \\ \operatorname{C}_{21}\operatorname{H}_{28}\operatorname{O}_{2}\operatorname{N}_{2} \\ \operatorname{Desoxytoluo\"{in}} \quad \operatorname{C}_{16}\operatorname{H}_{16}\operatorname{O} \\ \operatorname{Desylamin} \quad \operatorname{C}_{14}\operatorname{H}_{13}\operatorname{ON} \\ \operatorname{Desylenessig\"{s}\"{a}ure} \quad \operatorname{C}_{16}\operatorname{H}_{12}\operatorname{O}_{3} \\ \operatorname{Desylenmalons\"{a}ure} \quad \operatorname{C}_{17}\operatorname{H}_{12}\operatorname{O}_{6} \\ \operatorname{Desylessig\'{s}\"{a}ure} \quad \operatorname{C}_{18}\operatorname{H}_{14}\operatorname{O}_{3} \\ \operatorname{Desylphenol} \quad \operatorname{C}_{20}\operatorname{H}_{16}\operatorname{O}_{2} \\ \operatorname{Desylphenol} \quad \operatorname{C}_{20}\operatorname{H}_{16}\operatorname{O}_{2} \\ \end{array}$

Deuteroalbumose

 $\begin{array}{c} C_{102}H_{150}O_{31}N_{30}S \\ C_{105}H_{178}O_{36}N_{30}S \\ C_{111}H_{176}O_{38}N_{30}S \end{array}$ Dextran C₆H₁₀O₅ Dextrin $C_{12}H_{20}O_{10}$ $-C_{18}H_{30}O_{15}$ Dextronsäure $C_{6}H_{12}O_{7}$ Dextropimarsäure $C_{20}H_{30}O_{2}$ Dextrose C₆H₁₂O₆ Dextrose $C_6H_{12}O_6$ Dextrosecarbonsäure $C_7H_{14}O_8$ Diacetonalkamin $C_8H_{15}ON$ Diacetonalkohol $C_6H_{12}O_2$ Diacetonamin $C_6H_{13}ON$ Diacetonamin $C_6H_{13}ON$ Diacetondulcit $C_{12}H_{22}O_6$ Diacetonsenföl $C_7H_{11}ONS$ $\begin{array}{c} \text{Diacetyl } C_4H_6O_2\\ \text{Diacetylen } C_4H_2 \end{array}$ Diathylparanilin C16H22N2 Diakrylsäure C₆H₈O₄ Dialdan $C_8H_{14}O_3$ Dialdanalkohol $C_8H_{16}O_3$ Dialdansäure $C_8H_{14}O_4$ Diallylen C_6H_8 Dialursäure $C_4H_4O_4N_2$ Diamidocyanurwasserstoff CaH5N5 Dianthranol C28H20O2 Diantipyrinessigsäure C24H24O4N4 Diapocinchonin C₁₉H₂₂ON₂ Diapotetramorphin $\begin{array}{c} \text{Diaprection} \\ \text{C_{134}H}_{148}\text{O_{22}N}_8 \\ \text{Diarbutin} \quad \text{C_{25}H}_{32}\text{O_{14}} \\ \text{Diaterebilensäure} \quad \text{C_7H}_{10}\text{O_5} \\ \text{Diaterebinsäure} \quad \text{C_7H}_{12}\text{O_5} \end{array}$ Diaterpensäure C₈H₁₄O₅ Diazimidobenzoësäure $C_7H_5O_2N_3$ Diazimidobenzol $C_6H_4N_6$ Diazin C4H4N2 Diazoacetophenon C₈H₆ON₂ Diazoamidobenzol C₁₂H₁₁N₃ Diazobenzol C₆H₆ON₂ $\begin{array}{c} \textbf{Diazobenzolimid} \quad \textbf{C}_6\textbf{H}_5\textbf{N}_3\\ \textbf{Diazobenzols\"{a}ure} \quad \textbf{C}_6\textbf{H}_6\textbf{O}_2\textbf{N}_2 \end{array}$ Diazocampher C₁₀H₁₄ON₂ Diazoresorcin $C_{12}H_7O_4N$ Diazoresorcin $C_{12}H_7O_4N$ Diazoresorufin $C_{12}H_7O_8N$ Diazosantonsäure $C_{27}H_{28}O_4N_4$ Dibarbitursäure $C_{8}H_{6}O_5N_4$ Dibenzihazol $C_{14}H_8N_2S_2$ Dibenzyl $C_{8}H_{6}O_5N_4$

Dibornyl $C_{20}H_{34}O_2$ Dibutolakton $C_8H_{10}O_3$ Dibutyraldin $C_8H_{17}ON$

Dibutyryl $C_{16}H_{28}O_4$ Dicamphandisäure $C_{20}H_{32}O_4$ Dicamphanazin $C_{20}H_{30}N_2$

Dicampher $C_{20}H_{80}O_2$ Dicampherylsäure $C_{18}H_{20}O_6$ Dicamphochinon $C_{20}H_{28}O_2$

Dicampholyl C20H34O2

Dicaperin C72H120O6

Dicaprylen C₁₆H₈₂ Dicarbocaprolakton C8H10O6 Dicarbothionsäure C2H2O4S Dicarvelon C₂₀H₈₀O₂ Dicarveron $C_{20}H_{80}O_2$ Dicetyl $C_{33}H_{66}$ Dichinaldin $C_{20}H_{16}N_2$ Dichinolin $C_{18}H_{14}N_2$ $-C_{20}H_{18}N_2$ Dichinoylimid $C_6H_2O_4N_2$ Dichromatinsäure $C_{20}H_{34}O_3$ Dicinchonin C₈₈H₄₄O₂N₄ Dicinen $C_{20}H_{92}$ Dicinen $C_{36}H_{40}O_6N_2$ Dicodeïn $C_{36}H_{42}O_6N_2$ Diconchinin $C_{40}H_{46}O_3N_4$ Dicotoïn $C_{25}H_{20}O_6$ Dicumarin $C_{18}H_{10}O_4$ Didenlaktamidsäure $C_6H_{11}O_4N$ Didesmotroposantonigesäure C_{a0}H_{a8}O₆ Diemyctylin $C_{20}H_{18}O_7N_2$ Diepichlorhydrin $C_6H_{10}O_2Cl_2$ Diepihydrinamid $C_6H_{14}O_2N_2$ Diepijodhydrin C₆H₁₀O₂J₂ Diepinsäure C₂H₄O₄ Dieucarvelon C₂₀H₃₀O₂ Diffluan C₃H₄O₃N₂ Diformaldehydharnsäure $\begin{array}{c} C_7H_8O_5N_4\\ Diformazyl\ C_{28}H_{22}N_8\\ Difural triure \ddot{d}\ C_{13}H_{16}O_5N_6\\ Digalluss \ddot{a}ure\ C_{14}H_{10}O_9\\ \end{array}$ Digitaleïn $C_{22}H_{38}O_9$ Digitaligenin $C_{22}H_{30}O_8$ $\begin{array}{llll} \text{Digitaligenin} & C_{22}H_{30}O_{2} \\ \text{Digitalin} & C_{5}H_{8}O_{2} \\ & - & C_{21}H_{33}O_{9} \\ & - & C_{27}H_{45}O_{15} \\ & - & C_{86}H_{56}O_{14} \\ \text{Digitaliretin} & C_{15}H_{25}O_{5} \\ & - & C_{16}H_{26}O_{3} \\ \text{Digitalkrin} & C_{11}H_{22}O_{2} \\ \text{Digitalonsäure} & C. H. . O \end{array}$ Digitalonsäure C₇H₁₄O₆ Digitin $C_4H_9O_2$ Digitoflavon $C_{15}H_{10}O_6$ Digitogenin $C_{15}H_{24}O_3$ Digitogensäure $C_{14}H_{22}O_4$ Digitonin $C_{27}H_{46}O_{14}$ $-C_{31}H_{52}O_{17}$ Digitosäure $C_{13}H_{20}O_{3}$ Digitoxenin $C_{21}H_{32}O_{4}$ Digitoxigenin $C_{22}H_{32}O_{4}$

Digitoxosecarbonsäure

Digitsäure $C_{10}H_{16}O_4$ Diglycerin $C_6H_{14}O_5$ Diglykolsäure $C_4H_6O_5$

 $C_{12}H_{22}O_{11}$

Diglykose C₈H₁₆O₆

 $C_7H_{12}O_5$

Digsäure $C_8H_{12}O_3$ Diguanid $C_2H_7N_5$ Dihexolakton $C_{12}H_{18}O_3$ Dihexonsäure $C_{12}H_{20}O_4$ Dihydrakrylsäure C₆H₁₀O₈ Dihydroapona. Diindol $C_{16}H_{14}N_2$ Diindol $C_{16}H_{14}N_2$ Diisäthionsäure $C_{4}H_{10}O_7S_2$ Diisatinsäure $C_{16}H_{10}O_4N_2$ $C_{16}H_{14}O_6N_2$ Dihydroapoharmin C₈H₁₀N₂ Diisocrotyl C_8H_{14} Diisocugenol $C_{20}H_{24}O_4$ Diisohexolakton $C_{12}H_{18}O_3$ Diisohexonsäure $C_{12}H_{20}O_4$ Diisopren $C_{10}H_{16}$ Diisopren penyl $C_{6}H_{10}$ Diisopropenyl $C_{6}H_{10}$ Diisosafrol $C_{20}H_{20}O_{4}$ Dikohlenhexamerkaptid $C_{14}H_{30}S_{6}$ Dikonsäure $C_9H_{10}O_6$ Dikonylenalkohol $C_{16}H_{90}O_3$ Dilaktamidsäure $C_6H_{11}O_4N$ Dilaktylsäure $C_6H_{10}O_5$ Dilaurylalkohol $C_{23}H_{48}O$ Dilepidin $C_{20}H_{18}N_2$ Dilitursäure $C_4H_3O_5N_3$ Dimesityl $C_{18}H_{22}$ Dinaphtakridon $C_{21}H_{13}ON$ Dinaphtazin $C_{20}H_{12}^{21}N_2$ Dinaphtylin $C_{20}H_{16}N_2$ Dinikotinsäure $C_7H_5O_4N$ Diönanthaldehyd $C_{14}H_{28}O$ Diönanthsäure $C_{16}H_{14}O_7$ Dioscorin C₁₃H₁₉O₂N Diosmelaeopten C₁₀H₁₈O Diosphenol $C_{10}H_{16}O_2$ Diosphenolsäure $C_{10}H_{16}O_3$ Diostearopten $C_{10}H_{16}O_3$ Dioxindol $C_{8}H_{7}O_{2}N$ Dipenten $C_{10}H_{16}$ Dipenten $C_{10}H_{16}$ Dipentin $C_{10}H_{16}$ Diphenacyl $C_{16}H_{14}O_{2}$ Diphenin $C_{12}H_{14}N_{4}$ Diphensarre $C_{14}H_{10}O_{4}$ Diphenylaminblau $C_{37}H_{30}N_3Cl$ Diphenylenindol $C_{20}H_{13}N$ Diphloroglucincarbonsäure $C_{14}H_{10}O_{9}$ Diphosphobenzol $C_{6}H_{6}OP_{2}$ Diphtalylsäure C16H10O6 Dipiperallylalkin $C_{13}H_{26}ON_2$ Dipiperide $C_{10}H_{18}N_2$ Dipiperidinhydrin $C_{18}H_{26}ON_2$ Dipiperidyl $C_{10}H_{20}N_2$ Dipropargyl C₆H₆ Dipropenyl CoH10 Diprotokatechusäure $C_{14}H_{10}O_{7}$ Dipseudocumenol C₁₈H₂₂O₂ Dipulvinsäure C36H22O9 Dipyrogallocarbonsäure C14H10O9

 $\begin{array}{c} \text{Dipyropentylen} \ \ C_{10} \overline{H}_{12} \\ \text{Dipyrotartraceton} \ \ C_{8} \overline{H}_{12} O_{2} \end{array}$ Dipyruvintriureïd CoH12O5N6 Diresorcinphtalin C20H14O6 Diricinusölsäure C₃₆H₆₆O₅ Disakryl C₃H₄O Disantonigesäure C₃₀H₃₈O₆ Dispolin C11 H11 N Distyrensäure C₁₇H₁₆O₂ Distyrol C₁₆H₁₆ Ditaïn C₂₂H₄₆O₄N₂ Ditamin $C_{19}H_{19}O_2N$ Ditartrylsäure $C_8H_{10}O_{11}$ Diterebenthyl C20 H30 Diterebenthyle $C_{20}H_{20}$ Diterebenthylen $C_{20}H_{28}$ Diterpen $C_{20}H_{32}$ Diterpilen $C_{20}H_{32}$ Diterpodilakton $C_{15}H_{22}O_5$ Diterpolaktonsäure $C_{15}H_{24}O_6$ Diterpoxylsäure C₁₅H₂₆O₇ Diterpylsäure $C_{16}H_{22}O_7$ Diterpylsäure $C_{16}H_{22}O_7$ Ditetrolharnstoff $C_{9}H_{8}ON_{2}$ Dithiënyl $C_{8}H_{8}S_{2}$ Dithioammelid $C_{6}H_{8}N_{10}S_{2}$ Dithiobrenzweinsäure $C_{10}H_{14}O_{2}S_{2}$ Dithiocarbanilsäure $C_{7}H_{7}NS_{2}$ Dithiodilaktylsäure $C_6H_{10}O_4S_2$ Dithiodiphtalyl $C_{16}H_8O_2S_2$ Dithiophtalid $C_8H_6S_2$ Dithioprussiamsäure $C_6H_7N_9S_2$ $\begin{array}{c} \text{Ditolanazotid} \quad C_{28} \text{H}_{20} \text{N}_{2} \\ \text{Ditriazobenzol} \quad C_{6} \text{H}_{4} \text{N}_{6} \end{array}$ Diundekylensäure C₂₂H₄₀O₄ Divalerylen C₁₀H₁₆ Divalerylenhydrat C₁₀H₁₈O Divalolakton $C_{10}H_{14}O_{3}$ Divalonsäure $C_{10}H_{14}O_{3}$ Divaricatsäure $C_{22}H_{26}O_{7}$ Divicin $C_{31}H_{50}O_{16}N_{30}$ Divinyl C₄H₈
Dixanthon C₂₀H₁₀O₄
Dixyliton C₁₂H₂₀O₂
Döglinsäure C₁₉H₃₆O₉ Dokosan $C_{22}H_{49}$ Dotriakontan $C_{92}H_{66}$ Dracoalban $C_{20}H_{40}O_4$ Dracoresitannol $C_8H_{10}O$ Dracorestantial $C_8 L_{10}$ Drimin $C_{18} H_{14} O_4$ Drimol $C_{28} H_{58} O_2$ Drupose $C_{12} H_{20} O_8$ Düngersäure $C_{30} H_{30} O_{11} N_2$ Dulcamaretin $C_{16} H_{26} O_6$ Dulcamarin C22H34O10 Dulcid C6H12O4 Dulcit C₆H₁₄O₆ Dulcitamin C₆H₁₅O₅N Dulcitan C6H12O5 Dulcitweinsäure C14H20O15 Dumasin C₆H₁₀O Duplodithioaceton C6H12S4

 \mathbf{E} egonin $\mathbf{C_9H_{15}O_3N}$ Ecgoninamid $C_9H_{16}O_2N_2$ Ecgoninsäure $C_7H_{11}O_3N$ Echicerin C₃₀H₄₈O₂ Echicerinsäure C₈₀H₄₆O₄ Echikautschin C₂₅H₄₀O₂ Echinochrom $C_{102}H_{109}O_{12}N_{12}S_2$ Fe Echiretin $C_{35}H_{56}O_2$ Echitamin $C_{22}H_{28}O_4N_2$ Echitein $C_{42}H_{70}O_3$ Echitein $C_{10}H_{27}O_4N$ Echitin $C_{32}H_{52}O_2$ Eichengerbsäure C₁₄H₁₄O₇ $C_{17}H_{16}O_{9}$ $\begin{array}{c} C_{17}H_{16}O_9\\ C_{19}H_{16}O_{10}\\ C_{20}H_{20}O_9\\ C_{28}H_{28}O_{14}\\ C_{28}H_{30}O_{15} \end{array}$ Eichenrindengerbsäure $C_{28}H_{28}O_{14}$ Eieralbumin C₈₀H₁₂₂O₂₄N₂₀S Eikosan $C_{20}H_{42}$ Eikosan $C_{20}H_{42}$ Eikosylen $C_{20}H_{38}$ Eiweiss $C_{64}H_{100}O_{20}N_{16}$ Ekzemin $C_7H_{15}ON$ Elaeolsäure $C_{17}H_{30}O_{20}$ Elaeomargarinsäure Č₁₇H₃₀O₂ Elaeostearinsäure C₁₇H₃₀O₂ Elaïdinsäure $C_{18}H_{34}O_2$ Elaïnsäure $C_{18}H_{34}O_2$ Elaterin $C_{20}H_{28}O_5$ Elemisäure $C_{35}H_{56}O_4$ Ellagengerbsäure C₁₄H₁₀O₁₀ Ellagsaure $C_{14}H_6O_8$ Emetin $C_{15}H_{22}O_2N$ $\begin{array}{cccc} & - & C_{30} H_{40} O_5 N_2 \\ & - & C_{30} H_{44} O_4 N_2 \\ & - & C_{30} H_{44} O_4 N_2 \\ & - & Emodin & C_{15} H_{10} O_5 \\ & - & Enkephalin & C_{102} H_{206} O_{19} N_4 \end{array}$ Eosin $C_{20}H_8O_5Br_4$

 $C_{12}H_{27}O_4N_3Cl_2$

Epicyanhydrin C₈H₁₀O₂N₂ Epiglycerindiweinsäure $C_{11}H_{14}O_{2}$ Epiguanin C6H7ON5 Epihydrincarbonsäure $C_4H_6O_8$ Episarkin C₄H₆ON₃ Episarkin $C_4H_6ON_3$ Ericolin $C_{34}H_{56}O_{21}$ Ergosterin $C_{25}H_{40}O_6N_4$ Ergotinin $C_{35}H_{40}O_6N_4$ Erlenroth $C_{39}H_{22}O_8$ Erucasäure $C_{29}H_{42}O_2$ Erysipelin $C_{11}H_{18}O_3N$ Erythren $C_4H_6O_3$ Erythren $C_4H_6O_3$ Erythrin $C_{20}H_{22}O_{10}$ - $C_{21}H_{24}O_{10}$ Erythrit C4H10O Erythritsäure C₄H₈O₅ Erythritschwefelsäure $C_8H_{14}O_4S_8$ Erythritweinsäure C₁₂H₁₈O₁₄ Erythroäthylnitrolsäure $C_2H_4O_3N_2$ Erythrocentaurin $C_{27}H_{24}O_8$ Erythrodextrin $C_{216}H_{360}O_{180}$ Erythroglucin $C_4H_{10}O_4$ Erythroglucins are $C_4H_8O_6$ Erythrolaccin $C_{15}H_{10}O_5$ Erythrophein $C_{28}H_{49}O_7N$ Erythrophleïnsäure $C_{27}H_{40}O_8$ Erythroresinotannol $C_{40}H_{40}O_{10}$ Esdragol $C_{10}H_{12}O$ Eserin $C_{15}H_{21}O_2N_3$ Essigsäure $H_2H_4O_2$ Essignaure $H_2H_4O_2$ Ettidin $C_{15}H_{19}N$ Eucalypten $C_{10}H_{16}$ Eucaryot $C_{10}H_{18}O$ Eucaryot $C_{10}H_{14}O$ Eucaryon $C_{10}H_{14}O$ Euchinin $C_{23}H_{28}O_4N_2$ Euchronsäure $C_{12}H_4O_8N_2$ Eudesmin $C_{20}H_{30}O_8$ Eugenol $C_{10}H_{12}O_2$ Eugenolchinin $C_{30}H_{30}O_4N_2$ Eugenolglykosid $C_{16}H_{22}O_7$ Eugetinsäure $C_{11}H_{12}O_4$ Eukalyn C₆H₁₂O₆ Eulyt C6H6O7N4 Eupatorin C₂₀H₂₅O₃₆ Euphorbon C₁₅H₂₄O C20 H36O Euphthalmin C₁₇H₂₅O₃N Eupittonsäure C₂₅H₂₆O₉ Eurhodin C17 H13 N $\begin{array}{l} \text{Eurhodol} \quad \text{C_{16}H}_7\text{O_8N}_2\text{$Cl}_3$} \\ \text{Eurhodol} \quad \text{C_{16}H}_7\text{O_8N}_2\text{$Cl}_3$} \\ \text{Euterpen} \quad \text{C_{10}H}_{16} \\ \text{Euxanthinsäure} \quad \text{C_{19}H}_{18}\text{O_{11}} \end{array}$ Euxanthon C₁₃H₈O₄ Euxanthonsäure C13H10O5 Everniin C₆H₁₄O₇

Everninsäure $C_9H_{10}O_4$ Evernsäure $C_{17}H_{16}O_7$ Excretin $C_{20}H_{36}O$

C₁₁₄H₁₇₈O₃₇N₃₀S
Fibroin C₁₅H₂₃O₈N₅
Fichtelit C₁₈H₃₂
— C₄₀H₇₀
Fichtenroth C₄₂H₃₄O₁₇
Filixroth C₂₆H₁₈O₁₂
Filixsäure C₁₄H₁₆O₅
Fisetin C₁₅H₁₀O₆
Flavanilin C₁₆H₁₄N₂
Flavaspidsäure C₂₃H₂₈O₈
Flaveanwasserstoff C₂H₂N₂S
Flaveanwasserstoff C₂H₂N₂S
Flavenol C₁₆H₁₃ON
Flavindin C₃₂H₂₄O₅N₄
Flavindulin C₂₆H₁₇N₂Cl
Flavobuxin C₁₈H₁₀O₃N
Flavochinolin C₁₉H₁₄N₂
Flavolin C₁₆H₁₃N
Flavor C₁₅H₁₀O₂
Flavolin C₁₆H₁₃N
Flavon C₁₅H₁₀O₂
Flavopannin C₂₁H₂₆O₇
Flavopannin C₂₁H₂₆O₇
Flavopannin C₁₂H₁₂O₃
Flemingin C₁₂H₁₂O₃
Flemingin C₁₂H₁₂O₃
Fluoranthen C₁₅H₁₀N₄
Fluoran C₂₀H₁₂O₃
Fluoranthen C₁₅H₁₀
Fluoren C₁₃H₁₀
Fluorenchinon C₁₃H₁₀
Fluorescin C₂₀H₁₄O₅
Fluorescin C₂₀H₁₄O₅
Fluoroform CHF₃
Fluorolin C₁₂H₁₃N
Formalazin C₂H₄N₂

 $C_{14}H_{12}O_2N_4$ RICHTER, Lex. d. Kohlenstoffverb.

Formazylazobenzol C19H16N2

Formazylcarbonsäure

Formazylmethylketon $C_{15}H_{14}ON_4$ Formazylwasserstoff $C_{13}H_{12}N_{4}$ Formomelamin C4H8ON8 Formonetin C24H20O6 Formose $C_6H_{12}O_6$ Frangulin $C_{21}H_{20}O_9$ Fraxetin $C_{10}H_8O_5$ Fraxin $C_{16}H_{18}O_{10}$ Fraxinusgerbsäure C26H32O14 Fruchtzucker C₆H₁₂O₆ Fruktose C₆H₁₂O₆ Fruktose $C_6H_{12}O_6$ Fruktosediaceton $C_{12}H_{20}O_6$ Fruktoseketazin $C_{12}H_{24}O_{10}N_2$ Fucusamid $C_{15}H_{12}O_3N_2$ Fucusin $C_{16}H_{12}O_3N_2$ Fukose $C_6H_{12}O_5$ Fulminursäure C₈H₃O₃N₃ Fulmitetraguanurat $C_7H_{13}O_3\breve{N}_{11}$ Fulmitriguanurat C₆H₁₁O₃N₉ Fumarin $C_{21}H_{19}O_4N$ Fumarsäure $C_4H_4O_4$ Furalacetophenon $C_{13}H_{10}O_2$ Furallävulinsäure C₁₀H₁₀O₄ Furan C₄H₄O Furazanpropionsäure $C_5H_6O_3N_2$ Furbernsteinsäure C₈H₈O₅ Furfurakrolein C, H,O, Furfuralkohol C5H6O5 Furfurangelikasäure C₉H₁₀O₃ Furfurin C₁₅H₁₂O₃N₂ Furfurisophtalsäure $C_{12}H_8O_5$ Furfurol $C_5H_4O_2$ Furfurolglykose $C_{11}H_{16}O_5$ Furfurolurethan $C_{11}H_{16}O_5N_2$ Furfurostilben C₁₀H₈O₂ Furiarosiliber $C_{10}H_8O_2$ Furi $C_{10}H_6O_4$ Furisaure $C_{10}H_8O_5$ Furo $C_5H_4O_2$ — " $C_{10}H_8O_4$ Furonsaure $C_7H_8O_5$ Furylamin C_8H_7ON Furylurethan $C_8H_{11}O_3N$ Fuscophlobaphen C₂₇H₂₆O₁₂ Fuscusol C5H4O2 Fustin C₅₈H₄₆O₂₃

Galaktosecarbonsäure $C_7H_{14}O_8$ Galaktosidoglykonsäure C₁₂H₂₂O₁₂ Galangin C₁₅H₁₀O₅ Galaoktid C₈H₁₈O₈ Galaoktonsäure C₈H₁₆O₉ Galaoktose C₈H₁₈O₉ Galgantöl C10H18O Galipen C₁₀H₁₈Galipen C₁₅H₂₄Galipein C₂₀H₂₁O₃N Galipidin C₁₉H₁₉O₃N Gallacetol C₁₀H₁₀O₆Gallacetonin C₉H₁₀O₆Gallacetonin C₉H₁₀O₆Gallacetonin C₉H₁₀O₆Gallacetonin C₉H₁₀O₆Gallacetonin C₉H₁₀O₆Gallacetonin C₉H₁₀O₆Gallacetonin C₉Gallacetonin llacetophenon C₈H₈O₄ Gallactucon C14H24O Galläpfelgerbsäure C₁₄H₁₀O₉ Gallaktinsäure $C_{14}H_{10}O_9$ Gallamid $C_7H_7O_4N$ Gallein $C_{20}H_{10}O_7$ $\begin{array}{ll} \operatorname{Gallin} \ C_{20} H_{14} O_7 \\ \operatorname{Gallisin} \ C_{12} H_{22} O_{11} \\ \operatorname{Gallocarbons\"{a}ure} \ C_8 H_6 O_7 \end{array}$ $\begin{array}{c} \text{Gallocerin} \quad C_{20} H_{36} O_{2} \\ \text{Gallocyanin} \quad C_{15} H_{12} O_{5} N_{2} \end{array}$ Gallodiacetophenon $C_{10}H_{10}O_5$ Galloflavin $C_{13}H_6O_9$ Galloflavin $C_{20}H_{16}O_5$ Gallol $C_{20}H_{16}O_5$ Gallussäure $C_7H_6O_5$ Gallusschwefelsäure $C_7H_6O_8S$ Galsäure $C_{14}H_{12}O_{13}$ Galtose $C_6H_{12}O_6$ Gardeniasäure $C_{14}H_{10}O_6$ $\begin{array}{l} \operatorname{Gardenin} \ C_{14}H_{12}O_6 \\ \operatorname{Gaultherin} \ C_{14}H_{18}O_8 \\ \operatorname{Geissospermin} \ C_{19}H_{24}O_2N_2 \end{array}$ Gelatine $C_{78}H_{180}\mathring{O}_{32}\mathring{N}_{24}$ Gelose $C_{8}H_{10}\mathring{O}_{5}$ $\begin{array}{c} \text{Gelose } C_8 H_{10} V_5 \\ \text{Gelsemin } C_{22} H_{38} O_4 N_2 \\ \text{Gelseminin } C_{22} H_{26} O_3 N_2 \\ \text{Gentianin } C_{14} H_{10} O_5 \\ \text{Gentianose } C_{38} H_{66} O_{31} \\ \text{Gentiogenin } C_{14} H_{16} O_5 \\ \text{Gentiol } C_{30} H_{38} O_3 \\ \text{Gentiopikrin } C_{20} H_{30} O_{12} \\ \text{Gentiopikrin } C_{10} H_{30} \\ \text{Gentiopikrin } C_{10} H_{30} \\ \text{Gentiopikrin } C_{10} H_{30} \\ \text{Gentiopikrin } C_{10} H_{30} \\ \text{Gentiopikrin } C_{10} H_{30} \\ \text{Gentiopikrin } C_{10} H_{30} \\ \text{Gentiopikrin } C_{10} H_{30} \\ \text{Gentiopikrin } C_{10} H_{30} \\ \text{Gentiopikrin } C_{10} H_{30} \\ \text{Gentiopikrin } C_{10} H_{30} \\ \text{Gentiopikrin } C_{10} H_{30} \\ \text{Gentiopikrin } C_{10} H_{30} \\ \text{Gentiopikrin } C_{10} H_{30} \\ \text{Gentiopikrin } C_{10} H_{30} \\ \text{Gentiopikri$ Gentisein C₁₃H₈O₅ Gentisins C₁₄H₁₀O₅ Gentisinsäure C₇H₈O₄ $\begin{array}{l} \text{Geocerain } C_{28}H_{56}O_2\\ \text{Geocerins} \text{aure } C_{28}H_{56}O_2\\ \text{Geomyricin } C_{34}H_{68}O_2\\ \text{Georetins} \text{aure } C_{12}H_{22}O_4 \end{array}$ Geranial C10 H160 Geranien C₁₀H₁₆ Geraniol $C_{10}H_{18}O$ Geraniolen $C_{9}H_{16}$ Geraniumsäure $C_{10}H_{16}O_2$ Geranutissatic $C_{10}A_{16}C_{2}$ Geronsäure $C_{9}H_{16}C_{8}$ Gerontin $C_{5}H_{14}N_{2}$ Gingkosäure $C_{24}H_{48}C_{2}$ Glauconinsäure $C_{34}H_{29}C_{6}N_{3}$ Glaukohydroellagsäure $C_{14}H_{10}O_{7}$

Glaukomelansäure C₁₂H₆O₇ Glaukophansäure C27 H26 O12 Globularin C_9H_0O Globularin $C_{15}H_{20}O$ Globularin $C_{15}H_{20}O$ Globulin $C_{21}H_{314}O_{189}N_{175}S$ Glucoproteïn $C_8H_{12}O_4N_2$ Glutakonsäure $C_5H_6O_4$ Glutaminsäure $C_5H_0O_4N$ Glutaminsaure $C_5H_9O_4$... Glutarsäure $C_5H_8O_4$ Glutazin $C_5H_6O_2N_2$ Glutimid $C_5H_8O_2N_3$ Glutiminsäure $C_5H_7O_3N$ Glutinsäure C₅H₄O₄ $\begin{array}{ccc} Glutolin & C_{204} \ddot{H}_{336} O_{70} N_{60} S \\ Glutose & C_6 \ddot{H}_{12} O_6 \\ Glycerin & C_8 \ddot{H}_8 O_8 \end{array}$ Glycerindiweinsäure $C_{11}H_{16}O_{3}$ Glycerinsäure C3H6O4 Glycid $C_3H_6O_2$ Glycidsäur $C_3H_4O_3$ Glycin $C_2H_5O_2N$ Glycinphtaloylessigsäure $C_{10}H_9O_5N$ Glycinsäure $C_{12}H_{22}O_{12}$ Glycyphyllin $C_{21}H_{24}O_{9}$ Glycyrrhetin $C_{32}H_{47}O_{4}N$ Glycyrrhizinsäure C44 H63 O18 N $_{26}^{44}$ $_{63}^{63}$ $_{18}^{18}$ $_{18}^{18}$ $_{19}^{18}$ $_{1$ Glykocumaralkohol C₁₄H₂₀O₇ Glykocyamidin $C_3H_7ON_3$ Glykocyamin $C_3H_7O_2N_3$ Glykocyamin $C_3H_7O_2N_3$ Glykodrupose $C_{24}H_{36}O_{16}$ Glykodyslysin $C_{26}H_{39}O_4N$ Glykoferulaaldehyd $C_{16}H_{20}O_8$ Glykoheptit $C_7H_{16}O_7$ Glykoheptonsäure $C_7H_{14}O_8$ Glykoheptonsaure C₇H₁₄O₇
Glykoheptose C₇H₁₄O₇
Glykokoll C₂H₅O₂N
Glykolignose C₃₀H₄₆O₂₁
Glykolid C₄H₄O₄
Glykolin C₆H₈N₂
— C₆H₁₀N₂
Glykolsäure C₂H₄O₃
Glykolureïn C₅H₆O₅N₂
Glykolureïn C₅H₆O₅N₂ Glykoluril $C_4H_6O_2N_4$ Glykolylbarnstoff $C_3H_4O_2N_2$ Glykononit C₉H₂₀O₉ Glykonononsäure C₉H₁₈O₁₀ Glykononose $C_9H_{18}\mathring{O}_9$ Glykonsäure $C_6H_{12}O_7$ Glykooktid C₈H₁₈O₈ Glykooktonsäure C₈H₁₈O₉ Glykooktose C8H16O8 Glykosaccharinsäure C₆H₁₂O₆ Glykosamin $C_6H_{13}O_5N$ Glykosan $C_6H_{10}O_5$ Glykose $C_6H_{12}O_6$ Glykoseaceton $C_9H_{16}O_6$

 $\begin{array}{ll} Glykosealdazin & C_{12}H_{24}O_{10}N_2 \\ Glykosediaceton & C_{12}H_{20}O_6 \end{array}$ Glykosediweinsäure $C_{14}H_{18}O_{15}$ Glykosidoglykonsäure $\begin{array}{c} \text{GlykosinG}_{2}^{\text{Glykosin}} \text{ C}_{0}^{\text{H}_{0}} \text{N}_{4} \\ - \text{ C}_{6}^{\text{H}_{8}} \text{N}_{2} \\ - \text{ C}_{7}^{\text{H}_{10}} \text{N}_{2} \\ \text{Glykoson } \text{ C}_{8} \text{H}_{10} \text{O}_{6} \\ \text{Glykosyningasaure } \text{C}_{15} \text{H}_{20} \text{O}_{10} \\ \end{array}$ Glykotannin $C_{34}H_{28}O_{22}$ Glykovanillin $C_{14}H_{18}O_{8}$ Glykovanillinsäure C₁₄H₁₈O₉ Glykovanillylalkohol $C_{14}H_{20}O_{8}$ Glykuronsäure $C_6H_{10}O_7$ Glykuvinsäure $C_8H_6O_4$ $C_8H_{10}O_6$ Glyoxalin $C_3H_4N_2$ Glyoxim $C_2H_4O_2N_2$ Glyoxal $C_2H_2O_2$ Glyoxalbenzidin $C_{14}H_{14}O_2N_2$ Glyoxyldiureïd $C_4H_6O_3N_4$ Glyoxylatire C_4H_6U Glyoxylsäure C_2H_4Q Gnoskopin $C_{22}H_{23}Q_4N$ Gossypose $C_{18}H_{32}Q_{16}$ Gramminin $C_6H_{10}Q_5$ Granatanin $C_8H_{15}N$ Granatenin C8H13N Granatgerbsäure C₂₀H₁₆O₁₃ Granatgerosaure $C_{20}L_{11}$ Granatol $C_8H_{12}O$ Granatolin $C_8H_{15}O$ AN Granatsäure $C_9H_{15}O_4$ N Graphitoxyd $C_7H_2O_3$ — $C_{28}H_{10}O_{15}$ Graphitsäure $C_{11}H_4O_5$ — $C_{11}H_4O_5$ Gratioleretin, C₁₇H₂₈O₈ $\begin{array}{c} Gratioletin & C_{17}\overset{2}{H}_{28}\overset{2}{O}_5\\ Gratiolin & C_{20}\overset{2}{H}_{34}\overset{2}{O}_7\\ Gratiosoleritrin & C_{34}\overset{2}{H}_{52}\overset{2}{O}_9 \end{array}$ Gratiosoletin $C_{40}H_{68}^{34}O_{17}^{52}$ Gratiosolin $C_{46}H_{84}O_{25}$ Grönhartin $C_{15}H_{14}O_3$ Gröfinartin C_{18} Guajak
gelb $C_{20}H_{20}O_7$ Guajakharzsäure $C_{20}H_{24}O_4$ Guajakharzsau. Guajakol $C_7H_8O_5$ Guajakonsäure $C_{19}H_{20}O_5$ $C_{20}H_{24}O_5$ Guajaperol C₁₉H₂₇O₄N Guajen C₁₂H₁₂ Guajenchinon C₁₂H₁₀O₂ Guajol C₅H₈O $\begin{array}{ccc} & C_{15} H_{26} O \\ & - C_{15} H_{26} O \\ & Guanazol & C_2 H_5 N_5 \\ & Guanidin & C H_5 N_3 \end{array}$ Guanidinsarkosin C4H12O2N4 Guanin $C_5H_5ON_5$ Guanolin $C_4H_9O_2N_5$ Guanylharnstoff C2H6ON4

Hämateïn $C_{16}H_{12}O_6$ $\begin{array}{cccc} & C_{8} H_{9} O_{4} N_{9} \\ \text{H\"{a}matolin} & C_{14} H_{18} O_{3} N_{9} \\ \text{H\"{a}matolin} & C_{68} H_{78} O_{7} N_{8} \\ \text{H\"{a}matommins\"{a}ure} & C_{21} H_{23} O_{10} \end{array}$ Hämatoxylin $C_{16}H_{14}O_{6}$ Hämatoxylinphtaleïn $\begin{array}{lll} & C_{40}H_{30}O_{14} \\ H\ddot{a}min & C_{32}H_{30}O_{3}N_{4}Fe \\ & - & C_{35}H_{35}O_{4}N_{4}ClFe \\ H\ddot{a}min s\ddot{a}ure & C_{70}H_{68}O_{10}N_{2}Fe_{2} \end{array}$ Hämochromogen $C_{34}H_{37}O_5N_3Fe$ Hämocyanin $C_{867} H_{1363} O_{258} N_{223} S_4 Cu$ Hämoglobin $C_{636}H_{1025}O_{189}N_{164}S_3Fe$ $\begin{array}{c} -C_{536}^{1302} C_{189}^{189} C_{189}^{184} C_{3}^{3} \\ -C_{758}^{1} H_{1909}^{1} O_{218}^{0} N_{195}^{1} S_{3}^{3} Fe \\ \text{Hämosterin} \quad C_{20}^{0} H_{32}^{0} O \\ \text{Hamamelitannin} \quad C_{14}^{1} H_{14}^{1} O_{9}^{0} \end{array}$ Hamathionsäure C₁₂H₁₈O₁₆S Hamathionsäure $C_{12}H_{18}O_{1}$ Hanföl $C_{15}H_{24}$ Hanfölsäure $C_{18}H_{32}O_{2}$ Harm Jin $C_{13}H_{14}ON_{2}$ Harmalol $C_{12}H_{12}ON_{3}$ Harmin $C_{13}H_{12}ON_{2}$ Harminsäure $C_{10}H_{8}O_{4}N_{2}$ Harmol $C_{12}H_{10}ON_{2}$ Harmolsäure $C_{12}H_{10}O_{5}N_{2}$ Harnsäure $C_{5}H_{4}O_{3}N_{4}$ Harnstoff $C_{14}O_{12}O_{12}O_{13}O_{14}O$ Hartin C₁₀H₁₆O Hartii $C_{12}H_5$ Hartii $C_{12}H_5$ Hautfibroïn $C_{15}H_{23}O_6N_5$ Hederasäure $C_{16}H_{26}O_4$ Hefegummi $C_{12}H_{22}O_{11}$ $\begin{array}{l} \text{Helegulinii} & \textbf{G}_{12}\textbf{G}_{23}\textbf{G}_{11} \\ \text{Helenin} & \textbf{C}_{15}\textbf{H}_{20}\textbf{O}_{2} \\ \text{Helianthemin} & \textbf{C}_{72}\textbf{H}_{126}\textbf{O}_{83} \\ \text{Helianthin} & \textbf{C}_{14}\textbf{H}_{15}\textbf{O}_{3}\textbf{N}_{3}\textbf{S} \\ \text{Helianthia cure} & \textbf{C}_{14}\textbf{H}_{18}\textbf{O}_{8} \end{array}$ Helicin $C_{13}H_{16}O_7$ Helicinglykose $C_{19}H_{28}O_{13}$ Helicordin $C_{26}H_{34}O_{14}$ Helicorem $C_{26}H_{44}O_{15}$ $C_{37}H_{56}O_{18}$ Helleboresin $C_{30}H_{38}O_{4}$ Helleboretin $C_{14}H_{20}O_{3}$

 $\begin{array}{ccc} \text{Helleborin} & C_8H_{10}O \\ & C_{36}H_{42}O_6 \\ \text{Hemellithol} & C_9H_{12} \\ \text{Hemellithylsäure} & C_9H_{10}O_2 \end{array}$ Hemialbumin $C_{24}H_{40}O_{10}N_6$ Hemialbumose $C_{102}H_{150}O_{31}N_{30}S$ Hemicollin $C_{47}H_{70}O_{19}N_{14}$ Hemimellithen $C_{9}H_{12}$ Hemimelithsäure C_9H_{19} Hemipepton $C_{111}H_{176}O_{44}N_{30}S$ Hemipinsäure $C_{10}H_{10}O_6$ Hemiproteïdin $C_{24}H_{42}O_{12}N_6$ Hemlockgerbsäure $C_{20}H_{18}O_{10}$ Hemlockroth $C_{40}H_{30}O_{17}$ Heneikosan $C_{21}H_{44}$ Hentriakontan $C_{31}H_{64}$ Heptakosan C27 H56 Heptanaphtylen C7H12 Heptinsäure C₈H₁₂O₃ Heraclin C₃₂H₂₂O₁₀ Hermerythrin $C_{427}H_{761}O_{153}N_{135}S_2$ Fe Herniarin $C_{10}H_{30}O_{10}$ Heroïn $C_{21}H_{23}O_5N$ Hesperetol $C_9H_{10}O_2$ Hesperinsäure C₂₂H₂₈O₇ Hesperitin C₁₆H₁₄O₆ $C_{32}H_{28}O_{12}$ Heteroalbumose $C_{114}H_{176}O_{38}N_{30}S$ Heterofibrinose $C_{102}H_{150}O_{31}N_{30}S$ Heteroxanthin $C_6H_6O_2N_4$ Heteroxantını $C_6H_{16}O_2N_4$ Heveen $C_{15}H_{24}$ Hexakosan $C_{26}H_{54}$ Hexakrolsäure $C_{18}H_{24}O_6$ Hexerinsäure $C_6H_{12}O_8$ Hexerinsäure $C_7H_{10}O_3$ Hexoylen C_8H_{10} Hipparafin $C_1SH_{14}O_2N_2$ Hipparin $C_8H_9O_2N_1$ Hipparnylearhanil $C_8H_9O_2N_1$ Hippenylcarbanil C₉H₈O₂N₂ Hippokoprosterin C₂₇H₅₄O Hippuroflavin $C_{18}H_{10}O_4N_2$ Hippursäure $C_9H_9O_3N$ Hippuryltropein $C_{17}H_{22}O_3N_2$ Hirseölsäure $C_{18}H_{32}O_2$ $\begin{array}{lll} \text{Histidin} & C_{6}H_{9}O_{2}N_{3} \\ & - & C_{12}H_{20}O_{4}N_{2} \\ & + & \text{Holoca\"in} & C_{18}H_{22}O_{2}N_{2} \end{array}$ Holzgummi C₆H₁₀O₅ Homoapocinchen C₁₇H₁₅ON Homoasparagin C₅H₁₀O₃N₂ Homoasparaginsäure C5H9O4N Homoatropin C₁₆H₂₁O₃N Homobenzhydrylamin C14H15N Homobetain C6H15O3N

Homobrenzkatechin C7H8O2 Homocamphersäure C11 H18 O4 Homocerebrin $C_{70}H_{138}O_{12}N_2$ Homochelidonin $C_{21}H_{21}O_5N$ Homocholesterin $C_{28}H_{48}O$ Homocholin C₆H₁₇O₂N $\begin{array}{l} Homocinchonidin \overset{1}{C}_{19} H_{22}ON_2 \\ Homocinchonin & C_{19} H_{22}ON_2 \\ Homococas\"{a}ure & C_9 H_8O_2 \end{array}$ Homoconiin C9H19N Homocominsäure $C_8H_{17}O_2N$ Homocumarsäure $C_{10}H_{10}O_3$ Homocuminsäure $C_{11}H_{14}O_2$ $\begin{array}{l} \text{Homoferulasäure} \ C_{11}^{11} H_{12}^{4} O_4 \\ \text{Homoflemingin} \ C_{12} H_{12}^{} O_3 \\ \text{Homofluorindin} \ C_{18} H_{12}^{} N_4 \\ \text{Homogentisinsäure} \ C_8^{} H_8^{} O_4 \end{array}$ Homohydroapoatropin $C_{16}H_{21}O_{2}N$ Homohydroquercinsäure $C_{16}H_{18}O_{6}$ Homoisatosäure C9H7O3N $\begin{array}{l} \textbf{Homoisococas\"{a}ure } ^{\circ}\textbf{C}_{9} ^{\circ}\textbf{H}_{8} ^{\circ}\textbf{O}_{2} \\ \textbf{Homoisophtals\"{a}ure } ^{\circ}\textbf{C}_{9} ^{\circ}\textbf{H}_{8} \textbf{O}_{4} \end{array}$ Homoitakonsäure C6H8O4 Homokaffeïdincarbonsäure $C_9H_{14}O_3N_4$ Homokreatin C₅H₁₁O₂N₃ Homolävulinsäure C₆H₁₀O₃ Homolinalool C₁₁H₂₀O Homomesakonsäure C₆H₈O₄ Homomethylenblau $C_{17}H_{20}N_3CIS$ Homonikotinsäure $C_7H_7O_2N$ Homophtalamidsäure $C_9H_9O_8N$ Homophtalsäure C9H8O4 Homopiperonylsäure C9H8O4 Homoprotokatechusäure $C_8H_8O_4$ $\begin{array}{ll} \text{Homopterocarpin} & C_{24}H_{24}O_6\\ \text{Homopyrrol} & C_5H_7N\\ \text{Homorottlerin} & C_{33}H_{36}O_9\\ \text{Homosalicylsäure} & C_6H_8O_3 \end{array}$ Homosaligenin C₈H₁₀O₂ Homoscopolamin C₁₆H₁₉O₄N Homoterpenoylameisensäure $C_{10}H_{14}O_{5}$ Homoterpenylsäure $C_9H_{14}O_4$ Homoterephtalsäure $C_9H_8O_4$ Homoumbelliferon $C_{10}H_8O_3$ Homovanillinsäure $C_9H_{10}O_4$ Homovitexin C16H16O7 Hopfenöl C₁₀H₁₈O Hordeïnsäure $C_{12}H_{24}O_2$ Huminsäure $C_{26}H_{22}O_{10}$ $\begin{array}{lll} & \text{Humulen} & C_{16} H_{12} \\ & \text{Humulen} & C_{15} H_{24} \\ & \text{Humussäure} & C_{24} H_{10} O_{10} \\ & - & C_{60} H_{54} O_{27} \\ & \text{Hyaenasäure} & C_{25} H_{50} O_{2} \\ & \text{Hydantoïn} & C_{3} H_{4} O_{3} N_{2} \\ & \text{Hydantoïnsäure} & C_{3} H_{6} O_{3} N_{2} \end{array}$ Hydracetamid C6 H12 N2 Hydräskuletin C18H14O8

Hydrakrylsäure C₃H₆O₃ Hydranisoin $C_{16}H_{18}O_4$ Hydrastal $C_{10}H_8O_3$ Hydrastimisäure $C_{11}H_9O_6N$ $\begin{array}{l} \text{Hydrastin} \ \ C_{21}H_{21}O_6N \\ \text{Hydrastinin} \ \ C_{11}H_{11}O_2N \end{array}$ $C_{11}H_{13}O_{3}N$ $\begin{array}{l} {\rm Hydrastlakton} \ {\rm C_{10}H_8O_5} \\ {\rm Hydrastons\"{a}ure} \ {\rm C_{20}H_{18}O_7} \end{array}$ Hydrastsäure C₉H₆O₆ Hydratropasaure $C_9H_6O_6$ Hydratropasaure $C_9H_{10}O_2$ Hydrazioxalyl $C_4H_4O_4N_4$ Hydrazobenzol $C_{12}H_{12}N_2$ Hydrazoisatin $C_8H_7ON_3$ Hydrazotetrazol $C_2H_4N_{10}$ Hydrazotriazol $C_4H_6N_8$ Hydrazulmin C₄H₆N₆ Hydrindin C₃₂H₂₂O₅N₄ Hydrindinsäure C8H7O2N Hydrindon C9H8O Hydrisalizarin $C_{28}H_{18}O_8$ Hydroabietinsäure $C_{44}H_{68}O_5$ Hydrobenizoïn $C_{14}H_{14}O_{2}$ Hydrobenizoïn $C_{14}H_{14}O_{2}$ Hydroberberin $C_{20}H_{21}O_{4}N$ Hydrobilirubin $C_{32}H_{40}O_{7}N_{4}$ Hydrocarotin $C_{18}H_{30}O$ Hydrocarpol C₁₆H₂₀O Hydrocellulose C12H22O11 Hydrochelidonaminsäure $C_7H_{11}O_4N$ Hydrochelidonsäure C7H10O5 $\begin{array}{l} Hydrochinolin & C_{18}H_{16}N_2\\ Hydrochinon & C_{6}H_{6}O_2\\ Hydrocinnamid & C_{27}H_{24}N_2\\ Hydrocotarnin & C_{12}H_{15}O_3N\\ Hydrocumaron & C_{8}H_{8}O\\ \end{array}$ Hydrocumarinsäure C₁₈H₁₈O₆ Hydrocyanaldin C9H12N Hydrocyanauramin C₁₈H₂₂N₄ Hydrocyanrosanilin C₂₀H₁₈N₄ $\begin{array}{ll} \text{Hydrodicotarnin} & C_{24} H_{28} O_6 N_2 \\ \text{Hydrodigitos\"aure} & C_{13} I I_{22} O_3 \\ \text{Hydroecgonidon} & C_9 H_{15} O_2 N \end{array}$ Hydroeuthiochronsäure $C_6H_6O_{10}S_2$ Hydrofluoransäure C₂₀H₁₄O₃ Hydrofuronsäure $C_7 \overset{\circ}{H}_{10} \overset{\circ}{O}_5$ Hydrogardeniasäure $C_{14} \overset{\circ}{H}_{14} \overset{\circ}{O}_6$ Hydrogratioleretin $C_{34}H_{56}O_{11}$ Hydrohydrastinin $C_{11}H_{13}O_{2}N$ Hydroisatin $C_{8}H_{7}O_{2}N$ Hydrojuglon $C_{10}H_{6}O_{3}$ Hydrokaffursäure $C_6H_9O_3N_3$ Hydrokrokonsäure $C_5H_4O_5$ Hydrokurin C18H20O2N2 Hydrolapachosäure C₁₅H₁₆O₃ Hydromellophansäure $C_{10}H_{10}O_{8}$ Hydrophtalid C₈H₈O₂ Hydropiperoïn $C_{16}H_{14}O_6$ Hydroplumeriasäure $C_{10}H_{12}O_5$ Hydropolyporsäure $C_{18}H_{18}O_4$ HydroprehnitsäureC₁₀H₁₀O₈

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Hydropyromellithsäure $C_{10}H_{10}O_{8}$ Hydroquercinsäure C₁₅H₁₆O₆ Hydroresorufin C₁₂H₉O₃N Hydrorufigallussäure $C_{14}H_{10}O_{8}$ Hydrasontonsäure C₁₅H₂₂O₄ Hydrosedanolidcarbonsäure C13H20O4 Hydroshikiminsäure C₇H₁₂O₅ Hydrosparteïn, C15 H28 N2 Hydrothiokrokonsäure $C_5H_4O_4S$ Hydrotinsäure C₅H₉O₇N Hydrotropidin C₈H₁₅N Hydrotropilidencarbonsäure $C_8H_{10}O_2$ $\begin{array}{l} H_{\rm p} H_{\rm p} G_{\rm s} H_{\rm h} G_{\rm s} H_{\rm h} G_{\rm s} \\ H_{\rm p} H_{\rm p} H_{\rm p} H_{\rm p} G_{\rm s} \\ H_{\rm p} H_{\rm p} H_{\rm p} H_{\rm p} H_{\rm p} H_{\rm p} H_{\rm p} \\ H_{\rm p} H_{\rm p} H_{\rm p} H_{\rm p} H_{\rm p} H_{\rm p} H_{\rm p} H_{\rm p} \\ H_{\rm p} H_{\rm p} H_{\rm p} H_{\rm p} H_{\rm p} H_{\rm p} H_{\rm p} H_{\rm p} H_{\rm p} \\ H_{\rm p} H_{\rm p} H_{\rm p} H_{\rm p} H_{\rm p} H_{\rm p} H_{\rm p} H_{\rm p} H_{\rm p} H_{\rm p} H_{\rm p} \\ H_{\rm p} H_{$ Hydrozimmtsäure C₉H₁₀O₂ Hydruvinsäure C₆H₁₀O₇ Hydurilsäure C₈H₆O₆N₄ Hydurinphosphorsäure $C_{25}H_{40}O_{4}$ Hyoglykocholsäure Hyosein C₁₇H₂₁O₄N - C₁₇H₂₃O₃N Hyoseyamin C₁₇H₂₃O₃N Hyotaurocholsäure $\begin{array}{c} C_{27}H_{45}O_6NS \\ Hypnal \ C_{13}H_{15}O_3N_2Cl_3 \\ Hypnoacetin \ C_{16}H_{15}O_3N \end{array}$ Hypoäthyltheobromin $C_7H_9O_3N_3$ Hypogäsäure $C_{16}H_{30}O_2$ Hypoquebrachin $C_{21}H_{28}O_2N_2$ Hyposantonigsäure $C_{15}H_{20}O_2$ Hyposantonin $C_{15}H_{18}O_2$ Hyposantoninsäure $C_{15}H_{20}O_3$ Hyposantonisäure $C_{15}H_{20}O_3$ Hypoxanthin $C_3H_4ON_4$ Hystazarin C₁₄H₈O₄

Ilicylalkohol C₂₅H₄₄O $\begin{array}{l} \text{Ilixanthin } C_{17} H_{12}^{-2} O_{11}^{-1} \\ \text{Imabenzil } C_{65} H_{28} O_{3} N_{2} \\ \text{Imasatin } C_{16} H_{11} O_{3} N_{3} \\ \text{Imesatin } C_{8} H_{6} O N_{2} \\ \text{Imidated } C_{14} N_{15}^{-1} O_{15}^{-1} \\ \text{Imidated } C_{14} N_{15}^{-1} \\ \end{array}$ Imidazol C₃H₄N₂ Imidotriacetonamin $C_9H_{16}ON_2$ $\begin{array}{lll} & \text{Imperatorin} & \text{$C_{16}H_{18}O_4$} \\ & \text{Imperialin} & \text{$C_{85}H_{60}O_4$N} \\ & \text{Indazin} & \text{$C_{28}H_{22}N_4$} \\ & \text{Indazol} & \text{$C_{7}H_6N_2$} \\ & \text{Indazol} & \text{$C_{7}H_6N_2$} \\ \end{array}$ Indazolessigsäure C9H8O2N2 Inden C9H8 Indenigo C₁₈H₈O₄ Indenoxybromid C₉H₉OBr Indenoxychlorid C₉H₉OCl $\begin{array}{c} \text{Indo\"in} \ \ C_{82}H_{20}O_5N_4\\ \text{Indol} \ \ C_8H_7N \end{array}$ Indoir $C_{8}H_{7}N$ Indoir $C_{12}H_{14}N_{2}$ Indophan $C_{22}H_{10}O_{4}N_{4}$ Indophenazin $C_{14}H_{9}N_{3}$ Indophenin $C_{12}H_{7}ONS$ Indoxin $C_{18}H_{12}O_{4}N_{2}$ Indoxyl $C_{28}H_{7}ON$ Inosinsäure C₁₀H₁₃O₈N₄P Inosit $C_6H_{12}O_6$ Inulenin $C_{60}H_{104}O_{52}$ Inulin $C_{12}\ddot{H}_{20}\ddot{O}_{10}^{*2}$ $- {
m C_{36}^{12} H_{62}^{20} O_{31}^{10}} \over {
m C_6 H_{10} O_5}$ Ipecacuanhasäure C₁₄H₁₈O₇ Ipomsäure C₁₀H₁₈O₄ Iridinsäure $ilde{\mathrm{C}}_{10} ilde{\mathrm{H}}_{12} \mathrm{O}_5$ Iridol C9H12O3 Iridolin $C_{10}H_9N$ Irigenin $C_{18}H_{16}O_8$ Iriscampher $C_8H_{16}O_2$ Irisin $C_6H_{10}O_5$ Iron $C_{13}H_{20}O$ Isäthionsäure C₂H₆O₄S $\begin{array}{l} \text{Isamid} & C_{2}H_{6}O_{4}S\\ \text{Isamid} & C_{16}H_{14}O_{3}N_{4}\\ \text{Isamsäure} & C_{16}H_{13}O_{4}N_{3}\\ \text{Isansäure} & C_{14}H_{20}O_{2}\\ \text{Isaphensäure} & C_{16}H_{11}O_{3}N\\ \text{Isatatil } & C_{32}H_{26}O_{6}N_{4}\\ \text{Isatilim} & C_{24}H_{16}O_{5}N_{4} \end{array}$

Isatimid $C_{24}H_{17}O_4N_5$ Isatin $C_8H_5O_2N$ Isatinblau $C_{36}H_{30}O_4N_5$ Isatincarbonsaure $C_9H_5O_4N$ Isatinchlorid C_8H_4ONCl Isatinindogen $C_{16}H_{10}O_2N_2$ Isatinsäure C₈H₇O₃N Isatinschwefligesäure $C_8H_7O_5NS$ Isatoäthyloxim C10H10O2N2 Isatochlorin $C_{32}H_{24}O_5N_4$ Isatogensäure $C_9H_5O_4N$ $\begin{array}{cccc} \operatorname{Isaton} & \operatorname{C}_{32}\operatorname{H}_{24}\operatorname{O}_{3}\operatorname{N}_{4} \\ \operatorname{Isatopurpurin} & \operatorname{C}_{32}\operatorname{H}_{28}\operatorname{O}_{3}\operatorname{N}_{4} \end{array}$ Isatosäure C₈H₅O₈N Isatoxim C₈H₆O₂N₂ Isatyd C₁₆H₁₂O₄N₂ Isoäpfelsäure C₄H₆O₅ Isoakonitsäure C₆H₆O₆ Isoalizarin C₁₄H₈O Isoalloxansäure C₄H₄O₅N₂ Isoamarin $C_{21}H_{18}N_2$ Isoanethol $C_{10}H_{12}O$ Isoanthracen $C_{14}H_{10}$ Isoanthrachinon $C_{14}H_{8}O_{2}$ Isoanthraflavinsäure $C_{14}H_8O_4$ Isoantipyrin $C_{11}H_{12}ON_2$ Isoapiol $C_{12}H_{14}O_4$ Isoapocinchonin C₁₉H₂₂ON₂ Isoapoglucinsäure C₉H₁₀O₅ Isoarabinsäure C₆H₁₀O₅ Isoatropasäure $C_{17}H_{14}O_2$ Isoatropasäure $C_{18}H_{16}O_4$ Isobarbaloin C16H16O7 Isobarbitursäure C₄H₄O₃N₂ Isobenzamaron C₃₅H₂₈O₂ Isobenzidin $C_{12}H_{12}N_2$ Isobenzoglykol $C_6H_8O_2$ Isobenzol $C_{14}H_{10}O_2$ Isobenzyyron $C_9H_6O_2$ Isoberberal C₂₀H₁₇O₇N Isobernsteinsäure C₄H₆O₄ Isobidesyl $C_{28}H_{22}O_2$ Isobiliansäure $C_{25}H_{36}O_8$ Isoborneol C₁₀H₁₈O Isobrenzschleimsäure $C_5H_4O_3$ Isobrenzterebinsäure $C_6H_{10}O_2$ Isobrenzweinsäure C₅H₈O₄ Isobutakonsäure C9H12O4 Isobuttersäure C₄H₈O₅ Isobutyraldin C₁₂H₂₅NS₂ Isocajeputen $C_{10}^{12}H_{16}^{12}$ Isocamphenon $C_{10}H_{14}$ Isocampher C₁₀H₁₆O $\begin{array}{l} Isocampherphoron \quad C_9H_{14}O \\ Isocamphers \"{a}ure \quad C_{10}H_{16}O_4 \\ Isocampholakton \quad C_9H_{14}O_2 \end{array}$ Isocampholen C_9H_{16} Isocampholsäure $C_{10}H_{18}O_2$ Isocampholytischesäure $C_9H_{14}O_2$ Isocamphoransäure C9H12O6 Isocamphoronsäure C9H14O6 Isocantharidin C₁₀H₁₂O₄

Isocantharidinsäure $C_{10}H_{14}O_5$ Isocaprinalkohol $C_{10}H_{22}O$ Isocaprolaktoïd $C_{12}H_{18}O_3$ Isocarbostyril C_9H_7ON Isocarbotitrarsäure C₈H₈O₅ Isocedrol C₁₅H₂₆O Isocerylalkohol C₂₇H₅₆O Isocetinsäure C₁₅H'₃₀O'₂ Isocetinsaure $C_{15}H_{30}O_{2}$ Isochinin $C_{2}H_{24}O_{2}N_{2}$ Isochinolin $C_{3}H_{7}N$ Isochinolinroth $C_{28}H_{19}N_{2}Cl$ Isochloralimid $C_{2}H_{2}NCl_{3}$ Isocholansaure $C_{25}H_{38}O_{7}$ Isocholesterin $C_{26}H_{44}O$ Isochrysazin $C_{14}H_{8}O_{4}$ Isochrysen C₁₈H₁₂ Isochrysofluoren C₁₇H₁₂ Isocinchomeronsäure $C_7H_5O_4N$ $\begin{array}{c} \textbf{Isocinchonidin} \quad C_{19} H_{22} ON_2 \\ \textbf{Isocinchonin} \quad C_{19} H_{22} ON_2 \\ \textbf{Isocitronensäure} \quad C_6 H_8 O_7 \end{array}$ Isococamin C₁₉H₂₃O₄N Isococamin $C_{10}H_{23}O_4N$ Isocodein $C_{18}H_{21}O_3N$ Isocollidin $C_8H_{11}N$ Isoconchinin $C_{20}H_{24}O_2N_2$ Isoconinin $C_8H_{17}N$ Isocopellidin $C_8H_{17}N$ Isocorydalin $C_{22}H_{27}O_4N$ Isocortonsäure $C_4H_0O_2$ Isocumarin C9H6O Isocuminsäure $C_{10}H_{12}O_2$ Isocyanursäure $C_3H_3O_3N_3$ Isocvanilsäure CHON Isocyansäure CHON Isocymol C₁₀H₁₄ Isodehydracetsäure C₈H₈O₄ Isodehydrocholal C₂₄H₃₄O₅

 $\begin{array}{c} {\rm Isodes motroposantonin} \\ {\rm C_{15}H_{18}O_3} \\ {\rm Isodes motroposantonins \"{a}ure} \end{array}$

 $\begin{array}{c} C_{15}H_{20}O_4\\ Isodialdan\ C_8H_{14}O_3\\ Isodiallyl\ C_6H_{10}\\ Isodialursäure\ C_4H_4O_4N_2\\ Isodiazobenzol\ C_6H_6ON_2\\ Isodibutol\ C_8H_{18}O\\ Isodibutolsäure\ C_8H_{16}O_2\\ Isodibutolsäure\ C_8H_{16}O_2\\ Isodiketocamphersäure\\ C_{10}H_{14}O_6 \end{array}$

Isodiphensäure $C_{14}H_{10}O_4$ Isodipiperideïn $C_{10}H_{18}N_2$ Isodipyridin $C_9H_{10}N_2$ Isodithiocyansäure $C_2H_2N_2S_2$ Isoduleit $C_6H_{14}O_6$ Isoduleitan $C_6H_{12}O_5$ Isoduleitearbonsäure $C_7H_{14}O_7$ Isoduleitearbonsäure $C_8H_{19}O_6$ Isoduleitsäure $C_6H_{19}O_9$ Isoduleitsäure $C_6H_{10}O_9$ Isodurol $C_{10}H_{14}$ Isodurol $C_{10}H_{14}$ Isodurol $C_{10}H_{14}$ Isodurylsäure $C_{10}H_{12}O_2$ Isodipnopinakolin $C_{32}H_{28}O$ Isodypnopinalkohol $C_{32}H_{28}O$

Isoerucasäure C22H42O2 Isoeugenol $C_{10}H_{12}O_2$ Isoeuxanthon C₁₃H₈O Isoeuxanthonsäure $C_{18}H_{10}O_5$ Isofencholenalkohol $C_{10}H_{18}O$ Isoferulasäure $C_{10}H_{10}O_4$ Isoflavanilin $C_{16}H_{14}N_2$ Isoformose $C_6H_{12}O_6$ Isofulminursäure $C_3H_3O_3N_8$ Isofumarsäure C₄H₄O₄ Isoteraniolen C_3H_{18} Isogeraniolen C_9H_{18} Isogeraniumsäure $C_{10}H_{16}O_2$ Isogeronsäure $C_9H_{16}O_3$ Isoglycerinsäure $C_3H_6O_4$ Isoglykosamin $C_8H_{18}O_5N$ Isohämatein $C_{16}\ddot{H}_{12}\ddot{O}_{6}$ Isoharnsäure $C_{5}H_{4}\ddot{O}_{3}N_{4}$ Isohelicin $C_{13}H_{16}O_7$ Isohemipinsäure $C_9H_{10}O_6$ Isonemipinsaure $C_9H_{10}O_6$ Isohesperidin $C_{22}H_{28}O_{12}$ Isohexerinsäure $C_8H_{12}O_4$ Isohexinsäure $C_7H_{10}O_3$ Isohydrobenzöin $C_{14}H_{14}O_2$ Isohydropiperoin $C_{16}H_{14}O_6$ Isohydropyromellithsäure $C_{10}H_{10}O_{8}$ Isohyposantonin C₁₅H₁₈O₂ Isohyposantoninsäure C₁₅H₂₀O₃ $\begin{array}{l} \textbf{Isoinden} \quad C_9H_8\\ \textbf{Isoindileucin} \quad C_{16}H_{12}ON_2\\ \textbf{Isojonon} \quad C_{13}H_{20}O \end{array}$ Isoketocamphersäure

Isoketocamphersäure $C_{10}H_{16}O_5$ Isolapachol $C_{15}H_{14}O_3$ Isolauronolalkohol $C_9H_{16}O$ Isolauronolsäure $C_9H_{14}O_3$ Isolaurononsäure $C_9H_{12}O_3$ Isolepiden $C_{97}H_{20}O$ Isolichenin $C_6H_{10}O_5$ Isolic $C_{14}H_{17}N$

Isolm $C_{14}H_{17}N$ Isolinusinsäure $C_{18}H_{36}O_8$ Isolomatiol $C_{15}H_{14}O_4$ Isolutidostyrilearbonsäure $C_{15}H_{14}O_1N$

 $\begin{array}{c} C_8H_9O_3\bar{N} \\ Isomalsäure \quad C_4H_6O_5 \\ Isomaltose \quad C_{12}H_{22}O_{11} \\ Isomannid \quad C_6H_{10}O_4 \\ Isomenthol \quad C_{10}H_{20}O \\ Isomethylpäonol \quad C_{10}H_{12}O_3 \\ Isomuscarin \quad C_8H_{16}O_2N \\ Isonaphtazarin \quad C_{10}H_6O_4 \\ Isonaphtoakridin \quad C_{21}H_{13}N \\ Isonarkotin \quad C_{22}H_{23}O_7N \\ Isonarkotinsäure \quad C_{23}H_{25}O_8N \\ Isonichin \quad C_{10}H_{24}O_2N_2 \\ Isonikotin \quad C_{10}H_{24}O_2 \\ Isonikotin \quad C_{10}H_{24}O_2 \\ Isononopiansäure \quad C_9H_{16}O_2 \\ Isonoropiansäure \quad C_9H_6O_5 \\ Isoölsäure \quad C_{11}H_{34}O_2 \\ Isoonanthsäure \quad C_7H_{14}O_2 \\ Isoonanthsäure \quad C_8H_6O_5 \\ Isoonanthsäure \quad C_8H_{16}O_2 \\ Isooktylsäure \quad C_8H_{16$

 $\begin{array}{l} \text{Isoopians\"aure} \quad \mathbf{C_{10}H_{10}O_5} \\ \text{Isoorcin} \quad \mathbf{C_7H_8O_2} \\ \text{Isopelletierin} \quad \mathbf{C_8H_{15}ON} \\ \text{Isopersulfocyans\"aure} \end{array}$

 $\begin{array}{c} C_2H_2N_2\hat{S}_3\\ \\ \text{Isophenanthrenchinon}\\ C_{14}H_8O_2\\ \\ \text{Isophenolphtale\"in}\\ C_{20}H_{14}O_4\\ \\ \text{Isophloretin}\\ C_{15}H_{14}O_5\\ \\ \text{Isophloretins\"aure}\\ C_9H_{10}O_3\\ \\ \text{Isophloridzin}\\ C_{21}H_{24}O_{10}\\ \\ \text{Isophoron}\\ C_9H_{14}O\\ \\ \text{Isophotosantons\"aureC}_{15}H_{22}O_5\\ \\ \text{Isophtalimidin}\\ C_8H_{10}N_4\\ \\ \text{Isophtalophenon}\\ C_{20}H_{14}O_2\\ \\ \text{Isophtals\"aure}\\ C_8H_6O_4\\ \\ \text{Isopimelins\"aure}\\ C_7H_{12}O_4\\ \\ \text{Isopinelins\"aure}\\ C_7H_{12}O_4\\ \\ \text{Isopulegon}\\ C_{10}H_{16}O\\ \\ \text{Isopulegon}\\ C_{10}H_{16}O\\ \\ \text{Isopurpurs\"aure}\\ C_8H_5O_6N_5\\ \\ \text{Isopyrocamphens\"aure}\\ \end{array}$

Isopulegon $C_{10}H_{16}O$ Isopurpursäure $C_8H_5O_8N_5$ Isopurpursäure $C_8H_5O_8N_5$ Isopyrocamphensäure $C_9H_14O_4$ Isoresacetophenon $C_8H_8O_3$ Isorhamnetin $C_{16}H_{12}O_7$ Isorhamnose $C_8H_{14}O_6$ Isorhamnose $C_8H_{14}O_6$ Isorhamnose $C_8H_{14}O_8$ Isorosindon $C_{22}H_{14}ON_2$ Isorosindon $C_{22}H_{14}ON_2$ Isorosindulin $C_{22}H_{15}N_3$ Isorosolsäure $C_{20}H_{15}O_3$ Isorottlerin $C_{12}H_{12}O_5$ Isosaccharin $C_{12}H_{12}O_5$ Isosaccharinsäure $C_{15}H_{16}O_2$ Isosantonigesäure $C_{15}H_{16}O_2$ Isosantonigesäure $C_{15}H_{16}O_3$ Isosantonigesäure $C_{15}H_{20}O_3$ Isosantonin $C_{15}H_{18}O_3$ Isosantonin $C_{15}H_{18}O_3$ Isosantoninsäure $C_{30}H_{38}O_6$ Isosantoninsäure $C_{16}H_{20}O_4$ Isoserin $C_3H_7O_3N$ Isosorbinsäure $C_8H_8O_2$ Isotrychninsäure $C_9H_{30}O_2$ Isoterebenten $C_{10}H_{16}$ Isoterebilensäure $C_7H_8O_4$ Isoterebinsäure $C_7H_8O_4$ Isoterebinsäure $C_7H_8O_4$ Isoterebinsäure $C_7H_8O_4$ Isoterebinsäure $C_7H_9O_4$

Isothijancitorins and $C_{10}H_{17}O_3N$ Isothujen $C_{10}H_{16}$ Isothujen $C_{10}H_{16}O$ Isotoluchinon $C_7H_6O_2$ Isotrachylolsäure $C_{58}H_{88}O_5$ Isotropylamin $C_8H_{16}N_2$ Isovaleriancumarin $C_{12}H_{12}O_2$ Isovaleriansäure $C_5H_{10}O_2$ Isovaleroglyceral $C_8H_{16}O_3$ Isovaleroglyceral $C_8H_{16}O_3$ Isovaleroglyceral $C_8H_{16}O_3$ Isovaleroglyceral $C_8H_{16}O_3$

Isovanillinsäure C₈H₈O₄ Isovulpinsäure C₁₉H₁₄O₅ Isoxanthin C₅H₄O₂N₄ Isoxanthon C₁₃H₈O₄ Isoxylidinsäure C9H8O4 Isoxylylsäure C9H10O2 Isozeorinin $C_{52}H_{84}O_2$ Isozimmtsäure $C_9H_8O_2$ Isozuckersäure $C_8H_8O_7$ Istarin C₁₈H₁₀O₂N₄ Isuretin CH₄ON₂ Isuvitinsäure C,H₈O₄ Itabrenztraubensäure C₄H₆O₃ Itakonsäure $C_5H_6O_4$ Itamalsäure $C_5H_8O_5$ Itaweinsäure C₅H₈O₆ Ivaïn $C_{24}H_{42}O_{8}$

Jabonin C9H14N2 $\begin{array}{lll} \mbox{ Jaboridin } & C_{10} \mbox{H}_{12} \mbox{O}_8 \mbox{N}_2 \\ \mbox{ Jaborin } & C_{22} \mbox{H}_{32} \mbox{O}_4 \mbox{N}_4 \\ \mbox{ Jaborinsäure } & C_{19} \mbox{H}_{25} \mbox{O}_5 \mbox{N}_8 \end{array}$ Jervin C₂₁H₃₇O₃N Jodal C₂HOJ₃ Jodgorgosäure C₄H₈O₉NJ Jodoform CHJ₈ $\begin{array}{l} \text{Jodol } C_4 \text{HNJ}_4 \\ \text{Jodospongin } C_{56} \text{H}_{87} \text{O}_{20} \text{N}_{10} \text{JS}_2 \\ \text{Jonegenalid } C_{12} \text{H}_{14} \text{O}_3 \end{array}$ Jonen $C_{13}H_{18}$ Jongenogonsäure $C_{13}H_{14}O_3$ Jonon C₁₃H₂₀O Jononoximessigsäure $\begin{array}{c} C_{15}H_{23}O_3N \\ Juglon \ C_{10}H_6O_3 \\ Juglonsäure \ C_8H_4O_9N_2 \end{array}$ Julolviolet C39 H36 O3 N3 Cl

Kämpferid C16H12O6 Kaffeegerbsäure C₁₅H₁₈O₈ $C_{21}H_{28}O_{14}$ Kaffeëlsäure $C_7H_8O_6$ Kaffeesäure $C_9H_8O_4$ Kaffeïdin $C_7H_{12}ON_4$ Kaffeïn C₈H₁₀O₂N₄ Kaffeincarbonsäure Kaffeol $C_8H_{10}O_2$ Kaffolin $C_5H_9O_2$ Kaffolin $C_5H_9O_2$ Kaffursäure $C_6H_9O_2$ Nairokoll $C_{11}H_{11}O_2$ Kairokoll $C_{10}H_{13}$ Kairolin $C_{10}H_{13}$

Kakodyl $C_4H_{12}As$ Kakodylsäure $C_2H_7O_2As$ Kakostrychnin $C_{91}H_{22}O_{10}N_5$ Kakothellin $C_{21}H_{22}O_9N_4$ Kamillenöl $C_{10}H_{18}O$ Kastaniengerbsäure C₁₈H₁₂O₆ Katechin C18H18O8 C₁₈H₁₈O₈ C₂₁H₂₀O₉ C₄₀H₃₈O₁₆ C₄₀H₃₈O₁₈ C₄₂H₃₆O₁₆ C₄₂H₃₈O₁₆ C₄₂H₃₈O₁₆ Katechinazobenzol $C_{80}H_{26}O_8N_4$ Katechugerbsäure C₈₆H₃₄O₁₅ Katechuretin C42H80O13 Katellagsäure C₁₄H₁₀O₇ Kautschin C_4H_6 - $C_{10}H_{16}$ Kawaïn $C_{15}H_{14}O_5$ Kerasin $C_{70}H_{198}O_{12}N_2$ Ketacetsäure $C_8H_6O_7$ $\begin{array}{c} \text{Ketin } C_6H_8N_2 \\ \text{Ketipinsäure } C_8H_6O_6 \\ \text{Ketopinsäure } C_{10}H_{14}O_3 \end{array}$ Kieselessigsäureanhydrid $C_8H_{12}O_8S_2$ Kinoïn $C_{14}H_{12}O_6$ Kinoroth $C_{28}H_{22}O_{11}$ Kohlensäure CO_2 Kolamin C₄₀H₅₆O₂₁N₄ Kolatannin C₁₆H₂₀O₈ Komansäure C₆H₄O₄ Komenaminsäure C₆H₅O₄N Komenaminsäure $C_6H_5O_4N$ Komensäure $C_8H_4O_5$ Koprinchlorid $C_6H_{14}ONCl$ Koprosterin $C_{27}H_{46}O$ Korksäure $C_8H_{14}O_4$ Kosin $C_{22}H_{26}O_7$ — $C_{23}H_{30}O_7$ — $C_{31}H_{88}O_{10}$ Kostotxin $C_{26}H_{24}O_{10}$ Kotinin $C_{10}H_{19}ON_2$ Kreatinin $C_4H_9O_2N_3$ Kreatinin $C_4H_9O_2N_3$ Kreatinin C₄H₇ON₃ Kresol C₇H₈O Kresoläther $C_{14}H_{14}O$ Kresolaurin $C_{22}H_{20}O_3$ Kresolcarbonsäure $C_9H_{10}O_4$ Kresochinon $C_{20}H_{20}O_4$ Kresolcumarin $C_{16}H_{12}O_3$ $\begin{array}{c} \text{Kresolphtale in} \quad C_{22} H_{18} O_4 \\ \text{Kresolphtalins \"aure} \quad C_{22} H_{20} O_4 \\ \text{Kresophenochinon} \quad C_{19} H_{18} O_4 \end{array}$ Kresorcin C₇H₈O₂ Kresorcinearbonsäure $\mathrm{C_8H_8O_5}$ Kresorcinphtaleïn $C_{22}H_{16}^{\bullet}O_{4}$ Kresorsellinsäure $C_{8}H_{8}O_{4}$ Kresotinsäure C₈H₈O₃ Kresylmekonin C₁₇H₁₆O₁ Kresylpurpursäure C₉H₇O₆N₅ Krokonsäure C5H2O5 Krokontolazin C₁₂H₈O₈N₂

Kryptidin C11H11N Kryptophansäure C₅H₉O₅N Kryptophansaure C₅H₉O₈ Kyanāthin C₉H₁₅N₃ Kyanamylin C₁₈H₃₃N₃ Kyanbenzin C₂₄H₂₁N₃ Kyanbenzylin C₂₄H₂₁N₃ Kyanbutin C₁₅H₂₇N₃ Kyanconiin C₉H₁₄N₂ Kyanmethäthin C₈H₁₃N₃ Kyanmethin C₆H₉N Kyanpropin $C_{12}H_{21}N_3$ Kyaphenin $C_{21}H_{15}N_3$ Kyklothraustinsäure

 $C_{17}H_{12}O_3N_2$ Kynurensäure $C_{10}H_7O_3N$ Kynurin C_9H_7ON

 ${
m Laccains \ddot{a}ure} \,\, {
m C}_{16} {
m H}_{12} {
m O}_8$ Lactucerin $C_{28}H_{44}O_2$ Lactucerol $C_{26}H_{60}O_2$ Lactucerol $C_{26}H_{60}O_2$ Lactucon $C_{28}H_{44}O_2$ Lavinulin $C_6H_{10}O_5$ Lävoglukosan $C_6H_{10}O_5$ Lävopimarsäure C20H30O2 Lävulinsäurethioglykolsäure $\begin{array}{c} C_9H_{14}O_6S_2 \\ L\ddot{a}vulosan \quad C_6H_{10}O_5 \\ L\ddot{a}vulose \quad C_6H_{12}O_6 \end{array}$ LävulosecarbonsäureC7H14O8 Lagsäure C₄H₄O₃ Laktamid C₃H₇O₂N Laktamidin C₃H₈ON₂ Laktamin $C_3 H_7 O_2 N$ Laktaron $C_{29} H_{58} O$ Laktarsäure C₁₅H₃₀O₂ Laktid $C_6H_8O_4$ Laktimid C_3H_5ON $- C_6H_{10}O_2N_2$ Laktobionsäure $C_{12}H_{22}O_{12}$ Laktocaramel C6H10O5 Laktonsäure C₆H₁₀O₆ Laktose C₁₂H₂₂O₁₁ Laktosecarbonsäure C₁₃H₂₄O₁₃
Laktosin C₃₆H₆₂O₅₁
Laktucerin C₂₀H₃₂O₂ Laktucerylalkohol Laktucol $C_{13}H_{20}O$ Laktucon $C_{15}H_{24}O$ $\begin{array}{ccc} Lakturaminsäure & C_4H_8O_3N_2\\ Laktylharnstoff & C_4H_8O_2N_2 \end{array}$ Laktyltropeïn $C_{11}H_{19}O_{3}N_{2}$ Laktyltropeïn $C_{11}H_{19}O_{3}N$ Lanocerinsäure $C_{30}H_{60}O_{4}$ Lanolinalkohol $C_{12}H_{24}O$ Lanolinsäure $C_{12}H_{22}O_{3}$ Lanopalminsäure $C_{16}H_{32}O_{3}$ Lantanursäure $C_{3}H_{4}O_{3}N_{2}$ Lanthopin C23H25O4N

Lanugininsäure C₁₉H₃₀O₁₀N₅ Lapachan C₁₅H₁₀O Lapachal $C_{15}H_{14}O_3$ Lapachol $C_{15}H_{14}O_3$ Lapachon $C_{15}H_{14}O_3$ Lapachonol $C_{16}H_{16}O_2$ Lapaconitin $C_{34}H_{48}O_8N_2$ Lariciresinol $C_{19}H_{22}O_6$ Larixinsăure $C_{10}H_{10}O_5$ Laurol C₁₁H₁₆ Laurolen C₈H₁₄ Lauron C₂₃H₄₆O $\begin{array}{c} \text{Lauronols\"{a}ure} & C_9H_{14}O_2\\ \text{Laurotetanin} & C_{19}H_{23}O_5N\\ \text{Lauroxyls\"{a}ure} & C_9H_{10}O_2 \end{array}$ Lavendol $C_{10}H_{18}O$ Lecanorol $C_{27}H_{30}O_9$ Lecanorsäure $C_{16}H_{14}O_7$ Lecasterid $C_{10}H_{18}O_3$ Lecasterinsäure $C_{10}H_{20}O_4$ Lecidsäure $C_{24}H_{30}O_6$ Lecithin $C_{42}H_{84}O_9NP$ Leden C₁₅H₂₄ Leditannsäure $C_{15}H_{20}O_8$ Ledixanthin $C_{30}H_{34}O_{13}$ Ledumcampher $C_{15}H_{28}O$ Leinsamenschleim C₆H₁₀O₅ Leken CH₂ Lepamin $\overset{2}{\mathrm{C}_{20}}\mathrm{H_{32}N_2}$ Lepargylsäure $\overset{2}{\mathrm{C}_{9}}\mathrm{H_{16}O_4}$ Lepiden $C_{28}H_{20}O$ Lepidin $C_{10}H_{9}N$ Lepidopterinsäure The photoetrin state $C_{11}H_{12}O_{10}N_8$ Leprarin $C_{88}H_{40}O_{17}$ Leucin $C_6H_{13}O_2N$ Leucinimid $C_6H_{11}ON$ Leucinsäure $C_3H_{12}O_2$ Leucodrin $C_{18}H_{20}O_3$ Leukanllin $C_8H_{11}ON$ Leukaurin C₁₉H₁₆O₃ Leukoäthylnitrolsäure C₂H₄O₃N₂
Leukodrin C₁₅H₁₆O₈
Leukogallol C₁₈H₈O₁₂Cl₁₂
Leukoglykodrin C₂₇H₄₂O₁₀
Leukolinsäure C₉H₉O₃N Leukomalachitgrün C₂₃H₂₆N₂ Leukonsäure $C_5H_8O_9$ Leukophtalgrün $C_{32}H_{35}ON_3$ Leukorosol $C_{24}H_{22}O_4$ Leukotursäure C6H6O6N4

Licareol C₁₀H₁₈O Licarhodol C₁₀H₁₈O Licarhodoläther C₂₀H₃₄O Licarinsäure C₁₀H₁₆O₂ Lichenin C₆H₁₀O₅ Lichenstearinsäure $C_{14}H_{24}O_3$ $C_{17}H_{28}O_4$ $\begin{array}{ccc} \text{Lichestearins\"{a}ure} & C_{17} H_{28} O_4 \\ - & C_{19} H_{32} O_4 \\ \text{Lichesteryls\"{a}ure} & C_{18} H_{34} O_3 \end{array}$ $\begin{array}{c} \text{Lignin} \quad C_{18}H_{24}O_{10} \\ \text{Lignocellulose} \quad C_{12}H_{20}O_{10} \\ \text{Lignocerins\"aure} \quad C_{24}H_{48}O_{2} \end{array}$ Eignote Instante $C_{44}C_{18}$ Lignon $C_{10}H_{22}O_{9}$ Lignonblau $C_{26}H_{22}O_{4}N_{2}$ Lignose $C_{18}H_{26}O_{41}$ Likareal $C_{10}H_{16}O$ Limettis $C_{11}H_{10}O_{4}$ Limetts are $C_{11}H_{8}O_{6}$ Limonen $C_{10}H_{16}$ Limonetrit $C_{10}H_{20}O_4$ Limonin $C_{22}H_{26}O_7$ Linalool $C_{10}H_{18}O$ Linaloolesaure $C_{10}H_{18}$ Linolensaure $C_{18}H_{30}O_2$ Linolsäure $C_{18}H_{32}O_2$ Linusinsäure $C_{18}H_{36}O_8$ Lithobilinsäure $C_{30}H_{58}O_6$ Lithofellinsäure $C_{20}H_{38}O_4$ Lithorellinsaure $C_{20}H_{36}$ \
Lithursaure $C_{15}H_{19}O_9N$ Lobarsaure $C_{17}H_{16}O_5$ Loganin $C_{25}H_{34}O_{14}$ Loiponsaure $C_7H_{11}O_4N$ Lokaëtin $C_9H_8O_5$ Lokain $C_{28}H_{34}O_{17}$ Lokansaure $C_{38}H_{36}O_{21}$ Lokaonsaure $C_{42}H_{48}O_{27}$ Lokaonsaure $C_{42}H_{48}O_{27}$ Lokaose $C_{6}H_{12}O_{6}$ Lomatiol $C_{15}H_{14}O_{4}$ Lophin $C_{21}H_{16}N_{2}$ Lophophorin $C_{13}H_{17}O_{3}N$ Lorenit $C_{9}H_{6}O_{4}NJS$ Loretin $C_{9}H_{6}O_{4}NJS$ Loxopterygin $C_{26}H_{34}O_{2}N_{3}$ Lunamin $C_{26}H_{4}O_{4}N_{3}$ Lupamin C₁₅H₂₄ON₂ Lupeol C₂₆H₄₂O Lupeoi $C_{26}H_{42}O$ Lupeose $C_{12}H_{22}O_{11}$ Lupigenin $C_{17}H_{12}O_{6}$ Lupinidin $C_{8}H_{15}N$ Lupinin $C_{21}H_{40}O_{2}N_{2}$ $C_{29}H_{32}O_{16}$ Lupulinsäure $C_{26}H_{36}O_{4}$ Luteinsäure $C_{20}H_{92}O_{12}$ $\begin{array}{ccc} \text{Luteol} & \text{C_{20}H}_{13}\text{ON_2Cl} \\ \text{Luteolin} & \text{C_{15}H}_{10}\text{O_6} \\ \text{Lutidin} & \text{C_7H}_{9}\text{N} \end{array}$ Lycaconitin C₂₇H₃₄O₆N₂
— C₄₄H₆₀O₁₂N₂
Lycin C₅H₁₁O₂N

Lycoctonin C24H42O7N

Lycopodiumoisaure C_{164} Lycoresin $C_9H_{16}O$ Lycorin $C_{32}H_{32}O_8N_2$ Lycostearon $C_{15}H_{30}O_2$ Lysatinin $C_6H_{13}O_2N_3$ Lysidin $C_4H_6N_2$ Lysin $C_6H_{14}O_2N_2$ Lysursäure $C_{20}H_{22}O_4N_2$ Lyxonsäure $C_5H_{10}O_6$ Lyxose C₅H₁₀O₅

Machromin C₁₄H₁₀O₅

Maclegin C₂₀H₁₇O₅N Magdalaroth C₃₀H₂₀N₄ Mairogallol C₁₈H₇O₁₀Cl₁₁ Maklurin C₁₈H₁₀O₆ Malaminsäure C₄H₇O₄N $\begin{array}{c} \text{Malanilsäure} \ \ C_{10} H_{11} O_4^{7} N \\ \text{Male "influoresce"in} \ \ C_{18} H_{12} O_6 \end{array}$ Maleïnsäure $C_4H_4O_4$ Maleïnursäure $C_5H_6O_4N_2$ Malobiursäure $C_5H_5O_4N_3$ Malondibenzamsäure $C_{17}H_{14}O_6N_2$ Malonsäure $C_3H_4O_4$ Malonylbiuret $C_5H_5O_4N_3$ Maltobionsäure C₁₂H₂₂O₁₂ $\begin{array}{c} \text{Maltodextrin} \ \ C_{24} H_{42}^2 O_{21}^2 \\ - C_{36} H_{62} O_{31} \end{array}$ Maltol C6H6O3 Maltosaccharinsäure C₆H₁₂O₆ Maltosamin C₁₂H₂₈O₁₀N Maltose C12H22O11 MaltosecarbonsäureC13H24O13 Malylureïd $C_5H_7O_3N_3$ Malylureïdsäure $C_5H_6O_4N_2$ Mandelsäure $C_5H_6O_4$ Mandelsäure $C_8H_6O_3$ Mandragorin $C_{17}H_{23}O_3N$ Mangostin $C_{20}H_{22}O_5$ Mannan $C_8H_{10}O_5$ Mannid $C_8H_{10}O_4$ Mannit $C_6H_{14}O_8$ Mannitäther $C_{12}H_{26}O_{11}$ Mannitan $C_6H_{12}O_5$ Mannitaborsäure $C_6H_{14}O_9B_2$ Mannitorsaure $C_0H_{14}O_0B_2$ Mannitin $C_0H_{12}O_0$ Mannitose $C_0H_{12}O_0$ Mannitsaure $C_0H_{12}O_7$ Mannitweinsaure $C_{30}H_{30}O_{35}$ Mannohepti $C_7H_{16}O_7$ Mannoheptonsaure $C_7H_{14}O_8$ Mannoheptose $C_7H_{14}O_7$ Mannonononsäure $C_9H_{18}O_{10}$ Mannonose C₉H₁₈O₉ Mannonsäure C₆H₁₂O₇ Mannooktid C₈H₁₈O₈ Mannooktose C₈H₁₆O₈ Mannose C₆H₁₂O₆ Mannosecarbonsäure C7H14O8 Mannozuckersäure C₆H₁₀O₈

Margarinsäure C₁₇H₃₄O₂ $\begin{array}{ccc} \text{Masopin} & C_{22}H_{18}O \\ & - & C_{22}H_{36}O \\ \text{Matezit} & C_{10}H_{20}O_9 \end{array}$ $\begin{array}{c} \mathbf{Matezodambose} & \mathbf{C_6H_{12}O_6} \\ \mathbf{-} & \mathbf{C_9H_{18}O_9} \end{array}$ Maticocampher $C_{12}H_{20}O$ Matrin $C_{15}H_{24}ON_2$ Mauvanilin $C_{19}H_{17}N_3$ Mauvein $C_{27}H_{24}N_4$ Mauvindon C₂₄H₁₇ON₃ Medicagol C₂₀H₄₂O $\begin{array}{l} \text{Medicagophyll } C_{42} \\ \text{Medicagophyll } C_{42} \\ \text{Medullinsäure } C_{21} \\ \text{H}_{42} \\ \text{O}_{2} \\ \text{Mekonidin } C_{21} \\ \text{H}_{23} \\ \text{O}_{4} \\ \text{N} \\ \text{Mekonin } C_{10} \\ \text{H}_{10} \\ \text{O}_{4} \\ \text{O}_{4} \\ \text{Mekonin } C_{10} \\ \text{H}_{10} \\ \text{O}_{4} \\ \text{O}_{4} \\ \text{Mekonin } C_{10} \\ \text{H}_{10} \\ \text{O}_{4} \\ \text{Mekonin } C_{10} \\ \text{H}_{10} \\ \text{O}_{4} \\ \text{Mekonin } C_{10} \\ \text{H}_{10} \\ \text{O}_{4} \\ \text{Mekonin } C_{10} \\ \text{H}_{10} \\ \text{O}_{4} \\ \text{Mekonin } C_{10} \\ \text{H}_{10} \\ \text{O}_{4} \\ \text{Mekonin } C_{10} \\ \text{H}_{10} \\ \text{O}_{4} \\ \text{Mekonin } C_{10} \\ \text{H}_{10} \\ \text{O}_{4} \\ \text{Mekonin } C_{10} \\ \text{H}_{10} \\ \text{O}_{4} \\ \text{Mekonin } C_{10} \\ \text{H}_{10} \\ \text{O}_{4} \\ \text{Mekonin } C_{10} \\ \text{H}_{10} \\ \text{O}_{4} \\ \text{Mekonin } C_{10} \\ \text{H}_{10} \\ \text{O}_{4} \\ \text{Mekonin } C_{10} \\ \text{H}_{10} \\ \text{O}_{4} \\ \text{Mekonin } C_{10} \\ \text{H}_{10} \\ \text{O}_{4} \\ \text{Mekonin } C_{10} \\ \text{H}_{10} \\ \text{O}_{4} \\ \text{Mekonin } C_{10} \\ \text{H}_{10} \\ \text{O}_{4} \\ \text{Mekonin } C_{10} \\ \text{Mekonin } C_{10} \\ \text{H}_{10} \\ \text{Mekonin } C_{10} \\ \text{H}_$ Mekoninessigsäure C₁₂H₁₂O₆ Mekoninsäure C₁₀H₁₂O₅ Mekonoisin $C_8H_{10}O_2$ Mekonsäure $C_7H_4O_7$ $\begin{array}{lll} \text{Metonsaure} & C_7\Pi_4O_7 \\ \text{Melam} & C_6H_9N_{11} \\ \text{Melamin} & C_3H_6N_6 \\ \text{Melampyrit} & C_6H_{14}O_6 \\ \text{Melanilin} & C_{13}H_{13}N_3 \\ \text{Melamin} & C_9H_{10}O_4N_9 \\ & - C_{68}H_{27}O_{26}N_{10}S \\ \end{array}$ Melanoïdinsäure $\begin{array}{c} C_{240}H_{231}O_{58}N_{17}S_2 \\ Melanoximid \ C_{15}H_{11}O_2N_3 \\ Melansäure \ C_6H_4O_3 \end{array}$ Melanthigenin $C_{14}H_{23}O_2$ $\begin{array}{lll} & \text{Melanthin } C_{20}H_{33}O_{2}\\ & -C_{29}H_{30}O_{10}\\ & -C_{29}H_{30}O_{10}\\ & \text{Melanurensäure } C_{3}H_{4}O_{2}N_{4}\\ & \text{Melassinsäure } C_{12}H_{10}O_{5}\\ \end{array}$ $\begin{array}{c} \text{Melam.} & \text{Melem.} & \text{C}_6H_6N_{10} \\ \text{Melen.} & \text{C}_{80}H_{60} \\ \text{Melen.} & \text{C}_{18}H_{39}O_{16} \\ \text{Melezitose.} & \text{C}_{12}H_{22}O_{11} \\ \text{Melibiose.} & \text{C}_{12}H_{22}O_{11} \\ \text{Melidoessigsäure.} & \text{C}_5H_8O_2N_6 \\ \text{Melilotol.} & \text{C}_9H_8O_2 \\ \text{Melilotsäure.} & \text{C}_9H_{10}O_3 \\ \text{Melissen\"{o}l.} & \text{C}_{10}H_{16}O \\ \text{Melissins\"{a}ure.} & \text{C}_{30}H_{60}O_2 \\ & - & \text{C}_{31}H_{62}O_2 \\ \end{array}$ $\begin{array}{c} {\rm Melitose} \ {\rm C_{18}H_{32}O_{16}} \\ {\rm Melitriose} \ {\rm C_{18}H_{32}O_{16}} \\ {\rm Melitriose} \ {\rm C_{18}H_{32}O_{16}} \\ {\rm Mellithsäure} \ {\rm C_{12}H_6O_{12}} \\ {\rm Mellogen} \ {\rm C_{11}H_2O_4} \\ {\rm Mellon} \ {\rm C_6H_6N_9} \\ {\rm Mellon} \ {\rm C_6H_6N_9} \end{array}$ $\begin{array}{c} \text{Mellonwasserstoff} \quad C_0H_3N_{13}\\ \text{Mellophansäure} \quad C_{10}H_6O_8\\ \text{Melolonthin} \quad C_5H_{12}O_3N_2S\\ \text{Menispermin} \quad C_{18}H_{24}O_2N_2\\ \end{array}$ $\begin{array}{ll} \text{Menthen } C_{10}H_{18} \\ \text{Menthenol } C_{10}H_{18}O \\ \text{Menthocitronellal } C_{10}H_{18}O \\ \text{Menthocitronellol } C_{10}H_{20}O \\ \end{array}$ Menthodicarbonsäure $C_{12}H_{18}O_{5}$ $C_{12}H_{18}O_{5}$ Menthoglykol $C_{10}H_{20}O_{2}$ Menthol $C_{10}H_{20}O$ Menthon $C_{10}H_{18}O$ Menthonensäure C₁₀H₁₈O₂

Menthonpinakon C20 H38 O2 $\begin{array}{c} \text{Menthonylamin} \quad C_{10}H_{21}N \\ \text{Menthoximsäure} \quad C_{10}H_{19}O_3N \end{array}$ Mental Menthylamin $C_{10}H_{21}N$ Menthylamin $C_{10}H_{21}N$ Mentonaphten $C_{10}H_{20}$ Menyanthin $C_{30}H_{40}O_{14}$ Menyanthol C_8H_8O Merochinen $C_9H_{15}O_2N$ Mesakonsäure $C_7H_8O_4$ $\begin{array}{c} \text{Mesicerin} \quad C_9H_{12}O_3 \\ \text{Mesidin} \quad C_9H_{13}N \end{array}$ Mesitenlakton C, H, O, Mesitenlaktoncarbonsäure C8H8O4 Mesitol C₉H₁₂O Mesitonsäure C7 H12O3 Mesitylen C_9H_{12} Mesitylensäure $C_9H_{10}O_2$ Mesityloxyd $C_8H_{10}O$ Mesityloxydoxalsäure C8H10O4 Mesitylsäure C₈H₁₃O₃N Mesocamphersäure C₁₀H₁₆O₄ $\begin{array}{l} \text{Mesorein } C_9H_{12}O_2 \\ \text{Mesoweinsäure } C_4H_6O_6 \\ \text{Mesoxalsäure } C_3H_4O_6 \\ \text{Mesoxalylharnstoff } C_4H_2O_4N_2 \end{array}$ Metachloral C2HOCl3 $\begin{array}{c} \text{Metacopaivasaure} \ \ \overset{\circ}{C_{20}} \overset{\circ}{H_{30}} \overset{\circ}{O_2} \\ - & \overset{\circ}{C_{22}} \overset{\circ}{H_{34}} \overset{\circ}{O_4} \end{array}$ Metafulminursäure $C_3H_3O_3N_3$ Metakroleïn C₆H₈O₂ C9H12O3 Metaldehyd $C_6H_{12}O_3$ Metanethol C₁₀H₁₂O $\begin{array}{ll} \text{Metanikotin} & \overset{\bullet}{C_{10}H_{14}N_2}\\ \text{Metapektin} & \overset{\bullet}{C_{32}H_{48}O_{32}}\\ \text{Metapimelinsäure} & \overset{\bullet}{C_7H_{12}O_4}\\ \text{Metapropionaldehyd} & \overset{\bullet}{C_9H_{18}O_3} \end{array}$ Metapurpursaure C7H5O4N9 $\begin{array}{lll} & \text{Metarabin} & C_{12}H_{22}O_{11} \\ & \text{Metasaccharin} & C_6H_{10}O_5 \\ & \text{Metasaccharinsäure} & C_6H_{12}O_6, \end{array}$ Metasantonin C₁₅H₁₈O₃ Metasantonsäure C₁₅H₂₀O₄ Metastyrol C_8H_8 Metaterebenten $C_{20}H_{32}$ $\begin{array}{l} \text{Metateropin } C_8 H_{15} ON \\ \text{Metaweinsäure } C_4 H_6 O_6 \\ \text{Metazuckersäure } C_6 H_{10} O_8 \end{array}$ Methakrylsäure C₄H₆O₂ Methan CH4 $\begin{array}{lll} & \text{Methan } \text{Cn}_4 \\ & \text{Methanthren } \quad \text{C}_{15}\text{H}_{12}\text{O} \\ & \text{Methanthrel } \quad \text{C}_{15}\text{H}_{12}\text{O} \\ & \text{Methazonsäure } \quad \text{C}_{2}\text{H}_{4}\text{O}_{3}\text{N}_{2} \\ & \text{Methebinin } \quad \text{C}_{10}\text{H}_{21}\text{O}_{3}\text{N} \\ & \text{Methionsäure } \quad \text{CH}_{4}\text{O}_{8}\text{S}_{2} \\ & \text{Methocode \"{in }} \quad \text{C}_{19}\text{H}_{23}\text{O}_{3}\text{N} \\ & \text{Methocode \r{C}_{14}} \quad \text{O}_{19} \\ & \text{Methocode \r{C}_{14}} \quad \text{O}_{19} \\ & \text{Methocode \r{C}_{14}} \quad \text{O}_{19} \\ & \text{Methocode \r{C}_{14}} \quad \text{O}_{19} \\ & \text{Methocode \r{C}_{14}} \quad \text{O}_{19} \\ & \text{Methocode \r{C}_{14}} \quad \text{O}_{19} \\ & \text{Methocode \r{C}_{14}} \quad \text{O}_{19} \\ & \text{Methocode \r{C}_{14}} \quad \text{O}_{19} \\ & \text{Methocode \r{C}_{14}} \quad \text{O}_{19} \\ & \text{Methocode \r{C}_{14}} \quad \text{O}_{19} \\ & \text{Methocode \r{C}_{14}} \quad \text{O}_{19} \\ & \text{Methocode \r{C}_{14}} \quad \text{O}_{19} \\ & \text{Methocode \r{C}_{14}} \quad \text{O}_{19} \\ & \text{Methocode \r{C}_{14}} \quad \text{O}_{19} \\ & \text{O}_{19} \quad \text{O}_$ Methose C₆H₁₂O₆ $\begin{array}{c} \text{Methronol} \ \ C_{18}H_{20} \\ \text{Methronsäure} \ \ C_{8}H_{8}O_{5} \end{array}$ Methylammonchelidonsäure C₈H₇O₅N Methylarabinosid C₆H₁₂O₅

Methylenazur $C_{16}H_{18}O_2N_3JS$ Methylenbisantipyrin C23H24O2N4 Methylenblau C₁₆H₁₈N₃ClS Methylendigallussäure $C_{15}H_{12}O_{10}$ Methylendikresotinsäure C17 H16 O6 Methylendisalicylsäure $C_{15}H_{12}O_{6}$ $\begin{array}{cccc} C_{15} H_{12} O_6 & & & \\ Methylenitan & C_6 H_{10} O_5 & & & \\ & - & C_7 H_{14} O_6 & & \\ Methylenroth & C_8 H_9 N_2 ClS_2 & & & \\ \end{array}$ Methylenviolet C14H12ON2S Methylglykoheptosid C₈H₁₆O₇ Methylguanicil C5H7ON3 Methylkaffursäure $C_7H_{11}O_4N_3$ Methylphtalhydrazid $C_9H_8O_2N_2$ Methylpyriculin C_4H_5N Methyltaurocyamin $C_4 H_{11} O_3 N_3 S$ Methyltetrose C₅H₁₀O₄ Methyltropenin C₈H₁₃N Methyltropolin C₈H₁₅ON Methyluvinsäure $C_8H_{16}O_3$ Methyluvinsäure $C_8H_{10}O_3$ Methylviolet $C_{25}H_{31}O_3$ Methylxylosid $C_6H_{12}O_5$ Methysticol $C_{13}H_{12}O_5$ Metinulin $C_8H_{10}O_5$ Metol C_7H_9ON Mezcalin $C_{11}H_{17}O_3N$ Milchsäure $C_3H_6O_3$ Milehzucker $\mathring{C}_{12}H_{22}O_{11}$ Mochylalkohol $\mathring{C}_{26}H_{46}O$ Monothiodiprussiamsäure $\begin{array}{c} \text{Mobility} \\ \text{$C_6H_8N_{10}S$} \\ \text{Moradin $C_{16}H_{14}O_6$} \\ \text{Morin $C_{15}H_{10}O_7$} \\ \text{Morindin $C_{26}H_{18}O_{14}$} \\ \text{Morindon $C_{15}H_{10}O_5$} \end{array}$ Moringerbsäure C₁₃H₁₀O₆ Morinsäure $C_{15}H_{10}O_7$ Morphenol $C_{14}H_8O_2$ Morphin $C_{17}H_{19}^{\dagger}\mathring{O}_{3}\mathring{N}$ Morphinviolet $C_{25}H_{29}O_{4}N_{3}$ Morpholin C₄H₉ON $\begin{array}{l} \text{Morrenol} \ \ C_{14}H_{22}O \\ \text{Morrhuin} \ \ C_{19}H_{27}N_3 \\ \text{Morrhuinsäure} \ \ C_9H_{13}O_3N \end{array}$ Moschatin C21H27O7N $\begin{array}{lll} \mbox{Moschath} & G_{21} + g_{7} & & \\ \mbox{Mucin } & C_{160} \mbox{H}_{256} O_{80} N_{82} \mbox{S} \\ \mbox{Mucobromsäure } & C_{4} \mbox{H}_{2} O_{3} \mbox{Br}_{2} \\ \mbox{Mucochlorsäure } & C_{4} \mbox{H}_{2} O_{3} \mbox{Cl}_{2} \\ \mbox{Mucochlorsäure } & C_{4} \mbox{H}_{2} O_{3} \mbox{Cl}_{2} \end{array}$ Mukolaktonsäure C₆H₆O₄ $\begin{array}{c} \text{Mukonsäure} \quad C_6 H_6 O_4 \\ \text{Murexan} \quad C_4 H_5 O_3 N_3 \\ \text{Murexid} \quad C_8 H_5 O_6 N_5 \end{array}$ Murexoïn $\overset{\circ}{C}_{12}\overset{\circ}{H}_{16}\overset{\circ}{O_6}\overset{\circ}{N_6}$ Murrayetin $\overset{\circ}{C}_{12}\overset{\circ}{H}_{12}\overset{\circ}{O_5}$. Murrayin C₁₈H₂₂O₁₀

Napellin $C_{31}H_{43}O_{11}N$ Naphtacen $C_{18}H_{12}$ Naphtalazin $C_{22}H_{16}N_2$ Naphtaleosin $C_{24}H_{10}O_5Br_4$ Naphtallovarin $C_{12}H_{10}O_5Br_4$ Naphtalin $C_{10}H_8$ Naphtalin $C_{10}H_8$ Naphtalin $C_{10}H_8$ Naphtalin $C_{10}H_8$ Naphtalisaure $C_{12}H_8O_4$ Naphtanthracen $C_{18}H_{12}$ Naphtanthrachinon $C_{18}H_{12}$ Naphtazarin $C_{10}H_0O_4$ Naphtazarin $C_{10}H_0O_4$ Naphtazin $C_{20}H_{12}N_2$ Naphtidiazin $C_{20}H_{12}N_2$ Naphtidiazin $C_{10}H_8N_2$ Naphtilbenzil $C_{24}H_{17}ON$ Naphtimidazol $C_{11}H_8N_2$ Naphtindon $C_{26}H_{16}ON_2$ Naphtindon $C_{26}H_{16}ON_2$ Naphtindon $C_{26}H_{16}ON_2$ Naphtindol $C_{12}H_9N$ Naphtindon $C_{26}H_{16}ON_2$ Naphtindol $C_{12}H_9N$ Naphtindolin $C_{28}H_{17}O_3$ Naphtiodiazol $C_{10}H_8N_2S$ Naphtisotiazol $C_{10}H_8N_2S$ Naphtisotiazol $C_{10}H_7N_3$ Naphtochinaldin $C_{14}H_{11}N$ Naphtochinaldin $C_{14}H_{11}N$ Naphtochinolin $C_{13}H_9N$ Naphtochinophenazin $C_{16}H_8O_2N_2$ Naphtochinophenazin $C_{16}H_8O_2N_2$

Naphtocumarin C₁₃H₈O₂ Naphtocumarsäure $C_{13}H_{10}O_3$ Naphtodiphenazin $C_{22}H_{12}N_4$ Naphtodiphedazhi C_{22} 114 Naphtoësäure $C_{11}H_8\tilde{O}_2$ Naphtoflavon $C_{19}H_{12}O_2$ Naphtofluoran $C_{28}H_{16}O_3$ Naphtofuran $C_{12}H_3O$ Naphtoglauconinsäure $C_{46}H_{35}O_6N_3$ Naphtol $C_{10}H_8O$ Naphtolbenzein $C_{54}H_{38}O_5$ Naphtolehizera $C_{18}H_{16}ON_2$ Naphtolfurazan $C_{10}H_{6}O_2N_2$ Naphtolphtaleïn $C_{28}H_{18}O_3$ $C_{28}H_{18}O_4$ Naphtolviolet C₁₈H₁₆ON₂ Naphtophenanthrazin $m \stackrel{C_{24}H_{14}N_2}{C_{16}H_{10}N_2}$ Naphtophenazin $C_{16}H_{10}N_2$ Naphtophenosafranin $C_{22}H_{17}N_4Cl$ Naphtopiaselenol $C_{10}H_6N_2S$ Naphtopiazthiol $C_{10}H_6N_2S$ Naphtopyron $C_{19}H_{12}O_2$ Naphtosafranol $C_{22}H_{14}O_2N_2$ Naphtostyril $C_{11}H_7ON$ Naphtostyrilchinon C₁₁H₅O₃N Naphtostyriltolazin $\begin{array}{c} C_{18}H_{11}ON_3 \\ Naphtoxalsäure & C_{10}H_8O_6 \\ Naphtoxdiazol & C_{10}H_6ON_2 \\ Naphtoxindol & C_{12}H_9ON \\ Naphtoxindol & C_{12}H_9ON \\ Naphttriazol & C_{10}H_7N_3 \\ Naphtursäure & C_{13}H_{11}O_3N \\ Naphtylblau & C_{38}H_{26}N_4 \\ Naphtylindigo & C_{24}H_{14}O_2N_2 \\ Naphtylroth & C_{36}H_{18}N_4 \\ Naphtylviolet & C_{33}H_{22}N_4 \\ Narcein & C_{23}H_{27}O_8N \\ Narceonsäure & C_{15}H_{15}O_8N \\ Narceonsäure & C_{21}H_{20}O_5 \\ Naringeni & C_{15}H_{16}O_5 \\ Naringin & C_{22}H_{26}O_{11} \\ Narkotin & C_{22}H_{26}O_{7N} \\ Nartinsäure & C_{20}H_{16}O_6N_2 \\ Nataloïn & C_{25}H_{28}O_{11} \\ \end{array}$ C18H11ON3 Nataloïn $C_{25}H_{28}O_{11}$ Naudinin $C_{19}H_{19}O_4N$ Neobornylamin C₁₀H₁₉N Neobornylamin $C_{10}H_1$ Nepalin $C_{17}H_{14}O_4$ Nephrin $C_{20}H_{32}$ Nephromin $C_{16}H_{12}O_6$ Nepodin $C_{18}H_{16}O_4$ Nerolin $C_{11}H_{10}O$ Nerolol $C_{10}H_{18}O$ Neuridin $C_6H_{12}N_2$ Neuridin $C_6H_{12}N_2$ Neurin $C_5 H_{13} \hat{O} N$ Neurostearinsäure $\mathrm{C_{18}H_{36}O_2}$ Neinostearinstate C₁₈I Nichin C₁₉H₂₄O₂N₂ Nigrosin C₃₀H₂₇N₃ Nikotidin C₁₀H₁₄N₂ Nikotin C₁₀H₁₄N₂ Nikotinsaure C₆H₅O₂N Nikotol C10H14ON

Nikoton C₁₀H₁₄ON₂

Nikotyrin $C_{10}H_{10}N_2$ Nipekotinsäure $C_6H_{11}O_2N$ Nithialin $C_{12}H_{16}ON_4S$ Nitrilodiacetonamin $C_7H_{14}ON_2$ Nononaphten C₉H₁₈ Nononaphtylalkohol C₉H₁₈O Nononaphtylen C₉H₁₆ Nopinon C₉H₁₄O Nopinsäure $C_{10}H_{16}O_3$ Norcaperatsäure $C_{21}H_{36}O_8$ Norcegonin $C_8H_{15}O_3N$ Norgranatenin $C_8H_{13}N$ Norguajakharzsäure $C_{18}H_{22}O_4$ Norhemipinsäure $C_8H_6O_8$ Norhydrotropidin $C_7H_{13}N$ Norisozuckersäure $C_8H_{10}O_8$ Normekoninessigsäure C10H8O6 Nornarkotin C₁₉H₁₇O₇N Noropianmethyläthersäure $C_9\hat{H}_8O_5$ Noropiansäure C₈H₆O₅ Noropiaisante $C_8H_6O_5N_2$ Noropiazon $C_8H_6O_3N_2$ Norpinsäure $C_9H_{12}O_4$ Norrangiformsäure $C_{20}H_{34}O_6$ Norrhizocarpsäure $C_{26}H_{18}O_7$ Northebenol $C_{16}H_{12}O_3^{26}$ Nortropinon $C_7H_{11}ON$ Noryohimbinsäure C₁₉H₂₀O₇N₂ Nucin C₁₀H₆O₃ Nucleĭn C₂₉H₄₉O₂₂N₉P₃ Nucleosin C₅H₆O₂N₂ Nupharin C₁₈H₂₄O₂N₂

 $egin{array}{l} egin{array}{l} egin{array}{l} O_{18} H_{34} O_2 \\ O_{2} O_{2} H_{12} \end{array}$ Oenanthodithioureïd $C_9H_{20}N_4S_2$ Oenanthodiureïd $C_9H_{20}O_2N_4$ Oenanthohexureïd $\begin{array}{c} C_{41}H_{84}O_6N_{12}\\ Oenanthol \ C_7H_{14}O\\ Oenantholanilin \ C_{13}H_{21}ON \end{array}$ Oenantholschwefligesäure C₇H₁₄O₃S Oenanthon C₁₃H₂₆O Oenanthotetrureïd $C_{25}H_{52}O_4N_8$ Oenanthothialdin C21H43NS2 Oenanthsäure C7H14O2 Oenanthyliden C7H12 Oenocarpol $C_{26}H_{42}O_3$ Oenocarpol $C_{36}H_{6}O_3$ Oenoglucin $C_{5}H_{6}O_3$ Oktaspartid $C_{32}H_{26}O_{17}N_8$ Oktaspartsäure $C_{32}H_{42}O_{25}N_8$ Oktokosan $C_{28}H_{58}$ Oktonaphtensäure C₈H₁₄O₉ Oktylerytrit $C_8H_{18}O_4$ Oleïnsäure $C_{18}H_{34}O_2$ Oleocutinsäure $C_{14}H_{20}O_4$ Olibanoresen C₁₄H₂₂O

Oliben $C_{10}H_{10}$ Olivil $C_{14}H_{18}O_5$ Omicholin $C_{24}H_{38}O_5N$ Qnocerin $C_{28}H_{44}O_2$ Onocol $C_{26}H_{44}O_2$ Onoketon $C_{26}H_{40}O_2$ Ononetin $C_{23}H_{22}O_6$ Ononin $C_{30}H_{44}O_{13}$ Onospin $C_{29}H_{34}O_{13}$ Opalisin $C_{150}H_{202}O_{68}N_{43}S_6P$ Opheliasäure $C_{13}H_{20}O_{10}$ Ophioxylin $C_{16}H_{12}O_6$ Opiammon $C_{20}H_{10}O_8N$ Opiamanthranilsäure $C_{17}H_{15}O_6N$ C17 H15 O6 N Opianharnstoff $C_{11}H_{12}O_5N_2$ Opianin $C_{22}H_{23}O_7N$ Opiansäure $C_{10}H_{10}O_5$ Opianschwefligesäure ${
m C_{10}H_{12}O_8S}$ Opianylessigsäure ${
m C_{12}H_{14}O_7}$ Opianylessignature $C_{12}H_{14}$ Opiaurin $C_{20}H_{18}O_6$ Opiazon $C_{10}H_{10}O_3N_2$ Opinsäure $C_9H_6O_5$ Orange III $C_{14}H_{15}O_3N_3S$ Orcacetein $C_{18}H_{16}O_4$ Orcacetophenon $C_9H_{10}O_3$ Orcein $C_{28}H_{24}O_7N_2$ Orcendialdehyd $C_9H_8O_4$ $\begin{array}{cccc} \text{Orcendial denya} & C_9\Pi_8C_4\\ \text{Orcin} & C_7H_8O_2\\ & & & C_8H_{10}O_2\\ \text{Orcinaurin} & C_{22}H_{18}O_5\\ \text{Orcindichroin} & C_{14}H_{11}O_3N\\ \text{Orcinphtale \"in} & C_{22}H_{16}O_5\\ \end{array}$ Orcinsäure $C_8H_8O_4$ Orcirufamin $C_{13}H_{12}O_2N_2$ Orcirufin $C_{14}H_{11}O_3N$ Orcylaldehyd $C_8H_8O_3$ Oreylaidenyd $C_8H_8C_3$ Oreoselon $C_{14}H_{10}O_3$ Oreosolin $C_{14}H_{12}O_4$ Orexin $C_{14}H_{12}N_2$ Ornithin $C_5H_{12}O_2N_2$ Ornithursäure $C_{19}H_{20}O_4N_2$ Orsellinsäure $C_8H_8O_4$ Orylsäure $C_1 H_2 O_3 N_4$ Orylsäure $C_1 H_2 O_3 N_4$ Oscin $C_2 H_{13} O_3 N$ Osmitesöl $C_{10} H_{18} O$ Osotriacol $C_2 H_3 N_3$ Osthin C₁₅H₁₆O₅ Ostruthin $C_{18}H_{30}O_3$ Osyritrin $C_{27}H_{30}O_{17}$ Oxaldibenzamsäure $C_{16}H_{12}O_6N_2$ Oxalessigsäure C4H4O5 Oxalohydroxamsäure $C_2H_4O_4N_2$ Oxalsäure $C_2H_4O_4$ Oxaluranilid $C_0H_9O_3N_3$ Oxalursäure C₃H₄O₄N₂

Oxalyldiaceton C₈H₁₀O₄ Oxalyldiureïd C₄H₆O₄N₄ Oxalylmalondiureïd $C_7H_4O_5N_4$ Oxamäthan $C_4H_7O_3N$ Oxamethylan C₃H₅O₃N Oxametnyian $C_3H_5O_3N_5$ Oxamid $C_2H_4O_2N_2$ Oxamidin $C_2H_6N_4$ Oxaminisäure $C_2H_3O_3N$ Oxanilinsäure $C_8H_7O_3N$ Oxatolylsäure $C_{16}H_{16}O_3$ Oxeton $C_7H_{12}O_2$ Oxetoncarbonsäure $C_8H_{12}O_4$ Oxetonearbonsaure U₈H₁₂:
Oximid C₂HO₂N
Oxindol C₈H₇ON
Oxoktenol C₈H₁₆O₂
Oxonsaure C₄H₅O₄N₃
Oxycannabin C₁₀H₁₀O₄N
— C₂₀H₂₀O₇N₂
Oxychinhydron C₁₂H₁₀O₆
Oxyconiceïn C₈H₁₅ON
Oxidiatornousing C H (Oxydiaterpensäure $C_8H_{14}O_6$ Oxydigitogensäure $C_{14}H_{20}O_4$ Oxygranatanin $C_8H_{15}ON$ Oxyhämoglobin $\begin{array}{c} C_{575} H_{852} O_{149} N_{149} S_2 Fe \\ - C_{712} H_{1130} O_{245} N_{214} S_2 Fe \\ Oxykomazin C_{10} H_7 O N_3 \\ Oxyleuceın C_8 H_{16} O_7 N_2 \\ Oxymercabid C_2 H_2 O_4 Hg_6 \end{array}$ Oxymesitendicarbonsäure C8H10O5 Oxyperezon C₁₅H₂₀O₄ Oxypeucedanin C₁₄H₂₂O₇ $C_{30}H_{26}O_{9}$ Oxyprotsulfonsäure $\begin{array}{cccc} & & & & & & & & & \\ & & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & & \\ & & & & \\ & & \\ & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & & \\ & & &$ Oxytropin $C_8H_{13}O_2N$ Oxywrightin $C_{12}H_{21}ON$ Ozobenzol $C_6H_6O_6$ Ozotoluol C7H8O6

Papaverinaminsäure $C_{16}H_{14}O_6N_2$ Papaverinsäure $C_{16}H_{13}O_7N$ Papaverolin $C_{16}H_{13}O_4N$ Paraäskuletin $C_9H_6O_4$ Parabansäure $C_3H_2O_3N_2$ Paracajeputen $C_{20}H_{32}$ Paracamphersaure C₁₀H₁₆O₄ Paracatol $C_{28}H_{40}O_2$ Parachloralose $C_8II_{11}O_6CI_3$ Parachloralosedischwefel-Parachioralosedischwerersäure $C_8H_{11}O_{12}Cl_3S_2$ Parachloralsäure $C_7H_9O_6Cl_3$ Paracholesterin $C_{26}H_{44}O$ Paracollidin $C_8H_{11}N$ Paraconiin $C_8H_{15}N$ Paracoten $C_{11}H_{18}$ $C_{12}H_{18}$ Paracotoïn $C_{12}H_8O_4$ Paracotoïnsäure C₁₂H₁₀O₅ Paracotol C₁₅H₂₄O Paracumarhydrin C₉H₈O₃ Paracumaron C₈H₈O Paracyan C_6N_6 Paradatiscetin $C_{15}H_{10}O_6$ Paradextran $C_6H_{10}O_5$ Paradextrair $C_6H_{10}O_5$ Paradiconiin $C_{16}H_{27}N$ Paradipimalsaure $C_6H_{10}O_5$ Paradipimsaure $C_6H_{10}O_4$ Paraffinsaure $C_{13}H_{26}O_5N$ — $C_{24}H_{58}O_2$ Paragalaktan $C_6H_{10}O_5$ Paraglobulin $C_{117}H_{132}O_{38}N_{30}S$ Paraglukonsäure $C_6H_{12}O_7$ Paraglykocholsäure $C_{26}H_{43}O_6N$ Parahydrocyanaldin C9H12N4 Parainden C_9H_8 $\begin{array}{c} Paraisodextran & C_6H_{10}O_5\\ Parakonsäure & C_5H_6O_4\\ Parakrylsäure & C_3H_4O_2 \end{array}$ Paraldehyd C₆H₁₂O₃ Paraldehydblau $\begin{array}{c} C_{31}H_{37}O_3N_3Cl_2\\ Paraldimin C_6H_{13}O_2N \end{array}$ Paraldol C₈H₁₆O₄ Paramenispermin $C_{18}H_{24}O_2N_2$ Paramilchsäure $C_3H_6O_3$ Paramorin $C_{12}H_8O_5$ Paramylum $C_6H_{10}O_5$ Paranthracen, $C_{28}H_{20}$ Paraorsellinsäure C.H.O. Parapektin C₃₂H₄₈O₃₂ Parapektinsäure C24H34O23 Parapepton $C_{144}H_{324}O_{43}N_{36}S$ Paraphytosterin $C_{24}H_{40}O$ — $C_{26}H_{44}O$ Parapropional dehyd $C_9H_{18}O_3$ Parapulegon C₁₀H₁₆O Parapyruvinsäure C₆H₈O₆ $\begin{array}{c} Pararabin \ C_{12}H_{22}O_{11} \\ Parareducin \ C_{8}H_{9}ON_{3} \\ Parasaccharinsäure \ C_{8}H_{12}O_{6} \end{array}$

Parasafranin C₂₀H₁₈N₄

Parasalicyl C₁₄H₁₀O₃
Parasantonid C₁₅H₁₈O₃
Parasantonsäure C₁₅Il₂₀O₄
Parasitosterin C₂₇H₄₄O
Parasorbinsäure C₆H₈O₂
Paratropin C₈H₁₅ON
Paraxanthin C₇H₈O₂N₄
Parazuckersäure C₆H₁₀O₈
Parallinsäure C₈H₁₀O₈ Parellinsäure C₁₉H₁₆O₈ Parvolin C9H13N Patellarsäure $C_{17}H_{20}O_{10}$ Patentblau $C_{27}H_{32}O_7N_2S_2$ Patschoulen $C_{15}H_{24}$ Patschoulicampher C₁₅H₂₆O $\begin{array}{l} {\rm Patschoulicampher} & {\rm C_{15}\,H_{20}} \\ {\rm Paucin} & {\rm C_{27}\,H_{39}\,O_5\,N_5} \\ {\rm Paytamin} & {\rm C_{21}\,H_{24}\,O\,N_2} \\ {\rm Paytin} & {\rm C_{21}\,H_{24}\,O\,N_2} \\ {\rm Pektin} & {\rm C_{0}\,H_{14}\,O_8} \\ & - & {\rm C_{28}\,H_{42}\,O_{24}} \\ & - & {\rm C_{32}\,H_{48}\,O_{32}} \\ {\rm Pektins\"{a}ure} & {\rm C_{14}\,H_{20}\,O_{13}} \\ & - & {\rm C_{16}\,H_{22}\,O_{15}} \\ {\rm Pektolaktins\"{a}ure} & {\rm C_{8}\,H_8\,O_6} \\ {\rm Pektosins\"{a}ure} & {\rm C_{15}\,H_{20}\,O_{15}} \\ \end{array}$ Pektosinsäure C₃₂H₄₆O₃₁ $\begin{array}{l} Pelagin \ C_{20}H_{17}O_7N \\ Pelargons\"{a}ure \ C_9H_{18}O_2 \\ Pelletierin \ C_8H_{18}ON \end{array}$ Pelletierin $C_8H_{18}ON$ Pellitorin $C_{18}H_{21}O_2N$ Pellotin $C_{18}H_{19}O_3N$ Pellotin $C_{18}H_{19}O_3N$ Pelosin $C_{18}H_{21}O_3N$ Pentaerythrit $C_5H_{12}O_4$ Pentaglykol $C_5H_{12}O_2$ Pentahirolin $C_{13}H_{15}N$ Pentakosan $C_{25}H_{52}$ Pentatriakontan $C_{35}H_{72}$ Pentinsaure $C_8H_{72}O_8$ Pentinsäure C₅H₆O₂ Pentinsaure $C_5H_6O_2$ Pepton $C_{72}H_{112}O_{22}N_{18}S$ Pereirin $C_{19}H_{24}ON_2$ Perezinon $C_{15}H_{18}O_3$ Perezon $C_{15}H_{20}O_3$ Periphlocin $C_{30}H_{48}O_{12}$ Periphlocin $C_{24}H_{34}O_5$ Perlatin $C_{21}H_{20}O_7$ Pernitrosocamphenon $C_{10}H_{14}O_{2}N_{2}$ Perseït $C_{7}H_{16}O_{7}$ Persulfocyanglykolsäure $C_6H_6O_4N_2S_3$ Persulfocyansäure C₂H₂N₂S₃ Pertusaren C₆₀H₁₀₀ Pertusarin C₃₀H₅₀O₂

 $\begin{array}{c} \text{Pertusars\"{a}ure} \ \ C_{24}H_{38}O_6 \\ \text{Peruresinotannol} \ \ C_{18}H_{20}O_5 \end{array}$ Petinin C₄H₁₁N Petrocin C₁₂H₈ Petrolen C₂₀H₃₂ Petroleumsäure C₁₁H₂₀O₂ Peucedanin C₁₆H₁₆O₄ $\begin{array}{ccc} & - & C_{15}^{16} H_{14}^{16} O_4^{4} \\ \text{Pharbitose} & C_{12} H_{22} O_{11} \\ \text{Phasäomannit} & C_{8} H_{12} O_{6} \end{array}$ Phasol C₁₅H₂₄O Phellandren $C_{10}H_{16}$ Phellonsäure $C_{22}H_{42}O_3$ Phellylalkohol $C_{17}H_{28}O_3$ $\begin{array}{ll} \text{Phenacete\"{in}} & C_{16}H_{12}O_2\\ \text{Phenacetin} & C_{10}H_{13}O_2\\ \text{Phenanthrapiazin} & C_{16}H_{10}\\ \text{N}_2 \end{array}$ Phenanthren $C_{14}H_{10}$ Phenanthrenchinon $C_{14}H_8O_2$ Phenanthridin C₁₃H₉N Phenanthridon C₁₃H₉ON Phenanthrolin $C_{12}H_8N_2$ Phenanthron $C_{14}H_{10}O$ Phenanthrophenazin $C_{20}H_{12}N_2$ $\begin{array}{c} C_{20}H_{12}H_2\\ Phenazin & C_{12}H_8N_2\\ Phenazon & C_{12}H_8N_2\\ Phenazoxin & C_{12}H_9ON\\ Phenetol & C_8H_{10}O\\ \end{array}$ Phenmiazin C₈H₆N₂ Phenmorpholin $\mathring{C}_8\mathring{H}_9ON$ Phenochinon $\mathring{C}_{18}H_{16}O_4$ Phenochinoxanthon $C_{16}H_9O_2N$ Phenocyanin C_6H_5ON Phenoglucin $C_6H_6O_3$ Phenoiazin $C_8H_6N_2$ Phenol C₆H₆O Phenoi C_6H_6ON Phenoiblau C_6H_5ON $C_{14}H_{14}ON_2$ Phenoiorallin $C_{20}H_{15}O_4$ Phenoidichro'in $C_{18}H_{15}O_3N$ Phenoiglykosid $C_{12}H_{16}O_6$ Phenolhemicampher $C_{22}H_{28}O_3$ $\begin{array}{c} \text{Phenolphtalol} \quad C_{20} \overline{H}_{18} \, \overline{O}_{3} \\ \text{Phenonaphtakridin} \quad C_{17} \, \overline{H}_{11} \, N \\ \text{Phenosafranin} \quad C_{18} \, \overline{H}_{16} \, O \, N_{4} \end{array}$ Phenose $C_6H_{12}O_6$ Phenothymochinon $C_{22}H_{24}O_{4}$ Phenothymochinon $C_{19}H_{18}O_{4}$ Phenotoluchinon $C_{16}H_{18}O_{4}$ Phenotripyridin $C_{15}H_{9}N_{8}$ Phenoxazin $C_{12}H_{9}ON$ Phenuvinsäure $C_{12}H_{19}O_{8}$ Phenyleinharnstoff $C_{3}H_{9}N_{3}S_{2}$ Phenyleinharnstoff $C_{7}H_{6}ON_{2}$ Phenylizindioxyweinsäure $C_{10}H_8O_5N_2$ Phenytetrose C10H12O4 Phenylthronsäure C₁₃H₁₀O₅

Phillyrin C₂₇H₈₄O₁₁ Philyrin $C_2H_{54}V_{11}$ Phlein $C_6H_{10}O_5$ Phlobaphen $C_{38}H_{34}V_{13}$ Phloramin $C_5H_7V_2$ Phlorein $C_{15}H_1V_7$ Phloretin $C_{15}H_1V_7$ Phloretinsaure $C_9H_{10}O_3$ Phloridzein $C_{21}H_{30}O_{13}N_2$ Phloridzin $C_{21}H_{24}O_{10}$ Phlorobromin $C_5O_2Br_8$ Phloroglucia $C_8H_4O_2$ Phloroglucid $C_{12}H_{10}^{\dagger}O_{5}$ Phloroglucin $C_{6}H_{6}O_{3}$ Phloroglucincarbonsäure C7H6O5 Phloroglucinphtalin C₂₀H₁₄O₇ Phloroglucinvanilleïn $C_{20}H_{18}O_8$ Phloroglucit $C_6H_{12}O_8$ Phlorol $C_8H_{10}O$ $\begin{array}{c} \text{Phloron} \ \ C_8H_8O_2 \\ \text{Phlorose} \ \ C_6H_{12}O_6 \\ \text{Phlorotanninroth} \ \ C_{14}H_8O_6 \end{array}$ Phoron C₉H₁₄O Phorondiessigsäure C₁₃H₂₂O₅ Phoronpyrrolin $C_{13}H_{19}N$ Phoronsäure $C_9H_{16}O_2$ $C_{11}H_{18}O_{5}$ Phosen Cocl₂
Phosgen Cocl₂ Phosphazobenzolpiperidid $C_{11}H_{15}N_{2}P$ Phosphinoanisol $C_7H_7O_3P$ Phosphinoanisol $C_6H_5O_2P$ Phosphinobenzol $C_{12}H_{10}P_2$ Phosphobenzol $C_{12}H_{10}P_2$ Phosphorbetain $C_5H_{11}O_2P$ Phosphororsellinsäure Phosphororseithisaure $C_{40}H_{36}O_{24}P_{4}$ Photoanethol $C_{10}H_{12}O$ Photosantonid $C_{17}H_{24}O_{4}$ Photosantonsäure $C_{15}H_{22}O_{5}$ Phrenosinhydrat $C_{41}H_{31}O_{9}N$ Phtalacen $C_{21}H_{16}$ Phtaladehydsäure $C_{21}H_{16}O_{2}$ Phtalaldehyd $C_{41}O_{42}$ Phtalallehyd $C_{41}O_{42}$ Phtalalkohol C₈H₁₀O₂ $\begin{array}{ll} \text{Phtalazin} & C_8H_6N_2\\ \text{Phtalazon} & C_8H_6ON_2\\ \text{Phtalgrün} & C_{24}H_{24}O_2N_2\\ \end{array}$ $C_{32}H_{35}O_2N_3$ $\begin{array}{c} Phtalhydroxamsäure \\ C_8H_3O_4N_2 \\ Phtalid C_8H_6O_2 \\ Phtalimid C_8H_5O_2N \\ Phtalimidin C_8H_7ON \end{array}$ l'htalons**ä**ure $\overset{\cdot}{C_9}\overset{\cdot}{H_6}\overset{\cdot}{O_5}$ Phtalophenon $\overset{\cdot}{C_{20}}\overset{\cdot}{H_{14}}\overset{\cdot}{O_2}$ Phtalsäure $C_8H_6\tilde{O}_4$ Phtalureïd $C_9H_6O_3N_2$ Phtalursäure $C_9H_8O_4N_2$ Phtalylasparaginsäure $C_{12}H_9O_6N$ Phtalylchlorid C₈H₄O₂Cl₂ Phtalyldiessigsäure C₁₂H₁₀O₆

Phtalylhomotaurin $C_{11}H_{11}O_5NS$ Phtalylpinakon $\mathrm{C_{16}H_{18}O_{4}}$ Phycit C₄H₁₀O₄ Phylläscitannin C₂₆H₂₄O₁₃ Phylligenin $C_{21}H_{24}O_6$ Phyllinsäure $C_{36}H_{64}O_8$ Phyllocyaninsäure $\mathrm{C}_{24}\mathrm{H}_{28}\mathrm{O}_4\mathrm{N}_2$ Phylloporphyrin $\mathrm{C}_{32}\mathrm{H}_{34}\mathrm{O}_2\mathrm{N}_4$ Phyllotannin C40 H40 O6 N6 Physalin $C_{14}H_{16}O_5$ Physeianin $C_{10}H_{12}O_4$ Physeiasäure $C_{16}H_{12}O_5$ Physeihydron $C_{18}H_{14}O_4$ Physiciol $C_7H_8O_8$ Physiciol $C_7H_9O_8$ — $C_9H_{10}O_4$ Physicion $C_{16}H_{12}O_5$ Physiconsäure $C_{16}H_3O_8$ Physiciol $C_{16}H_3O_8$ Physodeïn $C_{10}H_8O_6$ Physodin $C_{10}H_{10}O_7$ Physodsäure $C_{20}H_{22}O_6$ $\begin{array}{l} \text{Physol } C_{20} H_{24} O_5 \\ \text{Physostignin } C_{15} H_{21} O_2 N_3 \\ \text{Phytolaccatoxin } C_{24} H_{30} O_8 \end{array}$ Phytosterin C₂₆H₄AO Piaselenol C₆H₄N₂Se Piazthiol C₆H₄N₂S Picern $C_{14}H_{18}O_{7}$ Picen $C_{22}H_{14}$ Picenchinon $C_{22}H_{12}O_{2}$ Piceneikosihydrür $C_{32}H_{34}$ Picensäure $C_{21}H_{14}O_2$ Piceol $C_8H_8O_2$ Pikolin C_6H_7N Pikolinsäure C₆H₅O₂N Pikinsaure $C_6H_5O_2N$ Pikramid $C_6H_4O_6N_4$ Pikrinsaure $C_6H_3O_7N_3$ Pikroaconitin $C_{31}H_{43}O_{11}N$ Pikroerocin $C_{38}H_{66}O_{17}$ Pikroeyaminsaure $C_8H_5O_6N_5$ Pikroerythrin $C_{12}H_{16}O_7$ $\begin{array}{cccc} & \text{Pikroerythrm} & C_{12} \text{L}_{16} \\ & & \text{C}_{13} \text{H}_{16} \text{O}_{6} \\ & \text{Pikrolichenin} & C_{12} \text{H}_{20} \text{O}_{6} \\ & \text{Pikropodophyllin} & C_{15} \text{H}_{14} \text{O}_{6} \\ & & & \text{C}_{23} \text{H}_{24} \text{O}_{9} \\ & & & & \text{C}_{31} \text{H}_{24} \text{O}_{9} \\ \end{array}$ Pikropseudoaconitin Pikropseudoacomum $C_{34}H_{47}O_{11}N$ Pikrorocellin $C_{27}H_{39}O_5N_3$ Pikrotin $C_{15}H_{18}O_7$ Pikrotoxid $C_{15}H_{16}O_6$ Pikrotoxinin $C_{15}H_{16}O_6$ Pikrotoxinin $C_{15}H_{16}O_6$ Pikrotoxininsäure $C_{15}H_{18}O_7$ Pikrotoxininsäure $C_{15}H_{18}O_7$ Pikrotoxinsäure $C_{15}H_{18}O_7$ Pikrylvanillin $C_{14}H_9O_9N_3$ Pikryllvanillinsäure Pikrylivaininiaau $C_{14}H_9O_{10}N_3$ Pillijamin $C_{15}H_{24}ON_2$ Pillocarpen $C_{10}H_{16}$ Pilocarpidin $C_{10}H_{14}O_2N_2$ Pilocarpin $C_{11}H_{16}O_2N_2$ Pimelinsäure C7H12O4

 $\begin{array}{c} Pimpinellin \ C_{14}H_{12}O_{5} \\ Pinakolin \ C_{6}H_{12}O \end{array}$ Pinakolinalkohol C₆H₁₄O Pinakon C₆H₁₄O₂ Pinakonan $C_{20}H_{32}$ Pinakonen $C_{20}H_{30}$ Pinarin $C_{10}H_{14}O_3$ Pinastrinsäure $C_{19}H_{14}O_6$ Pinnaglobin Thinagioun $C_{724}H_{985}O_{210}N_{183}S_4Mn$ Pinnitansäure $C_7H_8O_4$ Pinocampheol $C_{10}H_{18}O$ Pinocamphon $C_{10}H_{16}O$ Pinocarveol $C_{10}H_{16}O$ Pinocarveol $C_{10}H_{16}O$ Pinocarveol $C_{10}H_{16}O$ Pinocarveol $C_{10}H_{16}O$ Pinocarveol $C_{10}H_{16}O$ Pinotaryon $C_{10}H_{18}O$ Pinol $C_{10}H_{18}O$ Pinolglykol $C_{10}H_{18}O_3$ Pinolhydrat $C_{10}H_{18}O_4$ Pinononsäure $C_9H_{14}O_3$ Pinononsaure $C_9H_{14}U_9$ Pinonsaure $C_{10}H_{16}O_3$ Pinophansaure $C_{10}H_{16}O_4$ Pinoresinol $C_{19}H_{20}O_6$ Pinoresinotannol $C_{32}H_{36}O_8$ Pinoylameisensaure $C_{10}H_{14}O_5$ Pinsäure $C_0H_{14}O_4$ Pinylamin $C_{10}H_{17}N$ Pipekolin $C_6H_{13}N$ Pipekolinsäure $C_6H_{11}O_2N$ Pipekolylfurylalkin $C_{11}H_{17}O_{2}N$ $\begin{array}{ll} \text{Piperazin} & \text{C_4H}_{10}\text{N}_2\\ \text{Piperhydrolakton} & \text{C_{12}H}_{12}\text{O}_4 \end{array}$ Piperhydronsäure C₁₂H₁₄O₄ Piperidin C₅H₁₁N Piperidin săure $C_4H_9O_2N$ Piperidoacetal $C_{11}H_{23}O_2N$ Piperidoacetal $C_{11}H_{23}O_2N$ Piperidoessigsăure $C_7H_{15}O_3N$ Piperidol C_8H_9ON Piperidylkaffein $C_{13}H_{19}O_2N_5$ Piperinsäure $C_{12}H_{10}O_4$ Piperinsäure $C_{12}H_{10}O_4$ Piperoketonsäure $C_{12}H_{12}O_5$ Piperonal $C_8H_6O_3$ Piperonalchlorid $C_8H_6O_2Cl_2$ Piperonalhydrocyanid $C_9H_7O_3N$ $C_{9}^{H_{1}}C_{3}^{H_{1}}$ Piperonalpaeonol $C_{17}H_{14}O_{5}$ Piperonanilid $C_{14}H_{11}O_{2}N$ Piperonylakrylsäure C₁₀H₈O₄ Piperonylalkohol C₈H₈O₈ Piperonylenbrenztraubensäure C₁₈H₁₀O₅ Piperonylenmalonsäure $C_{13}H_{10}O_6$ Piperonyloïn $C_{16}H_{12}O_6$ Piperonylsäure $C_8H_6O_4$ Piperovatin $C_{16}H_{21}O_2N$ Piperylen C₅H₈

Piperylenphtalamidsäure $C_{13}H_{15}O_{3}N$ Pipitzahoïnsäure C₁₅H₂₀O₃ Pipuzanohisaare $C_{15}H_{20}C_3$ Pirylen C_5H_6 Piscidin $C_{29}H_{24}O_8$ Piturin C_6H_8N Pleuricin $C_5H_5O_2N_2$ Plumeriasäure $C_{10}H_{10}O_5$ Podocarpinsäure $C_{17}H_{22}O_3$ Podophylloquercetin $C_{23}H_{16}O_{10}$ Podophyllotoxin C15H14O6 $\begin{array}{cccc} - & C_{23} H_{24}^{14} O_9 \\ \text{Podophyllsäure} & C_{15} H_{16} O_7 \\ - & C_{20} H_{24} O_9 \end{array}$ ${
m Polychloral} \,\, {
m C_2HOCl_3}$ Polychroït $C_{48}H_{60}O_{18}$ Polygonin $C_{21}H_{20}O_{10}$ Polymethakrylsäure $C_{82}H_{48}O_{16}$ Polyporsäüre $C_{18}H_{14}O_4$ Polysalicylid $C_7H_{14}O_2$ Polystichalbin C₂₂H₂₆O₉ Polystichalbin $C_{22}H_{24}O_9$ Polystichinin $C_{12}H_{24}O_9$ Polystichininin $C_{18}H_{22}O_8$ Polystichininin $C_{18}H_{22}O_9$ Polystichocitrin $C_{15}H_{22}O_9$ Polystichodlavin $C_{24}H_{30}O_{11}$ Polystichumsäure $C_{22}H_{24}O_9$ Polythiofurfurol $C_{10}H_3O_{28}$ Polythiofurfurol $C_{10}H_3O_{28}$ Polyundekylensäure $C_{11}H_{20}O_{2}$ Polyundekylensaure $C_{11}H_{20}$ Populin $C_{20}H_{22}O_8$ Porphyrin $C_{21}H_{25}O_2N_3$ Prehnitol $C_{10}H_{14}$ Prehnitsäure $C_{10}H_6O_8$ Prehnomalsäure $C_{11}H_{12}O_5$ Primulacampher $C_{11}H_{12}O_5$ Propargylalkohol C_3H_4O Propargylsäure C₃H₂O₂ Propenbiuret $C_5H_7O_2N_3$ Propheretin $C_{20}H_{30}O_4$ Propheteïn $C_{20}H_{30}O_4$ Prophetin $C_{28}H_{36}O_7$ Propiolsäure $C_3H_2O_2$ Propioin $C_6H_{12}O_2$ Propioncumarin $C_{10}H_8O_2$ Propionsäure C₈H₆O₉ $\begin{array}{l} Propylaldehydin \quad C_{12}H_{16}N_2 \\ Propylglykosid \quad C_9H_{18}O_6 \\ Protagon \quad C_{160}H_{308}O_{35}N_5P \end{array}$ Protalbumose $\begin{array}{c} - \frac{C_{108}H_{174}O_{34}N_{30}S}{C_{111}H_{176}O_{38}N_{30}S} \\ - \frac{C_{16}H_{28}O_{2}N_{9}}{C_{16}H_{31}O_{3}N_{9}} \\ - \frac{C_{16}H_{31}O_{3}N_{9}}{C_{16}H_{31}O_{3}N_{9}} \end{array}$ $\begin{array}{l} \text{Proteacin } C_{18}^{16} H_{31}^{3} O_{9}^{3} \\ \text{Proteasäure } C_{9} H_{10} O_{4} \\ \text{Proteïnochrom} C_{96} H_{119} O_{31} N_{21} S \\ \text{Proteïnsäure } C_{8} H_{14} O_{5} N_{2} \end{array}$ $\begin{array}{l} \text{Prothebenin} \quad C_{21}H_{25}O_{3}N \\ \text{Prothebenol} \quad C_{20}H_{20}O_{3} \\ \text{Protocetrarsäure} \quad C_{30}H_{22}O_{15} \\ \text{Protochinamicin} \quad C_{17}H_{20}O_{2}N_{2} \end{array}$ Protocotoïn C₁₆H₁₄Ö₆

 $\begin{array}{c} \text{Protocurarin} \quad C_{19}H_{25}O_2N \\ \text{Protocuridin} \quad C_{19}H_{21}O_3N \\ \text{Protocurin} \quad C_{20}H_{23}O_3N \\ \text{Protofibrinose} \end{array}$

 $\begin{array}{c} C_{102}H_{150}O_{31}N_{30}S\\ Protokatechusäure \quad C_7H_6O_4\\ Protophyscihydron \quad C_{15}H_{12}O_4\\ Protophyscion \quad C_{15}H_{10}O_5\\ Protopin \quad C_{20}H_{17}O_5N\\ Protoveratriid in \quad C_{26}H_{45}O_3N\\ Protoveratriid \quad C_{26}H_{45}O_3N\\ Protoveratriin \quad C_{25}H_{51}O_{11}N\\ Pseudoaconin \quad C_{25}H_{39}O_8N\\ Pseudoaconitsäure \quad C_6H_6O_5\\ Pseudoatropin \quad C_{17}H_{23}O_3N\\ Pseudobaptigenin \quad C_{17}H_{20}O_1\\ Pseudobaptisenin \quad C_{17}H_{30}O_{14}\\ Pseudobrenzterebinsäure \quad C_6H_{10}O_2\\ \end{array}$

 $\begin{array}{c} Pseudobutylen \ C_4H_8 \\ Pseudocamphersäure \\ C_{10}H_{16}O_4 \\ Pseudocampholaktonsäure \\ C_9H_{18}O_3 \end{array}$

Pseudocholoïdansäure

 $\begin{array}{c} C_{16}H_{24}O_7\\ C_{25}H_{36}O_{10}\\ Pseudocinchonin \ C_{19}H_{22}ON_2\\ Pseudocodeïn \ C_{18}H_{21}O_3N\\ Pseudoconhydrin \ C_8H_{17}ON\\ Pseudoconhydrin \ C_9H_{17}ON\\ Pseudocubebin \ C_{20}H_{20}O_6\\ Pseudocumarin \ C_7H_4O_2\\ Pseudocumenol \ C_9H_{12}O\\ Pseudocumidin \ C_9H_{13}N\\ Pseudocumidin \ C_9H_{12}O_7\\ Pseudocumidin \ C_{16}H_{12}ON\\ Pseudocinchin \ C_{16}H_{15}ON\\ Pseudoflavanilin \ C_{16}H_{13}ON\\ Pseudoflavanilin \ C_{16}H_{13}N\\ Pseudoflavolin \ C_{16}H_{19}N\\ Pseudoflavolin \ C_{16}H_{12}O_6\\ Pseudoharnsäure \ C_5H_6O_4N_4\\ Pseudohomoatropin \ C_{16}H_{21}O_3N\\ \end{array}$

 $\begin{array}{c} \operatorname{Pseudohomonarce\"{in}} & C_{24}H_{29}O_8N \\ \operatorname{Pseudoinulin} & C_{96}H_{162}O_{81} \\ \operatorname{Pseudojervin} & C_{29}H_{43}O_7N \\ \operatorname{Pseudojenon} & C_{13}H_{20}O \\ \operatorname{Pseudoicukanilin} & C_{19}H_{19}N_3 \\ \operatorname{Pseudoicukanilin} & C_{19}H_{19}N_3 \\ \operatorname{Pseudomave\'{in}} & C_{34}H_{18}N_4 \\ \operatorname{Pseudomave\'{in}} & C_{44}H_{18}N_4 \\ \operatorname{Pseudomave\'{in}} & C_{44}H_{18}N_4 \\ \end{array}$

Pseudomauvein C₂₄H₁₈N₄ Pseudomekonin C₁₀H₁₀O₄ Pseudomekoninsäure

 $\begin{array}{c} C_{10}H_{12}O_5\\ Pseudomorphin \quad C_{84}H_{36}O_6N_2\\ Pseudomarce in \quad C_{23}H_{27}U_8N\\ Pseudomichin \quad C_{20}H_{24}U_2N_2\\ Pseudopians äure \quad C_{10}H_{10}O_5\\ Pseudopelletier in \quad C_{9}H_{15}ON\\ Pseudophenanthren \quad C_{16}H_{12}\\ Pseudophenanthrolin C_{12}H_8N_2\\ Pseudophtalimidin \quad C_8H_7ON\\ \end{array}$

Pseudoricinolsäure C₁₈H₃₄O₃ Pseudosaccharinchlorid C₇H₄O₂NClS Pseudostyrylbydantoin

 $\begin{array}{c} Pseudostyrylhydanto \\ C_{11}H_{10}O_2N_2 \\ Pseudotagatose & C_6H_{12}O_6 \\ Pseudotheobromin & C_7H_8O_2N_4 \\ Pseudotriacetonalkamin \\ C_0H_{10}ON \end{array}$

 $\begin{array}{ccc} & - & C_8H_{15}ON \\ Pseudotropylamin & C_8H_{16}N_2 \\ Pseudoxanthin & C_4H_5ON_5 \end{array}$

 $\begin{array}{c} - & C_5 H_4 O_2 N_4 \\ Psoromsäure & C_{20} H_{14} O_9 \\ Psychosin & C_{23} H_{45} O_7 N \\ PsyllostearylalkoholC_{33} H_{68} O_2 \\ Pterocarpin & C_{20} H_{16} O_6 \\ Pulegenolid & C_{10} H_{14} O_2 \\ Pulegensäure & C_{10} H_{16} O_2 \\ Pulegol & C_{10} H_{18} O \\ Pulegon & C_{10} H_{16} O \\ Pulegonamin & C_{10} H_{19} N \\ - & C_{10} H_{19} O N \\ \end{array}$

 $\begin{array}{cccc} \text{Purin } C_5 H_4 N_4 \\ \text{Purpurin } C_{14} H_8 O_5 \\ \text{Purpurinamid } C_{14} H_9 O_4 N \\ \text{Purpurogallin } C_{18} H_{14} O_9 \\ & & & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & & \\ & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & & \\ & & & & \\ & & & & \\ & & & \\ & & & & \\ & & & & \\ & & & \\ & & & & \\ & & & \\ & & & & \\ &$

Purpursäure $C_8H_5O_6N_3$ Putrescin $C_4H_8N_2$ Pyogenin $C_{65}H_{128}O_{19}N_2$ Pyosin- $C_{57}H_{110}O_{15}N_2$ Pyrantin $C_{12}H_{13}O_{3}N$ Pyrazoi $C_4H_4N_2$ Pyrazol $C_8H_4N_2$ Pyrazolblau $C_{20}H_{18}O_2N_4$ Pyrazolblau $C_{20}H_{18}O_2N_4$ Pyrazolin $C_3H_6N_2$ Pyren $C_{16}H_{10}$ Pyrenolin $C_{19}H_{11}N$ Pyrensäure $C_{15}H_8O_5$ Pyridanthrilsäure $C_{15}H_{10}O_7N_2$ Pyridin C_5H_5N Pyridin C_5H_5N Pyridin phtalid $C_7H_7O_2N$ Pyridinntursäure $C_8H_8O_3N_2$

 $\begin{array}{lll} & Pyridinbeta \ddot{n} & C_7H_7O_2N \\ & Pyridinphtalid & C_7H_5O_2N \\ & Pyridinurs \ddot{a}ure & C_8H_8O_3N_2 \\ & Pyridochinon & C_5H_3O_2N \\ & Pyridochinon & C_24H_37O_9N \\ & Pyroaconitin & C_{81}H_{41}O_{10}N \\ & Pyroamars \ddot{a}ure & C_{16}H_{18}O_2 \\ & Pyrocamphens \ddot{a}ure & C_9H_{14}O_4 \\ & Pyrocholesterins \ddot{a}ure \end{array}$

 $C_{11}H_{16}O_{5}$

 $\begin{array}{cccc} & Pyrocinchons\"{a}ure & C_6H_6O_3\\ & & C_6H_8O_4\\ \\ & Pyrodextrin & C_{48}H_{74}O_{37}\\ & Pyrogallaurin & C_{19}H_{14}U_9\\ & Pyrogalle\"{n} & C_{18}H_{20}O_{10}N_6\\ \\ & Pyrogallochinon & C_{18}H_{14}O_9\\ & Pyrogallol & C_6H_6O_3\\ \\ & Pyrogallolbenze\"{n} & C_{38}H_{24}O_{11}\\ \\ & Pyrogallolcarbons\"{a}ure & Pyrogallolcarbons\"{a}ure & Pyrogallolcarbons\"{a}ure & Pyrogallolcarbons\"{a}ure & Pyrogallolcarbons\ddot{a}ure & Pyrogallolcarbons & Pyrogallolcarbons & Pyrogallolcarbons & Pyrogallolcarbons & Pyr$

 $C_7H_6O_5$ Pyrogallolvanillein $C_{30}H_{18}O_8$ Pyroglutaminsäure $C_5H_7O_3N$ Pyroglycerin $C_6H_{14}O_5$ Pyroglycid $C_6H_{12}O_4$ Pyrographitoxyd $C_4H_6O_5$

 $\begin{array}{c} \text{Pyroguajacin} \quad C_{13} H_{14}^{3} O_{2} \\ \qquad \qquad \qquad \qquad C_{19} H_{22} O_{3} \\ \text{Pyroinulin} \quad C_{6} H_{10} O_{5} \\ \text{Pyroisomalsäure} \quad C_{6} H_{8} O_{5} \\ \text{Pyrokoll} \quad C_{10} H_{8} O_{2} N_{2} \\ \text{Pyrokollodion} \quad C_{90} H_{38} O_{49} N_{12} \\ \text{Pyrokoman} \quad C_{5} H_{4} O_{2} \\ \text{Pyrokomenaminsäure} \end{array}$

 $\begin{array}{c} {}^{C}C_{5}H_{5}O_{2}N \\ Pyrokressol & C_{15}H_{14}O \\ Pyrolävulinsäure & C_{6}H_{8}O_{5} \\ Pyrolithofellinsäure & C_{20}H_{84}O_{3} \\ Pyromekazon & C_{5}H_{3}O_{8}N \\ Pyromekazonhydrat \end{array}$

 $C_5H_5O_4N$ Pyromekazonsäure $C_5H_5O_3N$ Pyromekonsäure $C_5H_4O_3$ Pyromellithsäure $C_{10}H_6O_8$ Pyromucinornithursäure

 $\begin{array}{c} C_{15}H_{16}O_6N_2\\ Pyron\ C_5H_4O_2\\ Pyronin\ C_{17}H_{21}ON_2Cl\\ Pyropapaverinsäure\\ C_{15}H_{13}O_5N \end{array}$

 $\begin{array}{c} Pyrophotosantonsäure \\ C_{14}H_{20}O_{2} \\ Pyrophtalon \ C_{14}H_{2}O_{2}N \\ Pyroschleimsäure \ C_{5}H_{4}O_{3} \\ Pyrotritarsäure \ C_{7}H_{5}O_{3} \\ Pyrousnetinsäure \ C_{12}H_{12}O_{5} \\ Pyroxanthin \ C_{15}H_{12}O_{5} \\ Pyrrodiazol \ C_{2}H_{3}N_{3} \\ Pyrrol \ C_{4}H_{5}N \\ Pyrrolalloxan \ C_{8}H_{7}O_{4}N_{3} \\ Pyrrolenphtalid \ C_{12}H_{7}O_{2}N \end{array}$

Pyrrolidin C₄H₉N
Pyrrolidin C₄H₇N
Pyrrolroth C₁₉H₁₄ON₂
Pyrrolylen C₄H₆
Pyrron C₉H₈ON₂
Pyrrylmesoxylamid

C₇H₆O₃N₂ Pyruvin C₆H₈O₄ Pyruvinureïd C₄H₄O₂N₂ Pyvuril C₅H₈O₃N₄

Quabaïnsäure $C_{80}H_{48}O_{13}$ Quassiasäure $C_{80}H_{38}O_{10}$

 $\begin{array}{c} {\rm Quassid} \ \, {\rm C_{89} H_{40} O_9} \\ {\rm Quassiin} \ \, {\rm C_{32} H_{42} O_{10}} \\ {\rm Quassol} \ \, {\rm C_{40} H_{70} O} \\ {\rm Quebrachin} \ \, {\rm C_{21} H_{26} O_3 N_2} \\ {\rm Quebrachogerbsäure} \\ {\rm C_{28} H_{24} O_{10}} \\ {\rm Quebrachol} \ \, {\rm C_{20} H_{34} O} \\ {\rm Quebrachol} \ \, {\rm C_{20} H_{34} O} \\ {\rm Quercetagetin} \ \, {\rm C_{27} H_{22} O_{13}} \\ {\rm Quercetin} \ \, {\rm C_{15} H_{10} O_7} \\ {\rm Quercetin} \ \, {\rm C_{15} H_{12} O_6} \\ {\rm Quercin} \ \, {\rm C_{6} H_{12} O_6} \\ {\rm Quercinsäure} \ \, {\rm C_{15} H_{12} O_9} \\ {\rm Quercinsaure} \ \, {\rm C_{15} H_{12} O_9} \\ {\rm Quercitan} \ \, {\rm C_{6} H_{12} O_5} \\ {\rm Quercitan} \ \, {\rm C_{6} H_{12} O_5} \\ {\rm Quercitan} \ \, {\rm C_{6} H_{12} O_5} \\ {\rm Quercitan} \ \, {\rm C_{6} H_{12} O_5} \\ {\rm Quercitan} \ \, {\rm C_{21} H_{22} O_{12}} \\ {\rm Quercitan} \ \, {\rm C_{21} H_{22} O_{12}} \\ {\rm Querlakton} \ \, {\rm C_{5} H_{0} O_{2}} \\ {\rm Quittenschleim} \ \, {\rm C_{18} H_{24} O_{14}} \\ {\rm Quittenschleim} \ \, {\rm C_{18} H_{24} O_{14}} \\ {\rm Quittenschleim} \ \, {\rm C_{18} H_{24} O_{14}} \\ {\rm Quittenschleim} \ \, {\rm C_{18} H_{24} O_{14}} \\ {\rm Quittenschleim} \ \, {\rm C_{18} H_{24} O_{14}} \\ {\rm Quittenschleim} \ \, {\rm C_{18} H_{24} O_{14}} \\ {\rm Quittenschleim} \ \, {\rm C_{18} H_{24} O_{14}} \\ {\rm Quittenschleim} \ \, {\rm C_{18} H_{24} O_{14}} \\ {\rm Quittenschleim} \ \, {\rm C_{18} H_{24} O_{14}} \\ {\rm Quittenschleim} \ \, {\rm C_{18} H_{24} O_{14}} \\ {\rm Quittenschleim} \ \, {\rm C_{18} H_{24} O_{14}} \\ {\rm Quittenschleim} \ \, {\rm C_{18} H_{24} O_{14}} \\ {\rm Quercitan} \ \, {\rm C_{18} H_{24} O_{14}} \\ {\rm Quercitan} \ \, {\rm C_{18} H_{24} O_{14}} \\ {\rm Quercitan} \ \, {\rm C_{18} H_{24} O_{14}} \\ {\rm Quercitan} \ \, {\rm C_{18} H_{24} O_{14}} \\ {\rm Quercitan} \ \, {\rm C_{18} H_{24} O_{14}} \\ {\rm Quercitan} \ \, {\rm C_{18} H_{24} O_{14}} \\ {\rm Quercitan} \ \, {\rm C_{18} H_{24} O_{14}} \\ {\rm Quercitan} \ \, {\rm C_{18} H_{24} O_{14}} \\ {\rm Quercitan} \ \, {\rm C_{18} H_{24} O_{14}} \\ {\rm Quercitan} \ \, {\rm C_{18} H_{24} O_{14}} \\ {\rm Quercitan} \ \, {\rm C_{18} H_{24} O_{14}} \\ {\rm Quercitan} \ \, {\rm C_{18} H_{24} O_{1$

Raffinose $C_9H_{16}O_8$ $- C_{18}H_{32}O_{18}$ Ramalsäure $C_{17}H_{18}O_7$ Randiaroth $C_{38}H_{34}O_{20}$ Randiasäure $C_{11}H_{18}O_3$ Rapiformsäure $C_{11}H_{18}O_3$ $- C_{21}H_{36}O_6$ Raphanol $C_{29}H_{58}O_4$ Rapinsäure $C_{18}H_{34}O_2$ Ratanhiaroth $C_{20}H_{16}O_8$ $- C_{28}H_{22}O_{11}$ Ratanhiaroth $C_{20}H_{16}O_8$ $- C_{28}H_{22}O_{11}$ Ratanhiaronform $C_{41}H_{34}O_{15}$ Ratanhiaronform $C_{41}H_{34}O_{15}$ Ratanhiaronform $C_{41}H_{34}O_7$ Reducin $C_6H_{11}O_4N_3$ Regiansäure $C_6H_6O_7$ Resaceteïn $C_{16}H_{12}O_4$ Resacetophenon $C_8H_8O_3$ Resacetsäure $C_{18}H_{22}O_5$ Resaurin $C_{19}H_{14}O_6$ Resazorin $C_{12}H_7O_4N$ Resazorin $C_{12}H_7O_4N$ Resodiacetophenon $C_{10}H_{10}O_4$ Resodicarbonsäure $C_8H_8O_7$ Resorcinetonnol $C_{18}H_{20}O_4$ Resorcinetonnol $C_{18}H_{20}O_4$ Resorcinetonnol $C_{18}H_{20}O_4$ Resorcinetonnol $C_{18}H_{20}O_4$ Resorcinetonnol $C_{19}H_{10}O_4$ Resorcinetonnol $C_{18}H_{20}O_7$ Resorcinènnom $C_{12}H_{10}O_4$ Resorcinènnom $C_{12}H_{10}O_4$ Resorcinènnom $C_{12}H_{10}O_4$ Resorcinènnom $C_{12}H_{10}O_4$ Resorcinhinon $C_{12}H_{10}O_4$ Resorcinhinon $C_{12}H_{10}O_4$ Resorcinhinon $C_{12}H_{10}O_4$ Resorcinhinon $C_{12}H_{10}O_4$ Resorcinhinon $C_{12}H_{10}O_4$ Resorcinhinon $C_{12}H_{10}O_4$ Resorcinhinon $C_{12}H_{10}O_4$ Resorcinhinon $C_{12}H_{10}O_4$

Retamin C₁₅H₂₆ON₂

Reten C₁₈H₁₈

Retenchinon C₁₈H₁₆O₂ Retendiphensäure C₁₈H₁₈O₄ Retenfluoren C₁₇H₁₈ Retensäure $C_{18}H_{18}O_2$ Retinindol C_8H_8ON Reuniol C₁₀H₂₀O $\begin{array}{cccc} Rhamnazin & C_{17}H_{14}O_{7} \\ Rhamnegin & C_{48}H_{66}O_{29} \\ Rhamnetin & C_{18}H_{12}O_{7} \end{array}$ Rhamnit C6H14O5 Rhamnoheptonsäure C₈H₁₆O₈ Rhamnoheptose C₈H₁₆O₇ Rhamnohexit $C_7H_{16}O_6$ Rhamnohexonsäure $C_7H_{14}O_7$ Rhamnohexose $C_7H_{14}O_6$ Rhamnonsäure $C_6H_{12}O_6$ Rhamnooktonsäure $C_9H_{18}O_9$ Rhamnosaccharin $C_8H_{10}O_5$ Rhamnosamin C₆H₁₃O₄N Rhamnose C₆H₁₄O₆ Rheïn C₁₅H₁₀O₆ Rheumgerbsäure C26 H26 O14 Rheumsäure $C_{29}H_{16}U_{9}$ Rhinacanthin $C_{14}H_{18}U_{4}$ Rhinanthin $C_{29}H_{52}Q_{20}$ Rhizocarpinsäure $C_{38}H_{26}U_{9}$ Rhizocarpsäure $C_{98}H_{20}U_{6}$ $C_{28}H_{22}O_7$ Rhizoninsäure $C_{10}H_{12}O_4$ Rhizonsäure $C_{19}H_{20}O_7$ Rhizopogonsäure $C_{14}H_{18}O_2$ Rhodanglykobrenzkatechin C₉H₇O₃NS Rhodanglykopyrogallol C₉H₇O₄NS Rhodaninroth C₉H₅O₃N₃S₅ Rhodaminsäure C₃H₃ONS₂ $\begin{array}{c} {\rm Rhodanuressigs\"{a}ure} \\ {\rm C_9H_9O_6N_3S_3} \\ {\rm Rhodinal} \ \ {\rm C_{10}H_{16}O} \\ {\rm Rhodinal} \ \ {\rm C_{10}H_{16}O} \\ {\rm Rhodinal} \ \ {\rm C_{10}H_{20}O} \\ {\rm Rhodizons\"{a}ure} \ \ {\rm C_{6}H_2O_6} \\ {\rm Rhodoxantin} \ \ {\rm C_{14}H_{14}O_8} \\ {\rm Rhodoxantin} \ \ {\rm C_{14}H_{14}O_8} \\ {\rm Rhoeadini} \ \ {\rm C_{21}H_{21}O_6N} \\ {\rm Rhoeadein} \ \ {\rm C_{21}H_{21}O_6N} \\ {\rm Rhoeadeoretin} \ \ \ {\rm C_{32}H_{62}O_{16}} \\ {\rm Rhoeadeoretin} \ \ \ {\rm C_{32}H_{62}O_{16}} \\ {\rm Ribons\~{a}ure} \ \ {\rm C_{5}H_{10}O_6} \\ {\rm Ribons\~{a}ure} \ \ {\rm C_{5}H_{10}O_6} \\ {\rm Ribons\~{a}ure} \ \ {\rm C_{5}H_{10}O_6} \\ {\rm Ribons\~{a}ure} \ \ {\rm C_{5}H_{10}O_6} \\ {\rm Ribons\~{a}ure} \ \ {\rm C_{5}H_{10}O_6} \\ {\rm Ribose} \ \ {\rm C_{5}H_{10}O_6} \\ \end{array}$ Rhodanuressigsäure Ribonsatre $C_5H_{10}O_5$ Ribose $C_5H_{10}O_5$ Ricidin $C_{12}H_{13}O_3N_3$ Ricinelaïdinsäure $C_{18}H_{34}O_3$ Ricinin $C_{17}H_{18}O_4N_4$ Ricininsäure $C_{18}H_{34}O_3$ Ricinolsäure $C_{18}H_{34}O_3$ Ricinsäure $C_{18}H_{34}O_3$ Ricinstearolsäure $C_{18}H_{32}O_3$ Ristinstearoxylsäure C₁₈ H₃₂O₄ Robinin $C_{25}H_{30}O_{16}$ Roccellsäure $C_{17}H_{32}O_4$ Roccellaminsäure $C_{17}H_{33}O_3N$ Rocellinin $C_{18}H_{1:6}O_7$ Rohrzucker $C_{12}H_{22}O_{11}$

Rosanilin C20H21ON3

 $\begin{array}{c} {\rm Roseol} \ \ C_{10} H_{18} O \\ {\rm Rosindon} \ \ C_{22} H_{14} O N_2 \\ {\rm Rosindons\"{a}ure} \ \ C_{22} II_{14} O_3 N_2 \end{array}$ Rosindulin C₂₂H₁₅N₃ Rosindulon C₂₂H₁₄ON₂ Rosol C24H20O4 Rosolsäure C20H16O3 Rothsäure $C_{14}H_{12}O_7$ Rottlerin $C_{33}H_{30}O_9$ Rottleron $C_{29}H_{26}O_6$ Rubamidid $C_8H_9ON_3$ $\begin{array}{lll} {\rm Rubazons\"{a}ure} & {\rm G}_{20}^{\rm H}_{17} {\rm O}_2 {\rm N}_5 \\ {\rm C}_{30}^{\rm H}_{21} {\rm O}_2 {\rm N}_5 \\ {\rm Hubbadin} & {\rm C}_{44}^{\rm H}_{32} {\rm O}_8 {\rm S}_4 \\ {\rm Rubeanwasserstoff} & {\rm C}_2^{\rm H}_4 {\rm N}_2 {\rm S}_2 \\ \end{array}$ Ruberythrinsäure C26H28O14 Rubiadin $C_{15}H_{10}O_4$ Rubiadinglykosid $C_{21}H_{20}O_9$ Rubidin $C_{11}H_{17}N$ Rubidiscin $C_{24}H_{26}N_4$ Rubigervin $C_{28}H_{43}O_2N$ Rubrophlobaphen C35 H34O17 Ruficarmin C₁₆H₁₂O₆ Ruficoccin C₁₆H₁₀O₆ Rufigallussäure C₁₄H₈O₈ Rufimorinsäure C₁₆H₁₄O₉ Rufin C₂₁H₂₀O₈ Rufiopin C₁₄H₈O₆ Rufohydroellagsäure $C_{14}H_{10}O_{6}$ Rufol $C_{14}H_{10}O_{2}$ Rumicin $C_{15}H_{10}O_{4}$ Rutin $C_{27}H_{32}O_{16}$ Rutylen $C_{10}H_{18}$ Rutyliden C11 H20

Sabadin C₂₉H₅₁O₈N Sabinol C₁₀H₁₆O Saccharonsäure C₆H₁₀O₇ Saccharose C12H22O11 Saccharumsäure C14H18O11 Sacculmin $C_{44}H_{38}O_{15}$ Sacculminsäure $C_{11}H_{10}O_4$ Sactuminsaure C₁₁H₁₀
Saffungelb C₂₄H₃₀O₁₅
Safraninon C₁₈H₁₃ON₃
Safranol C₁₈H₁₂O₂N₂
Safranon C₁₈H₁₂ON₂
Safren C₁₀H₁₆O₂
Safren C₁₀H₁₀O₂
Safren C₁₀H₁₀O₂ Sagaresinotannol C24 H28 O5 Salhydranilid C₁₃H₁₁ON Salicin C₁₃H₁₈O₇ Salicylaldoxim C₇H₇O₂N Salicylmilchsäure C9H10O4 $\begin{array}{l} {\rm Salicylorcin}\\ {\rm Salicylo}\\ {\rm Salicyls}\\ {\rm Salicyls}\\ {\rm Salicyls}\\ {\rm C}_7\\ {\rm H}_6\\ {\rm O}_3\\ {\rm Salicyls}\\ {\rm C}_7\\ {\rm H}_6\\ {\rm O}_6\\ {\rm S} \end{array}$ Saligenin C7H8O2 Saligeninglykolsäure C9H10O4 Saliretazin C₃₅H₃₃O₅N

 $\begin{array}{ccc} \text{Saliretin} & C_{14}H_{14}O_3 \\ & - & C_{23}H_{26}O_5 \\ \text{Salireton} & C_{14}H_{12}O_3 \\ \text{Salitannol} & C_{14}H_{10}O_7 \\ \end{array}$ Salmin C₁₆H₃₁O₃N₉ C30 H57 O6 N17 Salmonucleïnsäure $\begin{array}{c} {\rm Salmonucleinsaure} \\ {\rm C}_{40}{\rm H}_{54}{\rm O}_{27}{\rm N}_{14}{\rm P}_{4} \\ {\rm Salol} \ {\rm C}_{13}{\rm H}_{10}{\rm O}_{3} \\ {\rm Salviol} \ {\rm C}_{10}{\rm H}_{18}{\rm O} \\ {\rm Salylsäure} \ {\rm C}_{14}{\rm H}_{14}{\rm O}_{5} \\ {\rm -----} \ {\rm C}_{21}{\rm H}_{22}{\rm O}_{8} \\ {\rm Samandarin} \ {\rm C}_{34}{\rm H}_{60}{\rm O}_{5}{\rm N}_{2} \\ {\rm Sandarakolsäure} \ {\rm C}_{45}{\rm H}_{66}{\rm O}_{7}. \end{array}$ Santal C₈H₆O₃ Santalal $C_{15}H_{24}O$ Santalin $C_{15}H_{14}O_{5}$ $C_{17}H_{16}O_{6}$ $\begin{array}{c} \text{Santalol} \quad C_{15} H_{18} O_{5} \\ \text{Santalsäure} \quad C_{15} H_{14} O_{5} \\ \text{Santinsäure} \quad C_{15} H_{16} O_{2} \\ \text{Santogenin} \quad C_{15} H_{18} O_{4} \end{array}$ Santonid $C_{15}H_{18}U_{3}$ Santonigesäure $C_{15}H_{20}U_{3}$ Santonin C₁₅H₁₈O₃ Santoninsäure C₁₅H₂₀O₄ Santon C₁₅H₂₆ Saponin C₃₂H₅₂O₁₇ Saponin $C_{32}H_{52}O_{17}$ Saporubin $C_{72}H_{112}O_{40}$ Sapotin $C_{32}H_{52}O_{20}$ Sapotiretin $C_{17}H_{32}O_{10}$ Sappanin $C_{12}H_{16}O_4$ Sarbadinin $C_{27}H_{45}O_8N$ Sardinin $C_{17}H_{11}O_2N$ Sarkin $C_5H_4ON_4$ Sarkonelunipsuura Sarkomelaninsäure $- \frac{C_{68}H_{64}O_{26}N_{10}S}{C_{68}H_{67}O_{26}N_{13}S} \\ Sarkosin \ C_{3}H_{7}O_{2}N$ Sarkosinanhydrid C6H10O2N2 Sarkosinharnsäure C₈H₉O₄N₅ Sarkosinmesoharnsäure $C_8H_8O_5N_4$ Sarkosinsäure $C_3H_7O_2N_1$ Sativinsäure C₁₈H₃₆O₆ Scatol C9H9N Scharlachsäure C₄H₆ON₄S₆ Schleimsäure C₆H₁₀O₈ Schwefelkohlenstoff US2 Scombrin C₃₀H₈₀O₆N₁₈
Scoparin C₂₀H₂₀O₁₀
Scopolamin C₁₇H₂₁O₄N
Scopoletin C₁₀H₈O₄
Scopoligenin C₇H₁₁O₂N
Scopolin C₈H₁₃O₉N C24H30O15 Scyllit C6H12O6 $\begin{array}{c} \text{Seymnol} & \text{C_{27}^{12}H_{46}O_5$} \\ - & \text{$C_{29}^{12}$H_{50}O_5$} \end{array}$

Sebacin C₁₀H₁₈

Sebacin C₁₆H₃₀O₈ Sebacinsäure $C_{10}H_{18}O_4$ Sebaminsäure $C_{10}H_{19}O_3N$ Sedanolid C₁₂H₁₈O₂ Sedanolsäure C₁₂H₂₀O₃ Sedanonsäure C₁₂H₁₈O₃ $\begin{array}{ccc} Sekisanin & C_{34}H_{36}O_9N_2\\ Selenaldin & C_6H_{13}NSe_2 \end{array}$ Selenanthren C₁₂H₈Se₂ Selenophtalid C₈H₆OSe Selenoxen C₆H₈Se Semicarbazid CH5ON3 Semiglutin C₅₅H₈₅O₂₂N₁₇ Seminose C₆H₁₂O₆ Senecionin $C_{18}H_{26}O_6N$ Senegin $C_{20}H_{32}O_7$ Senfejii $O_{30}H_{32}O_{7}$ -- $C_{32}H_{52}O_{17}$ Senfölessigsäure $C_{3}H_{3}O_{2}NS$ Senfölsulfonsäure $C_{4}H_{7}O_{3}NS_{2}$ Septentrionalin $C_{31}H_{48}O_{9}N_{2}$ Sericin C₁₅H₂₅O₈N₅ Sericinsäure $\overset{1}{C}_{15}\overset{3}{H}_{30}\overset{3}{O_7}\overset{3}{N_4}$ Serin $\overset{1}{C_3}\overset{1}{H_7}\overset{3}{O_3}\overset{3}{N}$ Serumalbumin $\begin{array}{c} C_{78}H_{122}O_{24}N_{20}S\\ C_{225}H_{360}O_{70}N_{58}S \end{array}$ Sesamin C₁₈H₁₈O₅ $-\frac{C_{13}H_{14}O_6}{C_{22}H_{24}O_6}$ Sesquoien $C_{13}H_{10}$ Shikiminsäure $C_7H_{10}O_5$ Shikimipikrin C₇H₁₀O₃ $\begin{array}{c} \text{Shikimol} \quad C_{10}H_{18} \\ - \quad C_{10}H_{10}O_2 \\ \text{Siaresitannol} \quad C_{12}H_{14}O_3 \\ \text{Silicoessigsaure} \quad CH_4O_2\text{Si} \end{array}$ Silicoheptylkohlensäure $C_7H_{16}O_3Si$ Silicononylalkohol C₈H₂₀OSi Silicononylchlorid C₈H₁₉ClSi $\begin{array}{c} \text{Sinalbin} \ \ C_{30} H_{42} O_{15} N_2 S_2 \\ \text{Sinalbinsent\"ol} \ \ C_8 H_7 O N S \end{array}$ Sinamin C4H6N2 Sinapin $C_{16}H_{25}O_6N$ Sinapinsäure $C_{11}H_{12}O_5$ $\begin{array}{l} \text{Sinapolin } C_7 H_{12} O N_2 \\ \text{Sinistrin } C_8 H_{10} O_5 \\ - C_{12} H_{20} O_{10} \\ \text{Sinkalin } C_5 H_{15} O_2 N \\ \end{array}$ Siperin $C_{18}H_{19}O_3N$ Sitosten $C_{27}H_{44}$ Sitosterin $C_{27}H_{44}O$ Skatolearbonsäure $C_{10}H_9O_2N$ Skatolessigsäure $C_{11}H_{11}O_2N$ Skimmen C₁₀H₁₆ Skimmetin C₉H₆O₃ Skimmin C₁₅H₁₆O₈ Smilacin C₁₈H₃₀O₆ Sobreritrit C₁₀H₂₀O₄ Sobrerol C₁₀H₁₈O₂

Socaloin C34H38O15

 $\begin{array}{c} \text{Socotraloin} \quad C_{16}H_{16}O_7 \\ \text{Solanein} \quad C_{59}H_{93}O_{18}N \\ \text{Solanicin} \quad C_{26}H_{99}ON \\ \text{Solanidin} \quad C_{40}H_{61}O_2N \\ \text{Solanin} \quad C_{52}H_{93}O_{18}N \\ \text{Solorinsaure} \quad C_{15}H_{14}O_5 \\ \text{Sorbin} \quad C_{15}H_{14}O_5 \end{array}$ Sorbin C₆H₁₂O₆ Sorbinose C₆H₁₂O₆ Sorbinsäure C, H, O, Sorbit C6H14O6 Sorbosamin C₆H₁₃O₄N Sorbose $C_6H_{12}O_6$ Sordidasäure $C_9H_{10}O_4$ $\begin{array}{cccc} \text{Sortidas} & \text{C}_{9}\text{H}_{10}\text{O}_{8}\\ \text{Sortidin} & \text{C}_{19}\text{H}_{10}\text{O}_{8}\\ & - & \text{C}_{89}\text{H}_{90}\text{O}_{24}\\ \text{Sparte\"in} & \text{C}_{15}\text{H}_{26}\text{N}_{2}\\ \text{Spargulin} & \text{C}_{5}\text{H}_{7}\text{O}_{2} \end{array}$ Stachyose C₁₈H₃₂O₁₆ Stachyrin C₇H₁₃O₂N Stärke C6H10O5 $- C_{18}H_{32}O_{16}$ $C_{24}H_{40}O_{2}$ Stärkeschwefelsäure C8H14O10S Staphisagrin C22H33O5N Stearinsäure C₁₈H₃₆O₂ Stearocutinsäure C₂₈H₄₈O₄ Stearolsäure C₁₈H₃₂O₂ Stearon C₃₅H₇₀O Stearoxylsäure C18H32O4 Stercorin C27H48O Stereocaulsäure C9H10O3 Stilbazol C₁₃H₁₁N Stilbazolin C₁₃H₁₉N Stilben C₁₄H₁₂ $\begin{array}{c} \text{Storesin} \quad C_{38}H_{58}O_3 \\ \text{Storesinol} \quad C_{12}H_{19}O \\ \text{Strophantidin} \quad C_{19}H_{28}O_4 \end{array}$ $C_{21}H_{24}O_3N_2$ Strychnolin C21 H26 N Stryphninsäure C4H3O2N5 Sturin C6H11ON3 $\begin{array}{c} -C_{36}H_{69}O_7N_{19} \\ -C_{36}H_{69}O_7N_{19} \\ \text{Stycerin} \ \ C_9H_{12}O_3 \\ \text{Styphninsäure} \ \ C_8H_3O_8N_3 \end{array}$ Styracin C₁₈H₁₆O₂ Styrogallol C₁₆H₈O₅ Styrol C₈H₈ Styrolenalkohol C₈H₁₀O₂ Styrolnitrosit C8H8O3N2 Styron C9H10O Styryläther C₁₈H₁₈O Styrylharnstoff C9H10ON2 Styrylhydantoin C₁₁H₁₀O₂N₂

Styrylhydantoïnsäure $C_{11}H_{12}O_3N_2$ Suberaminsäure $C_8H_{15}O_3N$ -Suberan C7H14 Suberanilsäure $C_{14}H_{19}O_3N$ Suberconsäure $C_8H_{12}O_4$ Suberencarbonsaure C8H12O2 Suberkolsäure C8H10O4 Suberocarbonsäure C₉H₁₄O₆ Suberomalsäure C₈H₁₄O₅ Suberon CH12O Suberonpinakon C₁₄H₂₆O₂ Suberonsäure $C_8H_{14}O_2$ Suberoweinsäure $C_8H_{14}O_6$ Suberylalkohol C₇H₁₄O Suberylamin C₇H₁₅N Suberylchlorid C₇H₁₃Cl Suberylchlorid C₇H₁₃Cl Suberyloxyessigsäure $C_8H_{14}O_3$ Succinoabietinol C40H60O2 Succinoabietinsäure $C_{80}H_{120}O_{5}$ Succinoresinol C₁₂H₂₀O Succinosilvinsäure C₂₄H₃₆O₂ Succinursaure C₅H₈O₄N₂ Succinyldiharnstoff Succisteren $C_{15}H_{10}$ Sulfisatanigesäure $C_8H_7O_4NS$ Sulfocamphersäure $C_8H_1O_5S$ $\begin{array}{l} Snlfocinchen \ C_{19}H_{20}O_3N_2^*S \\ Sulfocodid \ C_{18}H_{21}O_5NS \\ Sulfohydrochinon \ C_{12}H_{10}O_4S_2 \end{array}$ $-\frac{C_{12}H_{12}O_4S}{Sulfoisatinsäure}$ $C_8H_7O_6NS$ Sulfonal C7H16O4S2 $\begin{array}{l} \text{Sulfophloretins\"{a}ure} & C_9H_{10}O_6S\\ \text{Sulfopiperidid} & C_{10}H_{20}O_2N_2S\\ \text{Sulfuvinurs\"{a}ure} & C_4H_4O_2N_2S \end{array}$ Sycocerylalkohol C₁₈H₃₀O Sylvan C₅H₆O Sylvancarbonessigsäure $C_8H_8O_5$ Sylvanessigsäure C₇H₈O₃ $\begin{array}{l} \mathrm{Sylvanessigs\"{a}ure} \quad \mathrm{C_7H_8O_3} \\ \mathrm{Sylvestren} \quad \mathrm{C_{10}H_{16}} \\ \mathrm{Sylvins\"{a}ure} \quad \mathrm{C_{20}H_{30}O_2} \\ \mathrm{Synanthren} \quad \mathrm{C_{14}H_{10}} \\ \mathrm{Synanthrin} \quad \mathrm{C_{48}H_{89}O_{41}} \\ \mathrm{Synanthrose} \quad \mathrm{C_{6}H_{10}O_5} \\ \mathrm{Syntonin} \quad \mathrm{C_{144}H_{224}O_{42}N_{36}S} \\ \mathrm{Syringas\"{a}ure} \quad \mathrm{C_{9}H_{10}O_5} \\ \mathrm{Syringenin} \quad \mathrm{C_{17}H_{14}O_4} \\ \mathrm{Syringin} \quad \mathrm{C_{17}H_{24}O_9} \end{array}$ Tagatose C₆H₁₂O₆ Taigusäure C₁₅H₁₄O₃

 $\begin{array}{ccc} Tanaceten & C_{10}H_{16} \\ Tanacetin & C_{11}H_{16}O_4 \end{array}$ Tanacetketocarbonsäure $C_{10}H_{16}O_{3}$ Tanacetketoximcarbonsäure $C_{10}H_{17}O_3N$ Tanacetogensäure C₉H₁₄O₂ Tanaceton C₁₀H₁₆O Tanacetophoron C₈H₁₂O Tanacetumgerbsäure $\begin{array}{c} C_{23}H_{29}O_{31} \\ Tanacetylalkohol \ C_{10}H_{18}O \\ Tanacetylamin \ C_{10}H_{19}N \end{array}$ Tanginin $C_{27}H_{40}O_8$ Tangsäure $C_{13}H_{20}O_4$ Tannon $C_{46}H_{42}O_{27}N_4$ Tannoform $C_{29}H_{20}O_{18}$ Tannowelansäure $C_6H_4O_8$ Tannoxylsäure $C_7H_6O_6$ Tarchonylalkohol $C_{50}H_{102}O$ $\begin{array}{l} Taririns\"{a}ure \ C_{18}H_{32}O_2 \\ Tarkonin \ C_{11}H_9O_3 \ N \\ Tarkons\"{a}ure \ C_{10}H_7O_3 \ N \end{array}$ Tarnin C₁₁H₉O₄N TartrabenzamsäureC₁₁H₉O₆N Tartrabelisaure $C_1H_1O_5$ R Tartralsäure $C_8H_{10}O_{11}$ Tartranilsäure $C_{10}H_{11}O_5$ N Tartrazin $C_{10}H_{12}O_9N_4S_2$ Tartrazinsäure $C_4H_4O_5$ Tartronsäure $C_9H_4O_5$ Tartronstaure $C_9H_4O_5$ Tartrophtalsäure C₈H₁₂O₆ Taurin C₂H₇O₃NS Tauroammelid C5H2O5N4S Taurobetaïn C₅H₁₃O₃NS Taurocarbaminsäure $C_3H_8O_4N_2S$ Taurochenocholsäure $\begin{array}{c} T_{29}H_{49}O_{8}NS \\ Taurocholsäure \ C_{28}H_{45}O_{7}NS \\ Taurocyamin \ C_{8}H_{9}O_{3}N_{3}S \end{array}$ Taurodiammelin $\begin{array}{c} C_{10}H_{15}O_8N_9S_2\\ Tauroglykocyamin\\ C_3H_9O_3N_3S \end{array}$ Tautocinchonin C₁₉H₂₂ON₂ Taxin C₃₇H₅₂O₁₀ Taxih $C_{37}H_{52}C_{10}C_{10}$ Tectochrysin $C_{16}H_{12}O_4$ Telaescin $C_{18}H_{30}O_7$ Terakonsäure $C_7H_{10}O_4$ Terakrylsäure $C_7H_{12}O_2$ $\begin{array}{c} \text{Terebenten} \quad C_{10} H_{16} \\ \text{Terebentils\"aure} \quad C_8 H_{10} O_2 \\ \text{Terebentins\"aure} \quad C_9 H_{14} O_5 \end{array}$ Terebentinsaure $C_9D_{14}C_5$ Terebilensäure $C_7H_8O_4$ Terebinsäure $C_7H_{10}O_4$ Terechrysinsäure $C_6H_8O_5$ Terelaktonsäure $C_6H_{10}O_3$ Terephtalamidin $C_8H_{10}O_4$ Terephtalophenon $C_{20}H_{14}O_2$ Terephtalsäure C₈H₆O₄ Teropiammon C₃₀H₂₉O₁₃N Terpadiën C₁₀H₁₆ Terpan $C_{10}H_{18}O$

 $\begin{array}{c} \textbf{Terpanol} \quad \textbf{C}_{10}\textbf{H}_{20}\textbf{O} \\ \textbf{Terpenon} \quad \textbf{C}_{10}\textbf{H}_{16}\textbf{O} \\ \textbf{Terpentinsäure} \quad \textbf{C}_{8}\textbf{H}_{12}\textbf{O}_{5} \\ \textbf{Terpenylsäure} \quad \textbf{C}_{8}\textbf{H}_{12}\textbf{O}_{4} \end{array}$ Terpenylsäure $C_8H_{12}O_4$ Terpilen $C_{10}H_{16}$ Terpin $C_{10}H_{16}$ Terpinelol $C_{10}H_{18}O$ Terpinelol $C_{10}H_{18}O$ Terpinelol $C_{10}H_{18}O$ Terpinelol $C_{10}H_{16}$ Terpinolen $C_{10}H_{16}$ Terpinylen $C_{10}H_{16}$ Tetanin $C_{13}H_{20}O_4N_2$ Tetrabutyraldin $C_{16}H_{29}ON$ Tetracodeïn $C_{72}H_{84}O_{12}N_4$ Tetrahirolin $C_{12}H_{13}N$ Tetrakosan $C_{24}H_{50}$ Tetralutidin $C_{28}H_{36}N_4$ $\begin{array}{c} Tetralutidin \quad C_{28}H_{36}N_4 \\ Tetramorphin \quad C_{68}H_{76}O_{12}N_4 \\ Tetrasalicylid \quad C_{28}H_{16}O_8 \end{array}$ $\begin{array}{c} -C_{23}^{23}H_{16}O_9\\ \\ \text{Tetraspartid} \quad C_{16}H_{14}O_9N_4\\ \\ \text{Tetraspartsäure} \quad C_{16}H_{22}O_{13}N_4\\ \\ \text{Tetraterebenten} \quad C_{40}H_{64}\\ \end{array}$ Tetrathiopenton C₁₅H₂₈S₄ Tetrazol CH₂N₄ Tetrinsäure C₅H₆O₃ Tetrol C4H4O $\begin{array}{c} \text{Tetroldianil} \ \ C_{16}H_{14}N_2 \\ \text{Tetrolditolyl} \ \ C_{18}H_{18}N_2 \\ \text{Tetrolharnstoff} \ \ C_5H_6ON_2 \end{array}$ Tetrolsäure $C_4H_4O_2$ Tetrolurethan $C_7H_9O_2N$ Tetronsäure $C_4H_4O_3$ Tetrose $C_4H_3O_4$ Teucrin $C_{21}H_{24}O_{11}$ Thallin $C_{10}H_{13}ON$ Thapsiasäure $C_{18}H_{30}O_4$ Thebaïn $C_{19}H_{21}O_3N$ Thebain $C_{19}H_{21}O_3N$ Thebaol $C_{16}H_{14}O_3$ Thebaolehinon $C_{16}H_{12}O_5$ Thebenin $C_{18}H_{19}O_3N$ Thebenol $C_{17}H_{14}O_3$ Theoromin $C_7H_{3}O_2N_4$ Theobromursäure $C_7H_8O_5N_4$ Theoromyslin $C_7H_8O_7N_4$ Theorbyllin $C_7H_8O_2N_4$ Theursăure $C_5H_7O_4N_3$ Theveresin $C_{48}H_{70}O_{17}$ Thevetin $C_{54}H_{84}O_{24}$ Thiacetonin $C_9H_{19}NS_2$ Thiacetonuraminsaure $C_5H_7O_2NS$ Thialdin ${}^2C_6H_{13}NS_2$ Thianisoïnsäure ${}^2C_{10}H_{14}O_4S$ Thianthren C₁₂H₈S₂ $\begin{array}{c} - \quad C_{14}H_{12}S_2 \\ \text{Thiazol} \quad C_3H_3NS \end{array}$ $\begin{array}{ccc} Thiazoltriazol & C_4H_3N_3S \\ Thiergummi & C_{12}H_{20}O_{10} \\ Thioacetophenon & C_8H_8S \end{array}$ Thioammelin $C_3H_5N_5S$ Thioanilin $C_{12}H_{12}N_2S$ Thioanisol $C_{14}H_{14}O_2S$

ThiobarbitursäureC₄H₄O₂N₂S

 $\begin{array}{c} Thiobenzhydrol \ C_{13}H_{12}S \\ Thiobenzophenon \ C_{13}H_{10}S \end{array}$ Thiobiuret $C_2H_5ON_3S$ Thiocampher $C_{10}H_{16}S$ Thiocarbanil C_7H_5NS Thiocarbanil C_7H_5NS Thiocarbanilid $C_{13}H_{12}N_2S$ Thiochinanthren $C_{18}H_{10}N_2S_2$ Thiochronsaure $C_6H_6O_{17}S_5$ Thiocumarin C_9H_6OS Thiocumazon C_8H_7ONS Thiodialursaure $C_4H_4O_3N_2S_2$ Thiodialursaure $C_4H_4O_3N_2S_2$ Thiodialursaure $C_6H_{10}O_4S_2$ Thiofucusol C_5H_4OS Thiofurfurol C_5H_4OS Thioglyoxylsäure $C_2H_2O_2S$ Thioharnstoff CH_4N_2S Thiohydantoïnessigsäure $C_5H_6O_3N_2S$ Thiohydantoïnsäure $C_3H_6O_2N_2S$ $\begin{array}{ll} Thiokaffein & C_8H_{10}O_2N_4S\\ Thiolepiden & C_{28}H_{20}S\\ Thionaphten & C_8H_8S \end{array}$ Thionaphten C_8H_8S Thionaphtol $C_{10}H_8S$ Thionessal $C_{28}H_{20}S$ Thionin $C_{12}H_9N_3S$ Thionolin $C_{12}H_8ON_2S$ Thionoursäure $C_4H_8O_8N_3S$ Thioopiansäure $C_{10}H_{10}O_4S$ Thiophaminsäure $C_{12}H_6O_8$ Thiophamsäure $C_{12}H_6O_8$ Thiophansäure C₁₂H₆O₁₂ Thiophen C₄H₄S $\begin{array}{c} Thiophengrün \ C_{21}H_{24}ON_2S\\ Thiophenstilben \ C_{10}H_8S_2\\ Thiophtalid \ C_8H_6OS\\ Thiophten \ C_0H_4S_2\\ \end{array}$ Thiopseudoharnsäure $C_5H_6O_3N_4S$ $\begin{array}{ccc} Thiorufins \ddot{a}ure & C_{10}H_{14}O_4S_3\\ & - & C_{15}H_{16}O_8S_6\\ Thiosinamin & C_4H_8N_2S \end{array}$ Thiosuccinursäure $\begin{array}{c} Thio_{1} \\ C_{5} H_{8} O_{3} N_{9} S \\ Thio sulfanilin & C_{24} H_{22} N_{4} S_{3} \\ Thio uramil & C_{4} H_{5} O_{2} N_{3} S \\ Thio urazol & C_{2} H_{3} O N_{3} S \\ \end{array}$ $\begin{array}{c} Thioxanthon \ C_{13}H_8OS \\ Thiuramdisulfid \ C_2H_4N_2S_4 \\ Thiuramsulfid \ C_2H_4N_2S_3 \end{array}$ Thiuret $C_8H_7N_3\tilde{S}_2$ Thujaketonsäure $C_{10}H_{16}O_3$ Thujaketoximsäure C₁₀H₁₇O₃N Thujamenthol C₁₀H₂₀O Thujamenthon C₁₀H₁₈O Thujamention $C_{10}H_{18}$ Thujer $C_{10}H_{16}$ Thujetin $C_{14}H_{14}O_8$ Thujetins aure $C_{28}H_{22}O_{13}$ Thujigenin $C_{14}H_{12}O_7$ Thujin $C_{20}H_{22}O_{12}$ Thujon $C_{10}H_{10}O$ Thujonamin $C_{10}H_{19}N$ Thujylalkohol $C_{10}H_{18}O$ Thyman $C_{10}H_{18}O$ Thymen C₁₀H₁₆

Thymin $C_5H_6O_2N_2$ Thyminsäure $C_{16}H_{25}O_{12}N_3P_2$ Thymoakrylsäure $C_{13}H_{16}O_3$ $\begin{array}{c} \text{Thymochinon} \quad C_{10}H_{12}O_2 \\ \text{Thymol} \quad C_{10}H_{14}O \\ \text{Thymolchroin} \quad C_{40}H_{52}O_5N_2 \\ \text{Thymolglukosid} \quad C_{16}H_{24}O_6 \end{array}$ Thymoxycuminsäure $m C_{10}H_{12}O_3$ Thymophenochinon $m C_{22}H_{24}O_4$ Thymotid $C_{11}H_{12}O_2$ Thymotinsäure $C_{11}H_{14}O_3$ Thyreoantitoxin $C_6H_{11}O_5N_3$ Tiglicerinsäure C₅H₁₀O₄ Tiglinsäure C₅H₈O₂ $\begin{array}{c} {\rm Tolan} \; {\rm C_{14}H_{10}} \\ {\rm Tolan} \; {\rm C_{14}H_{10}} \\ {\rm Tolanure in} \; {\rm C_{15}H_{12}ON_2} \\ {\rm Tolazon} \; {\rm C_{14}H_{12}N_2} \\ {\rm Tolen} \; {\rm C_{10}H_{16}} \\ {\rm Tolualloxazin} \; {\rm C_{11}H_8O_2N_4} \end{array}$ Toluanisaldehydin $\mathrm{C_{23}H_{20}O_{2}N_{2}}$ $\begin{array}{c} C_{23}H_{20}C_{2}H_{2}\\ Tolubenzaldehydin \quad C_{21}H_{18}N_{2}\\ Toluchinolin \quad C_{10}H_{9}N\\ Toluchinon \quad C_{7}H_{6}O_{2} \end{array}$ Tolurfuraldehydin $C_{17}H_{14}O_{2}N_{2}$ Toluidinschwarz C35H35N5 Toluidylmelamin $C_{24}H_{27}N_9$ Toluindazin $C_{15}H_{11}N_3$ Toluindophenazin $C_{15}H_{11}N_3$ Toluisatin $C_{22}H_{19}ON$ Tolunaphtazin C₁₇H₁₂N₂ Toluol C7H8 Toluphenanthrazin C₂₁H₁₄N₂ $\begin{array}{c} Toluresitannol \quad C_{17}H_{18}O_5 \\ Tolursäure \quad C_{10}H_{11}O_3N \\ Tolusafranin \quad C_{21}H_{20}N_4 \\ Toluylenblau \quad C_{15}H_{18}O_4 \\ \end{array}$ Toluylendioxamäthan $C_{15}H_{18}O_6N_2$ Toluylenoxamid C₉H₈O₂N₂ Toluylenoxamid $C_9H_8O_2$ Toluylenroth $C_{15}H_{16}N_4$ Toluylenviolet $C_{14}H_{14}N_4$ Toluylsäure $C_8H_8O_2$ Tolylsenzil $C_{21}H_{17}ON$ Tolylglycin $C_9H_{11}O_2N$ Tolylguanazol C9H11N Tormentillroth C₂₆H₂₂O₁₁ $\begin{array}{c} Toxigenon \ C_{20}H_{26}C_3^2 \\ Trachylolsäure \ C_{56}H_{58}O_8 \\ Traubensäure \ C_4H_6O_6 \\ Traubenzucker \ C_6H_{12}O_6 \end{array}$ $\begin{array}{c} \text{Transhalter} & G_{3} - Y_{12} G_{6} \\ \text{Trehalose} & C_{12} H_{22} O_{11} \\ \text{Trehalum} & C_{24} H_{42} O_{21} \\ \text{Triacetodiamid} & C_{6} H_{12} O_{5} N_{2} \\ \text{Triacetonalkamin} & C_{9} H_{19} O N \end{array}$ Triacetondiamin C9H20ON2 Triacetonin C9H17N $\begin{array}{c} {\rm Triaceton trisulfon} \ \ C_9H_{18}O_6S_3 \\ {\rm Trianil\"{a}skulin} \ \ C_{93}H_{31}O_6N_3 \\ {\rm Triazobenzol} \ \ C_6H_5N_3 \end{array}$ Triazol C2H3N3 Tricaprylen C₂₄H₄₈ RICHTER, Lex. d. Kohlenstoffverb.

Tricarbonimid C₃H₃O₃N₃ $\begin{array}{c} {\rm Trichinoyl} \ \ C_6H_{16}O_{14} \\ {\rm Trichloralimid} \ \ C_6H_6N_3Cl_9 \end{array}$ $\begin{array}{ccc} Tricitin & C_{12}H_{22}O_{11} \\ Tricode in & C_{54}H_{63}O_{9}N_{3} \end{array}$ Tricykloacetonsuperoxyd $C_9H_{18}O_6$ Triepinsäure C₃H₆O₅
Triepinsäure C₄H₇O₂N₃
Trigonellin C₇H₇O₂N
Trigonellin C₃H₆N
Triguanid C₃H₆N
Triglycerin C₃H₂₀O₇ Triglykolamidsäure C6H9O6N Triglykolsäure C₆H₁₂O₈ Trikosan $C_{23}H_{48}$ Trikosan $C_{23}H_{48}$ Trimellithsäure $C_{9}H_{6}O_{6}$ Trimesitinsäure $C_{8}H_{5}O_{6}N$ Trimerphin $C_{51}H_{57}O_{9}N_{3}$ $\begin{array}{ccc} \textbf{Trional} & C_8H_{18}O_4S_2\\ \textbf{Triphendioxazin} & C_{18}H_{10}O_2N_2 \end{array}$ Tripyrrol C₁₂H₁₅N₃ Tripyruvintetraureïd $\begin{array}{c} C_{13}^{\prime}H_{16}O_7N_8 \\ Triresore in \ C_{18}H_{14}O_4 \\ Trisuccinamid \ C_{12}H_{12}O_6N_2 \\ Trithioaceton \ C_9H_{18}S_3 \end{array}$ Trithiodilaktylsäure C6H10O4S3 Trithiopyroglycid C6H12OS3 Trithiovanillin $C_{24}H_{24}O_8S_3$ Tropacocain $C_{15}H_{19}O_2N$ Tropaolin D $C_{14}H_{15}O_3N_3S$ Tropanin $C_8H_{15}N$ Tropanin $C_7H_{13}N$ Tropasäure C₉H₁₀O₃ Tropidin C₈H₁₁N $\begin{array}{c} - & C_8 H_{13} N \\ - & C_7 H_{13} O N \end{array}$ Tropigenin $C_7 H_{13} O N$ Tropinpinakon C₁₆H₂₈O₂N₂ Tropilen C₇H₁₀O Tropiliden C₇H₈ Tropin C₈H₁₅ON Tropinneurin C₁₀H₁₉O₂N Tropinon C₈H₁₃ON Tropinsäure C₈H₁₃O₄N Tropolin C₇H₁₈ON Tropylamin C₈H₁₆N₂ Tropylscopole in $C_{17}H_{21}O_4N$ Truxen $C_{18}H_{12}$ $-C_{27}H_{18}$ Truxillfluoresceïn C₃₀H₂₄O₆ $\begin{array}{c} Truxillin \ C_{19}H_{23}O_4N \\ Truxills \\ \ddot{a}ure \ C_{18}H_{16}O_4 \end{array}$ Truxon C9H6O Tuberkulinsäure C7H10O4 $\begin{array}{ccc} \text{Tuberon} & C_{13} H_{20} O \\ \text{Tubocurarin} & C_{19} H_{21} O_4 N \\ \text{Tulucumin} & C_{10} H_{14} O_4 \end{array}$ Tunicin $C_6H_{10}O_5$ Turanose $C_{12}H_{22}O_{11}$ Turmerinsäure $C_{12}H_{16}O_2$ Turmerol $C_{13}H_{18}O$ Turpethin $C_{34}H_{56}O_{18}$ 156

 $\begin{array}{c} Turpethinsäure & C_{34}H_{60}O_{18}\\ Turpetholsäure & C_{16}H_{32}O_4\\ Typhotoxin & C_7H_{17}O_2N\\ \hline Tyroleucin & C_7H_{11}O_2N\\ \hline Tyrosin & C_9H_{11}O_3N\\ \hline Tyrosinhydantoin & C_{10}H_{10}O_3N_2\\ \hline Tyrosinhydantoinsäure & C_{10}H_{12}O_4N_2 \end{array}$

Ueberkohlensäure C₂H₂O₆ $\begin{array}{c} \textbf{Ulexin} \quad \textbf{C}_{11}\textbf{H}_{14}\textbf{ON}_2 \\ \textbf{Umbelliferon} \quad \textbf{C}_{9}\textbf{H}_{6}\textbf{O}_3 \end{array}$ Umbelliferonessigsäure $C_{11}H_8O_5$ Umbellol $C_8H_{12}O_5$ Umbellsäure C₉H₈O₄ Umbellsäure $C_9H_8O_4$ Umbellulsäure $C_{11}H_{12}O_2$ Undekolsäure $C_{11}H_{18}O_2$ Undekylensäure $C_{11}H_{18}O_2$ Uramil $C_4H_5O_3N_3$ Uramilsäure $C_8H_9O_7N_5$ Urazol $C_2H_3O_2N_3$ Urechitor $C_{28}H_{42}O_8$ Urechitoxin $C_{13}H_{20}O_5$ Urethan $C_3H_7O_2N$ Urethan $C_3H_7O_2N$ Urethanophenyloxamäthan $C_{13}H_{16}O_5N_2$ Uretropin $C_{15}H_{20}O_2N_2$ Urinilsäure $C_8H_7O_6N_7$ Urobilin $C_{92}H_{40}O_7N_4$ Urobutyrchloralsäure $C_{10}H_{15}O_7Cl_3$ Urocanin $C_{11}H_{10}ON_4$ $\begin{array}{l} \text{Urocanins\"aure} \quad C_{12}H_{12}O_4N_4 \\ \text{Urochlorals\"aure} \quad C_8H_{11}O_7Cl_8 \\ \text{Urofuscoh\"amatin} \quad C_{84}H_{37}O_5N_4 \end{array}$ Uronitrotoluolsäure $C_{13}H_{15}O_{9}N$ Uroprotsäure $C_{66}H_{116}O_{54}N_{20}S$ Urorubrohämatin $C_{34}H_{31}O_7N_4Fe$ Urosulfinsäure $C_5H_4O_2N_4S$ Uroxansăure $C_5H_8O_6N_4$ Urson $C_{30}H_{48}O_3$ Urushinsăure $C_{14}H_{18}O_2$ Uranarsăure $C_{30}H_{22}O_{15}$ Usneol $C_{11}H_{19}O_3$ Usnetinsäure $C_9H_{10}O_3$ $\begin{array}{c} \text{Usnetol } C_{13} H_{14} O_4 \\ \text{Usninsäure } C_{18} H_{16} O_7 \\ & - C_{18} H_{18} O_7 \\ \text{Usnolsäure } C_{18} H_{16} O_7 \\ \text{Usnolsäure } C_{18} H_{16} O_7 \\ \end{array}$ $\begin{array}{c} \text{Uvinon} \quad \text{C_{14}H}_{12}\text{O_4} \\ \text{Uvinsäure} \quad \text{C_7H}_8\text{O_3} \\ \text{Uvitaminsäure} \quad \text{C_9H}_{13}\text{O_7N} \end{array}$

 $\begin{array}{c} \text{Uvitins\"aure} \quad C_9 H_8 O_4 \\ \text{Uvitonins\"aure} \quad C_8 H_7 O_4 N \\ \text{Uvitons\"aure} \quad C_9 H_{14} O_9 \end{array}$

 \mathbf{V} aldivin $\mathrm{C}_{18}\mathrm{H}_{24}\mathrm{O}_{10}$ Valeraldin C₁₅H₃₁NS₂ $egin{array}{cccc} Valeraldol & C_{10}^{15}H_{20}^{2}O_{2} \ Valeriansäure & C_{5}H_{10}O_{2} \ \end{array}$ $\begin{array}{c} \text{Valerians\"aure} \quad C_5H_{10}\, O_2\\ \text{Valeridin} \quad C_{10}\, H_{19}\, N\\ \text{Valeridin} \quad C_{15}\, H_{27}\, N\\ \text{Valeron} \quad C_9H_{18}\, O\\ \text{Valerylen} \quad C_5H_{18}\\ \text{Validin} \quad C_{16}\, H_2\, N\\ \text{Valylen} \quad C_5H^9\\ \text{Vanillina} \quad C_8H_9\, O_3\, N\\ \text{Vanillina} \quad C_8H_8\, O_4\\ \text{Vanillodiacetonamin} \end{array}$ Vanillodiacetonamin $C_{14}H_{19}O_8N$ Vanilloylcarbonsäure C9H8O5 Vanillylalkohol C₈H₁₀O₃ Veratroïn $C_{55}H_{92}O_{16}N_2$ $egin{array}{c} Veratrol & C_8H_{10}O_2 \\ Veratrumsäure & C_9H_{10}O_4 \\ \end{array}$ $\begin{array}{l} \text{Veriat ulmisate } C_0 M_{10} \\ \text{Verin } C_{28} H_{45} O_8 N \\ - C_{55} H_{02} O_{18} N_2 \\ \text{Vernin } C_{19} H_{20} O_8 N_8 \\ \text{Vestrylamin } C_{10} H_{19} N \\ \text{Vesuvin } C_{12} H_{13} N_5 \\ \text{Vicin } C_8 H_{15} O_6 N_3 \\ \text{Victoriablus } R_3 C_4 H_{15} \\ \end{array}$ $\begin{array}{cccc} \textbf{Victoriablau} & \textbf{B} & \textbf{C}_{33}\textbf{H}_{32}\textbf{N}_{3}\textbf{Cl} \\ \textbf{--} & \textbf{4} & \textbf{R} & \textbf{C}_{34}\textbf{H}_{34}\textbf{N}_{3}\textbf{Cl} \\ \textbf{Viktoriagelb} & \textbf{C}_{7}\textbf{H}_{6}\textbf{O}_{5}\textbf{N}_{2} \end{array}$ m Vinakonsäure $m C_5
m H_6
m O_4$ Vincetoxin $C_{16}H_{12}^{\dagger}O_{6}$ Vinylalkohol $C_{2}H_{4}O$ $m Vinyldiacetonamin C_8H_{15}ON \ Vinyldiacetonin C_8H_{15}N$ Violantin $C_8H_6O_9N_6$ Violaquercitrin $C_{28}H_{28}O_{15}$ Violursäure $C_1H_3O_4N_3$ Viridin C₁₂H₁₉N Viscikautschin C₈H₁₆O Viscon C₁₀H₂₄Q₂ Viscone C₆H₁₀O₅ Vitexin C₁₅H₁₄O₇ Vitin C₂₀H₃₂O₂ Vitol C₁₇H₃₄O Vitylglykol C₂₃H₄₄O₂ Volemit C. H. O Volemit C7H16O7 Vulpinsäure Č₁₉H₁₄O₅

 $\begin{array}{c} \textbf{W}eins\"{a}ure \ C_4H_6O_6\\ \textbf{W}eins\"{a}urechloralid}\\ \textbf{C}_8H_4O_6Cl_6\\ \textbf{W}rightin \ C_{24}H_{40}N_2 \end{array}$

 \mathbf{X} anthalin $\mathrm{C}_{37}\mathrm{H}_{86}\mathrm{O}_{9}\mathrm{N}_{2}$ $X_{anthann} C_{37} H_{36} C_{9}$ $X_{anthen} C_{13} H_{10} O$ $X_{anthin} C_{5} H_{4} O_{2} N_{4}$ $X_{anthinin} C_{4} H_{3} O_{2} N_{3}$ Xanthochelidonsäure C7H6O7 Xanthochinsäure C₁₀H₇O₃N Xanthogallol C18H14O6Br4 $egin{array}{ll} Xanthogallolsäure & C_{18}H_7O_9Br_{11} & Xanthokreatinin & C_5H_{10}ON_4 & \end{array}$ Xanthokreatinin $C_{5}H_{10} \cup A_{4}$ Xanthon $C_{13}H_{8}O_{2}$ Xanthophansäure $C_{18}H_{20}O_{8}$ Xanthopurpurin $C_{14}H_{8}O_{4}$ Xanthorhamnin $C_{48}H_{68}O_{29}$ Xanthorocellin $C_{21}H_{17}O_{2}N_{2}$ Xanthorrhoeharz $C_{10}H_{10}O_{3}$ $ext{Xanthostrychnol} \ ext{C}_{21} ext{H}_{21} ext{O}_4 ext{N}_3$ Xanthostrychilor $C_{10}H_{16}$ Xanthoxylen $C_{10}H_{16}$ Xanthoxylen $C_{10}H_{12}O_4$ Xanthydrol $C_{13}H_{10}O_2$ Xenylamin $C_{12}H_{11}N$ Xeronsäure $C_8H_{12}O_4$ $Xylan C_4H_6O_3$ C5H8O4 $Xylylendiimin C_{16}H_{18}N_2$ $m Xylidinsäure ~C_6H_8O_4$ $\begin{array}{c} \text{Xylit } C_5H_{12}O_5\\ \text{Xylit } C_5H_{12}O_5\\ \text{Xyliton } C_{12}H_{18}O\\ \text{Xylochinon } C_8H_8O_2\\ \text{Xylochloral } C_7H_9O_5Cl_3 \end{array}$ $egin{aligned} \mathbf{Xylol} & \mathbf{C_8H_{10}} \\ \mathbf{Xylons\"{a}ure} & \mathbf{C_5H_{10}O_6} \end{aligned}$ Xylorcincarbonsäure CoH10O4 Xylosamin C₅H₁₁O₄N $egin{array}{lll} Xylose & C_5H_{10}O_5 & Y_{10}H_{11}O_2N & Y_{10}H_{11}O_2N & Y_{10}H_{10}O_3 & Y_$ Xylysäure C24H80O17

 $\begin{array}{l} \textbf{Y} ohimbenin & C_{35}H_{45}O_6\textbf{N}_3\\ \textbf{Y} ohimbin & C_{23}H_{32}O_4\textbf{N}_2\\ \textbf{Y} ohimbinsäure & C_{20}H_{24}O_6\textbf{N}_2\\ \textbf{Y} uccasaponin & C_{24}H_{40}O_{10} \end{array}$

 $\begin{array}{c} \mathbf{Z}_{eorin} \quad C_{18}H_{22}O \\ \mathbf{Z}_{eorinin} \quad C_{52}H_{84}O_{2} \\ \mathbf{Z}_{immtalkohol} \quad C_{9}H_{10}O \\ \mathbf{Z}_{immts\"{a}ure} \quad C_{9}H_{8}O_{2} \\ \mathbf{Z}_{uckers\"{a}ure} \quad C_{6}H_{10}O_{8} \end{array}$







